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**Developing SWOT/ TOWS Strategic Matrix for E-Banking in Lebanon****Bilal Jibai<sup>1✉</sup>, Hassan Alaaraj<sup>2</sup>, Abbas Issa<sup>1</sup>**DOI: <http://dx.doi.org/10.15294/ibarj.v2i1.27><sup>1</sup>School of Business, Management Information Systems Department, Lebanese International University (LIU),<sup>2</sup>School of Economics, Finance and Banking, University Utara Malaysia (UUM), Malaysia

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**Abstract**

The banking sector of Lebanon has witnessed a significant shift in its performance and services provided over the past years in line with the global transformation in information technology. The diffusion of internet in most of financial sectors has driven the banking sector to adapt new technologies and deliver its services electronically through E-banking. This paper highlights the current state of e-banking in Lebanon and analyzes the secondary data of previous literature to develop a SWOT/ TOWS strategic matrix. Policy makers, Bankers and online banking users can benefit from this study for better understanding and application of e-banking in Lebanon. Future studies can extend the literature and show more evident and updated data in terms of strength, weakness, opportunities and threats facing the e-banking sector in Lebanon or compare it to other countries strategies.

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## INTRODUCTION

The world has undergone a primary revolution through the spreading out of the internet and the financial society is one of the most sectors affected by the technological transformation. Financial organizations innovate constantly and modernize their marketing strategies in order to assemble the customers' demands within a confidential environment. The banking sector is no exception to this digital deluge. Banks are shifting toward information technology to improve service quality, enhance efficiency and catch the attention of new customers (Saadeh & Mikhael, 2016). Traditional banks allow customers to access services physically through contacting bank tellers which may cause a mismatch between bank facilities and customer demands because operations can be only settled at specific working hours and locations. Hence, internet technology allows banks to deliver banking regardless time and location through different communication means as websites, mobile networks and automatic teller machines (ATM). Such technological innovations that are used to deliver bank services using electronic communication channels are acknowledged as electronic banking or e-banking (Mwiya et al., 2017).

By definition, Electronic banking is the arrangement of banking services to customers through the internet and it the ability of customers to access banking site safely, without the need to go to the branch. There are three basic kinds of internet banking namely; informational, communicative and transactional internet banking. The informational type is an elementary phase of Internet banking by which the bank posts marketing information about its products and services on a separate server, and the risks in the processes are very low. However, the communicative type is the second higher level of internet banking by which the system permits selected interface between the customer and the system (E.g. loan applications, electronic mail; account inquiry), yet it involves higher risks than informational stage). The highest level of internet banking is the transactional which let clients to perform transactions (as accessing accounts, paying bills, transferring funds, etc.) involving the highest risk architecture and required to have the strongest controls (Abou Ali, 2016).

The e-banking business has been growing rapidly to assist banks enlarge revenue, cut costs and go well with customers. It provides huge benefits to customers in terms of the simplicity and cost of transactions. Also, e-banking provide more information to internet users to compare banks' services and thus, boost competition among banks. In addition, e-banking allows banks to go through new markets and spread out their geographical contact. E-banking can be also considered as a prospect for countries that suffer from weak financial systems to become up dated and step forward to developmental stages (Bahl, 2012). Banks worldwide are implementing such a technology for the sake of bigger sales volumes, more profits, larger customer reach and satisfying customer lifestyles (Suryanto, 2015). Nowadays, consumers worldwide are concretely surrounded by technologies that enforce a potential to redefine the relation of customers with their environment (Abou Ali, 2016).

Practically, Finland was the first country to adapt mobile banking applications in 1991 and customers were able to pay bills and complete the financial transactions through mobile phones. Later on, standards for wireless financial services were developed and spread out to the global market (Audi et al., 2016). As for the Middle East and North Africa (MENA) region, there is high rate of digital banking adoption with 62% overall rate. The highest digital banking adoption rate 75% was detected in Saudi Arabia, followed by 74% for the United Arab Emirates. However, the lowest digital banking adoption rate 42% was in Jordan, while Lebanon showed an average rate 54% (Saadeh & Mikhael, 2016).

