

# **The Admissibility of Computer Printouts in Tanzania: Should it be Any Different Than Traditional Paper Documents?**



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## ABBREVIATIONS

|             |   |
|-------------|---|
| &           | and   |
| A.C         | Appeal Cases (UK)                               |
| All ER      | All England Law Report                          |
| App.        | Appeal  |
| Atk         | Atkyns  |
| Cal         | California                                      |
| CEA         | Civil Evidence Act (UK)                         |
| Cir         | Circuit   |
| CJA         | Criminal Justice Act (UK)                       |
| CPC         | Civil Procedure Code (Tanzania)                 |
| Cr.App.R    | Criminal Appeal Reports (UK)                    |
| DPP         | Director of Public Prosecution                  |
| Ed          | edition   |
| ed          | editor  |
| e.g         | <i>exempli gratia</i> (for example)             |
| ER          | English Reports                                 |
| et al       | and others                                      |
| etc         | extra   |
| Ex          | Law Reports: Exchequer (UK)                     |
| FRE         | Federal Rules of Evidence                       |
| H.C         | High Court                                      |
| H.C.D       | High Court Digest (Tanzania)                    |
| HL          | House of Lords (UK)                             |
| <i>Ibid</i> | <i>ibidem</i> (in the same place)               |
| ICT         | Information and Communication Technology        |
| K.B         | King's Bench Division (UK)                      |
| L.R.T       | Law Report of Tanzania                          |
| N.M.L.R     | Nigeria Monthly Law Reports                     |
| N.W.L.R.    | Nigerian Weekly Law Reports                     |
| No          | Number  |
| NRCCCL      | Norwegian Research Centre for Computers and Law |

|               |   |
|---------------|---|
| O             | Order                                   |
| O.R           | Ontario Reports(Canada)                 |
| Ont.          | Ontario(Canada)                         |
| <i>op cit</i> | <i>opera citato</i> (in the work cited) |
| p (p)         | page(s)                                 |
| R             | Rule                                    |
| R.            | Regina/Republic                         |
| s             | section                                 |
| supra         | above                                   |
| T.L.R         | Tanzania Law Report                     |
| TEA           | Tanzania Evidence Act                   |
| UK            | United Kingdom                          |
| USA           | United States of America                |
| v             | versus                                  |
| vol           | volume                                  |
| W.L.R         | Weekly Law Reports (UK)                 |

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Tusen Takk!

## ABSTRACT

In this thesis I examine the challenges posed by Information and Communication Technology (ICT) developments on the law and practice of admissibility of documentary evidence by Tanzanian courts. Particular focus is put on the issues of admissibility of computer printouts in courts. The main argument advanced in this thesis is that the Tanzania Evidence Act, 1967(the TEA), being developed without reference to digital technologies, is inadequate to govern the admissibility of computer printouts with sensible results.

The methodology of data collection deployed in this thesis is predominantly documentary review. Throughout, I have made substantial reference to the landmark case in *Trust Bank Tanzania Ltd versus Le-Marsh Enterprises Ltd and Others* to analyze the legal issues emerging from dealing with computer printouts in the courtroom when their admissibility is at issue. This case is the only available decision in Tanzania to deal with admissibility of computer printouts.

In fulfilling the above mission, this thesis is organized in five Chapters. Chapter One sets out the aims of the thesis, background information to the problem of admissibility of computer printouts in courts, and literature review of previous works on the subject. The notion of electronic document is treated in Chapter Two. Chapter Three specifically focuses on bankers' books as a result of the landmark case cited above. Chapter Four briefly reviews the evidentiary rules of admissibility of documentary evidence: the best evidence rule, the rule against hearsay and authentication at common law and under the TEA, 1967. It also deals with an interpretative approach of Tanzanian courts in admitting computer printouts in the form of bankers' books. Chapter Five comprises concluding remarks and recommendations.

## CHAPTER ONE

### 1 Introduction

#### 1.1 Aims of the Thesis

The central aim of this thesis is to cast light on the current problems of adducing documentary evidence in the form of computer printouts before the Tanzanian courts. The thesis has also a law reformist ambition, that is, it seeks to push for amendment of the TEA, so that the Act may keep abreast with the development of the new technologies, particularly the computer. It is also the aim of this thesis to fill the gaps of the pre-existing discussion on the admissibility of electronic evidence<sup>1</sup> generally.

#### 1.2 Background to the Problem

In 1967 when the TEA was being enacted, there were hardly any computers in Tanzania. The only computer which was available in the country was installed in the Ministry of Finance.<sup>2</sup> During this period both public and private businesses were using traditional paper for keeping business records, communications of letters, memos, etc. Individuals were also using similar papers for various purposes like communication by

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<sup>1</sup> In this thesis electronic evidence and computer printouts are sometimes used interchangeably, this is despite the fact that the latter term is embraced in the former.

<sup>2</sup> Mgaya, K, "Development of Informatics in Tanzania" in Foster, F.G and Drew, E.P (eds) *Information Technology in Selected Countries: Reports from Ireland, Ethiopia, Nigeria and Tanzania*, The United Nations University, Tokyo, Japan, 1994 at p. 134. See also Nielinger, O. Creating an Environment for ICT in Tanzania-Policy, Regulation and Markets p. 11 at <http://www.tanzaniagateway.org/docs>.



letters and keeping records of transactions they made. In the prevailing circumstances the legislators were not concerned much with enacting a piece of legislation that would regulate the admissibility of computer printouts in court. Thus the fundamental rules of admissibility of documentary evidence notably the rules on best evidence, hearsay and authentication had been consistently applied in the traditional paper context with sensible results.<sup>3</sup>

A change of scene occurred in the 1990s following the proliferation of computers in the country and their increasing usage in both public and private businesses. With computer technology, communications through emails, record keeping in computer databases, data processing, to mention but a few examples, have radically transformed the reliance of use of traditional paper to computer amid the greater advantages of the computer system. In Tanzania computers are put into four main uses. These include processing of accounting data, processing research and survey data, teaching and specialized applications.<sup>4</sup> Individual uses of computers are also increasing at a rocketing rate as computer literacy is growing in the country.

While the computer technology seems to have simplified work on mankind and businesses in a number of aspects, the admissibility of documentary evidence in courts has been put at a cross-road. Hot debates among legal academics, lawyers and policy makers on admissibility of computer printouts in court have been a common place especially after the ruling in the Tanzanian case of *Trust Bank Tanzania Ltd v. Le-Marsh Enterprises Ltd and Others*<sup>5</sup>. The central agenda of these debates are the notions of document and originality, and the application of the traditional rules of documentary evidence in the computerized context.

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<sup>3</sup> See: Chapter Four.

<sup>4</sup> Mgaya, *op cit*, pp 145-146.

<sup>5</sup> Commercial Case No. 4 of 2000, In the High Court of Tanzania (Commercial Division) at Dar es salaam, *Unreported*.

With all these challenges springing out of the widespread use of computers in Tanzania and the increasing practice of tendering computer printouts in courts as evidence, magistrates, judges, attorneys and advocates have been seriously left in dilemma. There was an objection in an attempt to tender computer printout in *Trust Bank Tanzania Ltd* but this was overruled.

Be as it may, the admissibility of computer printouts is a new phenomenon in our courts. In the absence of specific provisions of law in the area, magistrates and judges have strived to develop the law by interpreting the traditional rules broadly to take account of the new technologies. This has not been an easy task for the judiciary. There are a number of issues which need clarification under our legal system as reliance on computer printouts by litigants in court is also growing at a rapid speed.

### 1.3 Statement of the Problem

The statement of the problem tabled by this thesis is that the TEA is inadequate to regulate the admissibility of computer printouts in courts with sensible results. The inadequacy of the TEA concerns three interrelated problems. First, computer data and printouts as concepts do not fit well within the language of the statute. This is partly because the statute was enacted without any reference to electronic document<sup>6</sup>. There has been an attempt by the judiciary to broaden the definition of bankers' book to include computer printouts in *Trust Bank Tanzania Ltd*, but this too has not sufficiently illuminated light on the notion of electronic document. Secondly, the originality criterion inherent in the notion of *document* is still vague such that it is difficult to distinguish *copy* from *original* in the computerised context. It is not clear whether

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<sup>6</sup> Electronic document includes computer data and computer printouts.

computer printouts are original documents or copies. Thirdly, the rules of admissibility under the TEA which are mostly a codification of common law principles are not sufficiently flexible to allow the admissibility of computer printouts.

#### 1.4 Methodology

This thesis relied on documentary evidence as the dominant source of data collection. A chain of literature including books, articles, journals, and theses were consulted to retrieve knowledge on treatment of computer printouts in courtrooms when the question of admissibility is at issue. To achieve this, the Faculty of Law Library of the University of Oslo offered a fertile ground for documentary review. Also the libraries of the High Court of Tanzania and University of Dar es salaam gave supporting research grounds as far as case law and previous theses are concerned. As most articles, journals, etc are available electronically, various websites were also consulted.

The available case law decided by the Tanzanian courts<sup>7</sup> was also consulted for analogous reasoning. Some comparison with law and cases decided in other common law jurisdictions like USA, UK, India, Republic of South Africa and Nigeria was also embarked upon for illustrative purposes and not as a standard of law to be adopted.

The main reasons for opting for documentary review as the dominant source of data collection for this thesis are limited resources and time. The base of my research was at the NRCCCL in Oslo, Norway. This means sufficient resources were needed to engage in extensive interviews and administer questionnaires to respondents in Tanzania. I lacked these resources! Again, the time dedicated to the writing of a master thesis, the summer period, was short to allow me to deploy the other methods of data collection. Finally,

the use of other methods of data collection was disproportionate in terms of the expected benefits that could be achieved by this thesis.

## 1.5 Literature Review

Until now literature on the operation of the TEA regarding the admissibility in evidence of computer printouts is scarce. However, given the nature of the problem and the complexity of issues underpinning this area, this section reviews the few existing pieces of literature from Tanzania and selected foreign jurisdictions to define the nature and dimension of the problem. The latter countries include the USA and UK. The reasons for selection of these countries are first and foremost, that these countries share similar legal system and tradition with Tanzania: the common law legal system. Besides, they are also the pioneers in addressing the problem dealt with in this thesis.

In the article, *Tanzania: Admissibility of Electronic Evidence*<sup>8</sup> which is intended as a piece of advice to foreign businesses in Tanzania, Sinare (2005) briefly comments on the operation of the TEA regarding the admissibility of computer printouts in court. The author reviews the ruling in *Trust Bank Tanzania Ltd*. It is her contention that the TEA does not recognize electronic documents as admissible evidence whether primary or secondary. She rules out the possibility of extending the traditional rules and concepts to electronic documents.

This article suffers two limitations. First, it does not reveal the nature of the problem posed by computer printouts when applying the traditional rules of admissibility of documentary evidence: the best evidence rule, hearsay and authentication. These are

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<sup>7</sup> The Court of Appeal of Tanzania ( the Tanzania's supreme court) and the High Court ( subordinate to the Court of Appeal).

<sup>8</sup> <http://www.mondaq.com/article.asp?articleid=35390&shownav=0> .

key issues raised in this thesis. Secondly, the article takes for granted that *electronic evidence* covers only computer printouts. With this generalization, the author fails to appreciate that there are other forms of electronic evidence like digital audio, voice mail, program codes, instant messages, digital photographs, electronic images or global positioning system information<sup>9</sup>, whose admissibility as evidence do not necessarily implicate the rules governing admissibility of documentary evidence.

Tapper (1989)<sup>10</sup> is among the leading scholars to write on the interplay between computer and the law of evidence. He makes two important points on the admissibility of evidence derived from computers. The first point is that in common law jurisdictions the adducement of evidence is the prerogative of the parties, regulated by general rules rather than arbitrary individual decision in each specific case. This raises problems in dealing with computer evidence. The second point made by Tapper is that if evidence derived from computers is to be adduced, conditions must define the form in which the evidence is to be tendered and how its authenticity is to be established, at least as a preliminary matter.

