

KEY ISSUES IN E-BANKING STRENGTHS AND WEAKNESSES: THE CASE OF TWO JORDANIAN BANKS

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Abstract

This explanatory research paper uses mixed methods. Research about e-banking has been conducted from different angles on different topics by a number of researchers. The paper aims to examine the current status of Jordan's e-banking industry, identify its strengths and weaknesses, and use the findings in formulating future recommendations to make a contribution to knowledge in the chosen area.

The choice of the topic was informed by previous studies and experiences of the researcher and his former students from different countries but currently focuses on the e-banking industry in Jordan.

The methodology used to achieve the research objectives included carrying out interviews with two local banking executives, a direct questionnaire for banking customers, and the review of the extant literature. The research commenced by formulating four hypotheses that address the positive impact of e-banking for both the banks and their clients. However, a limited size sample was selected due to research limitations. The orientation of the paper turned out to be explanatory and in the direction of being a case study within the Jordanian context. This exploratory research therefore, focused on three main dimensions of e-banking in Jordan namely; Infrastructure readiness, behavioral influences, and the regulatory coverage.

The findings indicated that while the infrastructure is advanced in comparison to some of the other regional examples, it was still below the Western standards. It also has been established that the Jordanian e-banking is still not trusted enough by the individual clients. Finally, the legal or regulatory coverage in Jordan was found to be not fully satisfactory yet, although not very different from what exists in some of the most advanced country examples that it was benchmarked with. Some important recommendations to enhance the e-banking industry are

presented, such as; focusing more on the mobile-functionalities and services for being more advanced than internet services in Jordan, enhancing the broader e-commerce regulations that are weakening the more advanced local e-banking regulations, and launching local awareness and familiarization campaigns which could be undertaken by Jordanian banks.

Keywords: E-banking, banks, infrastructure, Jordan, regulatory framework

Introduction

This explanatory research aimed to focus on strengths and weaknesses in the main areas (which will later be defined as dimensions) in the Jordanian e-banking sector and compares it with the same areas in the global e-banking industry. As a result e-banking is to be presented from the perspective of the banks, their objectives and impact of e-banking as well as e-banking from the perspective of the customers which comprises their desired benefits and cultural influences. Lastly, e-banking dimensions such as the infrastructure readiness level, regulations of e-banking or legal coverage, respectively, and the readiness of the users of e-banking culturally and behaviorally are analyzed. The research suggests some recommendations for enhancement as related to each of the examined dimensions.

Research Methodology

The research focuses on a few areas of specific importance at the local level which is a bank in Amman (Alpha). In order to get an insight into the myths and myriads of customer perceptions of e-banking, customers had to be questioned directly. This was performed through the use of a designed a questionnaire (see Appendix I) which had been distributed among a sample of 22 customers. Of the total sample, 85% of the respondents were male and 15% were female. This discrepancy between the genders in terms of answering the questionnaires was a result of randomness (which customer enters the bank during the survey time) and of unequal willingness to respond to the questionnaire.

To obtain the answers with regards to infrastructure readiness and the impact of e-banking services on the bank's performance, two interviews were conducted with two executives from the main case bank and from other local bank. The two executives from the two different banks were chosen with consideration that both banks had introduced e-banking at different times. One bank chose to introduce e-banking about four years ago, whereas the other bank opted for e-banking in 2012 only. Bank Alpha has already a long experience with the customers' perception of e-banking while Bank Beta was still new to this service which makes them still very involved in the beginning stages. The data from both, the questionnaires and the interview questions, were used to address the hypotheses which are

covered under section 5. Legal coverage has been researched through literature review, by benchmarking local e-banking regulations with two examples from the international environment, in addition to an interview with a local banking expert in Amman.

Research Limitations:

There were at least three factors that were considered to be limitations to this research endeavor which are:

1- Managing access to carry out the interviews with the local bankers was not easy. The wide scope of the selected research topic would allow drilling down into details of only a limited number of dimensions such as infrastructure, regulations, and culture.

2- Time limitations lead to a reduced sample size for the customer survey.

3- The executives interviewed were reluctant to answer in-depth questions about their businesses. One reason for this reluctance might have been that they did not want to disclose what they considered was company-confidential information. Not only were they reluctant to providing details but perhaps, expressed in what was considered shallowness in answering these types of questions, was that the interviewees did not have much time or incentive to think about how to respond in far more detail.

Problem Statement and Hypotheses:

In order to create a protocol for the banking executive interview and a separate questionnaire to be used for the bank's customers, the problems at Alpha were identified and that formed the basis for the formulation of two of the general hypotheses namely H1 to H4. The bank noticed that their customers did not understand the process of how banks do their transactions which ultimately lead to the first hypothesis:

H1: e-banking services reduce the gap between the difficulties in customer understanding of the banking transactions and their participation in improving the sophistication of these services.

Moreover, the Beta bank realized that market share was lost to other Jordanian banks. They needed to follow up in a more technical and advanced way in order to cope with the competition. Therefore e-banking in their branches was introduced quite late, only in the summer 2012. This triggered formulating the second hypothesis:

H2: e-banking leads to having a competitive advantage in the different levels (e.g. Locally or internationally).

It can be concluded that other banking customers might have the same objections to and perceptions of e-banking. Therefore:

H3: e-banking is not trusted sufficiently by customers due to security-related issues and legislation-related issues.

This refers to hypothesized concerns of individual bank customers and ultimately leads to the question whether corporate customers such as firms have a different attitude towards e-banking. Therefore the following hypothesis have been put forward:

H4: Corporate Customers trust e-banking more than individual customers.

