

Principles of Electronic Evidence in Sharī'Ah and Law-A Comparative Study

Hafsa Abbasi<sup>\*</sup> Dr. Summayyah<sup>\*\*</sup> Dr. Syed Naeem Badshah<sup>\*\*\*</sup>

#### Abstract

This article is aimed at addressing the issue of principles of electronic evidence from Shari'ah perspective. As principles of electronic evidence in common law are quite established. But this area is not addressed extensively in Islamic law. Importance of these evidences cannot be denied as most of the lawsuits now a days involve electronic evidence. It has been accepted generally, that rules of evidence for electronic evidence are the same as for physical evidence. So it is very helpful tool to make research in this area in Islamic law. It is also observed that means of proof in English and Islamic law are the same. Present study shall apply Sharī'ah rules of evidence on electronic evidence and explore their permissibility status from the perspective of Islamic law. Major areas to be explored in this research are oral testimony, documentary evidence and circumstantial evidence. **Keywords:** Electronic, evidence, Sharī'Ah, common law, lawsuit

#### 1. Introduction

Electronic evidence are permeating in all fields of our lives. From our mobile phones to official computers, electronic microwave oven to ATM machines everything is generating electronic evidence. Large number of clues can be taken out from mobile phone records, computer history and social media interactions. Where these electronic means have made it easier to catch criminals, at the same time criminals have started using these mediums for stealing and committing crimes. Most of the lawsuits these days involve electronic evidence. These circumstances have forced lawmakers to make necessary changes in law in order to incorporate changes to cope up with high-tech revolution. Developed countries are incorporating these changes quite vigilantly. Developing countries, on the other hand are also trying to accelerate their speed of new legislations.

The talks of improving the legal system for addressing high-tech issues are headed too far. But there is a strong need to address these issues from the perspective of Islamic law of evidence. There are no direct precedents of electronic evidence in Islamic law. However, traces can be found out based on other means of proofs in Islamic law. Like, Documentary evidence, circumstantial evidence and oral testimony etc.

This article is aimed at exploring the principles of evidence in classical pick and analysing them from the perspective of modern principles of electronic evidence in English law this

<sup>\*</sup> Lecturer (Law), Allama Iqbal Open University Islamabad, Ph.d scholar (International Islamic University Islamabad) in "Admissibility of Electronic Evidence; A comparative study in Sharī'ah and law.

Email: hafsa.abbasi@aiou.edu.pk

<sup>\*\*</sup> Assistant Professor, Department of Islamic Studies, National University of Modern Language, Karachi.

Email: srafique@numl.edu.pk

<sup>\*\*\*</sup> Chairman. Islamic Studies, The University of Agriculture Peshawar.

Email: syenbs@yahoo.com

will help in checking the permissibility status of modern principles of electronic evidence from Sharia perspective.

Brief review of the literature on the topic of electronic evidence must start with one of extensive book "electronic evidence", is compiled by Stephen Mason, with his team of authors. "Searching and seizing computer and obtaining electronic evidence in criminal investigation", <sup>1</sup> is another source book dealing with these issues. "Admissibility of electronic evidence in court fighting against Hi-Tech crime results of European study",<sup>2</sup> is another wonderful research dealing with principles of electronic evidence in western law. From among the articles in Law of different western countries few remarkable articles include, "Law of Evidence in Canada: the Uniform Evidence Act, Twelve Years Later"<sup>3</sup>, "Admissibility of E-Evidence under the Federal Rules of Evidence" <sup>4</sup> and "Digital Evidence and the U.S. Criminal Justice System, Identifying Technology and Other Needs to More Effectively Acquire and Utilize Digital Evidence". <sup>5</sup>

For exploring the principles of Islamic law of evidence, *Imām Sarakhsī's* <sup>6</sup> *kitāb al-shahadāt* in his book al-*Mabsūt*,<sup>7</sup>is worth mentioning. The main focus of *Imām sarakhsī* is to teach his disciples techniques of getting flawless and authentic evidence.. *Imām Kasāni* in his book *Badāi'-al-Sanāi'*<sup>8</sup> and *kitāb al-Shahadāt*, has compiled detailed debate on oral-testimony. *Imām Marghinanī* <sup>9</sup> has given a brief yet very compact insight into the Islamic law of testimony. 'Ibn Rushd has also given wonderful comparison four school thoughts. <sup>10</sup>

Circumstantial evidence (Qarīna) is a very interesting and helpful field in Islamic law of evidence, which helps solve the riddles of electronic evidence for modern world. An important book of worthy jurist 'Ibn-Qayīm, al-Jaūzīah, titled "Al-Turuq al-Hukmīyah fī al-Siyāsah al-Shar'īah"<sup>11</sup>, gives a brief overview regarding the legal validity and status of circumstantial evidence in Islamic law. Article, titled, "Al Ouwah al-Thabūtiah lil-Mu'amalāt al-Ilectroniah"<sup>12</sup> is latest study on electronic laws, discussing legisltation of number of muslim countries regarding incorporation of electronic evidence. An Article titled, "al-Tijārah electroniah 'Ibr al-Internet Ahkāmūha wa atharūha fil figh al-Islāmi wa nizām al-Sau'di"<sup>13</sup> by Dr. 'Ali bi 'Abdullah al-Shehri has written on the same topic. It is basically dealing with Saudi legal system with reference to the electronic laws and legislations. Another article with the topic "Hūkūm Ijrā al-'Aqd bil alāt Itīsāl al-Hadīsa"<sup>14</sup> by the writer 'Ali Mūhīūdin Qaradaghi is a good attempt on this topic. It compares modern electronic laws with that of classical Islamic Law of Shahādāt. Writer cites sources from the classical literature and takes out the similarities and dissimilarities of modern law of electronic evidence and Islamic law of evidence. Another article "Reception of electronic Evidence from Islamic perspective", is a good analysis of electronic evidence from Islamic law perspective.<sup>15</sup> This article focuses on documentary nature of electronic evidence.

"Evidence in Islamic law reforming Islamic evidence law based on Federal rules of evidence" by Maha Abul Faraj<sup>16</sup> is a good analysis of American law of evidence (Federal rules of evidence) from the perspective of Islamic law.

### **1.1 Definition of Digital Evidence**

"Digital evidence is defined as any data stored or transmitted using a computer that support or refute a theory of how an offense occurred or that address critical elements of the offence

#### such as intent or alibi."17

Another simplified definition says; "information and data stored on, received or transmitted by an electronic device". <sup>18</sup>

Keeping in view the above definitions, following characteristics of electronic evidence can be drawn out:

- It is hidden, like DNA or Finger prints,
- It is very easy to alter or destroy.
- It has no limits of border or jurisdiction
- It can be time sensitive. <sup>19</sup>

Estimates may be different but it is widely accepted that electronic commerce (ecommerce) is undergoing explosive growth. Electronic evidence (E-evidence) arising from this field has different forms. Data files, internet postings and emails are perhaps the most common one. E-evidence can have many areas. It can come in the form of so called "background" information. The Background information refers to audit trails, access control data, and other non-printed information. E-evidence can also be a type of residual data that remains on hard drive after being deleted, or in printer and fax memories.<sup>20</sup>

#### I. Principles of Electronic Evidence in Law

Different countries have different laws related to electronic evidence but the principles of electronic evidence are more or less the same. Principles defined by the Association of Chief Police Officers (ACPO) in the UK 'Good Practice Guide for Computer Based Evidence' (Version 3) are the most compact. These are:

"Principle 1: No action taken by law enforcement agencies or their agents should change data held on a computer or other media which may subsequently be relied upon in court;

Principle 2: In exceptional circumstances, where a person finds it necessary to access original data held on a computer or storage media, that person must be competent to do so and be able to give evidence explaining the relevance and the implications of their actions;

Principle 3: An audit trail or other record of all processes applied to computer based evidence should be created and preserved. An independent third party should be able to repeat those processes and achieve the same result;

Principle 4: The person in charge of the investigation (the Incident Manager or the Laboratory Manager) has overall responsibility for ensuring that the law and these principles are adhered to."  $^{21}$ 

Above mentioned principles reveal that electronic evidence should be appropriate to be presented in court of law, that is it should be admissible.

