QURANICA, International Journal of Quranic Research, Vol. 11, Issue. 2, December 2019, pp. 53-83

QURANIC MOTIVATION TOWARD MODERN APPROACH FOR E-DA'WAH *

Meftah Mohammed Charaf Eddine[1] and Akram M Zeki[2]

ABSTRACT

The world today needs to know Islam correctly. In our days there are more than five billions people who do not believe in Islam all over the world. Most of them have never been invited or have a distorted view of Islam. Therefore, doubling the efforts to communicate with them is one of the most important tasks. The call of non-Muslims to Islam at all places and all times, with the latest methods and techniques does not have time to delay. Based on quranic motivations and hadith, we can be concluded that the greatest task of the Muslim in this world is to call to Allah S.W.T with wisdom and knowledge insight (Elhikmah and Elbasirah). Since wisdom is to put the right thing in the right place by the most appropriate way, the elements of this wisdom vary according to time and place. On the other hand, one of the most important shortcomings of current Da'wah methods is that they tend to invite those who have a predisposition toward Islam, while the vast majority of non-Muslims don't have inclination towards Islam. Current e-Da'wah methods does not take into account the changing characteristics and modes of Da'wah according to the time, the environment, and characteristics of both: the invited and the da'ee .In this paper, a new approach for e- Da'wah is proposed to be directed especially to the large proportion of non-Muslims who don't have inclination towards Islam .Based on quranic motivations: wisdom (Islamic Da'wah Database System -Reference Guide: database that includes various appropriates da'wah modes), knowledge insight (Internet map, mapping techniques and networks analyses for Electronic Islamic

* This article was submitted on 15.11.2019 and accepted for publication on 22.12.2019
[1] Department of Computer Science, University of Echahid Hamma Lakhdar, Eloued, POBox 789, Algeria, mohammed-meftah@univ-eloued.dz

[2] Kulliyyah of Information and Communication Technology, International Islamic University Malaysia, Kuala Lumpur, Malaysia, akramzeki@iium.edu.my

Da'wah), and latest and most appropriate ICT means.

Keywords: *e-Da'wah, Wisdom, Knowledge, Islamic Da'wah Database System, Internet map for e-Da'wah, Networks analyses for e-Da'wah.*

1. INTRODUCTION

Da'wah literally means "issuing a summons" or "making an invitation", meaning "to summon" or "to invite". A Muslim who practices da'wah, either as a religious worker or in a volunteer community effort, is called a dā'ī (داعي, plural du'āt دعاة). A dā'ī, as a person who invites people to understand Islam through dialogue, may be regarded as a missionary inviting people to the faith, prayer and manner of Islamic life (Oxford, 2008). So, e-Da'wah can be described as an invitation to non-Muslims to know about Islam using the information and communication technologies (ICT).

One of the most important features of the modern world is the emergence and the spread of the information and communication technology (ICT). The impact of ICT is increasing day by day in the lives of people. As the owners of the last universal divine message (Da'wah), Muslims should be active in this space of ICT to serve this Da'wah for the benefit of all humanity. They have to take into account the characteristics of this space: permanent change, speed and huge number of information. There is a weak presence (details in section: 3.0) of e-Da'wah activities and they are characterized by the following problems:

What is noticeable is that most of the current works in the field of e-Da'wah are dispersed and does not share a single vision, and also absence of a comprehensive framing of the concept of e-Da'wah as reference for the development of applications in this field.

One of the most important shortcomings of current Da'wah methods is that they tend to invite those who have a predisposition toward Islam, while the vast majority of non-Muslims don't have inclination towards Islam. Current e-Da'wah methods does not take into account the changing characteristics and modes of Da'wah according to the time, the environment, and characteristics of both: the invited and the da'ee.

Any successful approach on the web must be based on elements:

intelligence, speed, and adaptation. So how to integrate these critical elements into any approach to develop systems and applications in Da'wah field is a fundamental challenge for those working in this field.

These problems are addressed in the approach that is proposed in this paper through the following sections.

2.0 QURANIC MOTIVATION

Allah S.W.T said: «And who is better in speech than one who invites to Allah and does righteousness and says, "Indeed, I am of the Muslims." (Sûrat Fussilat: 33) He (S.W.T) also said: « Invite to the way of your Lord with wisdom (EL HIKMAH) and good instruction, and argue with them in a way that is best. Indeed, your Lord is most knowing of who has strayed from His way, and He is most knowing of who is [rightly] guided." (Sûrat An-Nahl: 125). Wisdom, as defined by ibn al-Qayyim, is to put the right thing in the right place by the most appropriate way right on time. It is also defined in Cambridge dictionary as: the ability to use your knowledge and experience to make good decisions and judgments (Cambridge, 2019).

> Allah S.W.T said: "Say, This is my way; I invite to Allah with insight (BASIRAH), I and those who follow me. And exalted is Allah; and I am not of those who associate others with Him." (Sûrat Yusuf: 108). Insight is the knowledge and the ability to have a clear, deep, and sometimes sudden understanding of a complicated problem or situation.
>
> Allah S.W.T said: "And We did not send any messenger except [speaking] in the language of his people (Li-San) to state clearly for them, and Allah sends astray [thereby] whom He wills and guides whom He wills. And He is the Exalted in Might, the Wise." (Sûrat Ibrahim :4). The Qur'anic term of expression "the language of his people" is: Li-San which is a group of distinguishing elements common to a homogeneous group of languages. The language is part of the parts of one language family.
>
> Allah S.W.T said: "And We have not sent you, [O Muhammad], except as a mercy to the worlds (El ALAMIN)" (Sûrat Al-Anbyaa: 107), and He S.W.T said: "Say, [O Muhammad], O mankind, indeed I am the Messenger of Allah to you all" (Sûrat Al-Ar'aaf: 158). The Islamic call is universal and

does not exclude anyone, regardless of gender, language and color.

In light of this quranic motivation, key words related to the successful Islamic Da'wah are: Wisdom (EL HIKMAH), knowledge insight (BASIRAH), Speaking a common language (Li-San), and the worlds (El ALAMIN). These Qur'anic words will be pillars of the approach presented in this paper.

A new approach for Electronic Islamic Da'wah (e-Da'wah) is proposed and it will be directed especially to the large proportion of non-Muslims who have no inclination towards Islam and who have a distorted view of it. Based on the following elements: Wisdom (Islamic Da'wah Database System -Reference Guide: a database that includes various appropriates da'wah modes and contents), knowledge insight (mapping techniques and social networks analyses for Da'wah), the worlds (use the latest and most appropriate ICT means to reach them).

There are many positive features in non-Muslims that facilitate their acceptance of the invitation. These features show what was stated in a field study on a sample of non-Muslim invited guests in Riyadh city, where the following percentage was obtained:

- 70% of them believe that the weakness of religion is a cause of psychological and social problems, and this gives an indication of the importance of providing Islam to them as a comprehensive religion for the life of the individual and society and that it provides the correct solutions to all problems at all times and places.

- 80.4% believe that there is a relationship between one's happiness and religion, and this requires that those who carry the Da'wah to show the true religion that brings happiness to the believers in the world and the Hereafter.

- 78.8% of them think they should be aware of other religions, and 62.8% want to increase their knowledge about Islam. This makes the opportunity to invite them to Islam more easily, especially since the study showed that 79.8% want to have a relationship with others.

- 91% believe that religious scholars should be respected, which confirms that religion is a place in the soul cannot be erased (Al-Luhaidan, 1997).

These characteristics and others enhance the acceptance of these people to the

Islamic Da'wah.