Banks in Lebanon took the initiative to implement the e-banking services with the superior flow of technology in the banking sector. Basically, the Lebanese banking sector is a dynamic, competitive and tolerant with any development in technologies and new services. Banks in Lebanon are distinguished historically in the Middle East and all over the world. This sector has showed a

stable and active occurrence in both local and international economies. It is characterized by the openness and commitment to meet international standards, in addition to the absence of restrictions on capital flows and foreign exchange transactions (ABL, 2013; Saadeh & Mikhael, 2016; Abou Ali, 2016). Therefore, this paper will highlight the Lebanese experience in adopting E-banking through addressing its current status and developing SWOT/ TOWS strategic matrix.

## **E-Banking in Lebanon**

### *Banking sector in Lebanon*

Throughout the Lebanese history, the banking sector has been a vital source for the stability of economy even in the periods where resources or the political ability were lacking. Banks play an affirmative role in financial policy and ensuring consistency in unstable situations. For example, commercial banks in Lebanon embrace more than 50% of the Lebanese public debt (ABL, 2013). This sector has been always open and liberal aligned with Lebanon's free market economy. Banks contribute to the financial system of Lebanon and provide credit to both, individuals and businesses. It is obvious how the branches of the Lebanese banks are spread all over the Gulf region, Arab neighboring countries, Africa, Europe and the United States. These include branches, subsidiaries, contributing companies, representative offices and sister banks. Although e-banking allow customers to compare online services offered by different banks and increase competitiveness, not all banks in Lebanon adopt this new technology. Majority of banks restricts its services for inquiries only (Ghobril, 2017; Audi et al., 2016).

Moreover, banks in Lebanon face many challenges especially at the level of technology transmission in its overall practices. Many operations are still at early stages in implementation such as the securitization and the internal transition of innovation within these banks. However, banking sector in Lebanon is working hard to integrate the new information and communication technology (ICT) to its indirect financial system in order to empower, fasten and ease access to all customers (Hilal, 2015).

### *Key characteristics of banking sector in Lebanon*

According to the annual report by ABL (2015), there is a huge number of banks of diverse sizes, nature and ownership structure. Over the last 50 years, there were 60 to 92 banks in Lebanon with small, medium and large-size private owned commercial banks; Islamic Banks; medium and long-term credit and investment banks; foreign, Lebanese and mixed Banks. By the end of 2015, there were 69 operating banks, 53 commercial banks and 16 investment banks. In addition, there were 1039 commercial banks branches with majority distributed in Beirut and suburbs (54%). As for the human resources, the total number of banking sector employees in Lebanon was 24,638 in 2015. Majority (93.9%) were distributed in the Lebanese Commercial Banks, and 3 % in Foreign Commercial Banks, and 3.1 % in Investment Banks. The banking sector employees in Lebanon are experienced and high skilled with majority (49.9%) were aged between 25 and 40 years old and 76% were university degree holders.

Since the late 1980's, Lebanon was from the earliest countries in the Middle East to start developing its ICT sector boosting its service sectors into global competitiveness (Alaaraj & Hassan, 2014). Recent reports showed that Lebanon was ranked 101 out of 140 countries based on the Global Competitiveness Index 2016–2017 Rankings (Schwab, 2017). As shown in Table 1, Lebanon was best ranked globally (34/138) based on the soundness of its banks. In addition, Lebanon was ranked 72 out of 138 countries in terms of its technological readiness, especially at the level of availability of latest technologies, firm-level technology absorption, mobile-broadband subscriptions, internet users, fixed-broadband internet subscriptions, internet bandwidth and FDI and technology

transfer. Therefore, Lebanon acquires a good technological background that allows the enhancement of the e-banking services.