#### 1. Stages of admissibility

The admissibility of physical as well as electronic evidence in the U.S law is dependent on four steps, agreed upon by the legal experts;

- 1. Relevance
- 2. Authentication
- 3. Hearsay rule
- 4. Best evidence rule<sup>22</sup>

### 1.1 Relevance

It is the first step for admissibility of electronic evidence. The evidence which is relevant shell be admitted in a trial. The relevance of evidence is judged by the fact that it has tendency to make any fact more or less probable. It is not necessary that the relevant fact should carry weight to be admitted. It is enough if it has capacity to prove do or disprove consequential facts.<sup>23</sup>

## 1.2 Authentication

Authentication of electronic evidence is the backbone of admissibility. This step is very important because it ensures complete trust or mistrust of the judge on particular piece of evidence. Authentication of electronic evidence must be proved beyond reasonable doubt. Proponent must offer an evidence "sufficient to support a finding that a matter in question is what its proponent claims".<sup>24</sup>

Multifarious sources and types of electronic evidence pose challenges for electronic evidence. These multifarious sources include, data files, metadata, emails, text messages, log files, mobile calls records etc. Different types of evidence require different authentication techniques.

These issues can be resolved if the parties employ proper procedures to preserve and identify ESI. Documenting the chain of custody during the production process is also very important. But it must be anticipated that not all the parties will have the procedures rightly placed. So there may be disputes regarding the authenticity of documents.

Due to the difference in types of electronic data, authentication techniques vary according to the nature of a file or a document. In other words, the difference in the nature of electronic files changes the evidential foundation of such documents, e.g. emails, websites, instant messaging, electronic contracts. Other types include, authentication of hard drives, data storage devices like USB's, etc. Some cases may involve authentication of material from a database. Information from database is entirely a different type of data and files, and are dealt differently in the courts.

Different techniques of authentication includes; authentication through oral testimony, authentication through circumstantial evidence, metadata, hashtags, authentication through chain of custody<sup>25</sup> and data logs.

### 1.2.1 Authentication through Meta Data and Hash Value

Authentication through hash value and meta data are technological method of authentication of electronic evidence. Hash value<sup>26</sup> are principally used for verification of digital data. These values are generated from a document, at the start of the investigation, which makes the integrity of digital material verifiable. Later, at the time of delivering document the hash values are compared to initial ones. It discloses if the documents is tampered or not.<sup>27</sup> Another very important use of hash values is identification and classification of document. Electronic documents are saved in many copies and in many places. <sup>28</sup>

Hash values can be inserted into original electronic documents when they are created to provide them with distinctive characteristics that will permit their authentication.

Another way an electronic evidence could be authenticated is by examining the metadata

for the evidence. Metadata is commonly described as "data about data," and is defined as "information describing the history, tracking, or management of an electronic document.<sup>29</sup> *Appendix F* to *The Sedona Guidelines: Best Practice Guidelines & Commentary for Managing Information & Records in the Electronic Age* defines metadata as "information about a particular data set which describes how, when and by whom it was collected, created, accessed, and how is it formatted (Including data, demographics such as size, location, storage requirements and media information)." <sup>30</sup>

### **1.3 Hearsay Rule**

Hearsay is the declaration made by someone other than the declarant, while testifying at court trial or hearing. This statement is offered as evidence to prove the truth of the matter asserted. Common law recognizes the rule against hearsay. Hearsay issues are confronted while dealing with electronically stored information is sought. There are issues like, whether a statement made by a computer can be termed as hearsay or not. Law of evidence states that hearsay statements must be uttered by human beings. So, the issue arises as to how a PC can be cross-examined, and whether the PC "knows" something, and if it is an original thought or something that has been fed into it.<sup>31</sup>

Above statements seems impractical hypothesis but when electronic means are used as source of communication, such issues are pervasive. Such statements must be verified by the persons who made these statements. In this case witness with knowledge shall be called.

Most of the communications nowadays are in electronic medium, such as, e-mails, text messages, chat rooms, internet postings, Facebook and YouTube. These electronic communications carry human statements. Communications include observations of events around, statements about plans, motives, and feelings. All of this data is transmitted through electronic medium.<sup>32</sup>

### 1.4 Best Evidence Rule

Best Evidence Rule is the fourth and last stage of admissibility. It is also one of the basic requirement that the evidence rendered in the court, must be original, real, primary, and direct. The doctrine of best evidence rule is based on the same notion that a high level of trust and integrity must be established when the best evidence is presented before the court.

The traditional principle of documentary evidence "Best Evidence", interpreted as a requirement of the original copy, is an impractical requirement with regards to electron records. Researches have shown that Best evidence rule is meaningless in the electronic environment.<sup>33</sup>

The reason of this new theory is the absence of an original record in the digital environment. But it is necessary to refer to an unbroken line of traces left by all those who interacted with the record or to the legitimate custody of a professional who can account for them.<sup>34</sup> It is possible to prove about the electronic records that they have the "force of original". <sup>35</sup>

The copies produced through a mechanical process are exactly identical to the original. There may be little difference in the hidden information (Meta data) but the main text is the same. If the record is kept in the safe custody and produced in the ordinary course of business, there is no problem in admitting copies. The copies, no doubt would be subject to provenance.

There are many countries in world that have legalized secondary evidence by force of law. However, there are some states in USA,<sup>36</sup> that still have the Original writing rule in place. But these states, by virtue of practice, are no longer capable of keeping up with the original writing rule. They have not explicitly legislated or stated that they have abolished the original writing rule but their course of practice and decisions depict that they have curtailed the use of this principle in the case of electronically stored information.

## 1. Other Means of Proofs

## 2.1 Oral Testimony

Oral Testimony plays a vital role in the journey of electronic evidence. For instance, as stated above, when the e-evidence is presented in court the first thing to be checked is whether this statement is fed into computer by human input? If yes, then witness will be called to verify. There are many other cases when witnesses shall be called, like authentication of different electronic records in data basis, or soft wares.