3.0 LITERATURE REVIEW

There is no doubt that Muslims so far have not succeeded in exploiting the Internet in Islamic Da'wah as it should, with the importance of the web that penetrates the borders, statistics say: The number of Islamic sites on the Internet that serve the Islamic Da'wah is still limited. Christian sites in the Internet exceed the Islamic sites at a rate of 1200%. The percentage of Muslims sites from the internet so far is still poor, and does not live up to the required level. A recent study indicated that Christian organizations are the top handlers in the internet. They occupy 62% of the sites, followed by Jewish organizations; while the percentage of Islamic and Hindu presence on the internet does not exceed 9% for each of them (Zeid, 2008).

The number of sites that attack Islam, whether directly or indirectly more than ten thousands and the budget allocated to attack Islam in the media around the world exceeds one billion dollars a year. On the other hand, the effort to defend Islam in the web is a few individual with a budget of few millions (Zeid, 2008).

Internet has opened up new horizons for the Islamic call and Islamic action, and its use in Da'wah has become an urgent necessity, in addition to all the media, such as printing, photography, computer, radio and television, especially directed radio stations and satellite channels.

Recently, a number of distinguished Islamic Da'wah sites have emerged, in various fields supported by Islamic bodies, companies, organizations and ministries in different countries of the Islamic world:

- Examples of classical Web sites of Da'wah

http://www.islam-guide.com
http://www.thetruereligion.org
http://www.sultan.org
http://www.beconvinced.com
http://www.al-sunnah.com
http://english.islamway.com
http://www.islamtoday.net/english/

http://www.saaid.net/islam/

- Websites of preachers, sheikhs and bloggers

http://www.elsharawy.com/
http://www.arefe.com/
http://www.shankeety.net
https://binbaz.org.sa/
http://misharialafasy.net/

In addition to other means via the web:

- Publishing brochures, articles and text messages.
- Web and mobile applications (downloaded and installed)
- Lectures.
- Dialogue, research and debate.
- Personal efforts of people
- Collective activities

These sites and means are characterized by good planning so that they came out in good designs and better material than the above, but they are full of major shortcomings that must be avoided. The arena still needs more Islamic sites that benefit from these experiences for the new progress. It is noted that many of the Islamic sites on the network still has limited impact.

The most important problems and shortcomings of current Da'wah methods:

1- Tend to invite those who have a predisposition toward Islam, while that the vast majority of non-Muslims don't have inclination towards Islam and have a distorted view of Islam.

2- Waiting for those who come to see them or contact them. The approach of the Prophet Muhammad, peace be upon him and all the prophets and messengers in the Da'wah is to go the du'āt (preachers) to invited and not waiting for the arrival of people to him.

3- Don't take into account the changing characteristics and modes of Da'wah according to: time, environment, styles and characteristics of

both the da'ee (preacher) and the invited.

4- The content is characterized by long and tedious details at times, while people in nowadays tend to short, fast and influential content.

5- Absence of an international multidisciplinary team groups that they can formulate more effective e-Da'wah methods. Successful Da'wah is a multidisciplinary activity that involving several academic disciplines for topics and problems of e-Da'wah.

4.0 METHODOLOGY

Unfortunately, there's no comprehensive framework for e-Da'wah based on scientific (sciences, psychological, social, …) and technological norms that can be as a reference guide to determine the most appropriate way (content and method) to invite the various human patterns, taking into account the different human and psychological characteristics; to remedy this shortage, this paper will propose a modern approach for e-Da'wah

4.1 The proposed approach

In the light of the quranic motivation and hadith as mentioned in the sections (1.0 and 2.0), the keywords of successful Da'wah can be deduced: wisdom, insight, universality and teamwork; these are the key elements that make up the framework, which is proposed in this paper.

4.1.1 Framework for e-Da'wah

To materialize these elements, this paper will propose a modern approach for e-Da'wah which contains the following axes:

Table 1: ICT and elements of successful Electronic Islamic Da'wah

Wisdom	Database System for e-Da'wah (Reference Guide). that includes various appropriates da'wah modes (Section 4.1.2.1).
Knowledge insight	Internet Map, Mapping techniques and social networks analyses for Islamic Da'wah (Section

	4.1.2.2).
The worlds	Internet, Social networks, u-Da'wah ,MMS, ..ect (Section 4.1.2.2 and Section 4.1.3).
e-Da'wah Workers and Multidisciplinary Teamwork	Continuous researches in the field of e-Da'wah with all concerned parties laboratories and scientists (Section 4.2) : Religious scholars Psychologists Education scientists ICT specialists …

Wisdom as defined by ibn al-Qayyim: is to put the right thing in the right place by the most appropriate way right on time. So in the formal approach, the wisdom is the best relationship between a set of elements to achieve a goal. This relationship can be formally achieved via a database (Fig.1). A database (Relation) is an organized collection of data, stored and accessed electronically. Database designers typically organize the data to model aspects of reality (Islamic Da'wah).

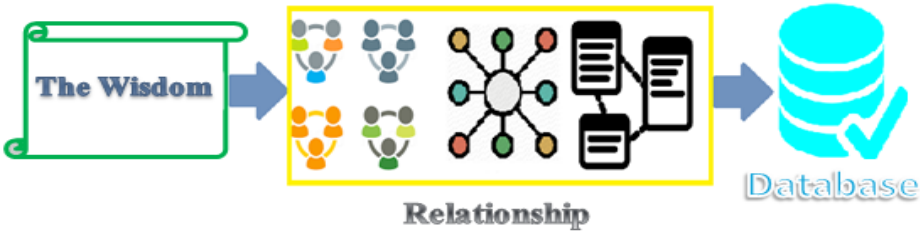


Fig. 1: Wisdom as a database

As mentioned by many specialists (Al-Nghaimishia, 2003) (Garaba, 2015) (Ma'ada, 2010) (Al-Raqab, 2005) in the field of Da'wah, especially the field of psychology of Da'wah, that there is a set of styles can be characterized for both the invited (I) and Da'ee (preacher) (D). In addition, a variety of different Methods (S) and Means (M), each of which can fit certain characteristics related to invited(I) and Da'ee (D); without ignoring the impact of environmental characteristics (economic, social, political and climatic) surrounding each of them (E) and the timing factor (T).

Therefore a successful e-Da'wah should consider the following elements shown in figure 2:

- Invited(I) : I(i1,i2,i3,i4,…….,in)
- Da'ee (preacher) (D) : D(d1,d2,d3,…….,dm)
- Content (C) : C(c1,c2,c3,…….,cj)
- Means (Tools) (M) : M(m1,m2,m3,……my)
- Methods (S): S(s1,s2,s3,……,sk)
- Environment (E): E(e1,e2,e3,…….ez)
- Time (T): T(t1,t2,t3,….,tr)

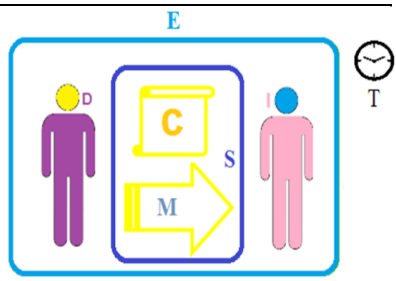


Fig. 2: Elements of e- Da'wah

Note:

i1,i2,i3,i4,…….,in : Invited Styles (I)

d1,d2,d3,…….,dm: Da'ee Styles (D)

c1,c2,c3,…….,cj: Content types (C)

s1,s2,s3,……,sk: Methods(S)

m1,m2,m3,……my: Means Types (M)

e1,e2,e3,…….ez: Environment (Context) Characteristics(E)

t1,t2,t3,….,tr: Time Periods (T)