**Table 1.** The Global Competitiveness Index 2016–2017 Rankings- Lebanon

Pillar	Rank/138
Technological Readiness	72
Availability of latest technologies	91
Firm-level technology absorption	68
Mobile-broadband subscriptions	123
Internet users	38
Fixed-broadband Internet subscriptions	40
Internet bandwidth	82
FDI and technology transfer	67
Financial Market Development	69
Financial services meeting business needs	52
Affordability of financial services	66
Financing through local equity market	105
Ease of access to loans	37
Legal rights index	29
Soundness of banks	34
Regulation of securities exchanges	51
Legal rights index 0-10 (best)	108

## LITERATURE REVIEW

E-banking has been inspected as a revolutionary movement in the banking business. Thus, many studies were conducted to understand what key factors manipulate the adoption of e-banking and its impact on the financial market. Abou Ali (2016) focused in his study on the factors affecting the accepting of the internet banking in Lebanon. The model was tested with 384 Lebanese consumers and the results showed that security and privacy issues have a positive impact on accepting the new online service channel in the Lebanese banking sector.

On the other hand, Audi et al. (2016) conducted a survey among 315 respondents from five different locations in Beirut and studied the effect of adopting mobile banking in Lebanon. The results showed that banks in Lebanon have to amplify perceived usefulness, compatibility, ease of use, trial-ability and trust. This in turn would increase the customer approach towards the online banking services provided. However, communicability of mobile banking applications showed a negative impact on customers' attitude.

Hilal (2015) studied the effect of technological progress on the production, distribution and productivity levels of commercial banks in Lebanon in terms of technological transition and technological performance. Results showed that new technologies are essential to develop the banking business through escalating profitability and enhancing productivity.

Moreover, Toufaily (2009) examined the structural, organizational and strategic factors that speed up or slow down the adoption of E-banking innovations by financial institutions in the Lebanese market. Results showed that organizational factors including infrastructure, bank size, degree of international experience, presence of functional divisions, tolerance of risk of the decision makers and technical staff have a significant effect on the adoption of E-banking in Lebanon. Also, structural factors including the internal technological environment and relative advantage of the

innovations positively affected e-banking adoption. As for strategic factors, the adoption of e-banking was positively affected by the banks' degree of international operations.

From other perspective, Mwiya et al. (2017) applied the modified Technology Acceptance Model (TAM) to examine the influence of e-banking technology's perceived usefulness, perceived ease of use and trust (safety and credibility) on e-banking adoption in Zambia. The findings indicate that the modified TAM model is applicable in the Zambian context and that perceived usefulness, ease of use and trust each significantly positively influences attitude to e-banking. In turn attitudes to e-banking influence intention and actual adoption of e-banking services.

Another study conducted by the World Bank (2014), investigated the factors that may hinder or facilitate the acceptance and usage of Internet Banking in Lebanon. A quantitative approach based on cross-sectional survey was used to collect data from 408 Internet banking consumers. The results showed that performance expectancy, social influence, perceived credibility and task-technology fit to be significant predictors in influencing customers' behavioral intention to use Internet banking where performance expectancy was found the strongest antecedent of behavioral intention. However, the effect of effort expectancy on behavioral intention was insignificant. In addition, both behavioral intention and facilitating conditions were found to affect the actual usage behavior.

In addition, Sankari (2015) examined the factors affecting the adoption of internet banking in Lebanon by using several variables which are taken from three different models, the Technology Acceptance Model (TAM), the Theory of Planned Behavior (TPB) and the Theory of Reasoned Action (TRA). These variables are intention, attitude, perceived behavioral control, trust, perceived usefulness, perceived ease of use and subjective norms. The results showed that attitude has positive and significant impact on intention. Moreover, perceived behavioral has positive and significant impact on intention. Also, subjective norms have positive and significant impact intention. In addition, trust has positive and significant impact on intention, attitude, perceived behavioral control and subjective norms. Furthermore, perceived ease of use has positive and significant on perceived usefulness, trust and attitude. Finally, perceived usefulness has positive and significant impact on attitude and intention.