It has been recognised by different courts that witness with knowledge should carry personal knowledge about the information testified. But personal knowledge does not imply to advanced technical knowledge. For instance, it is not necessary that witness has programmed the computer. Knowledge is considered sufficient, if it is for maintenance and technical operations i.e. person has witnessed entrance of data. <sup>37</sup>

Oral testimony can be required when there are questions regarding; completeness of record, or methods and procedures of inputting data, or allegations of tampering of data. In these cases the prosecutions must be prepared for presenting witness with knowledge to address such issues. <sup>38</sup>

Other cases when oral testimony may be required include authentication of emails, or instant message chats etc. i.e cases in which data is fed by a human being. For instance, in case *Harper case*, <sup>39</sup> appellant presented a capital card, during travelling to London. Revenue inspection protection officer had to prove that it is a stolen card, as revealed from the record.

The evidence, was rejected in appeal because the officer could not justify the reliability of computer record, through his personal knowledge.

Here another important point is that if the matter is of technical nature, expert testimony shall be acquired by court. Qualification of experts shall be approved by court.

## 2.2 Documentary Evidence

modern age the definition of documents has expanded to many new types of evidences, like CD's, Usbs, emails, messages, web pages, public documents (electronically generated). These expanded definitions of documentary evidence are endorsed by most of the legislations through-out the world. Like, UNCITRAL Model law on Electronic Evidence<sup>40</sup>, Uniform Act of Australia<sup>41</sup>, Common law of England. Etc. <sup>42</sup>

There is a group of countries which expressly consider electronic document equivalent to

paper documents, and give them values of Documentary evidence at trial. Deep analysis of 16 European countries<sup>43</sup> show such equivalence. <sup>44</sup>

### 2.3 Circumstantial Evidence

In many cases when there is problems of anonymity, circumstantial evidence plays a vital role.<sup>45</sup> For instance, when authorship is the problem such cases largely depend on circumstantial evidence for instance, in case of child pornography where chats were involved. Evidence gathered from defendant's residence, which was connected to the chats, the proof offered by the Investigation officer was sufficient evidence to prove authorship. <sup>46</sup> Circumstantial evidence sometimes prove to be decisive in cases involving electronic evidence. For instance, *U.S vs. Simpsons*<sup>47</sup> and *Christian Augilar Case*<sup>48</sup>. Both these cases show the unavoidable importance of circumstantial evidence in cases. Sometimes the nature of circumstantial evidence is that it is in electronic form (being an aid for solving physical crime like in Augilar case) and sometimes it is in physical form but it helps in solving a case of electronic crime. Both the cases are briefly explained below:

a) In *U.S v. Simpsons* case, an electronic crime was solved with the help of circumstantial evidence. The defendant denied the authorship of chats between him and FBI agent. Government in response presented number of circumstantial evidence. One of them was, that during chat defendant gave his house number, street number and email address to the Investigation Officer. The same pieces of information was recovered from defendants' house during search operation. So the claim of the defendant that he is not the author of the conversation was rejected.

b) *Augilar* case is about a murder, which took place in 2012. Augilar was murdered and his dead body was found from a grave 60 miles in west from his residence. He was last seen with his friend Bravo. Police found out that Bravo had connection with his disappearance, because Augilar's backpack was recovered from Bravo's possession. Electronic evidence helped investigation officers solve this case. Some pieces of evidence from Bravo's cell phone were really helpful. It was found out that in cache of his phone's face book, there was a screen shot of Siri search made near time of Augilar's disappearance that said, "I need to hide my roommate". With the help of tower which received the phone's signals, it was further investigated that Bravo had moved far in west after disappearance. In the end it was discovered that flash light app of phone was used for more than one hour after disappearance. Bravo was tried in court in 2014. Finally he confessed the crime and was convicted of first degree murder.<sup>49</sup>

## II. Principles of Evidence in Islamic law

After having analysed English legal system on electronic evidence, this article shall move to its second part which is principles of evidence in Islamic law. it will not be incorrect to state that the basic structure of both the legal systems is not really different from each other. Because primary means of proofs are same in both of them. Like oral testimony, documentary evidence, circumstantial evidence etc. The differences in Islamic law from English legal system shall be highlighted here which will be helpful for drawing rules for electronic evidence from Sharī'ah perspective.

In Islamic legal system the judge has a central role in judicial proceedings whose

responsibility is to establish both the right of the Lord (public rights) and the rights of man (Private right) to settle disputes by attaining competent evidence. There are three ways for the judge to acquire knowledge;

- 1. By confession
- 2. By oath
- 3. By evidence

## 2.1 *Shahādāh* – Oral Testimony

Oral Testimony is the back bone of classical Islamic law. The judge transfers the burden of proof on plaintiff, when accused denies committal of crime. Plaintiff is required to bring his witnesses or any other evidence to support his claim.<sup>50</sup> But the first difference in Islamic law is that the witness must have probable character<sup>51</sup>. Qur'ān states;

"And bring to witness two just men from among you and establish the testimony" Not only the character is important but number of witnesses vary from crime to crime in Islamic law. Oral Testimony in Islamic law is classified into different categories, varying according to the nature of crime. *Marghīnānī* states in his book that there are two broad categories of testimony in Islamic law; <sup>53</sup>

1. Testimony in the matters related to right of Allah Almighty

2. Testimony in the matters related to right of man

Numerical strength of witnesses varies in both the above cases. <sup>54</sup>In cases of Hudūd, the rules of testimony are more stringent. Women are specifically excluded from being witness in these cases. In cases of hudūd and qiṣaṣ, witnesses are at liberty either to give or refrain from giving testimony.<sup>55</sup> Witness in Hudūd and Qiṣaṣ must be male.<sup>56</sup> This opinion is unanimously agreed upon by pre-modern jurists, including Imām *Mālik*, Abū Ḥanīfa, Shāfi'ī, and Aḥmad bin Ḥambal.<sup>57</sup>

Essentially, there are four categories of testimony;

- 1. Testimony requiring four witnesses<sup>58</sup>
- 2. Testimony requiring two witnesses<sup>59</sup>
- 3. Testimony of one man and two women<sup>60</sup>
- 4. Testimony of woman alone <sup>61</sup>

# 2.1.1 Women's Testimony

Women's testimony is admissible in financial matters where two women shall testify along with one man.<sup>62</sup> *Imām Abū Ḥanīfa* says that testimony of women is admissible in all matters, whether financial or not, other than *Ḥudūd* and *Qiṣaṣ*.<sup>63</sup> These matters include, marriage (*Nikaḥ*), divorce, freeing of slave, '*Iddah* and *Ṣulḥ*. When a woman is replacing man for testimony, two female testimonies shall be admissible.<sup>64</sup>

*Shafi'ī* differ in this opinion and state that women's testimony is not admissible except in the matters pertaining to money. The reason according to them is that women's testimony is originally inadmissible due to their defect in understanding, incapacity of governance and lack of memory. <sup>65</sup>

*Al- Marghīnānī* is of the view that women can testify originally because a woman has the capability of managing everything which is required for testifying i.e. after watching the

incident, memorizing it, and conveying the relevant information of the incident to the judge. According to *al-Marghīnānī*, it is immaterial whether they are deficient in 'aql. He says that *Hanafīs* allow women to testify due to the reason that they are capable of meeting the basic elements for testimony although their memory is not that good as compared to men in general. This problem of not being able to remember incidents properly, according to him, is guarded against by making a requirement of two female witnesses for every male witness.<sup>66</sup>