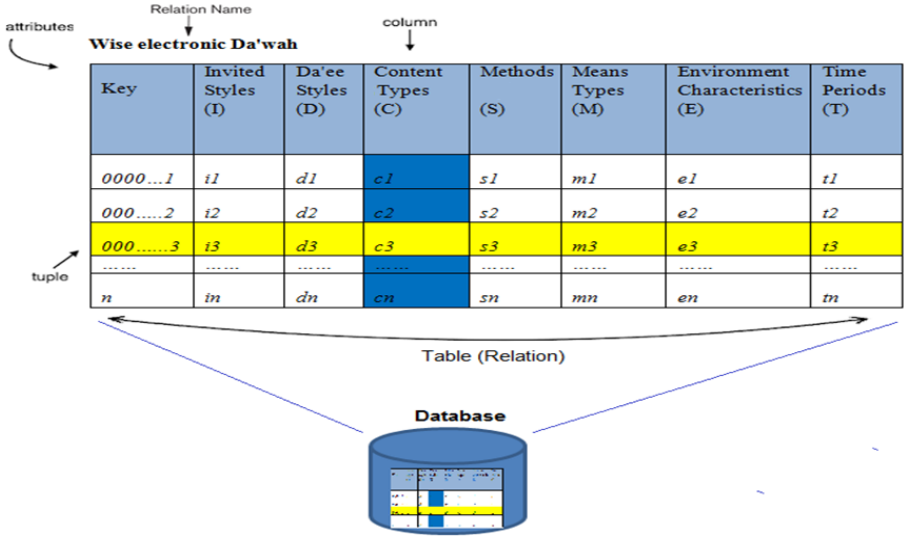
To understand the fundamentals of the proposed database technology, first the basics of traditional databases are highlighted.

In relational database theory, a relation, as originally defined by Codd E.

F (F, 1972) is a set of tuples (d1, d2, ..., dn), where each element dj is a member of Dj (a data domain). Each element is termed an attribute value. An attribute is a name paired with a domain (more commonly referred to as a type or data type). An attribute value is an attribute name paired with an element of that attribute's domain, and a tuple is a set of attribute values in which no two distinct elements have the same name. Thus, in some accounts, a tuple is described as a function, mapping names to values.

The relational database data model is the primary data model, which is used widely around the world for data storage and processing. This model (Table, Row, Column Header, Column Type:: Relation, Tuple, Attribute, Domain) is simple and it has all the properties and capabilities required to process data with storage efficiency.

Table 2: – Relational data model of e-Da'wah



Key	Invited Styles (I)	Da'ee Styles (D)	Content Types (C)	Methods (S)	Means Types (M)	Environment Characteristics (E)	Time Periods (T)
0000…1	i1	d1	c1	s1	m1	e1	t1
000…..2	i2	d2	c2	s2	m2	e2	t2
000……3	i3	d3	c3	s3	m3	e3	t3
……	……	……	……	……	……	……	……
n	in	dn	cn	sn	mn	en	tn

4.1.2 Results

Based on Quranic sources, the proposed framework in (Table 1) and the materialization that is proposed for successful D'awah elements as a database in (Fig 2, Table 2 and Fig 3), offer prospects for the following results, which can be materialized in two main axes :

- Wisdom as a set of relationships can be materialized as Database System for E-Da'wah ;

- Knowledge insight can be materialized as System of Internet Map for e-Da'wah

4.1.2.1 Database System for e-Da'wah (Reference Guide)

A fundamental characteristic of the database approach proposed in this paper is that the database system contains not only the database but also a set of new applications of database systems as shown in figure (Fig. 3).

The database system is a set of software that interacts with end users, applications, and the database itself to capture and analyze data. A purpose of database system allows the definition, creation, querying, update, and administration of databases.

Database systems are an essential component of life in modern society. In the past few years, advances in technology have led to exciting new applications of database systems. New media technology has made it possible to store images, audio clips, and video streams digitally. These types of files are becoming an important component of multimedia databases, intelligent databases, big data, and data mining. Online analytical processing systems can be used for e-Da'wah purposes to extract and analyze useful information from very large databases to support decision making of e-Da'wah. Time series database and active database technology are used to control events processes. Database web service is being applied to the World Wide Web to improve the search for information that is needed by users browsing the internet

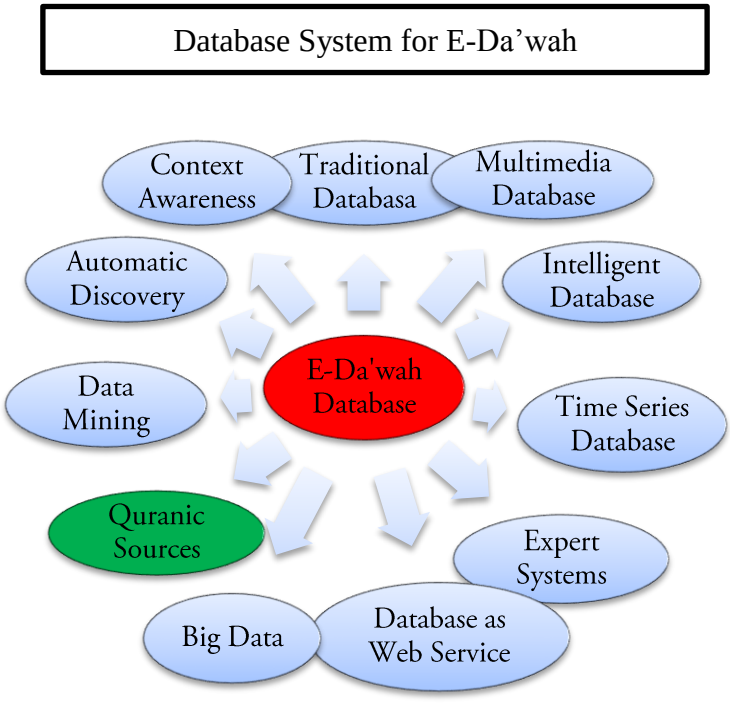


Fig. 3: e-Da'wah Database System

4.1.2.1.1 Multimedia databases for e-Da'wah (MMDB-ED)

Electronic Islamic Da'wah (e-Da'wah) is defined as a formal Da'wah activity that occurs when invited and Da'ee are separated by geographical distance. It is often supported by ICT such as, internet, mail, computers, videotape, and television. In order to facilitate the process of Da'wah either directly or indirectly, Da'wah environment, web browsers, audio/video communication tools and data conferencing tools are widely used. Multimedia databases can create enormous opportunities for improving the Da'wah process, and also help shape Du'ā't consciousness and perception in using information to enhance the Da'wah environment.

In this aspect e-Da'wah can benefit from media psychology, which seeks to explain the impact of media and the increasing use of technology on people's awareness, and how they respond to and interact with the world of media. Psychologists focus on identifying the potential benefits and negative consequences of different forms of technology and promoting the development of positive media. The field of media psychology cares about these kinds of psychological impact on humans resulting from a wide range of media such as social media, and social network.

