

ELECTRONIC BANKING, THE SECURITY AND RISKS
INVOLVED: A COMPARATIVE ANALYSIS BETWEEN
MALAYSIA, UK AND USA

BY

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ABSTRACT

Banking as practiced today demands constant updating of its technology to keep pace with the changing world where information technology guarantees success. The business of banks across the globe heavily depends on the technology to advance their business. Banking is almost in all places electronic, which the banking sectors now have to keep it ready to deal with Internet banking, the last development in the technological world. No one is quite sure how it would affect the conventional banking method, which has so far shown commendable enthusiasm and willingness to accept the developments in the technology.

Thus, what are the effects of electronic banking and how far it has changed the legal position of the parties? What happens when a customer transacts with a bank through Automated Teller Machines (ATM), who will be responsible when a customer loses his Personal Identification Number (PIN) and money is drawn from his bank? How far the bank is responsible for unauthorized withdrawal through ATMs? The threat of hacking is real so is the misuse and other criminal activities conducted over the Computers. What happens when a data is stolen while it is in the custody of some one? What happens when some one interferes with information stored in the computer? What are the legality of Internet banking and the validity of Digital Cash? How far the countries have prepared to this new challenge which is already in practice in certain places. What are the legislative positions to the reception of Internet banking? What are the attitudes of the judiciary to

the developments of electronic banking and its effect on the relationship between the banker and customer?

These issues affect the reliability and the authenticity of electronic banking. The question for the banking sector is how far the risks and security threat could be minimized considering the nature of electronic banking which involves transfer of funds from one bank to another through clearinghouses normally operated by a third party.

These issues have been analyzed in this dissertation in the light of decided cases, legislation and banking practices. In this study comparison have been drawn with Malaysia, the United Kingdom and the United States. The United States has been included in this study considering the technological developments in that country and legislative approach which so far has no parallel anywhere else. Each chapter begins with an introduction and ends with a conclusion where suggestions have been given for the improvement of the position in Malaysia while in each chapter the legal position is analyzed comparatively on legislative and judicial aspects in each jurisdictions. Other jurisdictions have also been brought in wherever necessary. In the final conclusion, the findings of this study are summarized and some suggestions have been given for the improvement of the position in Malaysia.

ملخص البحث

إن نظام البنوك كما هو مطبق اليوم يحتاج إلى تطوير مستمر في وسائله لتتماشى مع عالم متغير تحدد المعلومات التكنولوجية درجة النجاح فيه. عن نظام البنكي حول العالم يعتمد بدرجة كبيرة لتطوير أعماله التجارية على التكنولوجيا. إن نظام البنكي حول العالم أصبح نظاماً إلكترونياً وعليه أن يستعد لنظام المعاملات البنكية عبر الإنترنت كأحد أحدث التطورات التكنولوجية في العالم. لا أحد يعرف بالتحديد كيف يؤثر هذا النظام الجديد على الوسائل البنكية التقليدية والتي أبدت بدورها تقبلاً لهذا النظام الجديد.

فالسؤال هو ما مدى تأثير النظام الإلكتروني للبنوك على الوضع القانوني لطرفي المعاملة البنكية؟ ما هي الآثار القانونية لسحب الإنسان من مكينة السحب؟ من هو المسؤول إذا ضيّع شخص رقمه السري وسُحب مبالغ من حسابه؟ إلى أي مدى يكون البنك مسؤولاً عن أس سحب غير مأذون به من مكينة السحب. إن العمليات الإجرامية عبر الكمبيوتر وسوء استخدامه أمر واقعي. ماذا يحدث لو سرقت معلومات بينما هي بحوزة شخص ما؟ ما هي آثار استخدام إنسان لمعلومات مخزنة في الكمبيوتر؟ ما مدى قانونية العمليات البنكية عبر الإنترنت والسحب الآلي؟ إلى مدى استعدت الدولة لهذا التحدي والذي طبق في بعض الدول؟ ما هو موقف الجهاز التشريعي من العمليات البنكية عبر الإنترنت؟ وما هو موقف الجهاز القضائي من ذلك ومن العلاقة الجديدة بين البنك وزبائنه؟

إن هذه الجوانب تؤثر في مصداقية البنك ورسوخ العمليات البنكية عبر الإنترنت والسؤال بالنسبة للقطاع البنكي هو كيف يمكن التقليل من عمليات المخاطرة وعدم الأمن في ظل العمليات البنكية الإلكترونية والتي تتضمن تحويل رؤوس أموال من بنك لآخر بواسطة غرفة مقاصة يديرها طرف ثالث.