As far as the testimony of women alone is concerned it is considered acceptable by majority of the school of thoughts in the matters which are not exposed to men. These are the cases in which presence and testimony of men is usually not possible, <sup>67</sup> as it does not involve inspection of men. For instance, matters related to child birth, menstruation, clarification of female sexual defects, etc. In these cases, the testimony of a single woman alone is admissible.<sup>68</sup>

### 2.1.2 Hearsay Rule and Exceptions

Hearsay is allowed in Islamic law in very few cases which are not hearsay in its real sense. Islamic law allows hearsay in the cases, which are famous enough. For instance, cases of birth or death are the ones which are known to many. Or the cases of kinship. <sup>69</sup> Al – Majellah states in article 1688;

"It is necessary that the witness should know personally that to which they depose, and that their evidence should be given in that way. It is not permissible for them to give evidence saying, "By hearsay, i.e. I heard from people."<sup>70</sup>

But if, with respect to properly being *waqf*, or to the fact of a person being dead, person gives evidence saying, "I have heard from trustworthy person", his evidence is held good. In matter of *vilāīat* and death and parentage, it is permissible for a person to give evidence by hearsay."<sup>71</sup>

To state simply, a person can give evidence on certain facts, on the basis of public knowledge. This is permissible without witnessing the event or the act, upon which the testimony is being made. It is called *Al-Shahādah bi-Tasāmay'* in Islamic law. So, one can produce evidence concerning, a person's descent, marital status or death, without actually observing or being resent at the time of his birth, his marriage contract or his decease.<sup>72</sup> For instance, news of someone's death is enough to testify about it, because only a few people are present at the time of death. But this news spreads fast that so and so person died. On the basis of spreading of news, it is allowed to testify about it.<sup>73</sup>

### 2.2 Documentary Evidence in Islamic Law

Documentary evidence has extensively been used in early classical Islamic history as well as in late Islamic courts. Quran says;

ياايها الذين ءامنوا اذا تداينتم بدين الي اجل مسمي فاكتبوه وليكتب بينكم كاتب بالعدل74

"O ye who believe! When ye deal with each other, in transactions involving future obligations in a fixed period of time, reduce them to writing let a scribe write down faithfully as between the parties."<sup>75</sup>

This verse implies that the parties ought to write down the contracts which they transact during trade dealings and also to witness upon it.<sup>76</sup>

A large number of Prophet (PBUH)'s traditions established the precedent, regarding the orders about drafting legal documents and their enforceability in the court of law. For instance, Prophet (PBUH) ordered his companion 'Ali to draw up a document in his name at location Hudaībīyah.<sup>77</sup> Similarly, Prophet (PBUH) bought a slave from the companion and drafted written document. He commanded his representatives abroad to draft documents.<sup>78</sup> Classical Islamic law deals with documentary evidence in manuals of fiqh under the book *Kitab al-Shuruţ*. For instance Kitāb al-Maḥāḍir wa'l-Sijillāt, Kitāb al-Shurūţ al-Kabir and Kitāb al-shurūţ al-Saghīr by Abū Ja'far Aḥmad b. Muḥammad b. Salām b. *Al-Taḥawī. Imām Muḥammad* also wrote a book titled, *"Kitāb al-Shurūţ*". Chapters under the title *"Kitāb al-Maḥāḍir wa'l-Sijillāt"*<sup>79</sup> and *Kitāb al-Shurūţ* are being compiled in Al-Fatāwa Hindīah. Imam Sarakhsī wrote a very useful book on shurūt literature.

Documents played vital role in various legal contexts. Heim Gerber states in his book, State Society and law in Islam, about documentary evidence;

"Courts accepted masses of documents in as prima facie evidence. Claims of citizens on the government and vice versa were based solely on documentation-claims of income from *waqf*, taxation, *fetvas* from the *Shaikh-ul-Islam*, and so on were all embedded in documents. All this was certainly an element of major importance in the work of the court." <sup>80</sup>

Documents were admissible subject to the oral testimony. *Wakin* elaborates that the reason of introducing witness system on documentary evidence was, refusal to recognise the written documents. This system helped and improved a number of difficulties regarding the admissibility of documentary evidence. Otherwise, there were a lot of apprehensions about the forgery of the documents. This practice was carried out by a number of witnesses in a city greatly. <sup>81</sup>

But another very important point to be noted here is that, the condition of oral testimony on a document is for private documents, like transactions, marriage contract or debts etc. Public documents does not carry this conditions because they had already been witnessed, sealed and authorized to be used as a legal documents. <sup>82</sup>For, instance in classical Islamic courts, after the decision of a case, a legal documents was handed over to the parties referred as "the bearer of this document". This document was used as future reference.<sup>83</sup> This document helped in avoiding a thousands of cases taking place in future.<sup>84</sup> This document did not stipulate testimony of just witness because it was already a selfauthenticating document, having a seal of the court. In other words it was a public document. Same rule was applied in case of English law of evidence and electronic evidence. Examples of self-authenticating letters at the time of Prophet (P.B.U.H.), is that he that he used to write letters and handed them over to his envoys who sent them forward without knowledge of its contents and the latter accepted them without asking for any verifications. <sup>85</sup> Majority of Muslim jurists accepted documentary evidence as valid means of proof in Islamic law.<sup>86</sup>

## 2.3 Circumstantial Evidence (Qarīna)

The word *qarīna* (pl. *qarā'in*) is derived from the root-word qarana, qarinun, which means connected with, joined, linked, combined, united and affiliated. It is also called *bayyīnah al-zarfīyyah* (circumstantial evidence) or *qarīna al-hāl* (presumption). Literally, it means, in connection with, in conjunction with, and associated with. Judicially, it denotes any signs

and indications which show the existence or non-existence of a fact in issue (the thing claimed),<sup>87</sup> and articulate its evidentiary value according to the rules that govern *qarīna*.

Circumstantial evidence is equally important mean of proof in Islamic law of evidence endorsed by Qur'an, Conduct of Prophets and Righteous caliphs. Ibn Taīmīyyah, 'Ibn *Qayīm al-Jawzīyyah* and '*Ibn Farḥun* were strong supporters of circumstantial evidence into fiqh doctrine of evidence and procedure. *Ibn Qayīm* went so far as stating that physical indicators are stronger evidence than the testimony of witnesses, because they do not lie. Expert witnesses, by knowing how to interpret physical indicators, or how to interpret "the language of things," become indispensable aids to judge.

## III. Sharī'ah Rules for electronic evidence

For the current research, following types of cases and electronic evidence shall be considered. Analysis from Sharī'ah perspective will be helpful while keeping these different categories in mind.

First of all electronic evidence has to be dealt under following types of cases;

- a. Civil Cases
- b. Criminal Cases
- i. Hudūd cases
- ii. Cases pertaining to Ta'zīr punishment.

There are two major categories of electronic evidence which will be subject matter of discussion;

- a. Computer evidence
- i. Computer generated evidence
- ii. Computer stored evidence.
- b. Other electronic evidence
- i. Digital evidence (photographs, videos etc.)
- ii. Medical Forensics.