The research will conclude by providing the key findings, forecasted future evolution and recommendations for future research.

e-banking and e-readiness in Jordan

This paper addresses some contemporary and long time introduced banking ways in Western economies that have not long ago been emerging in Jordan. Out of the numerous definitions of e-banking that exist, the following is the most direct and comprehensive for the purpose of this paper: “*E-banking is defined as the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels. E-banking includes the systems that enable financial institution customers, individuals or businesses, to access accounts, transact business, or obtain information on financial products and services through a public or private network, including the Internet.*”²² This definition becomes relevant for this paper by elaborating on the following: “*Customers access e-banking services using an intelligent electronic device, such as a personal computer (PC), personal digital assistant (PDA), automated teller machine (ATM), kiosk, or Touch Tone telephone.*”²³ . The wording of “*intelligent e-device*” is essential here, as it perfectly fits into the context of this research. This paper distinguishes between e-banking which delivers online banking services through the internet, and mobile banking which refers to Smartphone or mobile device applications to conduct online banking services instead of via a computer. At the same time, Jordan’s readiness for online banking services is under examination. When discussing Jordan’s e-readiness or more precisely the readiness of bank customers as well as the readiness of banking institutions. The literature review, which will be addressed later in the paper, revealed that even though internet banking services have been widely adopted in developed countries, the usage in developing countries

²² http://wiki.answers.com/Q/What_is_e-banking

²³ <http://www.tech2date-com/the-history-of-internet-banking.html>

such as Jordan is still quite low.²⁴ Therefore, the coverage extends to the current status of the e - banking industry in Jordan as well as highlighting specific areas of strengths and weaknesses with regards to Jordanian e-banking.

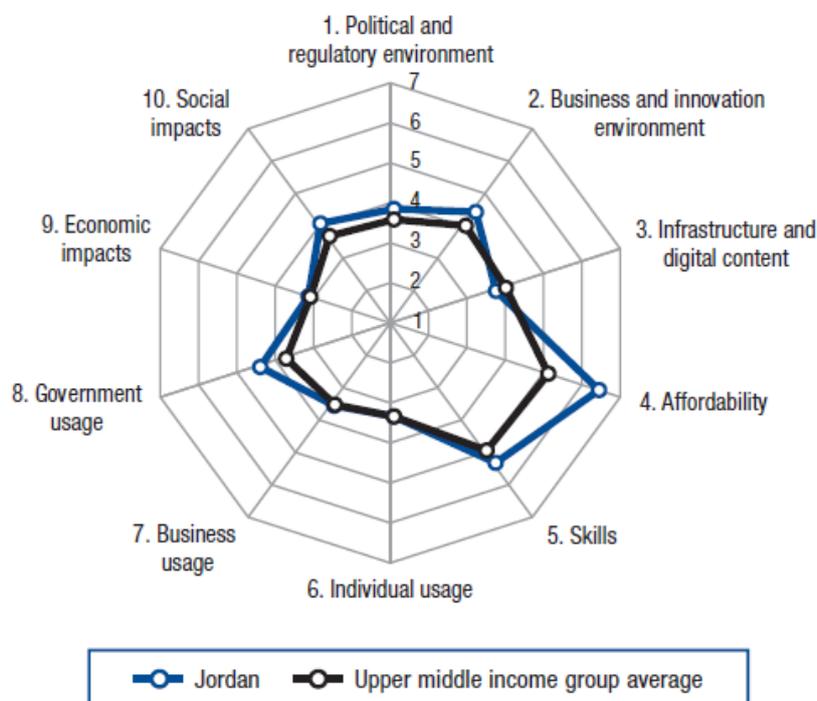


Figure 1: Jordan's Networked Readiness Index²⁵

The Networked Readiness Index launched in 2012 was composed of four sub-indices which were: Environment, Readiness, Usage and Impact. The following graph shows the four sub-indices as well as their sub-categories and relevant scores. The first number after each explanatory term represents the rank among 142 countries. The second value within the four sub-indices is the score out of seven. Within the 10 categories below the sub-indices the rank out of 142 is represented by the first number. The second number once again represents the score out of seven. In some cases it is not a score but a value corresponding to the scoring system. Further details can be obtained from the World Economic Forum document.