The issues raised by the learned author illuminate the potential problems of handling electronic evidence generally and possible solutions in overcoming the same. These issues are relevant as they point towards a common direction to my thesis.

Rice (2004)<sup>11</sup> has written on matters covering issues relating to electronic evidence generally. He provides useful insights on the application of the rules of admissibility of documentary evidence in a computerized context. This book however suffers some limitations when it comes to the notions of *document*, *original* and *copy*. It does not

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<sup>9</sup> Nancy, J. and Miller, S.L., 'The Electronic Evolution of Evidence', *Journal for Reporting and Captioning Professions*, September 2004, pp. 54-57, at p.55.

<sup>10</sup> Tapper, C. *Computer Law*, 4<sup>th</sup> Edition, Longman (London and New York), 1989.

<sup>11</sup> Rice P.R. *Electronic Evidence: Law and Practice*, American Bar Association, Chicago, 2004.

address these issues. Probably this is because under the Federal Rules of Evidence, 1975(FRE) the legal position regarding these notions is well settled.

Gahtan (1999) has written a book entitled: *Electronic Evidence*<sup>12</sup>. The text reviews extensively the general issues surrounding the admissibility and use of electronic evidence at trial, particularly computer-produced documents. In a special way the author has addressed the issue of whether or not a computer printout is an original or copy. He notes that there is no consistency in approach between US and Canada. Under the FRE computer printouts are treated as original documents. But there are states in the US which treat computer printouts as copies. This comprises of such states which have not yet implemented the FRE. The author observes that similar pattern occurs in Canada.

The books of Rice and Gahtan provide a broad knowledge of admissibility of electronic evidence in the USA, UK, and Canada. They raise similar issues to my thesis thus provide useful background to the law and practice in other common law jurisdictions.

Peritz (1986)<sup>13</sup> has extensively discussed the authentication of computerized business records under the FRE. The main thesis advanced by the author is that computerized business records should equally be subjected to the authentication rule by meeting a comprehensive foundation requirement before they are offered as evidence in court. The rationale for this proposition, according to the author, are two: first, that the current practice of admissibility of business records simply does not accord the objecting part a fair chance to argue the reliability question, and second is the practical limitation of the computer systems.

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<sup>12</sup> Gahtan, A.M. *Electronic Evidence*, Carswell, Canada, 1999.

<sup>13</sup> Peritz, R.J, 'Computer Data and Reliability: A Call for Authentication of Business Records under the Federal Rules of Evidence' in *Computer/Law Journal*, Vol.VII, No.1, Summer1986, pp.23-72.

While this article dwells on the authentication rule, my thesis goes further to consider the other two rules of admissibility of evidence namely, the best evidence and hearsay. This is because admissibility of documentary evidence is to be considered in all parameters and not on the basis of authentication rule alone. The other limitation is that, this article is confined only to business records. It is noted here that not every computer printout qualifies as a business record. Thus the present thesis considers computer printouts very broadly.

It must be noted that the pieces of literature considered in this section are not an exhaustive list. Their selection has been motivated by the fact that they cover issues canvassed in my thesis. There is however another reason. It is not possible to review every piece of literature relating to admissibility of electronic evidence in a thesis with a strict word limit like the present one.

## CHAPTER TWO

### 2 The Notion of Document

#### 2.1 Introduction

The central theme of Chapter Two concerns definitional problems associated with the notion of *document* in a computerised context. More specifically, this chapter describes the meaning of *document* in relation to computer data, soft copy and computer printouts. It also attempts a classification of such document along the lines of public *vis-à-vis* private as well as copy *vis-à-vis* original. The issues described in this Chapter are only relevant as they set the ground for the application of the rules of admissibility of documentary evidence in court. The theme of admissibility of document in court is taken up partly in Chapter Three and in details in Chapter Four.

#### 2.2 Grounding the Concept 'Document'

The question of what exactly may constitute a document is far from easy to answer, and appears not to be capable of being answered uniformly for all purposes.<sup>14</sup> In the so called Digital Age the efforts to achieve a standard definition of the term have not yielded much.<sup>15</sup> In the following, I review a few definitions of the term *document* as

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<sup>14</sup> Murphy, P. *Murphy on Evidence*, 9<sup>th</sup> Edition, Oxford University Press, United States, 2005, p. 582.

<sup>15</sup> There is no international or regional instrument in Europe which attempts to define the term 'document'. Although Article 9 of the Electronic Commerce Directive, Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on Certain Legal Aspects of Information Society Services removes obstacles for contracts concluded by electronic means, the same omits to define the term 'document' and/or 'electronic document'.



considered by authors of legal literature; statutes, the most important of them the TEA and case law. It should be noted that these definitions are not exhaustive. Their selection has been influenced by the fact that they provide clear distillations of the main criteria of the term *document*.

The simplest definition of the term *document* is provided in Black's Law Dictionary.<sup>16</sup> According to this, *document* means something tangible on which words, symbols, or marks are recorded.

Analyzing the above definition three criteria are set out for a document to exist in the domain of the law of evidence. The first criterion is *tangibility*; the second is *permanence* and the third is *inscription of words, symbols, or marks*.

In assessing whether or not certain material is tangible regard must be made to the following considerations: what is meant by 'tangibility'? Who determines the 'tangibility'? By what means? And is there a specific duration to warrant 'tangibility'? There is little guidance from the above definition to answer the questions raised in connection to 'tangibility'. The definition of the term *document* under the TEA employs the same criterion. In this piece of legislation the term *document* is defined as:

'Any writing, handwriting, typewriting, printing, photostat, photograph and every recording upon any *tangible thing*, any form of communication or representation by letters, figures, marks or symbols or by more than one of these means, which may be used for the purpose of recording any matter provided that *such recording is reasonably permanent and readable by sight*.'<sup>17</sup> (Emphasis supplied)

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<sup>16</sup> Gardner, B.A(ed) (et al), *Black's Law Dictionary, Eight Edition*, Thomson West, U.S.A, 2004, p. 519.

<sup>17</sup> Section 3(1) (d) of TEA.

It appears from the above definitions that the plain meaning of *tangibility* relates to the physical existence of certain material object. The presence of a physical medium like paper, wall, computer screen (monitor), etc is essential to make certain material tangible. *Tangibility* must also be assessed using human sensory organs. In other words, one should ask whether the material in question can be touched and/or perceived by human eye.

As to the consideration of duration in relation to *tangibility*, the provision of the TEA does not tell much. However guidance as to the duration of tangibility may be ascertained in the light of the second criterion.

The second criterion is record. This simply means that the writings, symbols or marks must have *permanence* such that the medium and its contents remain in the state of physical existence for all time in future. In the provision of the TEA this criterion is formulate as ‘...*recording is reasonably permanent*’. It is not clear what is meant by *reasonably*. In my view the term *reasonably* suggests that recording may only be permanent in a logical and sensible manner. This meaning seems to be too abstract but practical when consideration is made to the operation of the computer.<sup>18</sup> When the first criterion of tangibility is considered in the light of the second criterion it logically follows that the duration of tangibility must also be permanent as opposed to transitory.

The third criterion for the existence of a document is the *inscription of words, symbols, or marks* on the material object. These are sometimes referred to as *contents* of a document. Whenever a question of documentary evidence arises the contents of a document become the subject matter of proof.<sup>19</sup>

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<sup>18</sup> See: subsequent discussion in this section.

<sup>19</sup> See: Further discussion in Chapter Four.

The TEA provides an additional criterion for a document to exist, that is, words, symbols, or marks must be *readable by sight*.<sup>20</sup> This criterion is not found in the definition provided by Black's Law Dictionary cited above, nor is it found in the bulk of evidence legislation of common law countries.<sup>21</sup>

Few questions need consideration with regard to the above criterion. For example, what is meant by 'readable by sight'? Does the 'tangibility' criterion encompass 'readability'? Or are the two conditions distinct and separate?

The plain meaning of *readability* is looking at written or printed words or symbols and understand their meaning.<sup>22</sup> In this definition there is an element of ability to understand the words, symbols and marks inscribed on a physical medium and not just to perceive them by a human eye. This condition is in line with the object of tendering documents in courts for purposes of proving their contents. It could be illogical if the contents of the documents tendered in courts were incapable of conveying a particular meaning. But does this mean that the definitions of document which omit this condition do not entail the element of *understand* of the contents of such documents when they are perceived by a human eye? In my view the answer must be in the negative. This is because *tangibility* whose one aspect is the ability to perceive by human eye overlaps with *readability*. In addition the readability criterion has never attracted attention of legal academics probably because the same concept overlaps with tangibility.<sup>23</sup>

The question which arises now is: how should the above criteria be applied in the computerised context? In other words, can computer data and/or computer printouts constitute the definition of *document* within the meaning of section 3(1) (d) of the TEA?

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<sup>20</sup> See also: US FRE.

<sup>21</sup> See: for example, the UK Civil Evidence Act, 1995, The Zanzibar Evidence Act, Cap. 5, the Nigerian Evidence Act, Chapter 112.

<sup>22</sup> Wehmeier, S. (ed) (et al), *Oxford ADVANCED LEARNER'S Dictionary, 7<sup>th</sup> Edition*, Oxford University Press, 2005, p.1254.

Unfortunately there is no direct case law decided by the Tanzanian courts on this point.<sup>24</sup> As I have mentioned in section 1.4 the absence of relevant case law from Tanzanian courts dealing with electronic evidence will make much of the analysis in this thesis draw illustrations from other common law countries. Thus the same approach is taken up in the subsequent discussion of the definition of document in a computer environment.

In order to answer the above question consideration of the operation of the computer is unavoidable. Carey (1979)<sup>25</sup> explains extensively the process of computer operation, in the following I summarise it in a simplified version.

The process begins by data being keyed in the computer through the keyboard. These data are sent to the Central Processing Unit (CPU) of the computer in electronic signals. The CPU turns the signals into binary code, that is ones and zeros. Then the computer reads the code and sends it on to the monitor to display the information. A text of the information held in a computer machine can subsequently be printed on paper using a printer or stored in devices like discs.

The above summary of computer operation exposes two important points in relation to our question. The first point is that, when data are keyed into the computer machine through the keyboard, they are converted into ones and zeros (binary code) by a specific computer software. From computer science point of view the binary code is machine readable only. It should also be added that the binary code are also intangible. In these circumstances can computer data and/or computer printouts constitute *document* within

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<sup>23</sup> My review of case law from Tanzanian courts on admissibility of documentary evidence has failed to reveal specifically that 'readability' has been at issue.

<sup>24</sup> The only available decision of *Trust Bank Tanzania Ltd versus Le-Marsh Enterprises Ltd and Others* (*supra*) deals with the admissibility of computer printout in the context of Bankers' Books.

<sup>25</sup> Carey, D, *How It Works...The Computer*, Ladybird Books Ltd, Boughborough, 1979.

the meaning of section 3(1) (d) of the TEA? Let us start our discussion by considering the position of *computer data* first.

It is clear that computer data held in the machine are represented in binary code, that is, ones and zeros. Since the binary code can not be said to be tangible and readable by human eye the same falls short of the criteria of the term *document* set out in the cited provision of the TEA. In this regard an argument can be that computer data are not document in terms of section 3(1) (d) of the TEA. However as a point of departure the USA has made it specific in the FRE that *computer data* constitute ‘writings’ and/or ‘recordings’<sup>26</sup>. It is interesting to note that in the USA the term *document* is not used in the FRE. However the terms *writings* and *recordings* have similar meaning to *document*. It is not known which criteria were used to include computer data in the list of definition of writings and recordings.<sup>27</sup> My argument is that such classification can be justified on the ground of practical expedience than adhering to the letters of law. This approach however requires to be settled by the courts of law especially in jurisdictions like Tanzania where the TEA does not clearly and specifically stipulate that *computer data* constitute *document*<sup>28</sup>.