## 3.1 Civil cases

Criteria of admissibility of evidence in civil cases is not as strict as in Hudūd and Qisās cases. In civil cases mostly the debt transactions or other agreement between the parties were documented in classical Islamic courts and were handed over to private parties for future reference. And the practice of documenting important legal documents is reported to be in practice before the time of Prophet (PBUH). The medium of writing was leather or stones or wood. The time changed and such mediums were replace by paper without any hesitation. On the condition that paper presented in the court is authentic. So in the modern age if this medium is replace by computer, there will not be any repugnancy from Sharī'ah perspective as long as the document or agreement is authentic, that is why it has been accepted in modern *fatāwas* that electronic contacts are in consonance of Islamic law. <sup>88</sup>

## 3.2 Criminal Cases

In criminal cases, other than Hudūd, electronic evidence is admissible subject to test of reliability. For authentication purposes, there is nothing repugnant to Islamic law if modern means of authentication<sup>89</sup> are utilized. As mentioned above Islamic law does not stop from

giving strict ta'zīr punishment on crimes of serious nature. Authentic electronic evidence are accepted in all forms, but the punishment cannot be enforced in Hudūd cases, due to element of shubha, <sup>90</sup> unless corroborated by other evidence like confession or oral testimony.<sup>91</sup> If the crime is of serious nature and Hadd cannot be imposed due to presence of electronic evidence and court want to create deterrence for others, judge can award as strict punishment as possible. By way of *Siyasah Shariah* death punishment can also be awarded. <sup>92</sup>

## 3.3 Computer Generated Evidence

The rules defined for witnesses in Quran and Sunnah regarding Hudood offences cannot be changed. If there is a video of a murder case. Qisas shall be imposed if two just witnesses have observed the event and are ready to testify. But in case condition of witnesses is not fulfilled and court is sure about the malicious character of criminals accused can be punished by way of siyāsah sharī'ah and tazīr.

In cases, other than Hudūd and Qiṣāṣ and the nature of evidence is computer generated it shall not require witnesses, if the evidence is authentic. If not witness with knowledge can be called to authenticate. In these cases modern method of authentication can be replaced as stated above. Example Of computer generated evidence include, bank statements, ATM receipts, phone call records etc. These kind of evidence are accepted without testimony. But in case the other party challenge the authentication of such records, witness with knowledge is of great help. Such witnesses must have the idea of how the data is saved and it is fool proof. If there are some problems related to errors in system, the court will decide that whether an expert is required or not. Qualification of experts shall be decided by court. the writing done by a computerized system is considered as reliable. *Younus Sohaili*, opines about it as;

"It is the opinion of the researcher that the credit card serves the purpose of writing the debt of the customer at the point of transaction. The card is swiped and the magnetic strip (or micro-chip depending on the design of the card) is read by the computer and the account of the customer is accessed via several levels of computer verification, afterwards the customer approves the amount of money that will be credited to his or her account and then the merchant will use the card reading machine to record or "write" that amount of debt onto the customer's account."<sup>93</sup>

3.4 Computer stored evidence

These kinds of evidence, can be solved with the help of circumstantial evidence the authorship is denied. Islamic law trust circumstantial evidence it is a strong one. Along with that witnesses are called for such evidence which are fed in by human input.

There is another classification of electronic documents that must be discussed here too;

- 1. Public document,
- 2. Private document

Public documents are authenticated from reliable source and flawless chain of custody. Private documents on the other hand need witnesses. Same is the case when these documents are in electronic form. Examples of public documents in electronic forms include, computerized birth certificate, national identity cards, different types of licences and NOC etc.

#### 3.5 Other electronic evidence; Circumstantial Evidence

These evidences include, digital evidences like photographs, call records histories, videos and other evidences included from medical forensics, like finger prints DNA test etc. All these kinds of electronic evidences are treated as circumstantial evidence. Modern scholar of Islamic law also treat them as circumstantial evidence. Wahbah al-Zuḥaīylī opines in his book; "As a matter of fact on our contemporary time, there have emerged a number of powerful and clear forms of circumstantial evidences and indicators in the field of proof and evidence. For example, the identification of the culprit through fingerprints, blood testing, photographs, sound recordings, and blood sampling. . . . But the court has to be extremely cautious about using them as the chances of tampering with them are greatly worrisome."<sup>94</sup> Another modern scholar Anwarullah states that modern forensic evidence are kinds of circumstantial evidence. For instance, foot prints, medical reports on wounds and marks, blood tests, traces of violence on hidden parts of body, identification traces, finger prints and blood stains etc. <sup>95</sup>

These kinds of evidences are considered as strong circumstantial evidences by Dabur, another renowned modern scholar. He names them as *al qarā'in al-mustaḥdathah* (the modern types of circumstantial evidences). He further states that autopsy for knowing cause of death and blood tests for identification purposerse aere also strong circumstantial evidence. <sup>96</sup>

#### Conclusion

This article was divided in to three parts. Which were; principles of electronic evidence in English law, principles of evidence in classical Islamic law and Sharī'ah rules for electronic evidence. The first part discussed the modern principles prevailing for modern types of evidence. In order to scrutinize them from the perspective of Sharī'ah, principles of classical Islamic law were discussed. Finally in the third section both the above parts are compared and analysed for Sharī'ah perspective, which helped in deriving Sharī'ah rules for electronic evidence.

The first part was initiated from the principles of English law derived from ACPO from UK good practice guide. Which focused on fool proof chain of custody for electronic evidence. Based on these principles, four stages of admissibility of electronic evidence were discussed. These are relevance, authentication, hearsay and best evidence rule. The most important points discussed in that parts were that authentication being most important stage of admissibility require evidence to carry integrity. Secondly, oral testimony is also very important for electronic evidence where evidence is manually fed in to computer and but it is not that important for the data which is generated automatically by electronic means. Thirdly, if a document is self-authenticating it does not require more authentication procedures, like witnesses or other technological means. Fourthly, electronic evidence is electronic in nature (used for solving a case of physical crime) or it is physical in nature (utilized for electronic crime). It serves as decisive if it is a strong circumstantial evidence and is well authenticated.

Classical books of Islamic law discuss principles of evidence majorly in Oral testimony, documentary evidence, circumstantial evidence etc. Oral testimony is one of the essential elements for evidence in both the legal systems. Few major differences in Islamic law regarding oral testimony are; shuhūd 'udūl, purgation of witnesses (official screening) Tazkīyah, Fixation of number of just Witnesses for different cases, witness should not be relative or should not have interest in the case like business partner and women are not allowed to testify in Hudūd cases. In case of electronic evidence these principles shall be observed where testimony shall be acquired. But where testimony is not required such principles shall not be observed. For instance in cases electronically generated evidence is presented in the court. If these evidences are well authenticated by technological means or system there is no need of testimony.

Electronic evidence is admissible in cases pertaining to civil matters. In criminal cases, electronic evidence is admissible subject to test of reliability, but in Hudūd cases punishment cannot be imposed, unless corroborated by other evidence like confession or oral testimony

#### References

<sup>&</sup>lt;sup>1</sup> Orin Kerr, "Searching and Seizing computer and obtaining electronic evidence in criminal Investigations" U.S Department of Justice, *Computer Crime and Intellectual Property Section*, 2001. http://www.cybercrime.gov/s&smanual2002.htm, October 2004. (accessed September 1, 2015)

<sup>&</sup>lt;sup>2</sup> Fredesvinda Insa, "The Admissibility Of Electronic Evidence In Court (A.E.E.C): Fighting Against High-Tech Crime-Result of a European Study", *Journal of Digital Forensic Practice*, 1, no. 4, (2007), 285-289, <u>http://dx.doi.ord/10.1080/155</u> 67280701418049. (Last Accessed May 9, 2017).