تلك هي مواضيع التي حللت في هذا البحث على ضوء الحالات القضائية لمشروعات
القانونية والممارسات البنكية. وقد قارنت الدراسة في ذلك بين ماليزيا، المملكة المتحدة
والولايات المتحدة الأمريكية. وقد أدرجت الولايات المتحدة بسبب التطور التكنولوجي
والتشريعي الذي لا ميل له في ذلك البلد. ويبدأ كل باب من هذه الدراسة بمقدمة وينتهي
بخاتمة تتضمن بعض الاقتراحات التي يمكن الاستفادة منها في تطوير الحالة الماليزية. وقد
قورنت في كل باب الحالات القضائية والموافق التشريعية للبلدان الثلاثة. كما ذكرت
حالات قانونية لبلدان أخرى حيث دعت الحاجة لذلك. وقد لخصت نتائج البحث في
الخاتمة كما ذكرت بعض المقترحات لتطوير الحالة الماليزية.

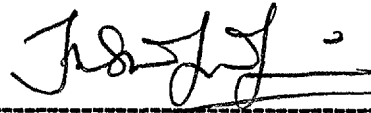
APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Comparative Laws



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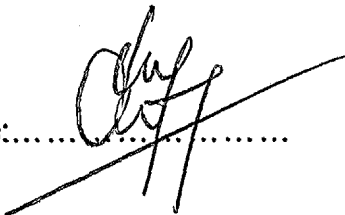
DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. Other sources are acknowledged by footnotes giving explicit references and a bibliography is appended.

MOHAMED JAMEEL AHMED

Name:.....

Signature:.....



Date..... 12/06/2000

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Dedicated

To

My beloved father Ahmed Abdullah

And

Mother Mariyam Mohamed

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United Kingdom

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Data Protection Act, 1984.

Supply of Goods and Services Act, 1982.

Unfair Contract Terms Act, 1979.

Theft Act, 1968.

United States

California Penal Code

Counterfeit Access Device and Computer Fraud and Abuse Act, 1984.

Computer Matching and Privacy Protection Act, 1978.

Computer Security Act, 1987.

Electronic Fund Transfer Act, 1978.

Financial Privacy Act, 1978.

Uniform Commercial Code.

Privacy Act, 1974.

Privacy Protection Act, 1988.

LIST OF ABBREVIATIONS

AC	Appeal Court
All ER	All England Report
ATM	Automated Teller Machines
APACS	Association of the Payment Clearing Service
APRA	Australian Prudential Regulation Authority
BACS	Banker's Automated Clearing Service limited
Bing	Bingham's Common Pleas Reports
CHIPS	Clearing House Interbank Payment System
Cr. App.R.	Criminal Appeal Report
DC	Digital Cash
EFTPOST	Electronic Fund Transfer at Point of Sale
Ed.	Editor
Edn	Edition
F 2d	Federal Reporter, Second Series USA 1924
Ibid	in the same
K.B	Kings Bench Division
MLJ	Malayan Law Journal
Op.cit.	In the Work quoted
QB	Queens Bench Division
Star	The Star NewsPaper (newspaper)

USC	United States Code
WWW	World Wide Web
W.L.R	Weekly Law Reports
Y2K	Year 2000

CHAPTER 1

INTRODUCTION

1 Definition of electronic banking & scope

Electronic banking is invoked by all strata of people in the society and countries around the world. Electronic banking is an incoming thing. It involves not only changes and shifts but the expansion of electronic banking involve variety of consideration, such as security and risks it may create.

Electronic banking is defined in the UNCITRAL¹ as a “fund transfer in which one or more steps in the process that were previously done by paper-based techniques are now being done by electronic techniques”. This is in harmony with the definition given in section 903 (6)² of the United States Funds Transfer Act of 1978, which is discussed further down in this dissertation together with the provision in Malaysia.

This dissertation covers certain legal issues in the light of electronic banking as defined above and its evolution in the banking industry. Since, this aspect of banking is one of the most growing areas of banking law³ the modern developments in this regard have

¹ Draft legal guide on Electronic Fund Transfer –United Nations Commission on International Trade Law 1987, p.12.

² Complete definition is provided in page 19 of this dissertation.

³ Smart, E, “ Electronic Banking An Overview of the Legal Implications”, Goode, R.M. (edit.), *Electronic Banking the Legal Implications*, Institute of Bankers, Center for Commercial Law Studies, University of London, 1985, p.1-2.

been accepted more readily than ever imagined.⁴ Countries worldwide have embraced themselves to these new technological developments by providing the necessary legislations and upgrading their banking system.⁵ However, for the purpose of this intended study, the dissertation will be conducted on the general hypothesis of “ how the paper work related to banking would be substituted with electronic banking with necessary safeguards”. This area was selected for this study considering the demand of the time and the interest it has been generating both in public and legal arena. The study mainly focuses on the legal issues it has since generated and comparison would be drawn between Malaysia, the United States, the United Kingdom and other jurisdictions⁶ would also be brought in wherever the necessary.