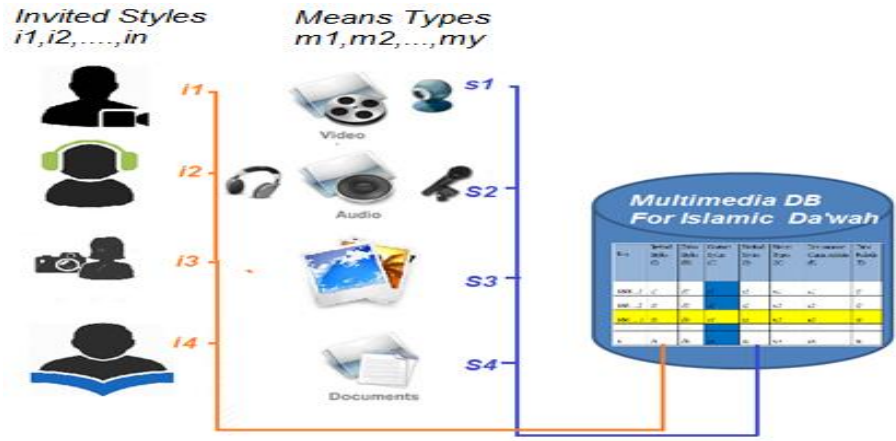


Fig. 4: Multimedia databases for e-Da'wah (MMDB-ED)

4.1.2.1.2 Intelligent Database for Intelligent Da'wah (IDB-ID)

The Da'wah to Islam today needs intelligence and great wits. Some Dûat (preachers) seemed very naive, in the face of contemporary challenges with their fast and different variables. The knowledge of people (Users or Invited) and their conditions and styles constitute the most important axes of Intelligent Da'wah.

Traditional databases give users little help in terms of accessing the database itself. They are searchable by keywords and phrases that are connected by Boolean operations such as AND, OR and NOT.

An intelligent database is a database with artificial intelligence (AI) components that interact with users (Invited(المدعوون) and Du'āt (الدعاة)) either directly or indirectly to ensure that users are supplied all relevant information. The AI portion is most often seen during searches providing intellectual operations and knowledge representations that are usually based on the connectionist neural network models. So, an intelligent database is a system that manages information, rather than simple data, and presents it in such a way that is natural and informative for users. As a result, its capacity is far beyond simple record keeping (techopedia, 2019).

One of the most important benefits of intelligence in e-Da'wah is to automatically identify the features of users (styles of invited), to deal with it in the appropriate manner and respond by the appropriate content (styles of content).

When a user types in a phrase or word (Ex : "Islam") in a library search computer, the intelligent database then provides a lists of results that are arranged according to how related they are to the phrase and avoid sites that display a distorted picture of Islam or that contain verbal controversies, and media conflict with people.

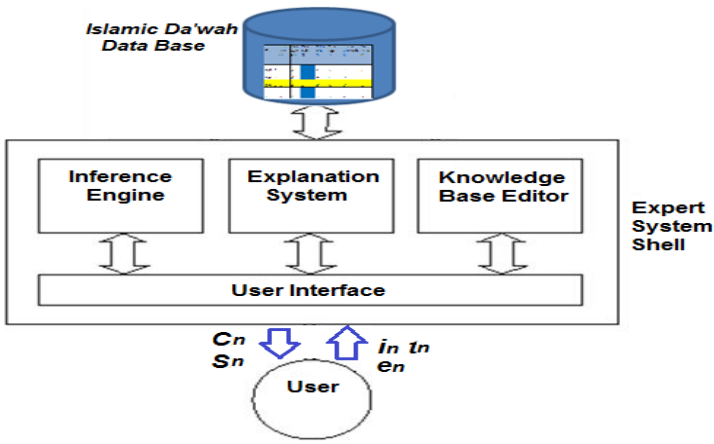


Fig 5. Intelligent Database for Intelligent Da'wah (IDB-ID)

Intelligent database interfaces, however, are cache-based, and are designed to efficiently access one or more database management systems (DBMSs), remote or not. As a result, they provide a lot of choices and flexible options for conducting queries.

The intelligent database engine serves as the foundation for the other two layers, often combining relational database (RDBMS) techniques with object-oriented ones (OODBMS) (techopedia, 2019).

4.1.2.1.3 Big Data Analytics and Data Mining for e-Da'wah (BDA-ED, DM-ED)

One of the most important characteristics of Islamic Da'wah is that it is directed to the worlds, i.e. to all human beings in different nationalities, languages, and their psychological, intellectual, scientific and social patterns as well as their cultures, desires and tendencies. In order to deal with these differences and variations wisely, the knowledge is required and the knowledge requires data of world-wide variety. It's very big and complex data in addition to the volume of data related to: content and methods styles, means tools, and environment characteristics. The solution to dealing with this huge and complex amount of data is to use the latest technologies in this field, i.e. big data technologies.

Big data is a term used to refer to the study and applications of data sets that are so big and complex that traditional data-processing application software are inadequate to deal with them. Big data challenges include capturing data, data storage, data analysis, search sharing, transfer, visualization, querying, updating, information privacy and data source. There are a number of concepts associated with big data: originally there were three concepts: volume, variety, velocity (Laney, 2001). Other concepts later attributed with big data (Goes, 2014) and (Bernard, 2014).

Lately, the term "big data" tends to refer to the use of predictive analytics, user behavior analytics, or certain other advanced data analytics methods that extract value from data. E- Da'wah certainly can benefit and be improved if these techniques are used.

In the same context of big data, e-Da'wah also can benefit from Data mining technologies. Data mining is the process of discovering patterns in large data sets involving methods at the intersection of machine learning, statistics, and database systems (Soumen , 2006). Data mining is an interdisciplinary subfield of computer science with an overall goal to extract information (with intelligent method) from a data set and transform the information into a comprehensible structure for further use (Soumen , 2006) (Clifton, 2010) (Hastie, 2009) (Han, 2011). Data mining is the analysis step of the "knowledge discovery in databases" process, or KDD (Fayyad, 1996). Aside from the raw analysis step, it also involves database and data management aspects, data pre-processing, model and inference considerations, interestingness metrics, complexity considerations, post-processing of discovered structures, visualization, and online updating (Soumen , 2006).

4.1.2.1.4 Database Web Services for e-Da'wah (DBWS-ED)

The Electronic Islamic Da'wah is based on three parties: Da'ee (preacher), Invited, and intermediary means. This trio is present in the Internet with a concept called: Web Service. Web Services are the means by which devices (application-to-application) communicate over the World Wide Web regardless of platform, language, or data formats. The data, and potentially the business rules, live on some other server on the network.

The Database Web services technology is a database approach to Web services. It works in the following two directions:

- Accessing database resources as a Web service;
- Consuming external Web services from the database.

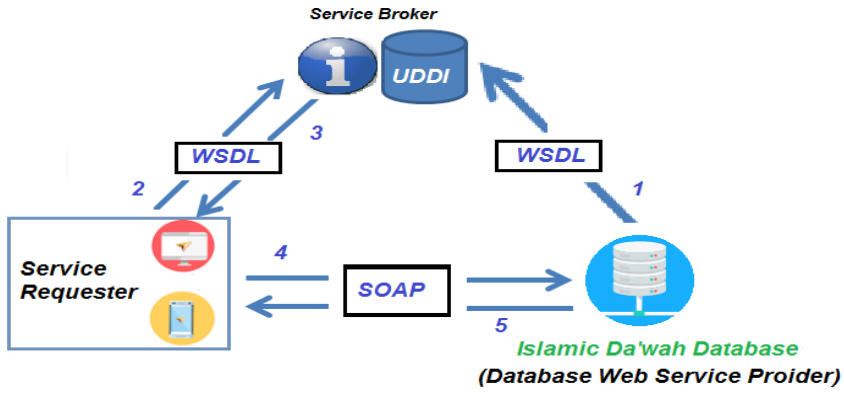


Fig 6. Database Web Services for e-Da'wah (DBWS-ED)

4.1.2.1.5 Time series database for e- Da'wah (TSDB-EID)

The importance of time factor appears in planning and prioritization. Planning makes it possible to set timetables that control the start and end of activities; this makes the person able to evaluate his work and the extent of his commitment to the time period specified for its implementation, as well as the timely establishment of programs and the prevention of conflicts with other activities.