Support for my argument can be found in the definition of *document* in the UK Civil Evidence Act, 1995<sup>29</sup>(CEA). In terms of section 13 of the CEA a *document* is defined as anything in which information of any description is recorded. This definition seems

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<sup>26</sup> In terms of rule 1001(1) of the US FRE ‘writings’ and ‘recordings’ consist of letters, words, or numbers, or their equivalent, set down by handwriting, typewriting, printing, photostating, photographing, magnetic impulse, mechanical or electronic recording, or other form of data compilation.

<sup>27</sup> Unfortunately I failed to have access to preparatory works behind the FRE which would throw light on the rationale of classifying computer data as document.

<sup>28</sup> In Tanzania there has been no direct case law decided by the Court of Appeal of Tanzania nor the High Court of Tanzania with regard to the status of ‘computer data’.

<sup>29</sup> See also: UK Criminal Justice Act, 2003.

to be influenced by the leading case in *R v. Daye*<sup>30</sup> where Darling J (as he then was) held:

‘A document is any written thing capable of being evidence, and... it is immaterial on what the writing may be inscribed. It might be inscribed on paper, as it is the common case now; but the common case once was that it was not on paper, but on parchment; and long before that it was on stone, marble, on clay, and it might be, and often was, on metal’ .

The UK definition of the term *document* is formulated in broad general terms. It does not make specific reference to *computer data* nor does it mention any technology used to produce a particular document. The question whether or not *computer data* constitute *document* in terms of the CEA is also a question of law to be determined by the English courts.

Thus it can be argued that even in the absence of a specific reference to *computer data* in the definition of *document* under section 3(1) (d) of the TEA, the provision can still be interpreted broadly to include *computer data*. As pointed out earlier in this section, there are two reasons in line with a broad interpretation. The first reason is based on practical expedience. My view is that in the computerised context any contrary approach to the one above will result into absurdity and leave *computer data* unregulated by the provisions of the TEA. The second reason is based on the implications of classifying computer printout as copy or original document.<sup>31</sup> Legal literature on electronic evidence and case law on the classification of computer printout as copy or original have always assumed that computer data constitute document.<sup>32</sup> For

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<sup>30</sup> (1908) 2KB 333, at 340.

<sup>31</sup> See: Section 2.3.2.

<sup>32</sup> Refer further to footnote 39.

example, in Nigeria, it is a settled legal position that a computer printout constitutes a copy<sup>33</sup>. This implies logically but not necessarily that computer data constitute original document as behind a copy there must be an original. Thus the above classification could not be possible if computer data were not considered to be document in the first place.

There is also consensus among most legal academics that computer data constitute document. However there have been divergences in their lines of reasoning. For example, in reading computer data within section 2 of the Nigerian Evidence Act,<sup>34</sup> Bamodu (2004)<sup>35</sup> assigns two reasons. Firstly, the definition is non-exhaustive of what amounts to documents because of the use of the word *includes*. Secondly, the definition encompasses within the meaning of document expression by letters, figures or marks on any substance, with *substance* not being confined to *tangible substances*.

In my view Bamodu's arguments can not be reconciled with section 3(1) (d) of the TEA for two reasons. Firstly, the formulation of this provision does not contain the word *includes* as it is the case in the Nigerian provision. Secondly, while the Nigerian provision omits reference to *tangibility* the TEA provision does not.

The second issue for consideration is whether a *computer printout* constitutes a *document* within the meaning of section 3(1) (d) of the TEA. The answer to this question must be in the affirmative. This is because the main criteria of *tangibility*, *permanence* and *readability* in the definition of document are fulfilled by a computer printout. It can further be argued that since the functional operations of the computer are

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<sup>33</sup> Nigerian case of *Anyaebo v R T Briscoe Nigeria Ltd* [1987] 3 N.W.L.R. 84 (part 59).

<sup>34</sup> ‘“document” includes books, maps, plans, drawings, photographs and also includes 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 the matter.’

<sup>35</sup> Bamodu, G. ‘Information Communications Technology and E-Commerce: Challenges and Opportunities for the Nigerian Legal System and Judiciary’ 2004 (2) *The Journal of Information, Law and Technology (JILT)*. [http://www2.warwick.ac.uk/fac/soc/law2/elj/jilt/2004\\_2/bamodu/](http://www2.warwick.ac.uk/fac/soc/law2/elj/jilt/2004_2/bamodu/) .

more or less the same as the machines listed in section 3(1) (d) of the TEA, the meaning of document can be extended to cover a computer printout.

As mentioned earlier, computer printout is just one form of the output results of computer operations in a hard copy. The other form of output of computer operations is what is displayed on the computer screen or monitor. In the community of computer scientists this is referred to as *soft copy*<sup>36</sup>. To my knowledge there has been no academic controversy in legal literature in respect to whether a computer printout amounts to document. However it is doubtful whether a *soft copy* of computer output constitutes a document under section 3(1) (d) of the TEA. This is because the criterion of ‘...*recording is reasonably permanent*’ may not be fulfilled. As discussed earlier, the requirement of record to remain permanent relates also to the tangibility. When a computer machine is turned off the *soft copy* may disappear in certain cases and immediately lose its *tangibility*. Two separate situations must be discussed here, first where such a *soft copy* is available only in the Random Access Memory (RAM) of the computer, and secondly, where a *soft copy* is kept in the hard disk of a computer and other storage devices.

The first situation raises the problem as to the *permanence* of soft copy. Once a computer machine is turned off anything and everything in RAM is lost if it is not saved. This is because the RAM is normally a working area of a computer used for displaying and manipulating data.<sup>37</sup> In my view a *soft copy* in this case remains a *document* so long the computer machine is kept on. However it ceases to be a *document* the moment the computer machine is turned off. The first situation can be compared to a destroyed printed hard copy when it no longer has a physical existence hence intangible.

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<sup>36</sup> Copy of text stored on the computer and only accessible through the computer, See: <http://www.computerhope.com/jargon/s/softcopy.htm> ; examples of ‘soft copy’ include emails, word documents, pdf. Files, etc

<sup>37</sup> RAM from Wikipedia, the free encyclopedia, [http://en.wikipedia.org/wiki/Random\\_access\\_memory](http://en.wikipedia.org/wiki/Random_access_memory) .



The second situation is rather straightforward. When a computer machine is turned off a *soft copy* continues to be held in the machine. This is because it has been saved in different storage devices of a computer. Just as a printed copy of a letter can be stored in a manual file of the office records so that it can no longer be visible and/or readable unless the file is consulted in future, the same applies to *soft copy*. The *soft copy* disappears temporarily but is not lost, it continues to be held in the computer machine, i.e., the hard disk, and/or other storage devices like floppy disk, Universal Serial Bus (USB) mass storage device, etc. The *soft copy* can later be retrieved on the computer monitor and be accessible to human eye. It can thus be argued that the question of where and how a *soft copy* should be stored and kept permanently is irrelevant.

## 2.3 Classification of Documents

### 2.3.1 Public v. Private

The *Public v. Private* classification of documents is based on the criterion of the institution from where a document originates. There are two institutional sources of documents for purposes of this classification. The first source of documents is the public institution while the second is the private institution. Suffice to mention here that a public institution encompasses certain acts or records of state officials and bodies; and a private institution covers private individuals and bodies. The documents which reside in the domain of the public institution are referred to as public documents and those in the private institution are known as private documents.

Phipson on Evidence<sup>38</sup> makes the distinction between public and private documents on the criteria of modes of proof. The learned author aptly says:

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<sup>38</sup> Howard, M.N, et al(ed) *Phipson on Evidence, 15<sup>th</sup> Edition*, Sweet & Maxwell, London, 2000, p. 1071.

‘Documents may, for evidential purposes, be roughly classed as public, *i.e.* their usual method of proof being by copy,...and private, *i.e.* their usual method of proof being by production of the original document...’

The criteria of classification of documents by Phipson are not free of doubts. First, entries in *bankers’ books* which are private documents<sup>39</sup> are always proved by production of *copies* instead of *original*. Second, with the development of computer technology, computer printouts have been regarded either as *original* (e.g. US) or *copy* (e.g. Nigeria). In either case, the treatment of computer printouts as original or copy may implicate their mode of proof in the contrary way as suggested by the learned author.

The TEA does not contain definitions of public nor private document. It only contains a list of public documents in section 83 of the Act<sup>40</sup>. The Act further states in section 84 that all other documents other than public documents are private documents.

In my view the above classification of documents is apparently not affected by the development of the new technologies, particularly the computer. This is because what makes a document public or private is not the technology involved in making it but the institution it resides. Thus a computer printout constituting the act of the President of the United Republic, for example, remains a public document. However the methods of proof of these documents have been affected in some ways by the development of computer technologies.<sup>41</sup>

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<sup>39</sup> Tapper, C, *Cross and Tapper on Evidence*, 10<sup>th</sup> Edition, Lexis Nexis, UK, 2004, p.708.

<sup>40</sup> *See*: Section 83. (a) documents forming the acts or records of the acts- (i) of the President of the United Republic; (ii) of official bodies and tribunals; and (iii) of public officers, legislative, judicial and executive; (b) public records kept in the United Republic of private documents.

<sup>41</sup> Further discussion on methods of proof is found in Chapter Four.

### 2.3.2 Original v. Copy

The determination of the original and copy of a document for purposes of the best evidence rule is among the most difficult areas of the law of evidence especially in the computerized environment. It can be asked: is the distinction between an *original* and a *copy* a question of logic or context? This is not an easy question to answer as correctly observed by one authority:

‘It is not always easy, however, to determine what is the original document so as to constitute primary evidence in this sense, and sometimes the same document is primary for one purpose and secondary for another.’<sup>42</sup>

The presence of computers has created additional complexities and definitional problems within the accepted rules of evidentiary procedure.<sup>43</sup> Gahtan (1999:152)<sup>44</sup> summarizes such complexities in the following paragraph:

*‘In the case of computer- produced evidence, it is not always clear what is an “original” and what is a “copy”.* When information is first entered into a computer system, it is commonly stored in the system’s memory (for instance, read/write or RAM memory on a PC, which generally has the quickest access time). It is then usually quickly copied to a semi-permanent storage device such as a hard disk so that

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<sup>42</sup> Malek, H. M(ed)( et al), *Phillips on Evidence*, Sixteenth Edition, Sweet & Maxwell, London,2005 p. 1192.

<sup>43</sup> Rines, R.H and Roster, M.D, *Computer Jurisprudence: Legal Responses to Information Revolution* 349(1986), Dobby Ferry, N.Y, Oceana Publications, c 1985.

<sup>44</sup> Gahtan, A.M, *Electronic Evidence*, Carswell,Canada/U.S,1999.

the system's core memory can be freed up of other tasks. At some point it may also be copied or moved to a magnetic tape or optical disk storage media for longer term storage. The information, as stored in any of the foregoing digital storage mediums, is not perceived by humans and must be printed out in hardcopy form, or displayed on a computer monitor. *Courts have not always been consistent as to when a record stops being an "original" and becomes a "copy" during this process*'.

Just to amplify the last point in italics from the above quote, the USA approach in this matter has been to make it specific in the FRE that *computer printout* is an *original* document.<sup>45</sup> The FRE however is the USA Federal statute. In states where the FRE has been transposed in their legislations the same approach is applicable. However in states where the FRE has not been implemented the common law admits computer printouts as *copy*. The Mississippi case of *King v. State for Use and Benefit of Murdock Acceptance Corp*<sup>46</sup> in the USA is an illustrative case to the point. In this case the court held:

'Information stored in the computer constituted the "original", and the printout was the "copy". The "copy" was admissible as secondary evidence as the "original" was unavailable, being in a form which was not readable.'

