

A Primary School Case Study on Difficulties of Using the Digital Document as Evidence

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Abstract

In the 21st century, papers are no longer simply created on paper and ink; they may also be extracted from discs, memory cards in computers, smartphones, and other devices and sent to other people in both tangible and intangible forms, such as electronic documents. The use of electronic documents has become so widespread that laws are developed to take them into account. In this age of big data, electronic documents have been acknowledged as a sort of documentary evidence, and regulations governing electronic evidence have been modified in terms of its authenticity and weight, or evidential value. In terms of law, documentary evidence is recognised as one type of evidence. Sekolah Kebangsaan (F) Bukit Jalor has been selected for this case study as a way to further explore these issues. This is relevant to the study's objectives, which include examining public servants' knowledge of the use of digital documents as evidence in governmental institutions, particularly in the field of education. The findings of the study employ SPSS as a tool for the purpose of measuring the discussed components. These includes concerning the issues of authenticity, acceptance, and admissibility of digital documents, as well as the method that is established for classifying digital documents, the pertinent aspects that are investigated for this study. The results of this study can be utilized to investigate the level of comprehension and awareness of digital document management as evidence among public officials in their respective areas of responsibility, which include the administration of schools as well as teaching and learning in schools in general. In conclusion, the respondent's grasp of digital documents and their level of awareness as evidence are commensurate with the progression of technology used in public services.

Keywords: Document, Electronic Document, Documentary Evidence, Authenticity, Sk (F) Bukit Jalor.

Introduction

A digital document can be text, image, video, or any combination of these formats. Information technology has contributed to the paradigm shift in the production, processing, exchange, and storing of data information by individuals and organizations. A digital

document can be defined as a form of probative information stored, recorded, or channeled in electronic form and the material can be presented in court as evidence supporting or denying the allegations. Data and information are stored electronically and can be used as valuable proof that can be stored or transmitted in digital form in a trial. Evidence could be submitted either orally or in writing. The situation is different nowadays; documented evidence is frequently produced or sent electronically. This is evidenced by the fact that technical improvements are inextricably linked to the way people live their lives. Even in enclosed spaces within buildings, people can only imagine seeing their loved ones while chatting with them, let alone across entire cities or even continents. It used to be that documents could only be accepted for a short period of time prior to the arrival of the internet, computers, smartphones, memory cards, and thumb drives, among other things. Analysing the awareness of the use of digital documents as evidence among civil servants in the organization are continuously increased. It is very important to note that in the government sector nowadays, many use digital documents as intermediaries in administrative matters and even in learning and teaching matters in the classroom. The use of storage media such as learning videos or the use of software to record teacher and student data is also used in the government sector. In connection with that, digital documents are also used as evidence and recorded for future reference purposes. The digital use of documents also invites its own challenges when it comes to authenticity, classification, admissibility, and acceptance within the organisation.

Statement of Problem

Nowadays, numerous instances of digital evidence have emerged because of people utilising technology to store information and data electronically and then restore data for a specific purpose. The difficulty in utilising a digital document as evidence occurred as a result of the authenticity of the digital document. Gouanou & Marsh (2004) says that computer data can be changed easily and simply turning on the computer causes the data stored on the computer to change.

Besides that, each form of this digital document would be determined in advance using the most appropriate approach for establishing that the evidence is authentic, reliable, and trustworthy for the digital document's admissibility. According to Chissick & Kelman (2000), for electronic or computer evidence, suitability and reliability are two important criteria for entry. Sometimes they are very difficult to determine due to the fact that the evidence in the computer may be connected to various computer networks and may be tampered with. Additionally, the trustworthiness of computer evidence is determined by a combination of two factors: the content of the evidence obtained from the computer and the subsequent method. The admissibility of evidence can be contested by disputing the evidence's weight or trustworthiness.

When papers are automatically classified, the option to dig into those areas for important knowledge is created, which improves decision-making in various procedures. This change entailed removing options requiring electronic record keeping and indexing, welding, naming conventions, and the production and maintenance of meta-data. Create a consolidated information repository to reduce duplicate entries while also improving content knowledge and administration, preserving, and analysing documents and modifications. Clean up repetitive schedules using a storage table, but keep access logs, audit trails, and associated metadata. Key issues in implementing electronic records in organisations are access, security, and interoperability (Abd Manaf & Ismail, 2010).