TSDBs are databases that are optimized for time series data. Software with complex logic and rules (Ex.: Islamic Da'wah Data base System) and high transaction volume for time series data may not be practical with traditional relational database management systems. Flat file databases are not a viable option either, if the data and transaction volume reaches a maximum threshold determined by the capacity of individual servers (processing power and storage capacity). Queries for historical data, replete with time ranges and roll ups and arbitrary time zone conversions are difficult in a relational database. Compositions of those rules are even more difficult. This is a problem compounded by the free nature of relational systems themselves. Many relational systems are often not modeled correctly with respect to time series data. TSDBs on the other hand impose a model and this allows them to provide more features [19] .

4.1.2.1.6 Context-Aware System for e-Da'wah (CAS-ED)

One of the most important factors of success of e-Da'wah is to identify the surroundings of the invited and the context in which they are located. Therefore, the modern e-Da'wah System should be a Context-Aware System.

CAS-EID is a system that able to detect, at a given moment, several elements (Location, language, age, religion, gender, origin, tendencies, culture, living, means used …) of the context in which the invited is located and to provide, in return, either information or services of Electronic Da'wah adapted to this context and to the changes of elements of the context.

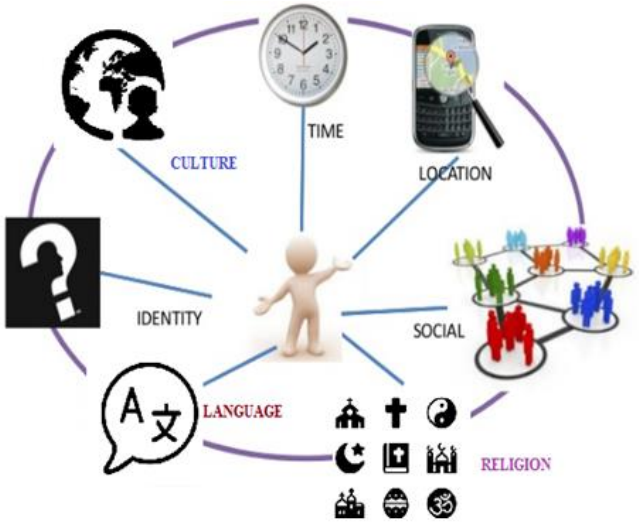


Fig 7. Example of Context Aware for e-Da'wah (CAS-ED)

4.1.2.2 Towards Internet Map for e-Da'wah purposes

In order for the e-Da'wah to be successful, it must have the ability to influence, and no influence without knowing the map of space (Internet Map) of the e-Da'wah. It's a very wide and multi-level global space. The Internet global network is a technological phenomenon, its exceptional complexity surpasses anything mankind has ever created. What we are dealing with here is a huge quantity of utterly unstructured information.

4.1.2.2.1 Internet Map for e-Da'wah purposes (IM-ED)

The internet Map for e-Da'wah (IMED) is a scheme displaying a relationship between objects: websites, web applications, social networks, tools, surfer languages, users, in general any object related to Islamic Da'wah purpose on the internet. Every object has its own code, size and/or position on the map.

The internet Map for e-Da'wah (IMED) is an attempt to look into the hidden structure of the network, fathom its colossal scale, and examine that which is impossible to understand from the figures of statistics.

How we use social network analysis techniques and tools to analyze our networks. Using this techniques, tools and information to shape and refine the e-Da'wah strategy can make it more effective.

In order to increase e-Da'wah activities and to make them more effective and influential, It becomes imperative to understand, study and analyze social networks so that the vision becomes clear and the strengths and weaknesses points are clear; and to identifying and measurement the influence points in social networks.

4.1.2.2.2 Social network analysis for e-Da'wah purposes (SNA-ED)

One of the most prominent features of our modern world is that social relations have moved into virtual space (social network on internet) and become more active and powerful than the real world.

Social network analysis (for e-Da'wah purposes) is the process of investigating social structures through the use of networks and graph theory (Evelien, 2002). It characterizes networked structures in terms of nodes (individual actors, people, or things within the network) and the ties, edges, or links (relationships or interactions) that connect them.

Social network analysis has emerged as a key technique in modern sociology. It has also gained a significant following in anthropology, biology, demography, communication studies, economics, geography, history (Martin, 2017), information science, organizational studies, political science, social psychology, development studies, sociolinguistics, and computer science and is now commonly available as a consumer tool (see the list of SNA software) (BBC, 2012) (Lardinois, 2012) (Uni-Georgetown) (Ivaldi).

Social networking potential (SNP) is a numeric coefficient, derived through algorithms (AngerI, 2011) (Riquelme, 2016) to represent both the size of an individual's social network and their ability to influence that network.

What most interested in the e-Da'wah is how to use social network analysis and the various tools to better understand social networks on Twitter or Facebook. We need software to do it. There's too much unstructured data (comments, replies, likes, etc), and cartographic maps must be available.

Social network map, it tells you a story. Who is connected to whom? How are they interacting? Where are the clusters? Who are the influencers? Who are the bridge builders between clusters? Who is in the edges? Who isn't connected? The analysis looks at frequency of interaction, relationship structure (two-way, one-way), and helps reveal structural similarities.

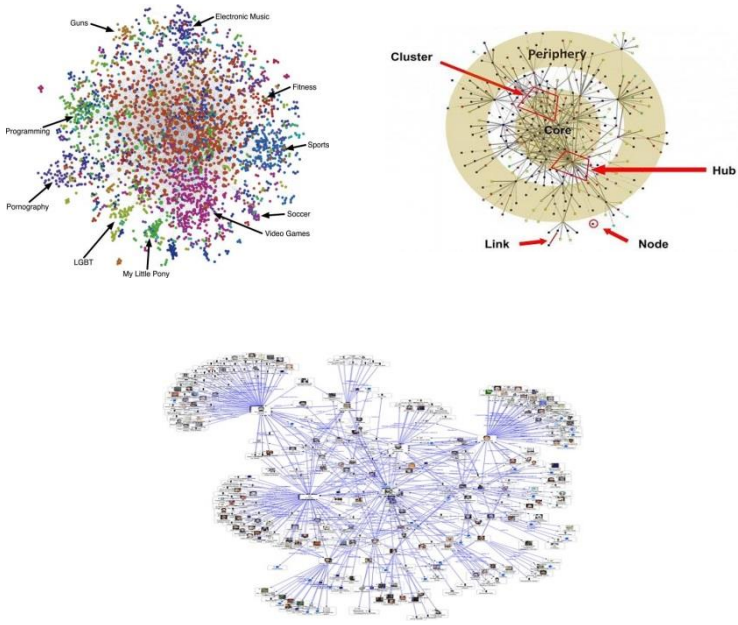


Fig 8. Social Network Analysis. Source: *Monitor Institute* http://www.bethkanter.org

4.1.2.2.3 Social network effects for e-Da'wah purposes (SNE-ED)

Techniques of the influence of direct and indirect relationship is used on Social Network Dynamics. Influence is a complex and subtle force that governs social dynamics and user behaviors. Understanding how users influence each other can benefit the Electronic Islamic Da'wah.

Social influence in social networks has been extensively researched. Most studies have focused on direct influence, while another interesting question can be raised as whether indirect influence exists between two users who're not directly connected in the network and what act's such influence. In addition, the theory of complex contagion tells us that more spreaders will enhance the indirect influence between two users.

4.1.2.3 U-Da'wah

Allah S.W.T said: To Allah belong the east and the West: Whithersoever you turn, there is the presence of Allah. For Allah is all-Pervading, all-Knowing.(Sûrat Al-Baqarah : 115). The poet Abu Ataheh said: Allah has in every movement and

in every tranquility, witness; and in all things he has a sign that he is the one.