²⁴ <http://etd.uum.edu.my/2432/>

²⁵ Global IT Report 2012, p. 238

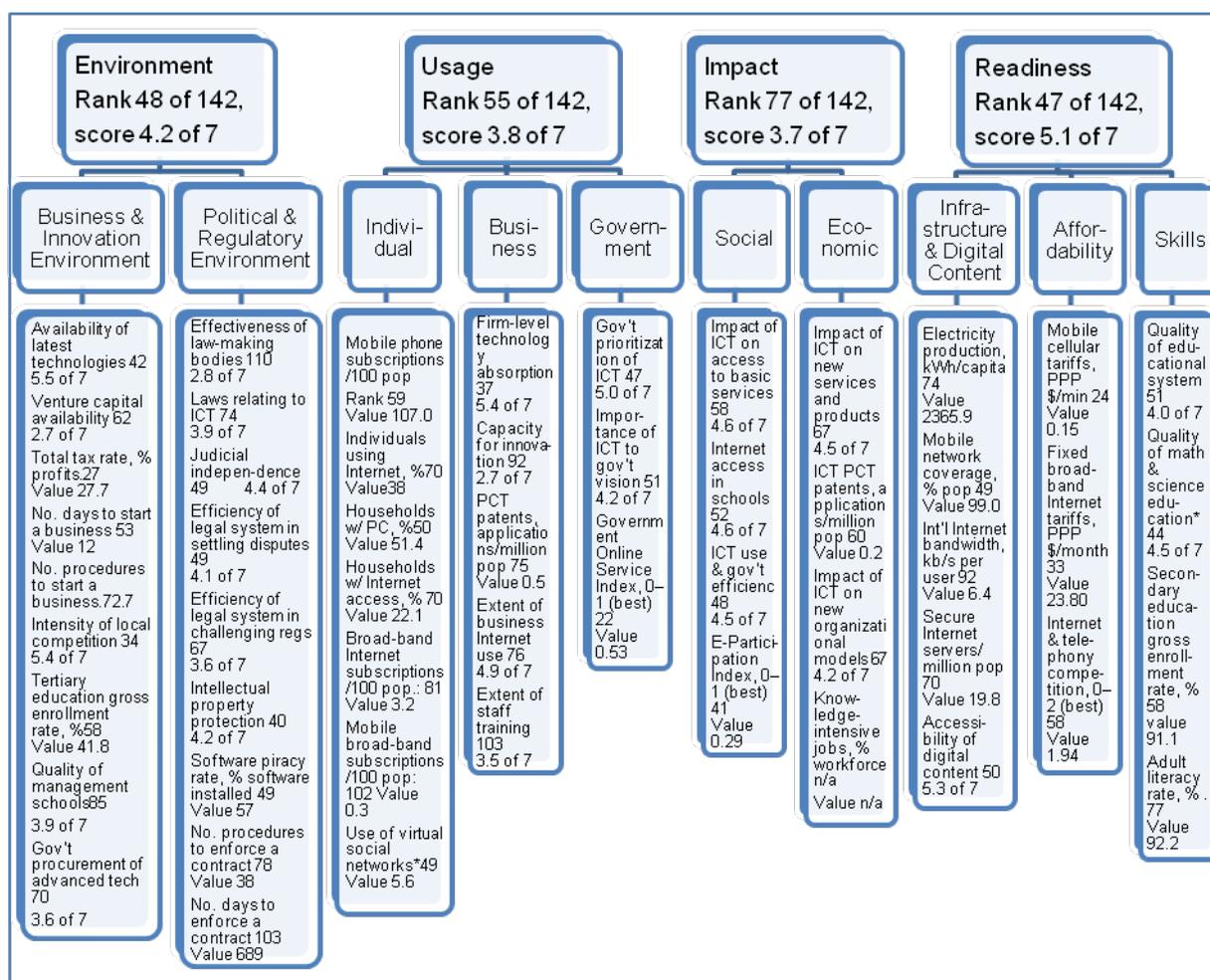


Figure 2: Jordan’s detailed Ranking and Scoring concerning Networked Readiness 2012

According to the World Economic Forum, Jordan ranks 47 in terms of information and communication technologies and in terms of Networked Readiness and scores 4.2 out of 7 points in the overall ranking after averaging the sub-indices. “Jordan, in 47th position, leads the ICT²⁶ race by far in the group of Levantine states. Despite the need to improve its ICT infrastructure (79th), especially in terms of getting access to a wider international Internet bandwidth (92nd), the country—led by a strong commitment of the government (37th)—has managed to liberalize the markets and provide affordable access to ICT (9th)”²⁷

Literature Review

Literature review comprises elements of historical development of e-banking and related businesses as well as definitions that assist readers and the researcher in dealing with this material. Moreover, literature review gives an overview of the direction in which e-banking is heading toward the future.

²⁶ ICT = Information and Communication Technologies

²⁷ *Global IT Report 2012.pdf*, p. 26

History²⁸

The e-banking business model started back in the 1980's, and it evolved through three main phases that can be summarized as follows:

The Eighties: The early beginning

Modern e-banking first appeared in New York in the early 1980's, where it was offered by major banks in that city, such as Citibank and Chase Manhattan. The United Kingdom banks started to adopt the concept in 1983 where the Bank of Scotland was the first to introduce it. Back then it required a computer terminal, a monitor, and a telephone line. It was also offered through a numeric keypad on a telephone enabling sending messages to the bank. The early services were very basic ones such as viewing your bank statements and paying your bills online. It was not a full transaction banking service; however, it paved the way for the more comprehensive and sophisticated e-banking services that we see today.

The Nineties: Modern Internet Banking

In the 1990's, the use of internet evolved when more people owned computers and were connected to the dial-up home internet. The first bank to offer the most comprehensive e- Banking services was the Stanford Federal Credit Union bank in 1994.

This technological evolution and the spread of home internet usage meant customers enjoyed 24/7 e- Banking services. On the other hand, many customers during the 1990's didn't trust the concept enough to make serious and substantial monetary transactions and did not think the internet banking is safe enough. This triggered a massive effort and investment by the offering banks to develop more security features for their online banking services and promoting them in the market.

The 2000's: The growth and acceptance

The first bank to reach three million online banking customers was the Bank of America in 2001. Throughout the 2000's on-line banking started to grow and become more acceptable by customers. It covered most of the banking services range. We also had our first "on-line only" banking firms that offered better interest rates and more features to their clients taking advantage of the cost savings achieved by the "Digital Firm" business model.

e- banking Versus Other Terms²⁹

While e-banking can be described as the "umbrella" term, it is used interchangeably when people refer to one or more forms or components of e-banking such as: Virtual banking, on-line banking, cyber-banking, net-banking, interactive-banking, web-banking,

²⁸ http://wiki.answers.com/Q/What_is_e-banking

²⁹ <http://www.aboulola.com/E-Banking.pdf>

phone-banking, PC-banking, and remote electronic banking. In the following paragraphs the main types of e-banking will be reviewed in more detail.

ATM (Automatic Teller Machine)

In 1969, the first ATM was offered in the public dispensing cash to customers at Chemical Bank in Rockville Center, New York. It revolutionized the banking industry by eliminating the need to visit a bank to conduct basic financial transactions. In the 1980's the machines provided many banking transactions and became widely acceptable and even popular amongst the clients. They provided many services provided by bank tellers on 24/7 basis, such as: deposits, withdrawals, transfer, account balances inquiries, requests for cheque books, account statements, etc. Using an ATM requires an ATM card and a personal identification number (PIN). They provide basic banking services such as described in the paragraphs 6.2.2, 6.2.3 and 6.2.4.

Telephone Banking

In the 1970's banking customers started to use their home phones to dial the phone to check their account balances, transfer funds, and pay bills. It provided 24/7 services, however, it did not provide visual features while conducting the transactions. Customers could listen to the transaction acknowledgements, but they could not view them. Of course, this was before the smart-phone era back in the 1970's.

In general, there are two types of phone banking:

1) Operator Services: for customers with very complicated inquiries needing personnel attention and cannot be covered by automated services, or customers who are not too comfortable with automated services and needed engagements by human personnel.

2) Automated Services: for functions that can be conducted by the automated system without the need for human operators.

This became less applicable in today's phone-banking with the evolution and development of smart-phones with internet connection and software applications.

Home Banking

In the early 1970's home banking was offered through touch-tone telephones for very basic banking transactions. During that era, it was considered "home banking" and not phone-banking. In mid-1980's banks offered more advanced home banking services to customers by installing software in customer's Personal Computers (PC) that enabled them to connect to the bank through a dial up connection. It was a sufficient enough secure channel; however, it provided a limited range of services. After 1985, this service was not popular anymore and was not widely spread because it required proprietary systems and huge

technology investments, so very few banks managed to provide it. In addition to that, the PC was still not widely spread.