<sup>&</sup>lt;sup>3</sup> Luciana Duranti, Corinne Rogers and Anthony Sheppard, "Electronic Records and the Law of Evidence in Canada: The Uniform Electronic Evidence Act Twelve Years Later", *Arhivaria*70 (Fall 2010); 95-124.

<sup>&</sup>lt;sup>4</sup>Jonathan D. Freider and Leigh M. Murray, "Admissibility of E-Evidence under the Federal Rules of Evidence" *Rich.J.L. & Tech 17*, no.2 (2011), http://jolt.richmond.edu/17i2/article5.pdf.

<sup>&</sup>lt;sup>5</sup>Goodison, Sean E., Robert C. Davis and Brian A. Jackson. Digital Evidence and the U.S. Criminal Justice System:

<sup>&</sup>lt;sup>6</sup> Muḥammad b. Aḥmad b. Abī Sahl Abū Bakr, Shams al-'Imma al-Sarakhsī, is a great Ḥanafī jurist of the 5<sup>th</sup> /11<sup>th</sup> century, who lived in Transxania. Sarakhsī is known for his scholarly commentaries on great books of Ḥanafī School, especially books of Muḥammad al-Shaybani. His al-Mabsūt, commentary on al-Siyar al-Kabīr and the book on Usūl al-Fiqh are Magnum Opuses in the Ḥanafī jurisprudence. He died around 490/1096.

<sup>&</sup>lt;sup>7</sup> Muḥammad bin Aḥmad bin abī Sahl Shams al-'Āa'ema al- Sarakhsī, *Al- Mabsūt*, 30 vols. (Beirut: Dār al-Ma'rafa, 1993)

<sup>&</sup>lt;sup>8</sup> 'Alā' *al-D*īn Abu Bakr bin Mas'ud bin 'Aḥmad al-Kāsānī, *Badā'i' al-Ṣanā'i fī tart īb al-sharā'i*, (Dār al-Kutub al-'Ilmīah,) 2<sup>nd</sup> ed 1998, 7 vols.

<sup>&</sup>lt;sup>9</sup> Burhān al-din abu al-Hassan 'Ali 'Ibn Abī Bakr Farghāni Marghīnānī, Al-Hidāyah, 3 vols. (Beirut: Dār Ahya Turās al-'Arabi, n.d)

<sup>&</sup>lt;sup>10</sup> Abū al-Walīd Muḥammad bin Aḥmad Ibn Rushd, *Bidāyat al- Mujtahid wa nihāyat al-Muqtaṣid.* 4 vols. (Cairo: Dār al-Ḥadith, 2004).

<sup>&</sup>lt;sup>11</sup> Shams al-Dīn Abū 'Abd Allāh Muḥammad Ibn Abī Bakr Ibn Ayyūb al-Zur'ī l-Dimashqī l-Ḥanbalī Ibn Qayyim, al-Jaūzīah , *al-Turuq al-Hukmiyyah fi al-Siyāsah al-Shar'iyyah* (Cairo: Dār ul-Madni, n.d).

<sup>&</sup>lt;sup>12</sup> Husaīn bin Ahmād al-Madnī, "Al Quwah al-Thabūtiah lil-Mu'amalāt al-Ilectroniah" Majallah Buhus

al-Qada'ia7, June (2007), 7-76.

<sup>13</sup> 'Ali bi 'Abdullah al-Shehrī, "al-Tijara electroniah 'Ibr al-Internet Aḥkāmūha wa atharūha fil fiqh al-Islāmi wa nizām al-Sau'di", *Majellah al-Būḥūs al-Fiqh al-Mua'sira* (n.d).

<sup>14</sup> 'Ali Mūhīūdin Qara daghi, "Hūkūm Ijrā al-'Aqd bil alāt Itīsāl al-Hadīsa", *Tadrees Ma'had al-Alī*, Riyaad (2005), 1-13.

<sup>15</sup> Mursilalaili Mustapa Sa'di, Abdul Rani Kamarudin, and Zulfakar Ramlee Saad. "Reception of Electronic Evidence from Islamic Perspective." *Australian Journal of Basic and Applied Sciences* 9, no. 26 (2015): 30-35.

<sup>16</sup> Maha Abualfaraj, "Evidence in Islamic law: Reforming the Islamic Evidence Law Based on the Federal Rules of Evidence." *Journal of Islamic Law and Culture* 13, no. 2-3 (2011): 140-165.

<sup>17</sup> Eoghan Casey and contributions from Susan W. Brenner.... [et.al.], *Digital Evidence and Computer Crime: forensic Science, computer and the internet*, 2<sup>nd</sup> Ed. (California: Elsevier, 2011),7.

<sup>18</sup> John Douglas, Burgess Ann W., G. Allen Burgess, and Ressler Robert K. *Crime classification manual: A standard system for investigating and classifying violent crime* (John Wiley & Sons, 2013).

<sup>19</sup> National Forensic Science Technology Centre "A simplified Guide to Crime Scene Investigation" *NFSTCentre*, September 2013. Accessed September 13, 2018. http://www.forensicsciencesimplified.org/index.htm

<sup>20</sup> Paul. R. Rice, *Electronic Evidence: Law and Practice* (New York: ABA Publishing, 2005), 1.

<sup>21</sup> Association of Chief Police Officers, ACPO Good Practice Guide for digital evidence, (PCEU, 2011), 6. Accessed 13 September, 2018. <u>https://www.digital-detective.net/digital-forensics-documents/ACPO Good Practice Guide for Digital Evidence v5.pdf.</u>

<sup>22</sup> Lorraine v. Markel, 241 F.R.D. 534 (D. Md. 2007)

<sup>23</sup> David Faigman, "Evidence: Admissibility vs. Weight in Scientific Testimony." *The Judges' Book* 1, no. 1 (2017): 11.

<sup>24</sup> Jarrett H. Marshall, Michael W. Bailie, Hagen, and N. Judish. "Searching and seizing computers and obtaining electronic evidence in criminal investigations." *US Department of Justice, Computer Crime and Intellectual Property Section Criminal Division* (2009), 197.

<sup>25</sup> Chain of custody means the document must be present in reliable custody. It contains a chain which proofs that at no time, the record or data was left in an unreliable custody which could tampered or affect the integrity of that evidence.

<sup>26</sup> A Hash value can be defined as, "A unique numerical identifier that can be assigned to a file, a group of files, or a portion of a file, based on a standard mathematical algorithm applied to the characteristics of the data set. The most commonly used algorithms, known as MD5 and SHA, will generate numerical values, so distinctive that the chance that any two data sets will have the same hash value, no matter how similar they appear, is less than one in one billion. 'Hashing' is used to guarantee the authenticity of an original data set and can be used as a digital equivalent of the Bates stamp used in paper document production." Rothstein, Barbara Jacobs, Ronald J. Hedges, and Elizabeth Corinne Wiggins. *Managing discovery of electronic information: A pocket guide for judges* (Federal Judicial Center, 2007), 24; see also Williams v. Sprint/United Mgmt. Comp., 230 F.R.D. 640, 655 (D. Kan. 2005).