Research Objectives

- i. To identify the issues of authenticity of digital document as evidence.
- ii. To analyse the issues of acceptance and admissibility of digital document as evidence
- iii. To formulate the method, use in the classification of digital document.

Literature Review

Articles, books, and printed journals were reviewed to establish the validity of this study in generating and linking ideas with previous research or studies.

According to Gingrande (2010), a digital document is a collection of coded document descriptors that exist as magnetic impulses on a hard disc and can be considered legal evidence when viewed with the appropriate document creator software. It used to be that documents could only be accepted for a short period of time prior to the arrival of the internet, computers, smartphones, memory cards, and thumb drives, among other things. Document delivery and viewing have become faster in recent years thanks to social media platforms such as Instagram, multimedia messaging service (MMS), short messaging service (SMS), and WhatsApp Messenger (WhatsApp), to highlight just some. The ability to make and execute banking transactions when not in the close surroundings of a business or financial institution has even been demonstrated in human beings. Traditionally, most of the mentioned actions could only be completed through direct interaction with a human being.

On the other hand, digital documents can be defined as notes or documents that have been produced, stored or extracted, copied or replicated, or transmitted electronically via other electronic equipment and can be clearly understood and interpreted (Fawwaz, 2008). These days, the government has embarked so much on splitting data technologies to facilitate practically every area of daily life, from identification cards, credit cards, cash cards, and toll cards to health records and immigration enforcement, to name a few examples, where the process of sending information becomes easier and faster at any time. Although there has been some research on the acceptability of digital documents under Islamic Syariah law, there has been no thorough examination of the concept of a digital document from an Islamic perspective, or of the admissibility of digital documents in the Syariah court in Malaysia. Nevertheless, the previous literature focuses exclusively on the general definition of a digital document, its function, and the different forms of digital documents that can be used as evidence in a legal proceeding. As Ismail and Ramlee (2013) stated, the court has authorised the use of email, short messaging service (SMS), digital pictures, automated teller machine transactions (ATM), internet usage networks, digital video, and other similar technologies as admissible forms of evidence. A similar concept, authenticity in documentary evidence, refers to the fact that the evidence in question is main evidence that has been verified and verified again. Electronic evidence is not without its critics, particularly when it comes to its accuracy and authenticity, as is the case with video. As a result of inappropriate treatment or examination, electronic evidence can be altered, damaged, or destroyed. This is because it is delicate by definition. Due to the fact that surveillance techniques are untrustworthy due to the possibility of manipulation, the most significant issue in assessing the admission of electronic evidence is a deep skepticism about its trustworthiness and authenticity.

CCTV cameras are increasingly becoming the ambassadors of criminal justice in the process of guaranteeing public safety and protecting the nation. This equipment or instruments are used to produce and keep electronic evidence, which is then used in the prosecution or defence of an accused person. Ismail (2016) stated that digital documents such as closed-circuit television (CCTV), short message service (SMS), and the like are one of the relatively

new methods of proofing compared to others, particularly in the Syariah court. This is due to the digital document's ability to provide clear and detailed information, as well as its difficulty in being destroyed and handled. Aside from that, fabricated or modified data, photos, or information are inadmissible as proof. A number of rules were enacted to counteract this legal plague, including a requirement that electronic evidence be validated first before evaluating the truthfulness of its contents, which was designed to ensure the legitimacy of electronic evidence.

Methodology

Research methodology describes how data is collected and analyzed. The Data Statistical Package for Social Science Software (SPSS) version 28 was used to analyse the data collected in this investigation. This software is suitable for quantitative research methods that cover a wide range of statistical formulas and routines. The aim of this research is to identify the awareness of the digital use of documents as evidenced in the organization. This study uses a questionnaire as its approach. The survey was given to 22 civil servants at Sekolah Kebangsaan (F) Bukit Jalor, Gemenceh, Negeri Sembilan. It was selected based on the digital use of documents as evidence in the government sector in administrative matters and learning matters and learning in the classroom.

Analysis and Findings

Table 1

Findings of descriptive statistics for formulating the method use in classifying the digital document as evidence.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Desktop, laptop, server	8	.0	36.4	36.4
	Personal computer, Internet, mobile telephone	10	.0	45.5	81.8
	Hardware, software, networks	2	.0	9.1	90.9
	Open computer systems, communication systems, embedded systems	2	.0	9.1	100.0
	Total	22	.0	100.0	

Table 1.1 What are the three general categories of computer systems that can contain digital document?