Internet Banking

This method offers a full range of advanced banking services by directly accessing the bank website using the internet browser (either through PC or Phone connected to the internet). This resulted in having lesser walk-in customers as they enjoyed full services on 24/7 basis. The services were provided through a portal, and relied on digital signatures and other safety and security measurements. Its main benefits to the customers and the banks can be summarized by the following:

- Despite the technical set-up and maintenance costs, the internet banking had reduced the traditional banking costs enabling more profitability
- Enabled offering more than banking services on the websites; such as tax services, where customers can fill out the tax application online, calculating the taxes, etc.
- Customers benefiting from the time and place shifting 24/7 services.
- Allows customers to be alerted via email and phone of updates and changes in their banking dealings.
- Cost efficiencies passed on to customers with lesser fees and charges than traditional banking. Banks to the banks but they vary such as cars, gold, mortgage, land, silver, etc.

Advantages and Disadvantages³⁰

Today, e-banking became a fact of life and even a survival issue for banks with their clients trusting and demanding it as a convenient, safe, and trustworthy way of conducting banking transactions. Moreover, bankers use it as a competitive edge and a method to efficiently and effectively expand their business beyond the geographical barriers.

Like any other solutions, e-banking does have both advantages and disadvantages. Figure 3 summarizes them:

³⁰ <http://methodofsolutions.com/2010/06/22/advantages-and-disadvantages-of-online-banking/>

E-Banking	
Advantages	Disadvantages
<ul style="list-style-type: none"> - Very convenient, comfortable, and easy way to do whatever monetary transaction you wish to do with your bank - Provides 24/7 services as the e-bank never closes and has no cutoff time - Smart and interactive with auto-solutions and troubleshooting functionalities. - Higher interest rate enabled through the cost savings achieved by digital firm capabilities. - Speed and easiness of conducting the digital transactions compared to paper-based dealings with walk-in customers. 	<ul style="list-style-type: none"> - Poorly delivered e-banking services can be slow & time consuming - Some identity authentication requirements can be annoying & overwhelming for clients - Might require lots of paperwork & procedures for registration & set-up, such as documentations & power of attorney to spouses beyond what is required for traditional paper-based dealings - Can be difficult for clients to get familiarized with the bank's website & e-banking channel – each bank has its own unique website & methods! - Frequent changes & adjustments to the bank's website & delivery channels that require re-familiarization & in some cases re-registration & documentation. - Distrust by some clients in some countries with primitive legal system and unreliable technological infrastructure might face security & legal challenges - Some clients still prefer human interaction & personalized attention.

Figure 3: Advantages and Disadvantages of E-Banking

Other authors' findings about the future of e-banking³¹

Many researchers argue that while e-banking (or internet banking) using a PC channel was the most advanced trend and the cutting edge competitive advantage in the banking industry during the last two decades, many other researchers believe that the PC-based internet banking is on its eminent way towards being obsolete. The future of e-banking is steadily and heavily heading towards the use of mobiles in conducting banking transactions.

In 2010, Lloyds Banking Group became the first bank in the UK to offer mobile banking services that allow funds transfer between bank accounts within the same bank through mobile applications run by a mobile money network called "Monilink". Customers were required to download these applications software to their phones equipped with internet access and color screens, enabling the mobile based banking transactions that are so easy and fast, and require only entering a six digit PIN code. It only cost them £2.50 a month.

Considering that 95% of the UK population is estimated to own a smart mobile phone, this had revolutionized the e-banking services in that country, even though the mobile banking is primarily used for basic transactions and payments. The customers still prefer PC-based internet channel for the more sophisticated transactions.

Experts expect that within the next five years mobile banking will become the main channel of providing most of the banking services and transactions, thanks to the fast-paced technological advancements in the smart-phone industry.

³¹ <http://www.moneywise-co.uk/banking-saving/current-accounts/the-future-banking-here>

Furthermore, and as a consequence of smart-phone banking capability evolution, experts expect that voice biometrics will be the preferred option for customer identity authentication for being practical and easy. Today, the biometric technology is not entirely secure, however, the error rate is generally low and the technological development in that area is becoming more advanced by the year.

Findings about the Dimensions of E-Banking

In the course of the research, three dimensions for e-Banking have been defined. Figure 4 gives an insight into these dimensions.



Figure 4: Dimensions of E-Banking

The interviews conducted with two executives from the two banks were helpful in covering the position of e-banking in Jordan within the behavioral and infrastructural dimensions as well as within the legal dimension.

BANK Alpha

Bank Alpha had been using the internet services for the past 4 years, now. They started it in order to respond to customers' demand and to cut their operational activities and related costs and ultimately to expand their market share and pursue a different strategy.

Their main clients were corporate clients (mainly car companies/ agencies). To them they provide services such as transferring big money amounts among many countries, checking their daily transactions and deposits from the clients who buy the cars from their company.

The reason for not providing this service at an earlier stage was that the bank was not sure about the cost-benefit analysis. As a considerable portion of their clients still feel more comfortable with making transactions directly with the customer services team.

Bank Alpha provides the service through their own IT department and not through external sourcing; that explains why it was and is still very costly to introduce and maintain

this service. But at the same time it did not add that much revenue to their business despite the proportion of the clients who use this kind of service was estimated at 63%. It can be assumed that, even if this service did not add much revenue, it helped reduce transaction costs tremendously.

Bank Alpha's customers were satisfied with their e-banking services so far. However, the bank still is exposed to a considerable portion of customers with lower education levels who, moreover, still fear security-related issues.

BANK Beta

Bank Beta introduced internet services in the year 2012, which was much later than other banks in Jordan have. When investigating further, the bank executive explained that the reason for this was that this bank has been established quite recently and numerous changes in the board and in terms of ownership occurred. Another possible reason behind that was expressed in that mobile-banking per se could be defined in two ways: On the one hand, it refers to online banking transactions made with a smart phone or on the other hand, as per Beta Bank definition, e-banking are services that can be sought for with a regular mobile phone (not a smart phone), which includes hotlines and SMS services. If mobile banking is understood as a service as per the latter definition, it obviously is already an old service which existed prior to e-banking.

The major rationale behind investing in e-banking service for bank Beta was to match competitors' services rather than increasing their market share or their profits which make sense considering the fact that the bank was a relatively newly established bank.