<sup>27</sup> Netherlands Forensic Institute, forensic use of Hash Values and Associated Hash Algorithms, January 2018, 2. Available at:

https://www.forensischinstituut.nl/binaries/nfi/documenten/publicaties/2018/02/13/vakbijlageforensisch-gebruik-van-bestandskenmerken-en-bijbehorende-hashalgoritmen/Supplement-hashesv2018 01a English.pdf. (Last Accessed June 25, 2019)

<sup>28</sup> Ibid, 4.

<sup>29</sup> Phillip J. Favro, "A New Frontier In Electronic Discovery: Preserving And Obtaining Metadata", B.U.

*J. SCI. & TECH. L* 13:1, 7.

<sup>30</sup> <u>www.sedonaconference.org</u>. Also see in *Lorraine v. Markel*, 241 F.R.D. 534 (D. Md. 2007) at 28.

<sup>31</sup> Susan E.E.B. Sherman, Hearsay and Evidence in the Computer Emergency Response Team (CERT), 5.
<sup>32</sup> Lorraine v. Markel American Ins. Co. 241 F.R.D. 534 (D. Md. 2007)

<sup>33</sup> Luciana Duranti, Corinne Rogers, "Trust in digital records: An increasingly cloudy legal area", *Computer Law and Security Law Review* 28, (2012), 527.

<sup>34</sup> Luciana Duranti, Corinne Rogers, And Anthony Sheppard, "Electronic Records and the law of evidence in Canada: the uniform electronic evidence act twelve years later", *Archivaria*70, (2010) <sup>35</sup> Paul Rice, *Electronic Evidence: Law and Practice*, 191.

<sup>36</sup> USA's Federal Rules of evidence clearly stipulated in Rule 10 that the evidence presented in the court should be "Best Evidence". (Accessed January 24, 2017)

https://www.law.cornell.edu/rules/fre

<sup>37</sup> National Centre for Forensic Science, and United States of America. "Digital Evidence in the Courtroom: A Guide for Law Enforcement and Prosecutors." (2007), 30. (Last Accessed: 22 Nov., 2019) *www.ojp.usdoj.gov/nij* 

<sup>38</sup> Ibid, 31.

<sup>39</sup> *R v Harper* [1989] 2 All ER 208, [1989] 1 WLR 441 at 443. R v Minors (Craig).

<sup>40</sup> The 1996 Model Law of UNCITRAL defines electronic or computer information and includes information: —generated, sent, received or stored by electronic, optical or similar means including, but not limited to, electronic data interchange (EDI), electronic mail, telegram, telex....

<sup>41</sup> Qanun-e-Shahadat Order defines documents as, "[a] document means any matter expressed or described upon any substance by means of letters, figures or marks or by more than one of these means intended to be used or which may be used for the purpose of recording of matter. Qanun-e-Shahadat Order 1984 §2(b).

<sup>42</sup> The Australian Uniform Law Commissioners, defines document as any —record of information, including: (a) anything on which there is writing; or (b) anything on which there are marks, figures, symbols or perforations having a meaning for persons qualified to interpret them; or (c) anything from which sounds, images or writings can be reproduced with or without the aid of anything else; or (d) a map, plan, drawing or photograph.

<sup>43</sup> Germany, Belgium, Spain, Finland, France, Ireland, Italy. Luxembourg, Portugal, and Romania. The regulation of documentary evidence plays a relevant role in these countries when it comes to considering the regulation of electronic evidence.

<sup>44</sup> Fredesvina Insa, "The Admissibility of Electronic Evidence in Court (AEEC): Fighting Against High-Tech Crime—Results of a European study." *Journal of Digital Forensic Practice* 1, no. 4 (2007): 285-289 and Murdoch Watney, "Admissibility of electronic evidence in criminal proceedings: an outline of the South African legal position." *Journal of Information, Law & Technology* 1 (2009): 3

<sup>45</sup> David W. Hagy, "Digital evidence in the courtroom: a guide for law enforcement and prosecutors." *National Institute of Justice* (2007), 30.

<sup>46</sup> United States v. Tank, 200 F. 3d 627 (9th Cir. 2000)

<sup>47</sup> United States v. Simpsons 152 F.3d 1241 (10<sup>th</sup> Cir 1998) [19]

<sup>48</sup> Sean E. Goodison, Robert C. Davis, and Brian A. Jackson, "Digital Evidence and the U.S. Criminal Justice System Identifying Technology and Other Needs to More Effectively Acquire and Utilize Digital Evidence" Rand Cooperation, 2015, 3. <u>https://www.ncjrs.gov/pdffiles1/nij/grants/248770.pdf</u>. (accessed, May 9, 2017) Also in, Dan Morse, Philip Welsh's simple life hampers search for his killer, Washington Post, May 6, 2014 https://www.washingtonpost.com/local/crime/philip-welshs-simple-life-hampers-search-for-hiskiller/2014/05/05/1fd20a52-cff7-11e3-a6b1-45c4dffb85a6\_story.html?utm\_term=.cc88146e147f <sup>49</sup> There was another case in which a child was killed in a car due to increased temperature and it was later found out that his own father

<sup>51</sup> Generally the official process of ascertain just character of witnesses is ascertained by the procedure of purgation. It means Tazkīyah in Arabic. It is a formal procedure which is carried out by the judge in order to check out the character of witnesses. If he possesses a good reputation, which means his good deeds are dominated in his personality upon the bad deeds, then he or she is able to testify. Purgation is slightly different from moral uprightness (Adālah). Moral uprightness is the apparent character of a witness while Purgation is a formal procedure as stated earlier. In some cases adālah is enough but in other purgation (i.e official screening) of witness is necessary. The condition of just character of witnesses is an essential element for admissibility of oral testimony. According to Imām *Sarakhsī*, the statement of just and probable witness (Shāhid 'Adil) is the only source of authentic oral testimony. Sarkhsi, Al - Mabsūt, Vol. 16/112.

52 Al- Qur'ān [65:2]

<sup>53</sup> Al-Hidāyah, vol. 3, 116.

<sup>54</sup> In fact, it is fixed by the Qur'ān on case to case basis. In cases of testimony for hudūd offences, right of Allah Almighty is involved. While in the matters related to private rights and financial matters, right of man in involved. Al-Hidāyah, vol. 3, 116.

<sup>55</sup> Rather in these cases it is preferable to conceal the testimony. Al-Hidāyah, vol. 3, 116. Prophet (PBUH) said to a person who had borne testimony "Verily it would have been better for you, if you had concealed it".<sup>55</sup> But this rule does not apply in the case of theft. Mālik bin 'Anas bin Mālik bin 'Āmir , "al-Maūta' ", vol 5, (Abu Ṣahbī: Mūassasah Zahid bin 'Amir al-'Asbīhi, 2004), 1198.

<sup>56</sup> Ibn Rushd, "Bidāyat al- Mujtahid wa nihāyat al-Muqtaṣid", 4/ 247.

<sup>57</sup> 'Abu Ḥussain Yaḥyah bin 'Abī al-Khaīr al-'Imranī al-*Shafi'ī, "Al- Bīyān fi-Mazhab Imam Shāfaī*", vol. 13 (Jaddah: Dār al-Minhāj, 2000), 324. This stance is adopted by all four school of thoughts because of the saying of the Prophet (PBUH).

<sup>58</sup> In case of fornication and slandering.