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<sup>45</sup> FRE; Rule 1001(3) -states in pertinent part: 'An "original" of a writing or recording is the writing or recording itself or any counterpart intended to have the same effect by a person executing or issuing it....If data are stored in a computer or similar device, any printout or other output readable by sight, shown to reflect the data accurately, is an "original"'

<sup>46</sup> 222 So.2d 393 (Miss. 1969), noted in 41 Miss.L.J. 604 (1970).

The opposite approach was taken by the Nigerian Supreme Court in *Anyaebosei v R T Briscoe*<sup>47</sup> where it was held that a computer printout is a copy. It should be recalled that the Nigerian Evidence Act, just like the TEA, does not specifically mention the status of computer data *vis-à-vis* computer printout.

The USA and Nigerian approaches as to the status of *computer printout* represent the main lines of the dichotomy between *original* and *copy* of a document in the rules of admissibility of documentary evidence. My research of statutory and case law as well as legal discussions across the common law countries has revealed four omissions in relation to the distinction between *original* and *copy*. The first point which has always been overlooked by legislators, judges and legal academics is that when a conclusion is made to the effect that *computer printout* is an *original* document and/or a *copy* the opposite determination is left unattended. For example, while the US FRE categorically states that a *computer printout* is an *original*, the same piece of legislation is silent on the status of *computer data*. The same trend occurs in the above cited Nigerian case. When the Nigerian Supreme Court ruled that a *computer printout* is a *copy* it stopped there and said nothing about the status of *computer data* of which the print-out was admitted as secondary evidence. In my view the omission to deliberate on the status of computer data in both cases does not necessarily mean that if a computer printout is said to be a copy then the former constitutes an original document and *vice versa*. If that was the case then it could be logically difficult to comprehend the US FRE situation where computer printout is held to be an original document.

The second point which has seldom been addressed in most evidence legislation, case law and in academic discussions is the status of *soft copy* available on the computer monitor. It has been pointed out earlier in this section that computer operations on the data input may result into two types of outputs: the *soft copy* on the monitor and the

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<sup>47</sup> See: footnote 37

printed *hard copy*. To my understanding *soft copy* stands in the middle of computer data and computer printout. Until it is printed a computer printout remains in the machine as either computer data or soft copy available on the monitor.<sup>48</sup> It appears to me that there are three types of documents which must be considered in the dichotomy of original and copy. These are *computer data, soft copy, and printout*. In reiterating the first point it is further argued that when a computer printout is treated as either original or copy relation must not necessarily be directed towards computer data as there exists also a soft copy on the computer monitor or in storage devices.

The third point which has been overlooked is relevant as far as secondary evidence is concerned.<sup>49</sup> The question which can be asked here is: what is a copy of a computer printout? Further to this question it can be asked: what is a copy of a computer printout when the former is held to be an original; similarly it can further be asked: what is a copy of a computer printout when the former is held to be a copy? These are important questions since they trigger the application of the best evidence rule.<sup>50</sup> If care is not exercised there is always the danger of categorising computer printouts as primary evidence or secondary evidence as the case may be.

The TEA provides under section 64 (4) the rule for determining the primary evidence<sup>51</sup> made by one uniform process. According to this provision, where a number of documents are all made by one *uniform process*, as in the case of printing, lithography or photography, each is primary evidence of the contents of the rest; but where they are all *copies of a common original*; they are not primary evidence of the contents of the *original*. Then what is meant by *uniform process*? Are computer printouts made by

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<sup>48</sup>A 'soft copy' may also be stored in different storage devices like floppy disk, USB mass storage, etc.

<sup>49</sup> Matters of secondary evidence are dealt with in Chapter Four.

<sup>50</sup> See: Chapter Four.

<sup>51</sup> Also known as the 'original' document.

*uniform process? What are copies of a common original? Are computer printouts copies of a common original?*

The phrase *uniform process* is linked to printing, lithography or photography such that documents made by each of these processes are the same in all parts and at all times. The question is whether computer machine can be read in the cited provision. The Nigerian case of *Esso West Africa Inc. v. L. Oladiti*<sup>52</sup> is relevant to interpret section 64(4) of the TEA. Section 94(4) of the Nigerian Evidence Act, which was at issue in the *Esso* case is in *pari materia*<sup>53</sup> to the cited provision of the TEA. In this case Aguda J. (as he then was) held:

‘In my view, the processes of “ printing”, “lithography”, and “photography” mentioned in this subsection is(sic) not meant to be exhaustive of such process but are mentioned only as examples of the type of uniform process intended....’.

As pointed out earlier in this chapter, the functionalities of the computer machine are generically similar to those mentioned in section 64(4) of the TEA. This being the case, it can be argued that computer printouts are made of uniform process thus each document is held to be original. The first limb of the rule seems to be in line with the approach of treating computer printouts as original.<sup>54</sup> However problems arise with respect to the second limb of the rule that where they are all *copies of a common original*<sup>55</sup>, they are not primary evidence of the contents of the *original*. When computer printouts are treated as copies as in the case of the Nigerian jurisdiction, where is a *common original? What is the status of such copies? The questions raised here show how it is difficult to apply the TEA in the ICT environment with sensible results.*

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<sup>52</sup> See: footnote 37.

<sup>53</sup> Identical.

<sup>54</sup> See: US FRE.

<sup>55</sup> Common original implies stemming out from the same existing document to multiple copies.

The final point overlooked in most evidence legislations of common law countries are definitions of the terms *original* and *copy*. Although substantial reference has been made to these terms there are no attempts to define them. I have been able to find one definition of the term *copy* in the UK CEA. In terms of section 13 of the Act a *copy* is defined as follows:

‘A copy in relation to a document, means anything onto which information recorded in the document has been copied, by whatever means and whether directly or indirectly.

Unfortunately, the UK CEA does not contain the definition of an original document. The omission to define these terms may bring great uncertainties especially in the computerised environment.

## **CHAPTER THREE**

### **3. Bankers' Books**

#### **3.1 Introduction**



Bankers' books constitute a special category of document. In most common law jurisdictions they are governed by special rules different from ordinary documents usually contained in a separate chapter/part<sup>56</sup> or statute.<sup>57</sup> By *ordinary documents* I mean all documents other than bankers' books. It is therefore prudent to treat them in a separate chapter of their own. There is also another reason why bankers' books should be treated in a separate chapter. In Tanzania the landmark case in *Trust Bank Tanzania Ltd* on the admissibility of electronic evidence was considered in the sphere of bankers' books.<sup>58</sup> Thus this Chapter seeks to define bankers' books and lay down the regime of their admissibility under TEA in the context of electronic evidence.

### 3.2 What are they?

Bankers' books comprise a wide range of documents of transactions between a banker and his customer. Examples of these documents include ledgers, day books, cash books, books of accounts, etc. However not every document that passes between a banker and his customer is a bankers' book. Under the English law bankers' books exclude copies of letters written and sent by the bank to a customer or bundles of cheques and pay -in-slips.<sup>59</sup>

As mentioned in section 3.1 of this Chapter, the rules governing the admissibility of bankers' books in Tanzania are found in *PART IV of CHAPTER III of TEA*. This part contains seven sections, namely section 76 to 82. Section 76 is an interpretation provision for *PART IV*. Unfortunately this section does not define what is a bankers' book. There are some case law instead which has considered the definition of a bankers'

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<sup>56</sup> In the case of the TEA, Part IV of Chapter III.

<sup>57</sup> See: UK Bankers' Books Evidence Act, 1879 and the Indian Bankers' Book Evidence Act, 1891.

<sup>58</sup> When I was writing this thesis such decision was the only authoritative case binding subordinate courts to the High Court of Tanzania; there was however no authoritative decision from the Court of Appeal of Tanzania-the supreme court.

<sup>59</sup> See: UK cases in *Dadson* (1983)77 Cr.App.R.91, C.A; *Williams v. Williams* (1988) Q.B. 161, CA.

book in the Tanzanian jurisprudence. The landmark case of *Trust Bank Tanzania Ltd* considered this issue for the first time.

The issue before the court in this case was whether or not a computer printout is a bankers' book under the TEA. In disposing this issue, the Court looked into the English law as well as the Court of Appeal of Tanzania in the case of *Tanzania Cotton Marketing Board v. Cogecot Cotton Company SA*<sup>60</sup> as this was still a grey area.

The Court was first referred to the definition of bankers' book found in *Sarkar on Evidence*<sup>61</sup> by Counsel for the Defendants. The actual provision of the Indian law is section 2(3) of the *Bankers' Book Evidence Act, 1891*<sup>62</sup> which provides that bankers' books include ledgers, day books, cash books, account books and all other books used in the ordinary business of a bank. It must be pointed out that this definition was amended and replaced by a new section in the year 2000 by the *Information Technology Act, 2000*<sup>63</sup> which provides:

'bankers books include ledgers, day-books, cash-books, account-books and all other books used in the ordinary business of a bank whether kept in the written form or *as printouts of data stored in a floppy, disc, tape or any other form of electro-magnetic data storage device*'.<sup>64</sup>(Emphasis supplied).

Counsel for the defendants did not address this latest development in the Indian legislation probably because it would turn against his clients' interests, was unaware of and/or the provision did not exist during this period. His submission was that computer

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<sup>60</sup> (1997) T. L. R 165.

<sup>61</sup> *Sarkar on Evidence*, 15th Edition, Vol. 2 p.2370.

<sup>62</sup> Act No. 18 of 1891(India).

<sup>63</sup> Act No. 21 of 2000(India), Paragraph 1, Third Schedule.

<sup>64</sup> It is not clear if this provision was already in force at the time of this case.

printout is not a bankers' book as the same was not contemplated in that definition (the old definition of bankers' books in the Indian legislation). The Court did not give its opinion on this submission. Instead it inclined to the submission of the Counsel for the plaintiff who cited the English law in support.

The Counsel started by citing section 9 of the *UK Bankers' Books Evidence Act, 1879* whose definition of bankers' books is the same as that found in the *Indian Bankers' Book Evidence Act, 1891*. He went further to note, as the Court did, that the definition of bankers' books under the English law was amended in 1979 by the *Banking Act, 1979*. In terms of section 9(2) of this piece of legislation, bankers' books include:

‘ledgers, day-books, cash books, account-books and other records used in the ordinary business of the bank, whether those records are in written form or are kept on microfilm, magnetic tape or any other form of mechanical or electronic data retrieval mechanism’.

In effect the statutory extension of the definition of the bankers' books in the *English Banking Act, 1979* is the same as that of the *Indian Information Technology Act, 2000*. Counsel for the plaintiff further cited the UK case of *Barker v. Wilson*<sup>65</sup> in which Bridge, L.J had this to say:

‘The Bankers' Books Evidence Act 1879 was enacted with the practice of bankers in 1879 in mind. It must be construed in 1980 in relation to the practice of bankers as we now understand it. So construing the definition of “bankers' books” and the phrase “any entry in the banker's book” it seems to me that clearly both phrases are apt to include any form of permanent record kept by the bank of transactions relating to the bank's business, *made by any of the*

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<sup>65</sup> (1980) 2 All ER 80 at p.82

*methods which modern technology makes available, including in particular, microfilm*'. (Emphasis supplied).

Convinced of the approach of the English law Nsekela, J. (as he then was) held that a computer printout is a bankers' book under the TEA. This means equally that the definition of a bankers' book in the Tanzanian jurisprudence extends from the original definition of bankers' books as found in the English law as well as the Indian law which included '*ledgers, day books, cash books, account books*'.

The Judge was also convinced that a broad approach of interpretation was appropriate and necessary and cited the Court of Appeal of Tanzania's judgment in *Tanzania Cotton Marketing Board* to support his opinion.

The strong persuasive force of the English law as to the definition of a bankers' book under the TEA clearly suggests that what is not a bankers' book in the former will likewise be excluded in the later. As mentioned above, copies of letters written and sent by the bank to a customer or bundles of cheques and pay-in-slips are not considered as bankers' books under the English law.<sup>66</sup> If this question arise in future in our courts, it is most likely that the courts will follow the principles under English law.