The highest percentage that was recorded was 45.5%, which corresponds to a total of 10 respondents, whereas the percentage that was recorded as having the lowest response rate was 9.1%, which corresponds to a total of two respondents. The percentage of 36.4%, which is comprised of a total of eight responders, is the second highest.

Table 1.2

The four steps in collecting digital document

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Collection	1	.0	4.5	4.5
	all of the above	21	.0	95.5	100.0
	Total	22	.0	100.0	

The process of collecting digital documents consists of four steps: identifying the documents to be collected, collecting them, acquiring them, and preserving them. The sum total of all of these percentages adds out to 95.5 percent. The largest percentage and the smallest percentage both have a difference of 91%. The highest response received had a total of 21 replies, while the response that had the fewest was just one person. The total number of respondents for all of the other answers combined was 21.

Table 1.3

What are the difficulties in handling Digital Document as evidence?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Easy to destroy	4	.0	18.2	18.2
	Hard to sustain	6	.0	27.3	45.5
	All of the above	12	.0	54.5	100.0
	Total	22	.0	100.0	

Some of the challenges involved in managing digital documents as evidence include the following: they are easy to destroy, difficult to maintain, and difficult to obtain, as well as all the above. The highest percentage ever recorded is 54.5 percent, which comes out to a total of 12 respondents. It was noted that 18.2%, or a total of four respondents, participated in the survey. The gap between them is equal to 36.3% of the total. A total of six people responded, which accounts for the 27.3% that was recorded.

Table 1.4

The challenges to controlling access to digital document.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Information may be stored on Internet servers in different locations	6	.0	27.3	27.3
	The computer case may be locked	1	.0	4.5	31.8
	The computer case may be locked	1	.0	4.5	36.4
	all of the above	14	.0	63.6	100.0
	Total	22	.0	100.0	

The difference between the percentage with the greatest value and the percentage with the lowest value was found to be 59.1%. The percentage with the highest value is 63.6%, which corresponds to a total of 14 respondents. The percentage with the second highest value is 27.3%, which corresponds to a total of six respondents. The percentage with the lowest value is 4.5%, which corresponds to a total of one respondent who was recorded.

Table 1.5

There needs to be a Standard Operating Procedure (SOP) for the purpose of digital document classification.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	disagree	2	.0	9.1	9.1
	neutral	1	.0	4.5	13.6
	agree	9	.0	40.9	54.5
	strongly disagree	10	.0	45.5	100.0
	Total	22	.0	100.0	

The highest proportion is 45.5%, which indicates that a total of 10 respondents were recorded, whereas the lowest percentage is 4.5%, which indicates that a total of only one responder was recorded. 40.9% of the respondents, which equals a total of nine, were recorded, and then 9.1% of the respondents, which equals a total of two, were recorded.

Table 1.6

What is the best and safest way to store digital document?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Portable hard disk	1	.0	4.8	4.8
	Cloud storage services	1	.0	4.8	9.5
	Online platform like dropbox, google drive, one drive	6	.0	28.6	38.1
	all of the above	13	.0	61.9	100.0
	Total	21	.0	100.0	

The combination of all of the aforementioned factors received the greatest percentage, which was 61.9%, and there was a total of 13 responders. They recorded 4.8%, which is one responder, for portable hard disc and cloud storage services as well as online platforms. In contrast, 28.6%, which is six respondents, was recorded for online platforms.

Results and Discussions

The purpose of this study is to identify the formula method used in the classification of digital documents as evidence used by organisations. The data was gathered by using the questionnaire survey. The goal and objective of the classification of digital documents is to ensure that respondents know the correct way to classify digital documents in work assignments. The study of document classification has become increasingly important recently due to the availability of electronic documents from various information sources.

Information sources that fall into the categories of unstructured and semi-structured data include the internet, electronic documents from the government, email, articles, news, videos, and so on. Therefore, extracting information from these sources, correcting categorisation, and knowledge discovery are important areas for research. As to extract, formulate the method used in the classification of digital documents has a bit of a challenge because the file format of digital documents is different from each other. From the findings, most of them store the digital documents in the different storage media according to the digital document category and also printed out some digital documents as evidence and filed them for reference.