The signs of oneness of Allah S.W.T are everywhere, but not every eye sees them. Everyone, whatever his place, is surrounded by signs of oneness of Allah S.W.T. On the other hand, what distinguishes our modern world is the existence of means of information and communication technologies everywhere. The challenge facing the e-Da'wah in our modern world is how to exploit these means spread everywhere to show the existence of Allah S.W.T and his oneness, for all people wherever they are (flexibility) .

Da'wah styles must progress from electronic Da'wah (e-Da'wah) to mobile D'awah (m-Da'wah) and from mobile Da'wah to ubiquitous Da'wah (u-Da'wah). The most significant role of ubiquitous computing technology in u-Da'wah is to construct a ubiquitous Da'wah environment, which enables anyone to know about Islam at any place at any time.

In e-Da'wah, Da'wah is confined to single desk while in ubiquitous Da'wah u-Da'wah, it is very much flexible :

u-Da'wah = e-Da'wah + m-Da'wah.

4.1.2.4 Data Monitoring System for e-Da'wah (DMS-ED)

Data Monitoring System for e-Da'wah is a set of means that lead the act of having procedures, technologies and benchmarks in place for tracking the quality and usefulness of data of Electronic Islamic Da'wah. Data monitoring allows the systems to proactively maintain a high, consistent standard of data quality. By checking data routinely as it is stored within applications, e-Da'wah can avoid the resource-intensive pre-processing of data before it is moved. With data monitoring, data is quality checked at creation time rather than before a move.

The first step to monitoring data is establishing data quality metrics or criteria that are tied to e-Da'wah objectives; the results are compared over time, allowing for improvement and deeper understanding of how the data can best be used.

4.2 E-Da'wah Workers

E-Da'wah is a multidisciplinary work, and since Islamic Da'wah has a universal dimension; the individual efforts are always very ineffective. Therefore, to be a successful Islamic Da'wah, the Electronic Islamic D'awah is proposed to be part

of a collective framework that includes the following categories of specialists:

Table 3: e-Da'wah Workers

Categories of specialists	Roles
Scholars of Sharia	Determination of the legitimate objectives (المقاصد الشرعية) and the content (C(c1,c2,c3,…cn))of the e-Da'wah and its conformity with the Holy Quran and Al Sunnah.
ICT specialists	Development modern and appropriate ICT strategy and systems for e- Da'wah . M(m1,m2,m3,….,mk)
Specialists in the field of multimedia	Design and develop multimedia strategies and applications, systems and products that persuade, inform, entertain, educate, the user (Invited).
Scientists in psychology, education and sociology.	- Identifying the different psychological, social, educational, cultural and intellectual styles and patterns of each of the invited and Dûat (preachers). - Identify the appropriate relationships between these styles and patterns to achieve a successful e-Da'wah.
Scholars in all scientific and literary disciplines	Successful e-Da'wah requires every scientist specialized in his knowledge, especially with regard to scientific miracles,(AlîJaz الإعجاز العلمي) which has a fundamental role in the influence .
Volunteers	Any Muslim who can help in e-Da'wah especially in: -Dissemination of e-Da'wah content in social networks -Help monitor and collect information for e-Da'wah around the world in all villages, cities, states and remote areas…

All of what were mentioned in this paper of the components of the proposed approach; it can be achieved by setting up a center for e-D'awah as shown in the following figure:

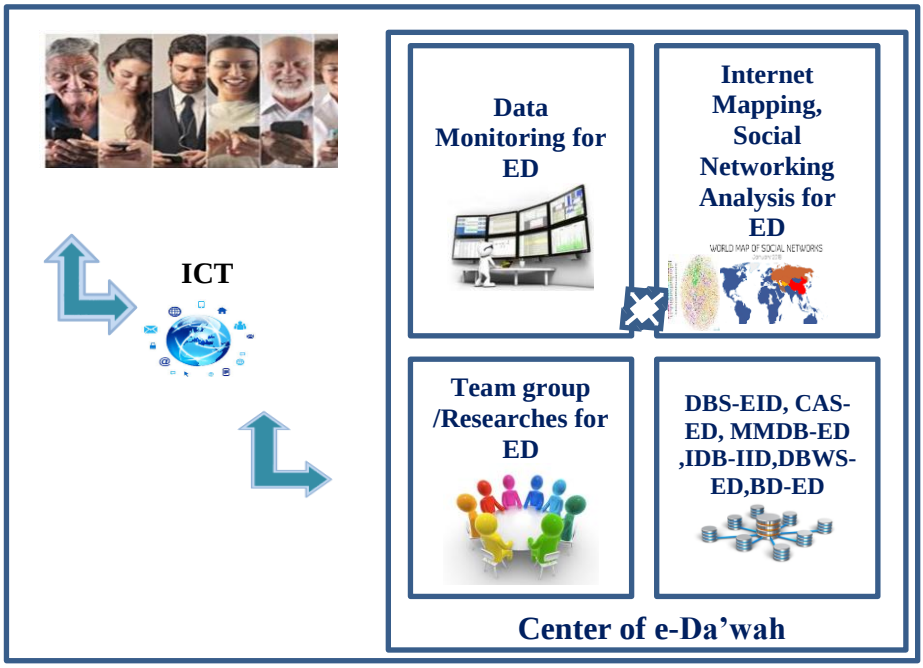


Fig 9. E- Da'wah Center

5.0 DISCUSSION

The most important thing facing those interested in the field of e-Da'wah is the lack of sufficient statistics and data to give a clear vision of the e-Dawah, mainly due to the lack of specialized institutions for collect , analyzed and exploited the data related to e-Daw'ah But this does not prevent us to forming an accurate perception through the study of data of similar fields (ICT statistics, e-field,…).

"The new 2018 estimates reveal that there continues to be a general upward trend in the access to and use of information and communication technologies," says Brahima Sanou, Director of the ITU Telecommunication Development Bureau. "Access to telecommunication networks continues to increase, in particular in mobile connections. However, affordability should continue to be at the top of our priorities for the digital economy to become a reality for all."

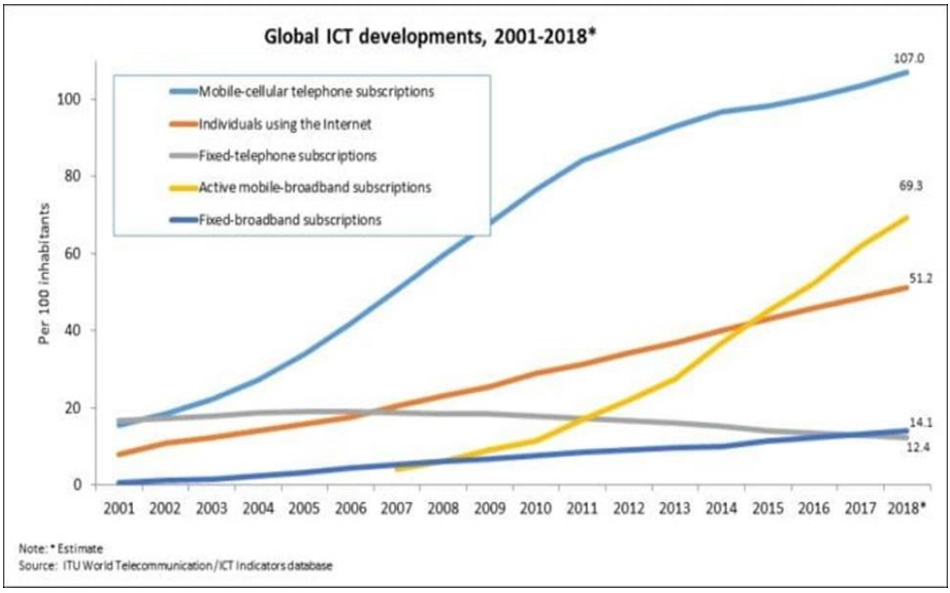


Fig 10. Global ICT deveopments (Source :ITU World Telecommunication/ICT indicators database)

ITU, the United Nations specialized agency for information and communication technologies (ICTs), estimates that at the end of 2018, 51.2 per cent of the global population, or 3.9 billion people, will be using the Internet (ITU, 2018) .