One legal commentator<sup>67</sup> has criticized the Court's reliance on the English law on its interpretation of the term bankers' book while the *reception clause* is no longer available under our legal system to automatically adopt the English law. The former constituted the legal basis for the application of the English law (the common law, the doctrines of equity and statutes of general application in England)<sup>68</sup> in Tanganyika (now called Tanzania after independence in 1961). In the opinion of the learned author if a

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<sup>66</sup> See: footnote 63.

<sup>67</sup> See: footnote 11.

<sup>68</sup> See: Section 17(2) of the Tanganyika Order-in-Council, 1920.

similar case find itself in the Court of Appeal, Tanzania's highest court, it is possible that the Court of Appeal may reach a different decision. It appears in my view that the author's conception of *reception clause* is misconstrued in this specific context. First, the *reception clause* as provided in section 17(2) of the *Tanganyika Order-in-Council, 1920* (hereinafter the *TOC*) introduced in Tanganyika for the first time the application of the English law.<sup>69</sup> This was a result of the German defeat in World War I and the transfer of the German East Africa (Tanganyika)<sup>70</sup> to the British<sup>71</sup>. The *TOC* was later repealed after independence in 1961 by the *Judicature and Application of Laws Ordinance, 1961*<sup>72</sup> (hereinafter the *JALO*). Section 2(2) of the *JALO* retained the application of the English law in Tanganyika (now Tanzania) in a limited scale. The conditions for the application of the English law are mainly three. The first condition is that there is no statute and/or provision enacted by the Tanzanian Parliament to govern a particular matter.<sup>73</sup> The second condition is that the said English law must have been in force in Britain on the reception date, i.e., 22<sup>nd</sup> July, 1920. The third condition is that such law is subject to modification by the court to suit local circumstances. Thus it is inconceivable to argue that the Tanzanian case of *Trust Bank Tanzania Ltd* was decided on the basis of the *reception clause* while pointing out a post-reception date English statute<sup>74</sup> and case law.<sup>75</sup>

It can further be argued that beyond the conditions stipulated in section 2(2) of the *JALO* the English law has persuasive force in Tanzania. This persuasive force of the English law has its legal basis from the common law legal system inherited by all most

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<sup>69</sup> The English law referred here was restricted to the law in force in Britain on the reception date, i.e., 22<sup>nd</sup> July, 1920. Subsequent development of the English law after this date had no force of law in Tanganyika.

<sup>70</sup> German East Africa comprised of Rwanda, Burundi and Tanganyika. After World War I Tanganyika was put under the mandate of the British by virtue of the League of Nations.

<sup>71</sup> See: Articles 118 & 119 of the Peace Treaty of Versailles, 1919.

<sup>72</sup> Cap. 453 of the Laws of Tanzania.

<sup>73</sup> A good example is the application of the common law doctrine of intention to create legal relation in contract formation which is not provided in the Tanzanian Law of Contract Ordinance, 1961.

<sup>74</sup> English Banking Act, 1979.

African countries formerly under the British colonial rule. Nguluma (1979: 192)<sup>76</sup> correctly observes:

‘We have seen that the Indian Evidence Act is little more than an attempt to reduce the English law of evidence to the form of express propositions, with only few modifications rendered necessary by the peculiar circumstances of India. The said Act, having worked successfully in the British India colony, was directly introduced in the East African countries, that is, Kenya, Uganda, Zanzibar and Tanganyika, late in the nineteenth century and early in the twentieth century, respectively...’.

Thus my view is that by making reference to the UK law the High Court of Tanzania was not falling to the defunct *reception clause*. It was rather looking around to other common law jurisdictions to see how the provisions of the TEA would be interpreted in the context of new technologies. This is not a new approach in the common law legal tradition. It is more akin to statute *in pari materia* approach, though in this particular situation the TEA does not contain a definition of bankers’ books at all. Arguably, the Court was not bound to follow the interpretation of the English law, it was merely persuaded.

Finally, it should also be noted that Nsekela J. cited also the Court of Appeal of Tanzania’s case of *Tanzania Marketing Board* where at pages 4 to 5 he noted:

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<sup>75</sup> See: footnote 75.

<sup>76</sup> Nguluma, A.T, ‘*The Tanzania Law of Evidence in Historical Socio-Economic Context*,’ A Dissertation Submitted for the Partial Fulfillment of the Requirements for the Master of Laws(LL.M) Degree of the University of Dar es salaam, 1979.

‘...But in taking this course of action, I am certainly not traversing virgin territory. The highest court of the land in the case of **Tanzania Cotton Marketing Board v. Cogecot Cotton Company SA** (1997) TLR 165 had occasion to construe the words “registered post” appearing in Rule 4 of the Arbitration Rules, 1957...’ (Emphasis original)

By the words ‘...But in taking this course of action, I am certainly not traversing virgin territory’ the Judge supposedly was referring to the broad interpretation in the Court of Appeal’s case. It is submitted that the Court of Appeal would most likely uphold the High Court position if the matter was appealed against.

### 3.3 Rules of Admissibility

The main rule of admissibility of a bankers’ book is contained in section 77 of the TEA.<sup>77</sup> According to this provision a bankers’ book is always admitted in court as copy. Section 78 of this Act lies down three criteria which must be fulfilled before a copy of an entry of a bankers’ book is admitted as evidence<sup>78</sup>. These include first, that the book must be one of the ordinary books of the bank, second, that the entry must have been

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<sup>77</sup>Section 77 provides that subject to this Act, a copy of any entry in a banker’s book shall in all legal proceedings be received as prima facie evidence of such entry and of the matters, transactions and accounts therein recorded.

<sup>78</sup>Section 78 (1) provides that a copy of an entry in a banker's book shall not be received in evidence under this Act unless it be first proved that the book was at the time of the making of the entry one of the ordinary books of the bank, and that the entry was made in the usual and ordinary course of business, and that the book is in the custody or control of the bank.(2) Such proof may be given by a partner or officer of the bank, and may be given orally or by an affidavit sworn before any commissioner for oaths or person authorized to take affidavits.

made in the ordinary course of business and finally that the book must be in custody or control of the bank. This section provides further two categories of persons who may give evidence for the bank and the manner such evidence should be given. It is specified in this section that *a partner or officer of the bank* may give proof of a bankers' book. This proof may be given *orally or by an affidavit* sworn before any commissioner for oaths or person authorized to take affidavits.

What is meant by the following phrases: *ordinary books of the bank*? in the first criterion; *in the ordinary course of business* in the second criterion? and *custody or control of the bank* in the third criterion? Unfortunately there is no guidance in the TEA and case law as to the meaning of these phrases. In the author's view the phrase *ordinary books of the bank* has direct bearing to the definition of *bankers' book*. The contrary view will mean that the former and the later are different sort of books maintained by the banker hence a situation of absurdity. The phrase *in the ordinary course of business* in the second criterion must be assessed within the practice of banking business across the bankers' community. It should not be limited to what a particular bank is doing its business. The last phrase *custody or control of the bank* is also problematic. Both *custody* and *control* in this context may mean within the jurisdiction of the bank. Thus it is difficult to envisage a situation where a bank has *custody* without *control* and vice versa.

There is an additional requirement in section 79 of the TEA to be fulfilled over and above the requirements in section 78. If this requirement is not met a copy of an entry in a bankers' book will not be received in evidence. For ease of reference this section of the law is reproduced verbatim:

'79.-(1) A copy of an entry in a banker's book shall not be received in evidence under this Act unless it be further proved that the copy has been examined with the original entry and is correct. (2) Such proof shall be given by some person who, has examined the copy with the original entry, and may be given either orally or by an affidavit sworn before any commissioner for oaths or person authorized to take affidavits' (Emphasis supplied)



The marginal notice to this section reads *verification of copy*. Thus simply stated, a copy of an entry in a bankers' book must also be verified. The verification is made through an examination of *the copy* with the *original entry*. The dichotomy of *copy* and *original entry* in the context of computerised environment brings the same problems considered in section 2.3.2 of Chapter Two. What is the *original entry* and what is the *copy*? It is unfortunate that the case of *Trust Bank Tanzania Ltd* did not direct itself to this point. The learned judge simply held:

‘It is in this spirit that I am prepared to extend the definition of bankers' books to include evidence emanating from computers *subject of course to the same safeguards applicable to other bankers' books under sections 78 and 79 of the Evidence Act.*’<sup>79</sup>.(Emphasis supplied).

In my view, reference to the *original entry* should be related to *the raw data* before keyed in the computer machine *via* the keyboard. This is because the *computer data* are intangible being in the form of binary code. Thus the concept of *original* in this context should not be confined to the *computer data* but to the *original raw data*.

There is another problem emerging from section 79(2) of the TEA. This provision provides further that proof shall be given by *some person*. The phrase *some person* is not clear. Are the categories of persons referred in section 78(2) of the TEA namely *a partner or officer of the bank* different from *some person* in section 79(2)? It can be argued that these are the same persons. This is because it could be difficult to bring a witness outside the bank for purposes of verification who is conversant with specific transactions and records of the bank. The categories of persons mentioned in section

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<sup>79</sup> At p. 4 of the High Court of Tanzania (Commercial Division) ruling.

78(2) are better placed in the business of the bank and most probably the authors of such entries in the bankers' book.

To conclude this Chapter, while I applaud the conclusion of the Court in the case of *Trust Bank Tanzania Ltd* I argue that the judgement falls short of clarification of a number of issues. Firstly, the learned judge, Nsekela (as he then was) dealt with the issue of whether a computer printout is a bankers' book under the TEA rather very briefly. The judge endorsed the English law without deep consideration of the import of the concerned provisions. For example, the judgment fails to make a distinction between *copy* and *original entry* in section 79 of the TEA. Again it fails to make specific discussion on how the traditional safeguards in sections 78 and 79 will apply to evidence emanating from computers. Second, the judge did not discuss what amounts to an entry in a banker's book and specifically whether a bank's computer records, not the printout, could amount to a banker's book for the purposes of the relevant provisions<sup>80</sup>. The judge seemed to have assumed that a bank's computer records could not amount to a banker's book<sup>81</sup>.

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<sup>80</sup> See: footnote 39..

<sup>81</sup> *Ibid.*

## CHAPTER FOUR

### 4. Admissibility of Computer Printouts at Trial

#### 4.1 Introduction

The admissibility of documentary evidence under common law jurisdictions is always subject to the requirements imposed by the three rules: best evidence rule, hearsay and authentication. The application of these rules is triggered the moment proof of contents of a document is sought by a party. These common law rules were developed in Britain and were imported to Tanzania in the 1920s *via* India when Tanganyika (now Tanzania) was officially put under the British colonial rule. The *Indian Evidence Act, 1872* was the vehicle of this importation. In 1967 when the TEA was enacted, these rules were retained although the *Indian Evidence Act, 1872* ceased to have force of law in Tanzania. In this Chapter I examine how the provisions of the TEA embracing the above common law rules can be applied to admit electronic evidence (*see*: section 4.2). In particular, this Chapter seeks to know if the admissibility of a computer printout as a bankers' book in the case of *Trust Bank Tanzania Ltd* can be applied to a class of ordinary documents(*see*: Chapter Three).This Chapter excludes discussion on situations

of *proof without evidence*.<sup>82</sup> These include formal admissions, judicial notice and presumptions.