Their main clients were individuals and not corporate. They provided them with e-banking services such as providing balance checks every day and money transfers, in addition to advertising the bank services and announcements through the website. Due to the lack of corporate clients who could have answered the survey questionnaires, Hypothesis H4 was neither rejected nor confirmed.

The bank established their own web site using their own IT department (insourcing). They still have some problems in dealing with such as lack of clients' awareness of and familiarization with e-services. This is proven by the fact that they had a considerable portion of clients being more comfortable with direct interaction with the customer service team than with e-banking.

Infrastructure

According to a research conducted by Salhieh et al. (2011), IT infrastructure is composed of personnel, connectivity, functionality and compatibility. Consequently, e-

banking depends on a modern, seamless, global telecom network and on the computers and information appliances that connect to it, as well as on an adequate level of infrastructure and human capacity building. The IT personnel possesses human and organizational skills, expertise, competencies, knowledge and commitments, whereas the connectivity dimension refers to the ability of any technology component to attach to any of the other components inside and outside the organizational environment. Functionality takes into consideration the functionality of applications and the ability to add, modify, and remove the modules of software application with little or no widespread effect on the applications collectively. Compatibility relates to the ability to share any type of information across any technology component. All these facets of IT infrastructure in Jordanian banks were given a high rating in Salhieh et al. (2011) study apart from the IT personnel who were found to be moderate. This is an indicator for the fact “that IT employees have only the basic adequate IT and skills needed to operate e-banking services”.³²

Another observation regarding the evolution of e-readiness in Jordan published by Trading economics demonstrates the advancements Jordan made in terms of internet infrastructure. Thus increased network capability and declining telecommunication costs ultimately lead to an increased number in internet users as per Metcalfe’s and Moore’s laws. The following three diagrams display selected features relevant to e-banking:

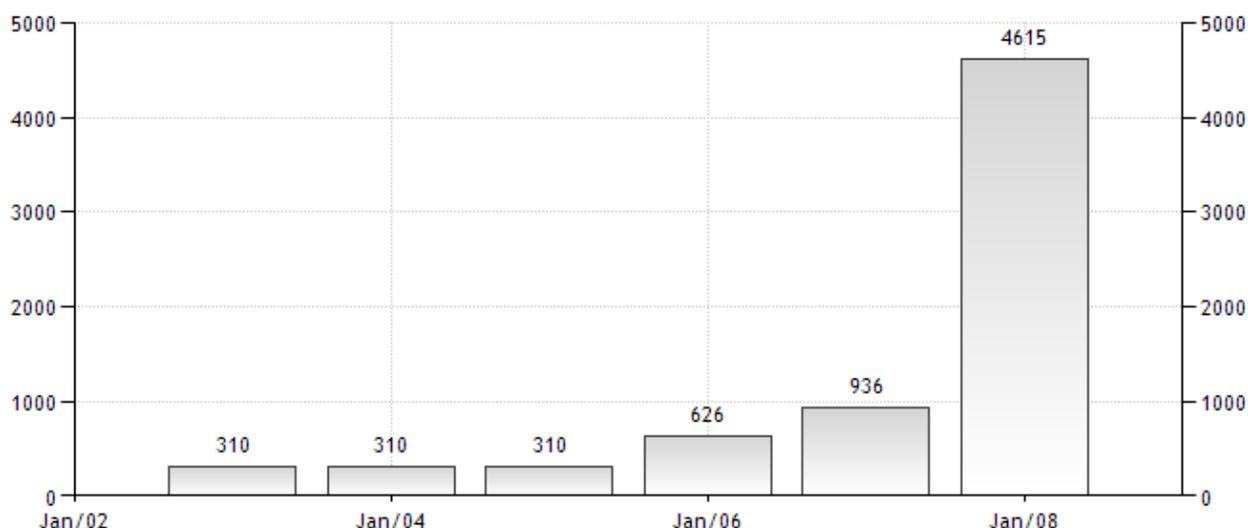


Figure 5: International Internet bandwidth (in Mbps – Megabits per second) in Jordan³³

³² Cf. Salhieh et al. (2011), p. 10

³³ <http://www.tradingeconomics.com/jordan/international-internet-bandwidth-mbps-wb-data.html>

International Internet bandwidth refers to the contracted capacity of international connections between countries for transmitting Internet traffic.³⁴



Figure 6: Internet Users in Jordan per 100 inhabitants³⁵

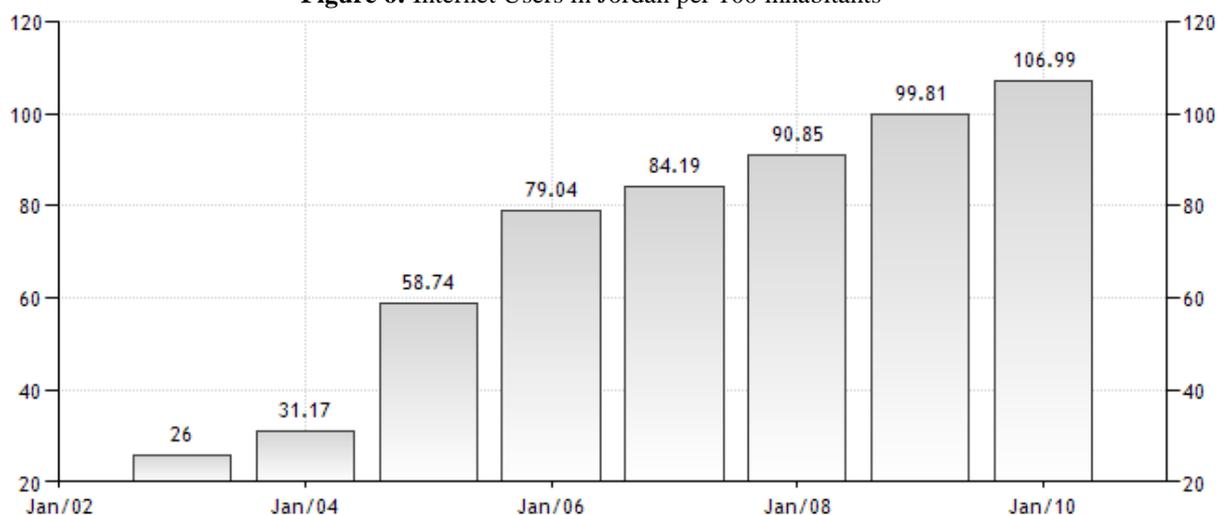


Figure 7: Mobile subscriptions in Jordan per 100 inhabitants³⁶

Taking a closer look at the report published by the World Economic Forum in (2012), once again Jordan turns out to be moderately advanced in terms of:

- Electricity production → rank: 74, kWh/capita: 2365.9
- Mobile network coverage: rank 49, % of population: 99.0
- International Internet bandwidth → rank 92, kilobits/s per user: 6.4
- Secure Internet servers/ million population: rank 70, # of internet servers/ million population: 19.8
- Accessibility of digital content: rank 50, score: 5.3 out of 7

³⁴ <http://www.tradingeconomics.com/jordan/international-internet-bandwidth-mbps-wb-data.html>

³⁵ <http://www.tradingeconomics.com/jordan/internet-users-per-100-people-wb-data.html>

³⁶ <http://www.tradingeconomics.com/jordan/mobile-cellular-subscriptions-per-100-people-wb-data.html>

Obviously Jordan still lacks some internet speed compared to other countries. Conversely, this problem is offset by the relatively good mobile network coverage. This suggests that mobile banking ought to be further enforced in order to take advantage of e-banking services at both, the customer's and the bank's side. Well secured internet servers are an issue in Jordan, too. Jordan, here, took a comparably low rank which gives weight to customers' worries about security issues regardless of their education level.

In summary, the results of the Global IT Report (2012) support the findings of Salhieh et al. (2011), that there is still plenty of room for improvement when it comes to infrastructure of e-banking in Jordan.

Behavioral and Cultural

As mentioned and expected in the research limitations, the survey and interview results were not satisfying the needs of this research that require a proper sample size, and the answers were not sufficient for hypothesis testing. Therefore the results of the customer survey and the executive interview were applied to build on the behavioral and cultural dimension of e-banking rather than testing the hypotheses.

About 70% of the customers found the internet services to be good, which is an impressive result considering that e-banking is a relatively new service in Jordan. On the other hand, 80% of the clients still find it more comfortable to have a personal contact with the customer service team.

Based on the survey and interview findings, a range of personal related factors including customer needs, experiences, trust and habits have an impact on customers' usage of e-banking. While the clients believe that e-banking is a "good to have" service, many of them still resort to direct and personal interaction with the customer service team whenever an "important" and "significant" banking transaction needs to be taken care of. This indicates that Jordanian clients still do not have the "trust" level that is required to rely on e-banking services beyond the routine transactions such as checking balances and paying for household bills.

In summary, the main issues of concern for Jordanian individual clients using e-banking services were related to "trust and familiarization". The well-rooted trust in "paper-based" transactions and the "change-avoidance" culture will still need more time to enable e-banking services to be used for the whole range of banking transactions.

Legal

This dimension is crucial and critical for conducting e-banking (and e-commerce in general) in any country. Having the adequate and sufficient infrastructure capabilities, and

having a favorable cultural acceptance and awareness are not enough to conduct a safe and smooth e-banking business. In fact, adequate legal and regulatory coverage and facilitation are essential as well.

Before engaging in discussing the legal dimension of e-banking, one should first understand and compare the paper-based transactions with the internet-based transactions, and highlight the main differences, which can be summarized in two main features, as follows:

a) Internet-based transactions and communications are easy to copy, store, and transfer:

While no one can safely claim 100% security of both paper-based and internet-based communications, the latter is deemed to be more insecure than the former, simply because e-communications and transactions are easier to store, copy, transfer, and have so many intermediate parties that may be intentionally or unintentionally compromising the security of these communications, such as internet service providers and telecommunications carriers. Theoretically, they can store, copy, and transfer these transactions while they pass from a computer to another through the network.

b) Numerous parties involved in the internet-based transactions:

In a paper-based transaction you have typically two parties involved; the client and the personnel of the financial institution. While in internet-based transaction, you have many involved parties, like the internet providers and telecommunication companies, who could be located in different locations inside and outside the company and even the country.

The above mentioned two main differences between the internet-based and paper-based transactions consequently lead to very complicated and challenging legal concerns and issues, such as the responsibilities and liabilities of each concerned party in any transaction, whether it is Clients, Financial Institutions, Internet or telecommunication service providers. These responsibilities and liabilities address many aspects and terms such as: negligence, trespass, intellectual property rights, copyrights, misrepresentations, privacy violations, unauthorized access, disclosure, and non-disclosure, force majeure events etc.

A Global Perspective on Internet Banking Regulation

Before addressing the Jordanian e-banking regulations, firstly the regulations at the global level are explored, and the legal issues and concerns typically faced by e-banking in any country, which are focused around the “exposure” of the financial institutions and their clients risk by the simple fact of using the “internet” in conducting transactions.

Two examples will be included: One from the Far East, and another one from Western Europe.

Internet Banking Regulations – Malaysia

The Central Bank: “Bank Negara Malaysia (BNM)” is the sole regulatory body that governs all banking services in Malaysia. The Internet banking was first introduced in Malaysia in June, 2000. It was first allowed for the local banks, and then in 2002 it was also allowed for foreign banks.

BNM provides the “Minimum Guidelines on the Provision of Internet Banking Services by Licensed Banking Institutions – (MGIB)”. It aims to protect both the clients and the banks themselves from the risks associated with such banking.

These guidelines are systematically structured in six chapters addressing the types of internet banking sites, oversight, risk management, security, consumer protection, compliance and other general requirements.