Moreover, the findings also shows that there are four ways of collecting digital documents, which are identification, collection, acquisition, and preservation. Based on the survey conducted, respondents stated that they understand these four ways when they handle digital documents in their work assignments. The percentage shown is 95.5%, which represents 21 respondents.

Facilities or high-value assets such as desktops, laptops, pen drives, and hard disks, which are found in school buildings, are generally one of the storage methods of digital documents, apart from manual file management in the office. In this method, the digital classification of documents that include teacher and student data is stored in a system such as HRMIS and APDM (Student Database Application) to ensure the security of this data is preserved and easily accessible at any time. Therefore, respondents agree that apart from using certain software in classifying and digitally storing these documents, there are other methods such as storing them on online platforms such as Google Drive, Dropbox, or cloud storage that can store various types of digital documents such as teaching videos or online meetings classified by category. The percentage of respondents who agreed to be recorded was 61.9%, representing a total of 13 respondents.

In the government sector, the file classification policy determined by the National Archives of Malaysia is a complete Standard Operating Procedure (SOP) that must be followed by every civil servant when carrying out the task of managing the file system in the organization. Therefore, based on the survey conducted, respondents stated that the SOP for handling digital documents is very necessary and very important to ensure that these digital documents can be classified as evidence according to categories and saved for reference in the future.

Conclusion

As a conclusion, the major findings of this shows that the majority of the respondent agree of providing the digital document as evidence contain several difficulties. Instead of acquisition, preservation, computer system issues, standard operating procedures (SOP) and storage, easy to destroy and hard to sustain have become the main issues highlighted in the findings. Moreover, this is also related to evaluating the level of understanding and awareness among government personnel about the use of digital documents as evidence as well. Then, the investigation into the difficulty of using digital documents as evidence that carried out at the Sekolah Kebangsaan (F) Bukit Jalor in Gemencheh, Negeri Sembilan, help the conclusion to be drawn that respondents understand the other issues that occurred in the school including the authenticity, acceptance, and admissibility as well as the formulation method classification files of digital documents as evidence. This indicates that the respondents are familiar with digital documents issues, which is consistent with the manner in which the technology utilised in public services has evolved over the course of time. As the issues are continuously evolved,

more investigation in solving the issues of digital documents as evidence need to be progressively conducted in the future.

Recommendations

This suggests that the priority should be given to digital document not only in admissibility but also in the evaluation or weight of evidence for a digital document. Sequentially, guidelines and regulations should be established regarding the storage, care, extraction, authenticity, and reliability of digital evidence. Thus, a team of experts in the digitization of documents should be prepared in each organisation that can consider the extraction, addition or deletion, preservation, storage, authenticity, and reliability of digital documents as evidence.

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References

- Abd Manaf, Z., and Ismail, A. (2010), "Malaysian cultural heritage at risk? A case study of digitisation projects", *Library Review*, Vol. 59 (2), 107-116.
<https://doi.org/10.1108/00242531011023862>
- Gingrande, A. (2010). Digital Documents and the Best Evidence Rule. Document Strategy. Retrieved from <https://documentmedia.com/article-180-Digital-Documents-and-the-Best-Evidence-Rule.html>
- Gouanou, M., and Marsh, M. (2004). "Imploding technologies – driven by the records management requirements?", *Records Management Journal*, 14,(2), 62 - 64.
- Chissick, M., & Kelman, A. (2000). *Electronic Commerce Law and Practice*.
<https://doi.org/10.1604/9780421708006>
- Fawwaz, M. (2008). "Al-Wajiz fi al-Uqud al-Tijarah alElektroniyyah". 'Amman: Dar al-Thaqafah, hlm 204.
- Ismail, W. A. F. W., & Ramlee, Z. (2013). Keterangan Melalui Kitābah: Menurut Fiqh dan Undang-Undang Semasa di Malaysia. *Jurnal Undang-undang dan Masyarakat*, 17, 1.
<https://core.ac.uk/download/pdf/33341201.pdf>
- Ismail, W., Abdul. Fattah, W. (2016). "Penerimaan dan Kekuatan Dokumen Elektronik dalam Pembuktian di Mahkamah Syariah di Malaysia". *Jurnal Kanun*, 28 (2), 338-355.