## 4.2 An Overview of Rules of Admissibility of Documentary Evidence

### 4.2.1 The Best Evidence Rule

#### 4.2.1.1 The Rule

The best evidence rule requires that an original document be produced whenever the contents of a private document are sought to be relied by a party to a case. In some common law jurisdictions the rule is referred to as *the original writing rule*<sup>83</sup> while in others it is called *the primary evidence*.<sup>84</sup> The latter is defined in section 64(1) of the TEA as *the document itself* produced for the inspection of the court. The document itself is the *original* as opposed to the *copy*. In situations where copies are allowed in evidence, these are referred to as *secondary evidence* in section 67 of the TEA. The best evidence rule is contained in section 66(1) of the TEA. According to this provision *documents must be proved by primary evidence* except in the cases hereinafter mentioned. The exceptions referred here are those covered by *secondary evidence* in section 67 of the TEA as well as the bankers' books<sup>85</sup>.

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<sup>82</sup> Murphy, *op cit*, pp. 602-621.

<sup>83</sup> US FRE.

<sup>84</sup> *See*: the TEA.

<sup>85</sup> *See*: Chapter Three.

There are two main criteria for the best evidence rule to apply. The first criterion is that the contents of the document are at issue, and the second criterion is that the document to be relied must be a *private document* as opposed to a *public document*.<sup>86</sup> The later category of document is always proved by secondary evidence under section 67(1) (e) of the TEA. This provision provides that secondary evidence may be given when the original is a public document within the meaning of section 83.

The rationale for the application of the best evidence rule is to give effect to the terms of the document with as much accuracy and certainty as possible.<sup>87</sup> This was a necessary rule in the 18<sup>th</sup> century when the methods of making copies were imperfect, involving largely manual copying.<sup>88</sup> Thus to avoid the risks of forgeries, mistakes and inaccuracy associated with manual copying, or a witness giving oral evidence of the contents of a document from memory it was necessary that only original documents should be admitted.<sup>89</sup> With modern developments in technologies some legal academics like Gahtan (1999:151), Dennis (2002:408) and Murphy (2005:584)<sup>90</sup> have argued that the rationale behind the best evidence rule is no longer valid.

It is submitted that the technological revolution claimed to have been capable of producing perfect copies have never completely prevented forgeries, mistakes and inaccuracy. The mechanical/electronic processes of the computer are still under the threat of hackers who can interfere with the system with the intention to defraud. Software is also not always perfect. There are cases of computer *virus* which corrupts documents and/or produce some errors in the functioning of software. Additionally, the

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<sup>86</sup> See: section 2.3.1.

<sup>87</sup> Murphy, *op cit*, p. 584.

<sup>88</sup> California Law Revision Commission, *The Best Evidence Rule*, November 1996, p. 373.

<sup>89</sup> Dennis, *op cit*, p. 408.

<sup>90</sup> They argue that the best evidence rule has diminished in importance today, not surprisingly since copies can now be made accurately and inexpensively, through electronic means such as photocopiers. These generally remove any potential for error or inaccuracy in the copy. In the case of digital works (such as data in a computer system or stored on computer-readable media), the copies can be an exact duplicate of the original.

new technologies have not completely replaced handwritten documents. Even in the cyberspace there are still as many handwritten documents as computer printouts in both public and private businesses. Thus with these concerns the best evidence rule can not be thrown away notwithstanding the prevalence of the new technologies and their alleged perfection.

#### 4.2.1.2 Computer Printouts and the Best Evidence Rule

It has been pointed out earlier that the best evidence rule is reflected in section 66 of the TEA. The question is: how should this rule be applied in admitting computer printouts in courts? In other words, can the decision of *Trust Bank Tanzania Ltd* in which the High Court of Tanzania (Commercial Division) admitted computer printout as a bankers' book be applied with regard to the ordinary documents?

To answer the above questions we must consider in the first place whether a computer printout is a *document*. Then whether such a document is a *public* or *private*, and finally whether it is an *original* or *copy*. These three questions have already been addressed in detail in sections 2.2 and 2.3.

The case of *Trust Bank Tanzania Ltd* was not concerned with the above questions. As mentioned, the main issue in that case was *whether a computer printout is a bankers' book* as opposed to *whether a computer printout is a document*. It is submitted that despite the variation of the two issues, the *Trust Bank Tanzania Ltd* case is relevant to confirm that a *computer printout is a document*. Bankers' books are only a special class of documents regulated with special rules. The mere fact that they are regulated by special rules does not exclude them from the general definition of document under section 3(1) (d) of the TEA. For all purposes and intents bankers' books are documents in the first place. They have only acquired a special name because they regulate the relationship between a banker and his customer. And for practical reasons, they have

been excluded from the general rules of documentary evidence with regard to the ordinary documents.

It can further be argued that bankers' books are only an exception to the best evidence rule. This can be gathered from the wordings of section 66(1) of the TEA. Just to recall what this section provides, I reproduce it below:

‘Documents must be proved by primary evidence *except in the cases hereinafter mentioned*’. (Emphasis supplied)

As it has already been mentioned above the phrase *except in the cases hereinafter mentioned* covers the secondary evidence where a *copy* is adduced in evidence. Now since sections 67 and 77 on proof of secondary evidence and bankers' book respectively come subsequently to section 66(1) in the arrangement of sections of the TEA, they are both envisaged in this phrase. It is further argued that in both cases the mode of proof is by adducing *copies* and not *original documents*.

The second consideration is whether a document is *public* or *private*. The best evidence rule requires that whenever the *contents of a private document* are sought to be proved an *original document* should be produced. The case of *Trust Bank Tanzania Ltd* is less helpful in this aspect. This is because bankers' books are private documents and so in theory they should be proved by primary evidence<sup>91</sup>, i.e., the production of the original document. Because of the obvious inconvenience of the rule to the banks, whose records of customers' accounts are often required in litigation, special provisions were enacted to regulate evidence of the bankers' books.<sup>92</sup> By section 77 of the TEA:

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<sup>91</sup> Tapper, *op cit*, p.708, See also: Murphy (*supra*) p. 590.

<sup>92</sup> *Ibid.*

‘Subject to this Act, *a copy* of any entry in a banker’s book shall in all legal proceedings be received as *prima facie* evidence of such entry and of the matters, transactions and accounts therein recorded’. (Emphasis supplied)

It is this rule which as a point of departure excludes bankers’ books from the general application of the best evidence rule. Thus the absolute rule becomes that bankers’ books are proved by secondary evidence regardless of their being *private documents*. But unlike the secondary evidence referred in section 67 of the TEA, bankers’ books are further subjected to more strict safeguards in sections 78 and 79 of the TEA. (*See: section 3.3*).

The last consideration is whether a computer printout is *original* or *copy*. There is no case law in Tanzanian jurisprudence which has considered this question. It is very unfortunate that the learned judge in the case of *Trust Bank Tanzania Ltd* did not address this issue. As mentioned earlier, before a bankers’ book is admitted in evidence an examination of a *copy* and an *original entry* must be carried out as required under section 79 of the TEA. (*See: section 3.3*). Thus the provisions *de lege lata* are far from being settled in respect to electronic evidence.

#### 4.2.2 The Rule against Hearsay

##### 4.2.2.1 The Rule

Hearsay is one of the most complex and confusing of the exclusionary rules of evidence.<sup>93</sup> Commenting on the complexity and confusion of the rule Lord Reid remarked it is difficult to make a general statement about the law of hearsay which is

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<sup>93</sup> Tapper, C. *Cross and Tapper on Evidence, 10th Edition*, Lexis Nexis, United Kingdom, 2004, p.577



entirely accurate.<sup>94</sup> However despite these hurdles many formulations in the academic circles and case law exist to define the rule. It is not possible in a short thesis like this to underscore all these formulations. In the following, this thesis adopts the definition used in *Cross on Evidence* as cited with approval by the House of Lords<sup>95</sup> in the cases of *R v. Sharp*<sup>96</sup> and *R v. Kearly*.<sup>97</sup> The rule is formulated in the following words:

‘An assertion other than one made by a person while giving oral evidence in the proceedings is inadmissible *as evidence of any fact asserted*.’ (Emphasis supplied)

The language used in this formulation is highly technical. To put it simple, the rule restricts a witness while in a witness box to repeat what a third party had said outside the courtroom as a matter of its truth. The parameters of the rule were made in the UK case of *Subramaniam v. Public Prosecutor*<sup>98</sup>. In this case the Privy Council held that evidence of a statement made to a witness by a person who is not himself called as a witness may or may not be hearsay. It is hearsay and inadmissible when the object of the evidence is to establish the truth of what is contained in the statement. It is not hearsay and is admissible when it is proposed to establish by the evidence, not the truth of the statement, but the fact that it was made.

Thus it is the *purpose and/or object* which defines whether a particular statement amounts to hearsay or not. The operational words are *truth* and *fact* of the statement. If a statement is tendered to the court for purpose of proving its *truth* it is hearsay and generally inadmissible unless it falls within a recognised exception to the hearsay

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<sup>94</sup> *Myres v. DPP* (1965) A.C. 1001, 1019, HL.

<sup>95</sup> English Supreme Court.

<sup>96</sup> (1988) 1 W.L.R. 7, HL.

<sup>97</sup> (1992) 2 A.C. 228, 254.

<sup>98</sup> (1956) W.L.R. 965.

rule.<sup>99</sup> However if the purpose is only to establish the *fact* of the statement it is not hearsay and is admissible.<sup>100</sup> In this later case the statement is admissible as *real evidence*.<sup>101</sup>

In the UK case of *re Levin*<sup>102</sup> where the argument for the appellant was that the computer print-outs were inadmissible because they were hearsay in criminal proceedings, Lord Hoffmann opined:

‘This argument seems to me wrong at every stage. First, the print-outs are not hearsay....The hearsay rule, as formulated in *Cross & Tapper on Evidence*, 8th ed. (1995), p. 46, states that "an assertion other than one made by a person while giving oral evidence in the proceedings is inadmissible *as evidence of any fact asserted*." *The print-outs are tendered to prove the transfers of funds which they record. They do not assert that such transfers took place. They record the transfers themselves, created by the interaction between whoever purported to request the transfers and the computer programme in Parsipanny. The evidential status of the print-outs is no different from that of a photocopy of a forged cheque.*’ (Emphasis supplied)

The rationale for the rule against hearsay was stated in the UK case of *Teper v. R*<sup>103</sup> by Lord Normand. It was said in this case that hearsay evidence is inadmissible because it is not the best evidence and it is not delivered on oath. The truthfulness and accuracy of

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<sup>99</sup> Malek, *op cit*, p. 789.

<sup>100</sup> Gahtan, *op cit*, p. 140.

<sup>101</sup> Real evidence as opposed to documentary, testimonial and circumstantial evidence, takes the form of material object (including computer output) tendered to the court so that an inference may be drawn from its observation as to the existence, condition or value of the object in question. See Gahtan, p. 149.

<sup>102</sup> <http://www.publications.parliament.uk/pa/ld199798/ldjudgmt/jd970619/levin.htm>.

<sup>103</sup> (1952) A.C. 480, 486.

the person whose words are spoken to by another witness cannot be tested by cross examination and the light which his demeanour would throw on his testimony is lost.

In Tanzania the rule against hearsay is reflected in *PART IV* of *CHAPTER II* of the TEA. Of particular relevance to this thesis are sections 34B and 34C which deal with proof of written statements in criminal and civil proceedings respectively. Since computer printouts are usually admitted as *real evidence* as we shall see in the next section then these provisions will not be discussed in details.

#### 4.2.2.2 Computer Printouts and the Rule against Hearsay

Modern technology has provided means of storing, interpreting and reproducing data in ways which lead to inherently probative evidence being available to the courts.<sup>104</sup> The question is how should the common law rule against hearsay be applied to regulate the new phenomena, especially computer printouts? This is a difficult question since there is neither statutory provision nor case law in Tanzania which has dealt with this issue before. The difficulty is exacerbated by the nature of the production of computer printouts themselves. Explaining this phenomenon Gregory and Tollefson (1995) put:

‘The exclusionary effects of the hearsay rule can make some matters of proof extremely difficult, especially with electronic evidence, where computer data is often not entered by a person with personal knowledge of the matters. Also, the person presenting the information contained in electronic documents as evidence in court will usually not have personal knowledge of that information.’<sup>105</sup>

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<sup>104</sup> Malek, *op cit*, p. 789.