Before granting the internet banking license to any bank, the BNM mandates having web page set in place by the concerned bank to educate their customers on the various aspects and issues, such as:

a) Terms and conditions of usage

b) The risks involved in using the internet banking, such as risk of ‘phishing’ where fraudsters copy the bank’s website and set up a fake page that appears to be part of the bank’s web site.

c) Liability Statement, clarifying to the customers their rights and responsibilities and that they are responsible for their own actions. It also states that banks will assume no liabilities for the loss and damage caused by the customer’s failure to adhere by the guidelines. The statements also includes that the “contractual arrangements for liability should provide for sharing of risks between the banking institution and the customers. Customers should not be liable for loss not attributable to or not contributed to, by them”.

d) A maximum limit may be specified for fund transfers to limit the risks.

e) Necessity of reading the privacy policy statements prior to providing any personal information to any third party advertisers or hypertext web links.

f) Educating clients about their role in maintaining security of banking information by not sharing IDs and passwords with anyone and by regularly changing their passwords and remembering to sign-off.

g) Prompt notification of any variation or changes in terms and conditions.

h) Advise on contractual arrangements for liability arising from unauthorized or fraudulent transactions, mode of notification, and information relating to lodgment of complaints.

i) A Client Charter on Internet Banking stating the institution's policies, products and services and commitment to offering quality service.

It is interesting to note that since internet banking's introduced in 2000, many online frauds and scams took place in Malaysia which raised huge concerns.

Internet Banking Regulations – United Kingdom

With the expansion of e-banking in the UK in the eighties, a “Banking Services Law and Practice” Review Committee was set up in 1986, and it issued its report in 1989. Its main concern was with customer activated Electronic Fund Transfers (EFT) transactions. The Committee's main recommendation was the adoption of provisions similar to s.83 and s.84 Consumer Credit Act 1974. Let's summarize the content of those acts, as follows:

- “A customer should be liable for losses incurred up to the point where the customer notifies the bank, subject to a financial limit”. On the other hand, “the bank's liability for a loss starts thereafter”.
- “Where gross negligence on the part of either party could be proved, then that party should be liable for the full amount of the loss”.

The regulatory bodies in the UK believe that three different approaches as taken by banks can be observed:

1. Terms similar to card transactions (i.e. Banks assume liability from the point of notification but there are certain limits imposed on the customer).
2. Banks will assume the entire risk until and unless it can be proved that the customer acted fraudulently or negligently.
3. Banks exclude all liability in case of fraudulent transactions until they are notified. This is the most common approach adopted by UK banks.

In the UK, despite the fact that the banks are governed by a Banking Code, each individual bank may formulate and publish its own terms and conditions. The customers then either accept them, or change their bank.

“S. 2” of the new “Banking Code 2008” includes essential liabilities and commitments that require banks to treat customers fairly.

S.12 of the Banking Code states the need to provide the customers with the most up to date information on how to protect their accounts from fraud.

The Liability is also outlined in s.12.13: “Unless you have acted fraudulently or without reasonable care (for example by not following the advice in section 12.9), you will not be liable for losses caused by someone else which take place through your online banking service”.

These regulations place the burden on the customer to ensure having all reasonable precautions and ensure that all instructions provided by the bank had been implemented and fully complied with. Despite these detailed regulations addressing the liabilities and responsibilities of the customers and the banks, there are still gray areas that need to be clarified and resolved.

A Jordanian Perspective on Internet Banking

It has been a common perception that the Jordanian laws and regulations do not provide sufficient legal coverage for e-banking, and that the local laws do not adequately cater for resolving any potential dispute between banks and their clients concerning an e-banking transaction. This research can report that contrary to common conviction, the Jordanian laws and regulations do cover this dispute resolving aspect, and provide a wide range of legal articles that cover in details all of the e-banking related issues and dealings.

Based on the “ELECTRONIC TRANSACTIONS LAW N0 (85) OF 2001” (2) as published on the website of Jordan’s Central Bank, and following general discussions with one local banking expert, it is believed that the local regulations address the following important issues inadequate details:

a) Definitions, prerequisites, and Acceptance:

Article (2) provides very clear and detailed definitions and of all of the words and expressions used in the decree and related to e-banking dealings. Articles (7) and (8) state that the terms and requirements that ensure giving e-documents and signatures the same weight and legal consequences as those with paper-based banking transactions. Other Articles also clarify the requirements from both the financial institution providing the services in terms of secure delivery channels and the client.

b) Responsibilities and Liabilities:

Many Articles such as (27), (28), and (29) provide clarifications of each party’s responsibilities and liabilities. If one reads through them and the rest of the relevant Articles, one would note that they are very similar to the respective Articles in British and Malaysian regulations. They mainly state that the bank should ensure the minimum required securities to their e-banking delivery channels, and provide clear instructions and notifications to their

clients in order to guide their usage of the service. If the client complies with those guidelines, then his or her liability is waved and passed on to the bank.

Article (27) had been investigated in particular. It states that; the client is not liable for any illegal activity that occurs AFTER he or she had notified the bank of this occurrence, and he or she had been in full compliance with both of the local and bank-specific regulations. A banking expert was asked the following question: “What about the illegal occurrences that occurred BEFORE the client’s notification to his/her bank?” The given explanation was that if the client was in full compliance with his or her responsibilities, then he or she is:

- Not liable for any occurrence AFTER the notification without any argument.
- For occurrences BEFORE the notification date, the bank would investigate the case to see whether the client did follow the guidelines and instructions in full compliance, or not. If the bank cannot prove non-compliance, then the client has no liability for those occurrences as well.

c) Criminal Conduct Penalties

Articles, such as (35), (36), (37), and (38) outlines very detailed penalties and fines against e-fraud and criminal attempts related to e-banking scams. The Articles provide a detailed description of the crimes, and state their penalties that range from imprisonment and financial fines that can reach up to JOD 50,000.

To sum up, contrary to the envisaged opinions, Jordanian regulatory coverage of the issues related to e-banking, although not airtight, is adequate and sufficient enough. At least, it can be considered up to the regulatory standards applied in more developed countries, such as the United Kingdom.

Summary and Recommendations

In line with the Global IT Report (2012) as well as the findings of Salhieh et al. (2011), there is still a performance gap between Jordan and Western countries in terms of e-readiness in general and subsequently, with respect to e-banking. One way to overcome this problem would be to use the bandwidth of other countries which Jordan is already doing to enhance internet speed.

Another way to overcome the still moderate infrastructure for e-banking is to neglect e-banking itself and to concentrate on mobile banking (with smart phones) since the network coverage for mobiles is quite favorable.

As covered earlier, major issues of concern for Jordanian individual clients using e-banking services are related to trust and familiarization. The well-rooted trust in “paper-

based” transactions and the “change-avoidance” culture will still need more time to enable e-banking services to be used for the whole range of banking transactions.