5.1 Where can ICT make the most difference?

Analysis shows that the quality of education has the highest correlation (72% correlation) with ICT in the 2019 assessment, consistent with 2018 results. To a lesser extent, with slightly lower correlations, (Industry, Innovation and Infrastructure) and (Gender Equality) also show correlations with ICT. These appear to be the areas where ICT development can have the greatest impact, and where there are opportunities for policymakers who are focused on improving these fields in their countries (Huawei, 2019). The D'awah can be considered as a kind of education which is to convey the idea through the best ways and wisdom.

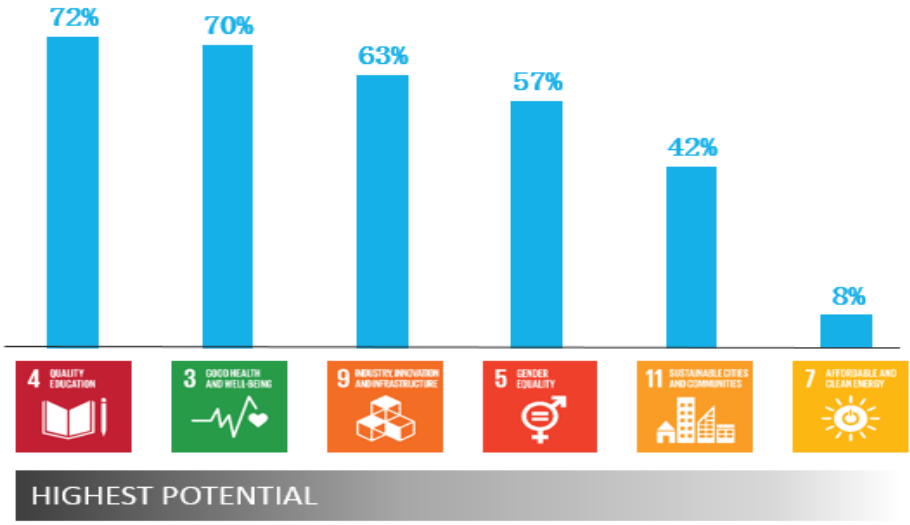


Fig 11. Where can ICT make the most difference? (Huawei, 2019).

5.2 E-Dawah as Service: Evaluation of the impacts of Information and Communications Technology (ICT) on Quality of Service

Considering e-Daw'ah as a service we can benefit from the study (Hananu, 2015); this study aims to evaluate the effects of Information Communication Technology on Quality Customer Service Delivery.

Data was analyzed and presented in descriptive and narrative forms using statistical methods and SPSS (Statistical Package for Social Sciences) and finally the effects of ICT usage on quality of service delivery was evaluated using likert scale analysis. This section deals with the level of agreement of customers with regards to how ICT affects the services. The responses were measured with a five-point Likert-type rating scale, where strongly disagree (SD) = 1; disagree (D) = 2; neutral (N) = 3; agree (A) = 4; and strongly agree (SA) = 5.

The customers' responses are presented in Table 4. The data presented in the Table 4 indicates the effects of ICT on customers' service delivery which includes the following (Hananu, 2015) :

A. Facilitation of convenient business hours

The analyses of responses of customers in Table 5 show that 370 of the respondents representing 77.7% agreed that the adoption of ICT has really facilitated convenient business hours. This show that majority of the respondents agreed that ICT has really help in this area. The computed mean of 3.79 confirm that ICT has made business hour convenient.

B. Enhancement of prompt and fair attention

The data presented in the table indicated that the respondent actually agreed that, ICT product enhances prompt and fair attention to customers. The mean of 3.86 Indicates that ICT has increase the level of responsiveness.

C. Speeding up the services

The customers responded negative to the effect that, the ICT slows down the services. The date presented in Table 5 shows clearly that, 65.6% of the respondent disagreed with that fact. There is clear indication that customers think that ICT has helped speed up transaction processing. This is confirming by the mean of 2.32.

D. Enabling customers to access their accounts at any location at any time

The data presented in the Table 4, shows evidence that there is slight agreement by the customers that, ICT enables the customers to have access to their accounts at any location at any point in time. The computed means of 3.52 and 3.56 for statement 4(e) and 4(f) respectively support these arguments.

E. Communication, security and transactions notification

That data presented on the table further shows that, ICT makes communication easily, facilitates credibility and security of customer of the service and makes the customer to know the transactions that affect his or her account at any time. These arguments are supported by the means of 4.36, 4.07 and 4.12 respectively.

Table 4: ICT Products or Delivery Channels Effects on Customer Service Delivery (Hananu, 2015) .

Response	Strongly Agree	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree	Total	Mean

	(5)				(1)		
ICT facilitates convenient business hours							3.79
Frequency	98	272	37	46	23	476	
Percentage	20.6	57.1	7.8	9.7	4.8	100	
ICT enhance prompt and fair attention							3.86
Frequency	118	233	89	10	26	476	
Percentage	24.8	48.9	18.7	2.1	5.5	100	
ICT slows down the services							2.32
Frequency	33	66	71	174	138	476	
Percentage	6.9	12.6	14.9	36.6	29.0	100	
ICT enables customers to access their accounts at any location							3.52
Frequency	136	109	117	93	21	476	
Percentage	28.6	22.9	24.6	19.5	4.4	100	
ICT enables customers to access their account at any point in time							3.56
Frequency	95	184	105	76	16	476	
Percentage	20.0	38.6	22.0	16.0	3.4	100	
ICT makes enquiries on accounts faster							4.08
Frequency	142	226	88	4	16	476	
Percentage	29.8	47.5	18.5	0.8	3.4	100	
ICT makes communication easy							4.36
Frequency	264	144	48	14	6	476	
Percentage	55.5	30.3	10.1	2.9	1.3	100	

ICT facilitates credibility and security of service							4.07
Frequency	186	188	73	9	20	476	
Percentage	39.1	39.5	15.3	1.9	4.2	100	

The data we have presented (Fig 10,Fig 11 (Huawei, 2019)and Table 4 (Hananu, 2015))illustrates the importance of exploiting ICTs in e-Da'wah field (e-Da'wah as service and ICT as Infrastructure).

On the other hand, similar to other areas such as e-commerce, e-marketing, e-education, and etc, where these fields were initially framed within approaches determine their course and tools. Such an approach constitutes a general vision to the development of applications and technologies within that specific framework. What is noticeable is that most of the current works in the field of e-Da'wah are dispersed and does not share a single vision. In addition, absence of a comprehensive framing of e-Da'wah be a reference for the development of applications in this field.

The most important result of the proposed approach is to provide a framework for the development of systems and applications in this area, within the following axes:

- Wisdom as a set of relationships can be materialized as Database System for E-Da'wah (Reference Guide) (DBS-ED); this system consists of the following components :

- Multimedia databases for e-Da'wah (MMDB-ED)
- Intelligent Database for Intelligent Da'wah (IDB-ID)
- Big Data Analytics and Data Mining for e-Da'wah (BDA-ED and DM -ED)
- Database Web Services for e-Da'wah (DBWS-ED)
- Time series database for e-Da'wah (TDB-ED)
- Context-Aware System for e-Da'wah (CAS-ED)

- Knowledge insight can be materialized as System of Internet Map for e-Da'wah :

- Internet Map for e-Da'wah purposes (IM-ED)
- Social network analysis for e-Da'wah purposes (SNA-ED)

- Social network effects for e-Da'wah purposes (SNE-ED).
- Data Monitoring for e-Da'wah.