<sup>105</sup> Tollefson, E and Gregory, J.D, ‘Proposals for a Uniform Evidence Act’, *Uniform Law Conference of Canada*, 1995 at <http://www.ulcc.ca/en/poam2/index.cfm?sec=1995&sub=1995ad>.

From the above quote it appears that the concern of Gregory and Tollefson is rested on *lack of knowledge* of the matter between a person who enters the data in the computer and the one who presents the information as evidence in court. There is however another concern by Keller and Murray (1997)<sup>106</sup>. The co-authors' concern is about *authorship*. They have observed that the difficulty with computer records is how to show who the author actually is or even how many authors created a document. It is further observed by the learned authors that as many computer records are now held on computer networks, the documents may have hundreds of potential authors.

The above concerns have led computer printouts to be treated in some common law jurisdictions as hearsay statement and only admissible under the business records exception<sup>107</sup>. The USA jurisdiction is a direct example to the point. Under Rule 803(6) of the US FRE the term *business* includes business, institution, association, profession, occupation, and calling of any kind, whether or not conducted for profit.

This provision excludes individuals outside the business circles to invoke its application. For instance, when two individuals exchange e-mails outside the business circles it is most likely the printouts of such e-mails will not qualify under the business record exception. Since in the US computer printouts are only admissible under the business record exception it can be argued that the approach is inadequate.

In the UK and some other common law jurisdictions the common law approach of admissibility of mechanically produced documents has been invoked to computer printouts as well. This however depends on whether a printout is derived from

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<sup>106</sup> Keller, D. And Murray, K. *Information Technology Law in Ireland*, Butterworths, Dublin, 1997, p. 353.

information fed into the machine by a person, the so called *human generated electronic evidence* or the printout was created without the intervention of a human mind, the so called *computer-generated evidence*.<sup>108</sup> The former involves *hearsay* and is inadmissible while the latter *real evidence* and admissible. Illustrative of these two situations is the English case of *R v. Spiby*<sup>109</sup> in which the printout was from a hotel's computerised machine called a 'Norex'. This machine monitored guests' telephone calls, recording them and working out charges.<sup>110</sup> The printout of this record was admitted as real evidence. Taylor LJ held:

*'This was not a printout which depended in its content for anything that had passed through the human mind. All that had happened was that when someone in one of the rooms in the hotel had lifted the receiver from the telephone and, with his finger, pressed certain buttons, the machine had made a record of what was done and printed out. The situation would have been quite different if a telephone operator in the hotel had had herself to gather the information, then type it into a computer bank, and there came then a print-out from the computer. There the human mind would have been involved, that would have been hearsay...'* (Emphasis supplied)

It has been pointed out earlier that the common law approach of admissibility of mechanically produced documents like computer printouts is not reflected in the provisions of the TEA. The reason is that when the TEA was enacted such technology was not available in the country. Thus when a question of admissibility of computer

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<sup>107</sup> R.King and C. Stanley, Ensuring the Court Admissibility of Computer-Generated Records, *Proceedings of the IEEE 1<sup>st</sup> International Conference on Office Automation* (New Orleans, La., Dec. 17-19) IEEE, New York, 1984.

<sup>108</sup> Tapper, *op cit*, p. 373 & Phipson, *op cit*, p.789

<sup>109</sup> (1990) 91 Cr App R 186, CA.

<sup>110</sup> Taylor, A, *Principles of Evidence, 2<sup>nd</sup> Edition*, Cavendish Publishing Ltd, London, 2000 p. 173.

printout arises consideration of the UK and other common law jurisdictions with the same approach may be relevant to the Tanzanian courts.

### 4.2.3 The Authentication Rule

#### 4.2.3. 1 The Rule

Authentication means satisfying the court (a) that the contents of the record have remained unchanged, (b) that the information in the record does in fact originate from its purported source, whether human or machine, and (c) that extraneous information such as the apparent date of the record is accurate. Reed (1990)<sup>111</sup>

Reed's definition points out three important elements of authentication namely: *unchangeability*, *origination* and *accuracy* of contents of a document. In some legal literature the authenticity is termed as '*integrity*' of a document'.<sup>112</sup> The latter relates to the ability to verify that the content of a document had not been changed since it was written, finished and adopted by the author. The term '*integrity*' is however more commonly used in communication of electronic documents in electronic commerce law than in evidence. Authentication can further be contrasted with information security. The former's primary function is to identify the author and accuracy of a document while the latter's primary function is the protection of information against unauthorised access, modification, destruction or disclosure. It can be argued that as an aspect of authentication accuracy may encompass some of the information security issues like modification. However authentication and information security are two different concepts and serve different functions.

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<sup>111</sup> Reed, C. *The Admissibility and Authentication of Computer Evidence- A Confusion of Issues*, 5th BILETA Conference British and Irish Legal Technology Association, p. 5.

The main rule with regard to authentication at common law is that a document or other thing must be introduced to the court by a human being whose task it is to explain its identity, its nature, its provenance and its relevance.<sup>113</sup> This rule stems out the maxim that a document or other thing cannot authenticate itself at common law.<sup>114</sup>

No particular mode of proof of authentication of a document at common law is required. Since authentication is a question of fact and not law, it may be proved through direct evidence (i.e. oral) or circumstantial evidence<sup>115</sup>. Modern technologies have also made it possible for authentication to be proved *via* technological features of the system or record.<sup>116</sup> It must be emphasised that the common law rule of authentication is premised on the assumption that any documentary evidence will exist on paper and authentication lies in the testimony of the document's author or in verification of signature.<sup>117</sup>

The common law rule of authentication is reflected in section 69 of the TEA. This section provides:

‘If a document is alleged to be signed or to have been written wholly or in part by any person, the *signature* or the *handwriting* of so much of the document as is alleged to be in that person's handwriting must be proved to be in his handwriting’ (Emphasis supplied)

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<sup>112</sup> Lim, Y.F, *Cyberspace Law: Commentaries and Materials*, Oxford University Press, South Melbourne, 2002, p. 220.

<sup>113</sup> Tapper, *op cit*, p. 369.

<sup>114</sup> *Ibid.*

<sup>115</sup> Angel J. and Reed C, *Computer Law*, 4<sup>th</sup> Edition, Blackstone Press Ltd, London, 2000, p. 308.

<sup>116</sup> *Ibid.*

<sup>117</sup> Bender, D, ‘Computer Evidence Law: Scope and Structure’, *Vol. 1, Computer Law Journal*, 699,714(1979).

The above section makes reference to two important concepts: signature and handwriting. The latter term is clear but less obvious in meaning is the former term. The TEA does not define what is a signature and which form it should take. However commenting on the principle and scope of section 67 of the Indian Evidence Act, 1872 which is in *pari materia* with section 69 of the TEA, Sarker<sup>118</sup> points out:

‘This section refers to documents other than documents required by law to be attested. It says that the signature of the person alleged to have signed a document (i.e. execution) must be proved by evidence that the signature purporting to be that of the executant is in his handwriting (see *Venkatachala v. Thimmajamma*, A 1959 SC 443 post) and the other matter is the document (i.e. its body) must also be proved by proof of handwriting of the person or persons purporting to have written the document. Execution is proved by the first (i.e. proof of signature) and the genuineness of the document is proved by the second (i.e. proof of handwriting, unless they are admitted by the other side’. (Emphasis supplied)

The above commentary does not also define what is a signature. It provides however its form i.e. manuscript. In an Indian case of *Gangadhar Das v. Gadadhar Das*<sup>119</sup> it was further held that the execution of a document can not be said to be invalid merely because a person who knows to sign his name executes a document by putting his thumb impression. Thus under section 69 of the TEA proof of signature is by handwriting of a person who signed a document and proof of the genuineness of a document is through handwriting of its author. Proof of signature must also comply with sections 47 and 49 of the TEA. The two provisions relate to proof by experts and

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<sup>118</sup> Manohar V.R and Sarkar, S. *Sarkar on Evidence, 14<sup>th</sup> Edition, Vol. 1*, Wadhawa & Co. Nagpur, India.

<sup>119</sup> A 1986 Orissa, 173, 181.



non-experts respectively. How far can the traditional rule of authentication be applied in the electronic environment? This question is taken up in the next section.

#### 4.2.3.2 Computer Printouts and Authentication

Like the best evidence rule and hearsay, authentication of computer printouts creates many problems. In many cases the evidence is produced from the custody of a party to the proceedings, who will have an interest to serve and may have an inducement to tamper with the evidence.<sup>120</sup> To make matters worse any alteration will have taken place not on the thing produced in court, but on the storage medium from which it has been derived.<sup>121</sup> Besides the malicious activities of the parties to the proceedings, there are other problems relating to the system itself and security. These include system failures, software problems, and danger of unauthorized access to the file through other terminals in the network or by hackers<sup>122</sup>

So far there is no Tanzanian case which has directly addressed the problem of authentication of evidence derived from the computer. The case of *Trust Bank Tanzania Ltd* addressed the problem of authenticity of computer printouts within the traditional safeguards governing the admissibility of a bankers' book. (See section 3.3). The judgment does not offer a deep discussion of authentication of computer printout. It simply subjects bankers' books to the provisions of sections 78 and 79 of the TEA. It should be recalled however that bankers' books are governed by special provisions, and they are generally outside the scope of section 69 of the TEA which regulates authentication of ordinary documents.

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<sup>120</sup> Tapper, *op cit*, p.369.

<sup>121</sup> *Ibid.*

<sup>122</sup> Gahtan, *op cit*, p.158.

In other common law jurisdictions like the USA for example, where computer printouts are admitted in evidence as business records no special foundation for qualifying computer printouts is needed.<sup>123</sup> The USA courts admit business records on a presumption that the systems producing such records yield accurate results. The rationale for the presumption of reliability of computer records arise from the fact that if businesses rely on the records in the ordinary course of their affairs, then the means by which businesses process and record the data under their control is accurate.<sup>124</sup> This approach is criticised by Peritz who argue that courts are too lax with computer records but seemed to be realistic by Wright.<sup>125</sup> It may be argued that the threshold level for foundation evidence in the USA when admitting computer records is too minimal. The UK has recently followed the USA approach. The CEA provides in its section 9:

‘Any document taken from a business record is to be admitted as evidence’.

This approach appears to remove unnecessary burden in proving authentication of computer printouts. In these jurisdictions also both expert and non-expert are allowed to demonstrate a minimum level the operation of computer system.

It must be noted that in the area of electronic commerce digital signatures are widely used in authenticating electronic contracts. This however has been the result of harmonisation of national laws in specific regions like European Union.<sup>126</sup> These are accepted in admissibility of electronic evidence. So far Tanzania has no specific

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<sup>123</sup> See: footnote 16.

<sup>124</sup> *Ibid.*

<sup>125</sup> Wright, B. *The Law of Electronic Commerce EDI, Fax, and E-mail: Technology, Proof, and Liability*, Little Brown and Co, London, 1991, p. 119.

<sup>126</sup> Directive 119/93/EC.

legislation to govern electronic contracts; hence the legal status of digital signatures is unknown.

#### 4.3 Modern Technology and the Interpretation of Older Statutes: The Age of Liberal Approach

Recent development in technologies, particularly the computer, has strained the traditional methods of statutory interpretation. This is partly because of the rise of new concepts associated with the new technologies previously unforeseen by the older statutes. There is another reason; the fact that these statutes were enacted in a different social and technological context from the present limit their interpretation in the light of the earlier object and purpose.

In a jurisdiction like Tanzania where most statutes have not been brought in line with the new technologies, courts are left with the task of developing the law through case law. This implies also that the courts have to find suitable interpretation of the older statutes in the new context. This is not an easy task considering the fact that technical issues relating to the new technologies are involved in most cases. In the previous sections of this thesis we have seen how difficult it is to interpret some concepts like *document*, *original*, *copy*, *etc.* We have seen also some difficulties in applying the common law rules of admissibility of documentary evidence to computer printouts.