The three dimensions of e-banking in Jordan were addressed. At this point it should be emphasized that the dimensions do not only co-exist but are interrelated as shown in figure 8.

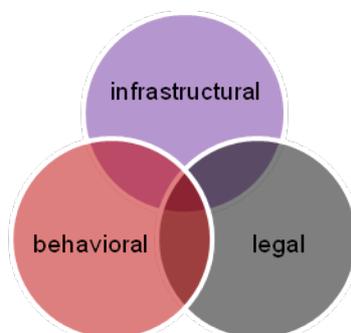


Figure 8: Interconnectedness of the Dimensions

For e-banking in Jordan the implications are obvious. The infrastructure influences the number of users of the internet; likewise do legal enforcements have a positive impact on behavioral patterns as legal bodies for internet banking reduce the fear of online transactions.

Benchmarked with e-banking regulations in the UK and in Malaysia, it is believed that Jordanian e-banking regulations (i.e. ELECTRONIC TRANSACTIONS LAW NO “85” OF 2001) is not too different, and provides a relatively sufficient legal coverage, that can be far beyond what most Jordanians currently think.

With this in mind, the question remains to be tackled is: Why do the local Jordanian communities continue to distrust e-banking and use it mostly for insignificant banking transactions (i.e. Balance checks and paying bills)? Following discussions with local experts and having read through the local regulations, the best answer one can think of would be that the e-banking regulatory coverage in Jordan has been overshadowed by the poor reputation of e-commerce regulatory issues.

Despite the fact of its openness and its free market orientation, the banking industry in Jordan is highly regulated by the Central Bank of Jordan. The banking regulations are detailed and strictly implemented. However, this is not the case when it comes to the broader concept of “e-commerce” where the regulations are deemed – at least from the clients’ perspective- to be unclear and even distorted when it comes to legal disputes.

Based on the above analysis, the recommendations for enhancing and developing the legal dimension of e-banking in Jordan are:

1) Closing the e-regulatory loop: On top of strengthening and developing e-banking regulations, the Jordanian regulator, in coordination and consultancy with The Association of Banks in Jordan (AJB), the local consumer protection association, and other relevant and

concerned parties need to address the gaps and weaknesses currently existing in the broader e-commerce regulations.³⁷

2) Familiarization and Awareness Campaigns: As it is the case with any other new service or technology introduction in a market, a considerable portion of clients (i.e. Aside from the risk takers) would prefer to avoid the change and wait until it's well tested and used by others. The regulatory bodies, the "AJB", and other concerned parties should coordinate launching a public campaign through the local media channels, with a focus on assuring customers of the legitimacy and reliability of e. Banking and point-out the regulatory coverage aspect.

3) Benchmarking and learning from others: As Jordan's banking industry regulations are formulated with Free Market Economy orientation, it is recommended to avoid re-inventing the wheel and learn from the regulations that exist in the countries with more advanced e-banking environment than Jordan. Following the initial benchmarking made in this research, it has shown that there were similarities in the main regulatory issues faced by most countries.

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³⁷ http://abj.org.jo/Public/Main_English.aspx?page_id=1396

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Appendices:

Appendix I: Questionnaire for customers:

Questions for our valued customers

1. Since when are you using online banking services?
2. Please rank the safety and security of using online banking from 1 (poor) to 4 (excellent).
 - Poor
 - Satisfactory
 - Good
 - Excellent
3. How comfortable are you with using computerized services?
 - I do not know how to use it.
 - I find it easier to have personal contact with a staff member.
 - I am not sure whether I really receive the service I called for.
 - I just make cash deposits. Online services are not useful for me.
4. What kind of services would you prefer to do online?
 - Transfer between accounts
 - International currency transfer
 - Daily transactions on my account, such as checking my account’s balance.
5. Have you tried the e-services of another bank? Do you think they provide it in a different way? Please describe in which way.
6. Would you like to use e-banking on your Smartphone? Why? Why not, respectively?
7. Are there certain services which you would like our bank to provide online? Please name them.

Notes for the surveyor: Estimated age: Gender: Education Level: Corporate Client?

Individual Client?

Appendix II: Interview protocol with bank executives:

Interviewed Bank Specifics:

1. When did your bank start online services?
2. What was the deciding point in having e-banking capability in your bank? (Please rank from highest to lowest weight)
 - To match competition in the market or to even beat competition in the market
 - Expand market sales and share
 - Respond to market and customer demands
 - Service differentiation strategy
 - Operational Efficiency (Cost cutting)
 - Other: (please specify)
3. Who are your main e-banking clients? (i.e. Corporate or individual customers, etc.)
4. What kind of e-banking services do you provide?
5. Why did the bank not improve internet banking services prior to mobile banking (especially considering the fact that e-banking is not costly)? Why did your bank not introduce e-banking before introducing mobile services?
6. What is the proportion % of traditional banking vs. e-banking services? And which one generates more revenues?
7. Who provides your e-banking services (i.e. insourced IT Department, outsourced, etc.)?
8. What are the main features of the service provided?
9. What are the main features of the IT infrastructure?
10. Is e-banking in your bank up to the level you would like to have it?
11. What is your competitive strategy to beat similar services provided by your main competitors?
12. What are the obstacles and barriers you face internally and externally?
13. What would be your wish-list to enhance e-banking services provided by your bank?

Country Specifics:

1. How would you describe e-banking in Jordan? (i.e. Advanced compared to the region, to the global industry, infant industry, etc.)
2. What are the advantages and disadvantages of e-banking in Jordan?
3. Is the Jordanian technical infrastructure ready for e-banking? What's missing?
4. Are the Jordanian regulations and legislations sufficient enough to cater for e-banking business?
5. What's the status of the local e-banking industry when it comes to...
 - a. ... Privacy challenges
 - b. ... Security challenges
6. How would you describe Jordanian clients' readiness for the e-banking services? Are there any issues (i.e. Cultural, security and privacy risk fearing, e-environmental illiteracy, etc.)?
7. What is the next phase or milestone you expect or hope to have in e-banking in Jordan (i.e. Mobile phone banking!)?
8. What industries are considered complementary and supportive e-banking industry (i.e. Telecommunications)?