<sup>59</sup> All *Hudūd* offences (except fornication and slandering), punishment of *Qiṣaṣ* and commercial transactions requires two male witnesses.

<sup>60</sup> If two male witnesses are not available, then testimony of two women and one man is admissible.

<sup>61</sup> Testimony of a woman alone is allowed in the cases where presence of a man is very rare.

<sup>62</sup> Al-*Qur'an* [2:282]. Qura'n states that two women can testify replacing a male testimony.

<sup>63</sup> Marghīnānī, al-Hidāyah, vol3/ 116. Also in Ibn Rushd, "Bidāyat al- Mujtahid wa nihāyat al-Muqtaşid", 4/ 247.

<sup>64</sup> Ibid

<sup>65</sup> Al-Shīrāzī, "Al-*Muhazab fī al-fīqh al-Imām Shafi'ī*", vol. 3/437.

<sup>66</sup> Marghīnānī, *al-Hidāyah*, vol3/ 116 *Translated by* Karen Bauer, "Debates on Women's Status as Judges and Witnesses in Post-Formative Islamic Law", 7.

<sup>67</sup> Prophet (PBUH), said, شهادة النساء جائزة فيما لا يستطيع الرجل النظر اليه, Sarakhsī, (*Al- Mabsūt*, vol.5/101.), trans. "The evidence of women is valid with respect to such things as is not fitting for man to behold" The Hidayah or Guide: A commentary on the Mussalman Laws, Trans. Charles Hamilton, vol. 2 (London: T. Benslay, n.d), 668.

https://books.google.com.pk/books?id=Tq9CAAAAcAAJ&pg=PA668&lpg=PA668&dq=The+evidence +of+women+is+valid+with+respect+to+such+things+as+is+not+fitting+for+man+to+behold&source =bl&ots=0qwE6qEfe0&sig=BO3cBfegfjoysZxtz4sEMiWa9wU&hl=en&sa=X&ved=0ahUKEwjExraN2K rTAhUEVxQKHRY8BrAQ6AEIKTAC#v=onepage&q&f=false (acessed: 17<sup>th</sup> April, 2017)

<sup>&</sup>lt;sup>50</sup> Prophet PBUH says "Produce your two witnesses or else the defendant is to take an Oath" Kāsāni, vol.7, 287.

<sup>68</sup> Sarakhsī, *Al- Mabsūt*, vol.5/10`1. Also in 'Ibn Rushd, *Bidāyatu'l-Mujtahid*, 4/248.

<sup>69</sup> Encyclopaedia if Islam, "Shahid", vol. 9 (Leiden: Brill, 1997), 208.

<sup>70</sup> Majallah al-Aḥkām al-'Adalīah, (Karachi: Kārkhāna Tijārat Kutub, n.d), art: 1688.

<sup>71</sup> Ibid.

<sup>72</sup> Encyclopedia of Islam, s.v. "Shāhid", (Leiden: Brill, 1997) vol.9, 208.

http://library.ut.ac.ir/documents/381543/3581025/Brill - The Encyclopaedia of Islam\_Vol 9\_San-Sze .pdf (accessed: 19<sup>th</sup> April, 2017)

<sup>73</sup> Sarakhsī, *Al-Mabsūt*, Vol.16, 150. Marghīnāni, *Al – Hidāyah*, vol. 3, 120-121. Also in Kāsānī, Badā'i' al-Ṣanā'i , vol.6, 266.

<sup>74</sup> Al-Qur'an [2:282]

<sup>75</sup> Translated by Yūsaf Ali.

<sup>76</sup> Al-Ṭabri, *Jāmay' al-Bayān*, vol. 6/ 45.

<sup>77</sup> Muḥammad bin Isma'il (d. 256), *Saḥiḥ al-Bukhari*, vol. 3 (al-Najat: Dār al-Taūq, 2001),Bab: Kaīfa Yaktub, tradition no. 2698.

<sup>78</sup> Al- Sarakhsī, A*l-Mabsūt*, vol. 30, 168.

<sup>79</sup> Al-Fatāwa al-Hindīyah, 2<sup>nd</sup> Ed. Vol. 6 (Dār al-Fikr, 1310H), 160.

<sup>80</sup> Haim Gerber, *State Society and law in Islam, Ottomon Law in Comparative Perspective (Albany: State University of New York Press, 1994), 48.* 

<sup>81</sup> Jeanette Wakin, *The Function of documents in Islamic Law* (New York: State University of New York Press, 1972), 8.

<sup>82</sup> Mahadir and Sijilat in used in Islamic courts are a good examples of such kind of docuements.

<sup>83</sup> Haim Gerber, State Society and law in Islam, Ottomon Law in Comparative Perspective (Albany: State University of New York Press, 1994), 48.

<sup>84</sup> Ibid

<sup>85</sup> Ibn Qayyim, al-Jauziah , *al-Turuq al-Hukmiyyah fi al-Siyasah al-Shar'iyyah*, 220.

<sup>86</sup> Abd al-Karim Zaydan, *Nazam al-Qada fi al-Shari'ah al-Islamiyyah*, (Baghdad: Matba'at al- 'Ani, 1984), 157.( REPLACE WITH GERBER)

<sup>87</sup> Milton J. Cowan, *Dictionary of modern written Arabic*, 3rd ed., (Beirut: n.p., 1974), 760; Elias A. Elias, *Modern Dictionary: Arabic English* (Beirut: Dar al-Jalil, 1986), 537.

<sup>88</sup> Justice Khalil ur Rehman, "Cyber Laws In Pakistan" Supreme Court of Pakistan, (2012), 1. Last Accessed 29th November, 2019)

http://www.pja.gov.pk/system/files/Cyber\_Laws\_in\_Pakistan\_Justice\_%28R%29\_Khalil\_ur\_Rehman\_Khan.pdf

<sup>89</sup> For instance Hash tags and Meta data as discussed in topic 1.2.1 above.

<sup>90</sup> Prophet (PBUH) said, which is also a legal maxim"Fixed punishments are nullified by doubts", Muhamad Ibn 'Isa al-Tirmidhi, Sunan al-Tirmidhi, vol. 4 (Beirut; al-Maktab al-Islami, 1988), 25.

<sup>91</sup> Sayed Sikanadar Shah Haneef "Modern means of proof: Legal basis for its accommodation in Islamic law." *Arab Law Quarterly* 20, no. 4 (2006), 362.

<sup>92</sup> 'Abd al-Qādir 'Awdah, al- Tashrī ' al-Jina'i 'l-Islamī Muqaranan bi'l-Qanün al-Wadi (Beirut: Dār al-Kātib al-' Arabi, n.d.), 1:688.

<sup>93</sup> Ahmad Abdur-Raheem Sabree and Younes Souhaili, "Evidence in the Quran Related to Credit Card Transactions." *Journal of Islamic Economics, Banking and Finance* 113, no. 3158 (2015), 7

<sup>94</sup> Wahbah al-Zuhaīlī, "Al-Fiqh al-Islamī wa 'Adiltuhu" vol6. (Damascus: Dār al-fikr,1985), 556.

<sup>95</sup> Sikanadar Shah Haneef, "Modern means of proof: Legal basis for its accommodation in Islamic law", 343.

<sup>96</sup> Ibid, 345.