The case law concerning the interpretation of the TEA in the light of modern technologies is rather small and to my knowledge the problem has not been treated directly in the landmark case of *Trust Bank Tanzania Ltd*. However in the two cases of *Tanzania Cotton Marketing Board v. Cogecot Cotton Company SA*<sup>127</sup> and *Trust Bank Tanzania Ltd* the Court of Appeal of Tanzania and the High Court of Tanzania

(Commercial Division) respectively have been prepared to invoke the principle of updated construction to interpretation of older statutes. This approach is liberal in the sense that it flexibly interprets older statutes to accommodate changing circumstances.

In the case of *Tanzania Cotton Marketing Board* the Court was faced with question of whether the words *registered post* appearing in Rule 4 of the Tanzania Arbitration Rules of 1957 included DHL courier. The Court answered this question affirmatively. It said the words *registered post* had to be interpreted widely enough in order to take into account the current development in communication technology, such as courier postal services, that had taken place since 1957 when the rules were enacted.

The High Court of Tanzania (Commercial Division) followed the same line of reasoning in *Trust Bank Tanzania Ltd*. As already noted, in this case the issue was whether or not a computer printout is a banker's book under the TEA. The Court answered this question in the affirmative. The reasoning of the Court is found in pertinent part at page 4 of the ruling where it held:

‘...Tanzania is not an island by itself. The country must move fast to integrate itself with the global banking community in terms of technological changes and the manner in which banking business is being conducted. The courts have to take due cognizance of the technological revolution that has engulfed the world. Generally speaking as of now, record keeping in our banks is to a large extent “old fashioned” but changes are taking place. The law can ill afford to shut its eyes to what is happening around the world in the banking fraternity.’

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<sup>127</sup> T. L. R. 165

In arriving at this interpretation the Court also cited the earlier case of the Court of Appeal of Tanzania in *Tanzania Cotton Marketing Board*. This is the same trend of judicial practice across the common law jurisdiction in this field of law even in the absence of a specific provision of the law. The Canadian case of *Tecoglas Inc. v. Domglas Inc.*<sup>128</sup> and the UK case of *R v. Minors*<sup>129</sup> are illustrative of this trend. In the *Tecoglas Inc* the court held that there are not many large enterprises operating successfully today who do not use computers in connection to record-keeping. It would be almost impossible and certainly impractical to prove expenditures of the nature of those in this case without admitting the computer records or documents based on the computer print-out. In the case of *Minors*, the UK Court of Appeal noted:

‘The law of evidence must be adapted to the contemporary business practice. Mainframe computers, minicomputers and microcomputers play a pervasive role in our society. Often the only record of a transaction, which nobody can be expected to remember, will be in the memory of a computer. The versatility, power and frequency of use of computers will increase. If computer output cannot relatively readily be used as evidence in criminal cases, much crime (and notably offences involving dishonesty) will in practice be immune from prosecution’.

The question is whether the Tanzanian Courts’ approach to interpretation of the TEA in the light of the digital technology leads to sensible results. In my view it does although some questions are still left unanswered. This is because the ruling in *Trust Bank Tanzania Ltd* has made it clear from the definitional point of view that a bankers’ book extends from the traditional bankers books, namely ledgers, day books, cash books, account -books to computer printouts. It has also confirmed that computer printout is a

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<sup>128</sup> (1985), 51 O.R. (2d) 196(Ont.H.C)

document within the provisions of the TEA. The Court has also settled that the authentication of computer printouts is the same as traditional bankers' books.

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<sup>129</sup> (1989) 2All E.R.208

## CHAPTER FIVE

### 5. Conclusion

The development of digital technology in the last century has made profound impact on the traditional concepts of law and legal rules in the law of evidence. The body of rules governing the admissibility of documentary evidence has been severely strained. The principle problem lies in the definition of *document* that does not adequately reflect the electronic environment. In most common law jurisdictions the term *document* had been defined in reference to tangible media. Modern technologies especially the computer has made it possible for a *document* to exist in intangible medium. The so called *soft copy* in the language of computer scientists falls outside the traditional definitions of *document* in most evidence statutes including the TEA.

There are also other concepts which have brought difficulties in interpretation of evidence statutes. The terms *original* and *copy* of an electronic document are clear illustrations. The question is: *what is an original* and *what is a copy* as between *computer data* and *computer printouts*? These two questions have rarely been precisely answered. In some common law jurisdictions *computer printouts* are treated as *original* while in others *copy*. In each case the status of *computer data* is left unattended. In addition to the above general conceptual problems, the TEA has special problems with the definition of *bankers' books*. The law lacks a definition of bankers' books. Unfortunately the first case law in Tanzania to address this lacuna emerged in the context of computer printout. Although the court determined that computer printout is a bankers' book, it left some questions unanswered.

Besides conceptual dilemmas, the traditional rules of admissibility of documentary evidence have been challenged too. The best evidence rule which requires an original document to be produced in court whenever reliance is put on its contents has been encroached upon by digital technology. The determination of the *original* and *copy* under the TEA as pointed out is still problematic.

The rule against hearsay has similarly been strained. Its application has led to the distinction between computer output as a result of some human intervention and those

automatically generated by the computer. The hearsay rule has been held to apply to the former when truth of assertion is at issue in court. Despite this categorization the rule is still difficult to be applied in the computerized context. In some jurisdictions like United Kingdom, the hearsay rule has been abolished in civil proceedings and relaxed to a large extent in criminal proceedings. No case regarding admissibility of computer printouts has been tested in court on the basis of hearsay rule under the TEA.

The authentication rule has also been affected. Generally there has been an additional requirement of foundation evidence as to the operation of the computer system at all material time. In some jurisdictions the standard is higher than in others. In Tanzania this aspect has never been litigated except in admissibility of bankers' books where the court extended traditional safeguards to bankers' books in the form of computer printouts.

One thing which can be generally said about the law and practice of admissibility of documentary evidence across the common law jurisdictions is that there are no consistent approaches. Whereas in some jurisdictions legislative response has been quickly taken to amend the old laws in some other jurisdictions like Tanzania reliance is still heavily put on the traditional rules with slight and slow judicial innovation. Besides this apparent difference the content of the law is sometimes not the same.

## 5.1 Recommendations

The main recommendation advanced in this thesis is the amendment of the TEA to reflect the development of the new technologies. The main justifications in favour of the above proposal are three. First, the judiciary is not better placed to respond to the technological revolution of the computer as it cannot answer hypothetical legal questions and must always wait for an actual lawsuit to be filed. This implies that it will take long time for the law to develop on a case to case basis while legal certainty is immediately required by businesses and individuals. Second, it is the call from the judiciary itself to the legislature. This call was made specifically by the High Court of Tanzania (Commercial Division) in the landmark case of *Trust Bank Tanzania Ltd*. The Judge said:



‘As I have stated above, in as much as I subscribe to the view that the court should not be ignorant of modern business methods and shut its eyes to the mysteries of the computer, *it would, however, have been much better if the position were clarified beyond all doubt by legislation rather than by judicial intervention.*’ (Emphasis supplied)

Although no specific reasons were advanced by the Judge in the above invitation, it appears that the changing circumstances of technology previously not contemplated in the TEA required specific legislative measures.

Third, there is the difficulty of employing traditional methods of statutory interpretation to old concepts in the electronic environment.

In light of the above, this thesis recommends that first, the definition of the term *document* in section 3(1) (d) of the TEA be re-worded in order to accommodate the *electronic document*. Since modern technologies are dynamic and continue to change, the new definition should not make reference to a particular technology. In other words the provision must be technologically neutral to take into account future innovations. A useful point of departure for re-definition could be the US FRE definition<sup>130</sup>:

‘Writings and recordings.—“Writings” and “recordings” consist of letters, words, or numbers, or their equivalent, set down by handwriting, typewriting, printing, photostating, photographing, magnetic impulse, mechanical or electronic recording, or other form of data compilation.’

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<sup>130</sup> Rule 1001(1) of the US FRE.

Secondly, the concept of *original* and *copy* in sections 64(4), 65, and 79 of the TEA should be revised to precisely provide for the status of computer printouts. The USA has clarified the status of computer printout in Rule 1001(3) of FRE which provides categorically that if data are stored in a computer or similar device, any printout or other output readable by sight, shown to reflect the data accurately, is an original. It is recommended that this definition should be avoided, and a computer printout should instead be treated as a copy under the TEA. This approach will reflect the logic that computer input data are original and any output is a copy. It means that computer printouts should always be admitted in court as secondary evidence so long they accurately reflect the original data input. This approach is applicable in the Nigeria and the USA in states which have not transposed the FRE. The justification for admission as copy was stated in the Mississippi case of *King v. State for Use and Benefit of Murdock Acceptance Corp*<sup>131</sup> in the USA. In this case the court said that information stored in the computer constituted the *original*, and the printout was the *copy*. The *copy* was admissible as secondary evidence as *the original was unavailable, being in a form which was not readable*.

Thirdly, the definition of *bankers' book* should be introduced in section 74 of the TEA. It is recommended that the definition of bankers' books under the English law as cited with approval in the Tanzanian case of *Trust Bank Tanzania Ltd* should be adopted. This definition is technologically neutral and will take into account future development in technology regarding banking business.

Fourthly, the definition of the term *computer* and *computer printout* should be added in section 3(1) (d) of the TEA to define the scope of the machines whose printouts may be recognized by courts as computer printouts. This will avoid ambiguities from use of other types of machines not categorized as computers in ordinary language but with

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<sup>131</sup> 222 So.2d 393 (Miss. 1969), noted in 41 Miss.L.J. 604 (1970).

similar functions. As a point of departure the *South African Computer Evidence Act, 1983*<sup>132</sup> is recommended:

*'computer'* means any device or apparatus, whether commonly called a computer or not, which by electronic, electro-mechanical, mechanical or other means is capable of receiving or absorbing data and instructions supplied to it, of processing such data according to mathematical or logical rules and in compliance with such instructions, of storing such data before or after such processing, and of producing information derived from such data as a result of such processing;

*'computer print-out'* means the documentary form in which information is produced by a computer or a copy or reproduction of it, and includes, whenever any information needs to be transcribed, translated or interpreted after its production by the computer in order that it may take a documentary form and be intelligible to the court, a transcription, translation or interpretation of it which is calculated to have that effect;

Fifthly, the provisions requiring authentication of electronic documents like computer printouts should be introduced in *PARTS III* and *IV* of the TEA. Foundation evidence of reliability of the computer system should be provided for in sections 34B and 34 C; *PART III* and *IV*. The standard should not be too high. A tier system of expert and non-expert should be used to provide explanation of system reliability. Affidavits may also be used for this purpose.

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<sup>132</sup> Section 1(1)

The hearsay provisions in sections 34, 34B and 34C should be reconsidered generally in the light of admissibility of electronic evidence. This should be done after assessing local circumstances. The UK approach of abolishing hearsay in civil proceedings is recommended. However other safeguards must be put in place to ensure reliability of the computer system. This approach should not be introduced in the criminal proceedings whose standard of proof is too high.

In implementing the above proposals it is further recommended that the necessary details should be included in the text of the law. This is because in common law countries preparatory works have often not been given a great deal of weight in the interpretation of statutory legal text to which the works have led.<sup>133</sup> This also applies in Tanzania. But this is not to say that statutory legal text should contain every detail. It only means that there should be a balance between the details included in the text and the preparatory works. This is in sharp contrast to the jurisprudence of some of the civil law jurisdictions where preparatory works are not given a great deal of weight in interpretation of statutory legal text.

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<sup>133</sup> Stone J. *Legal System and Lawyers' Reasonings*, Stanford University Press, Stanford California, 1964, p. 32.

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