Also through this approach and its techniques that two characteristics can be achieved to make the e-Da'wah more effective:

- Take into consideration the tendency of peoples to messages with short and effective content and avoid long, detailed and tiresome content.

- Through this approach, it is possible to find direct and indirect ways and means to convey the Islamic call to non-Muslims who don't have inclination and knowledge of Islam.

E-Da'wah as Da'wah work is a very huge work and has a universal dimension; therefore, the future extension of the proposed approach will be within the following axes

- E-Da'wah Workers (Team group).
- U-Da'wah

What is proposed in this paper is a comprehensive and modern reference approach that takes into consideration the latest developments in the field of information and communication technologies. It is not just a method, technique, application or program to undergo an empirical experiment and then analyze experimental results. It is a reference approach presented for modification and criticism.

6.0 CONCLUSION

Muslims face a reality that raises many questions that go beyond traditional issues of an individual nature to more significant and profoundly relevant issues that are relevant to the Islamic identity and message of Muslims in today's world and their connection to humanity around them.

Islam has flexibility, capacity, and the ability to renew and change judgments, which is consistent with the human and society development. Based on quranic motivation and ahâdeeth, it is concluded that the greatest task of the Muslim in this world is Da'wah to Allah S.W.T with wisdom and knowledge insight (Elhikmah and Elbasirah). Since wisdom is to put the right thing in the

right place by the most appropriate way right on time. So in the formal approach, the wisdom is the best relationship between a set of elements to achieve a goal.

What is noticeable is that most of the current works in the field of e-Da'wah are dispersed and does not share a single vision; it is clearly absent of a comprehensive work based on scientific (Islamic, psychological, social, sciences,…) and technological (ICT) rules be as a reference guide to determine the most appropriate way (contents and methods) to invite the various invited taking into account their different human, psychological and scientific characteristics.

In this paper we proposed a framework and materialization of its elements within the following axes

- Wisdom as a set of relationships can be materialized as Database System for E-Da'wah;

- Knowledge insight can be materialized as System of Internet Map for e-Da'wah.

Finally, this proposed approach remains continually modified and criticized to keep pace with the rapid changes of our modern world. As a future work, this research will seek to:

- Extend this approach in terms of developing and deepening the concept of ubiquitous Da'wah (u-Dawah);

- This approach will be achieved (Inch'Allah) through the establishment of an international center for e-Da'wah that promotes the Islamic Da'wah.

ACKNOWLEDGEMENT

This paper was partially supported by International Islamic University of Malaysia under (FRGS19-083-0691) research project.

REFERENCES:

Al-Luhaidan, A. b. (1997). Inviting non-Muslims to Islam in the city of Riyadh. Evaluation study. Riyadh: PhD thesis.

Al-Nghaimishia, A. (2003). Psychological of Da'wah . Dar Almouslim .

Al-Raqab, S. (2005). Conference of Islamic call and changes of the age. Contemporary means and methods of Islamic preaching. Gaza .

AngerI. (2011). Measuring influence on Twitter. ACM.

BBC. (2012). Facebook friends mapped by Wolfram Alpha app. Récupéré sur bbc.com: https://www.bbc.com/news/technology-19699776

Bernard, M. (2014). big-data-the-5-vs-everyone-must-know. Consulté le 2019, sur /www.linkedin.com: https://www.linkedin.com/pulse/20140306073407-64875646-big-data-the-5-vs-everyone-must-know

Cambridge. (2019). Cambridge dictionary. Consulté le 2019, sur Cambridge dictionary: https://dictionary.cambridge.org/dictionary/english/wisdom

Clifton, C. (2010). Encyclopædia Britannica: Definition of Data Mining.

Evelien. (2002). Social network analysis: a powerful strategy. Journal of Information Science.

F, C. E. (1972). Further normalization of the database relational model. Further normalization of the database relational model". Data Base Systems. Prentice-Hall. ISBN 013196741X.

Fayyad. (1996). From Data Mining to Knowledge Discovery in Databases. American Association for Artificial Intelligence.

Garaba, Z. M. (2015). Introduction to the science of Da'wah. Constantine, Algeria.

Goes, P. B. (2014). Design science research in top information systems journals. MIS Quarterly Vol. 38 No. 1 pp. iii-viii, https://misq.org/misq/downloads/download/editorial/595/.

Han. (2011). Data Mining: Concepts and Techniques. MORGAN KOFMAN.

Hananu, B. (2015). Evaluation of the Effects of Information and Communications Technology (ICT) on Quality Customer Service

Delivery in the Banking Industry Evidence from Selected Banks in the Tamale Metropolis". International Journal of Innovation and Scientific Research ISSN 2351-8014 , Vol. 15 No. .

Hastie. (2009). Hastie, Trevor; Tibshirani, RobThe Elements of Statistical Learning: Data Mining, Inference, and Prediction. New York: Springer-Verlag New York.

Huawei. (2019). The Huawei ICT SDG Benchmark Report.

ITU, t. U. (2018). https://www.itu.int/en/mediacentre. Récupéré sur https://www.itu.int/en/mediacentre: https://www.itu.int/en/mediacentre

Ivaldi. (s.d.). We-Sport: from academy spin-off to data-base for complex network analysis; an innovative approach to a new technology. Ivaldi M.; Ferreri L.; Daolio F.; Giacobini M.; Tomassini M.; Rainoldi A. "We-Sport: from academy spin-off to data-base for complex network aJ Sports Med and Phys Fitnes. , J Sports Med and Phys Fitnes. 51 (suppl. 1 to issue 3).

Laney, D. (2001). 3D-Data-Management-Controlling-Data-Volume-Velocity-and-Variety. Consulté le 2019, sur META Group: https://blogs.gartner.com/doug-laney/files/2012/01/ad949-3D-Data-Management-Controlling-Data-Volume-Velocity-and-Variety.pdf

Lardinois, F. (2012). Wolfram Alpha Launches Personal Analytics Reports For Facebook. Récupéré sur Tech Crunch: https://techcrunch.com/

Ma'ada, A. R. (2010). Da'wah to Allah through the Internet: Their Methods and Means. Riadh.

Martin. (2017). Complex structures and international organizations[Analisi e visualizzazioni delle reti in storia. L'esempio della cooperazione intellettuale della Società delle Nazioni. Récupéré sur www.martingrandjean.ch: https://www.academia.edu/34761560/Analisi_e_visualizzazioni_delle_r

eti_in_storia._L_esempio_della_cooperazione_intellettuale_della_Societ%C3%A0_delle_Nazioni

Oxford. (2008, 05 06). Oxford Islamic. Consulté le 12 22, 2019, sur Oxford Islamic: http://www.oxfordislamicstudies.com/

Riquelme. (2016). Measuring user influence on Twitter: A survey. Information Processing & Management. . 949-975.

Soumen . (2006). Data Mining Curriculum: A Proposal (Version 1.0) ACM SIGKDD. Récupéré sur .kdd.org: https://www.kdd.org/exploration_files/CURMay06.pdf

Techopedia. (2019). https://www.techopedia.com/definition/14703/intelligent-database. Récupéré sur techopedia.com: https://www.techopedia.com/definition/14703/intelligent-database

Uni-Georgetown. (s.d.). Institute of Reproductive Health Georgetown University. Récupéré sur irh.org: http://irh.org

Zeid, A. M. (2008, 3 2015). alukah.net/culture/. Consulté le 12 22, 2019, sur alukah.net: http://www.alukah.net/culture/0/2066/