2 The scope of the study

This study is concentrated on the issues of securities and risks that are emerging as a result of electronic banking. Most of these issues are relatively new and is debatable in many aspects. However, for the purpose of this thesis the study is restricted to issues involving authenticity and reliability of the electronic banking that has been discussed with regard to technologically friendly banking system. Therefore, while this study will

⁴ Lass, J, “ Fraud, Error, and System Malfunction A Banker’s Viewpoint”, Goode, R.M. (edit.), *Electronic Banking the Legal Implications*, London, 1985, p.57. The author states that the changing roles of communication in the banking environment as in many businesses further emphasis the changing world picture.

⁵ For example since the introduction of the EFT several countries including the USA and Australia have introduced extensive legislations designed to govern it. See also Lass J, “Fraud, Error and System Malfunction A Banker’s Viewpoint”, Goode, R.M. (edit.), *Electronic Banking the Legal Implications*, London, 1985, p.57.

⁶ Other jurisdictions such as France, German and the European Union have been referred in wherever appropriate.

first discuss the security and risks of the electronic banking, and the problems of fraud it would also bring the conventional banking system in parallel to examine the security it had provided in the old system. The risks and the obligations of the customers and the banks under the ATM will also be analyzed. Secondly, the study would discuss the mode of the electronic money transfer and its applicability in the banking sector where comparison would also be drawn on the conventional money transfer system. The issues of authenticity and the system of clearing house operated in the countries mentioned in this study would also be discussed. Besides, the legal nature of the payment and the responsibility of the parties would be brought in and in this regard the time of the completion of the payment is discussed.

Technologies are vulnerable to the outside interference even by those with novice experience with it. This makes it one of the most unreliable methods of transfer. Often crooks find it thrilling to penetrate computer held materials and hackers are common phenomena to the electronic banking system. Still, bankers are not deterred by what they perceive to be a mechanical problem. It will be there no matter what kind of software is in place but the advantages are too high to turn it away. The financial systems operated through electronic means are faster, easier and provide bigger profit due to its low cost and less staff requirements.⁷ The various legislations found in different jurisdictions on the electronic funds transfer and its applicability suggests the degree of seriousness,

⁷ Lunt, P, "Welcome to sfnb.com The paradigm just shifted", (1995) /December ABA banking Journal, 40-43.

which the governments attach to it.⁸ Malaysia is one of the countries, which has consistently and ambitiously pursued the path of information technology. It could well be said that with the introduction of the Multimedia Super Corridor (MSC) the country is heading for the big time in the information technology. Electronic Commerce or E-Commerce⁹ is already here, hence the Government and the financial sector may also need to further adjust and probably amend certain laws such as the Banking and Financial Institutions Act 1989, to provide a mechanism for the regulation of the necessary financial structure.

Malaysia has already enacted certain pieces of legislation, such as the Digital Signature Act 1997 and the Computer Crimes Act 1997, both of which came into force on 30th of June that same year, may have been designed to regulate activities such as e-commerce and other business activities conducted through the computer. Hence, it is also analyzed in this study whether these legislations are also suitable to regulate the future developments and mode of banking such as the Internet banking. Laws are not the only tools by which commerce conducted on the net is regulated, but the judiciary plays a

⁸ See for example the Electronic Funds Transfer Act 1978 of the United States, which provides that the terms and conditions of the electronic funds transfer should be disclosed to the customer and his liability to unauthorized transfer must be available in an understandable language, and his right to stop the payment to a pre-authorized transfer. Similar venue is available under the Consumer Credit Act 1974 of the United Kingdom which stipulates that in the event of any loss of the credit card the holder's liability is limited to the financial institution and his liability is limited to the period before the notice to the amount of 50 pound. In Malaysia though there is no such law. The government is seriously pursuing the information technology (IT) that it has recently drafted the Computer Crimes Act 1997 and the Digital Signature Act 1997 both of which came into force on the 30th of June the same year. These legislations in effect are capable of governing the transactions conducted through computer or electronic means.

⁹ There is no specific definition of E-Commerce but in its basic form "electronic commerce represents transactions that are handled electronically –invoices, for example –rather than on paper. It includes but is not limited to, buying on Internet", Lucas, Al, "What in the World Is Electronic Commerce?", *World Executive Digest*, June 1997, p.16.