Furthermore, Koksai (2016) identified the factors that differentiate customers with high intentions to adopt mobile banking in Lebanon. He examined the effect of perceived usefulness, ease of use, perceived credibility, trust, normative pressure, self-efficacy, compatibility and trialability through surveying 800 respondents from Beirut, Lebanon. The main findings showed that perceived compatibility, trialability, perceived usefulness, ease of use, perceived credibility and trust positively and significantly discriminate high-mobile banking adopters from low adopters. This study also found that perceived self-efficacy separates customers through their willingness to adopt mobile banking.

Based on the previous discussion, customers need to be made aware of e-banking services and feel secure and comfortable while using such services as it is a radically new technology to them. The technology sector still faces challenges in Lebanon, most notably in relation to the provision of high-speed internet access. More commitment should be noticed from the public side that is still not under control in terms of developing the infrastructure that will ensure better connectivity in the country (Fitzgeorge-Parker, 2015).

These implications would be helpful for bank managers and policy makers to explain the current relatively low penetration rate of internet banking in formulating strategies to encourage the adoption and acceptance of internet banking by Lebanese customers.

Thereby, there is a need to understand the factors that influence the adoption and acceptance of e-banking customers in Lebanon in order to formulate strategies that will guarantee the effective implementation and adoption. Hence, it is important to carry out SWOT analysis for the status of e-

banking in Lebanon to find out the challenges and benefit from the available opportunities that would enhance the efficiency of e-banking implementation.

## **METHODS**

The main objective of this paper is to provide a critical outline for the current status of e-banking in Lebanon through SWOT analysis which is applied to define the strength, weakness, threats and opportunities for e-banking in Lebanon. Furthermore, TOWS analysis is generated based on the obtained data to draw a strategic matrix for e-banking in Lebanon. TOWS matrix is used to analyze the external environment (threats and opportunities) and the internal environment (weaknesses and strengths). Each combination of the external and internal factors result a new strategy, where mainly four different combinations are developed (Alaaraj & Hassan, 2014).

The applied methodology is based on a combination of analytical and descriptive methods based on analysis of secondary data and information derived from previous statistical reports conducted by local and international research organizations. The data provides a systematic review of general literature on e- banking and ICT sector in Lebanon.

### **SWOT Analysis**

#### *Strength*

The Lebanese banking system is a very dynamic industry and it is the strongest thriving sector that is competing on attaining large levels of comparative advantages. This is evident through the wide expansion of Lebanese banks' branches all over the Arab neighboring countries, Gulf region, Europe, Africa and the United States. Moreover, unmistakable presence of branches and representative offices of Arab and Foreign banks in Lebanon is clear and there is a significant network of contributing banks (BILAL).

Occasionally, banks in Lebanon launch a series of programs, services and features to improve customers' banking experience. Majority of Lebanese Customers (97%) who used digital banking services will continue implementing this type of action, as they view it as an efficient, fast and less expensive way of performing their transactions. Moreover, internet usage among Lebanese population has rapidly increasing with a growth of 215% from 2000 till 2009. Thus, in setting up the digital services, banks make sure that the systems are well integrated and are convenient to the customer (Saadeh & Mikhael, 2016; Abou Ali, 2016).

#### *Weakness*

Despite the advantages and the innovation undergone in Lebanese banks, Lebanon has one of the lowest digital banking adoption rates in the MENA. Trust, security and accessibility are among the factors that trigger the slow pace of digital banking adoption in Lebanon where 47% of the Lebanese surveyed are discouraged to use digital banking and prefer dealing directly with the bank instead. Other obstacle may include application issues such its incompatibility with the mobile, poor user experience, lack of sufficient instruction, the app does not add value or it does not have enough relevant features (Saadeh & Mikhael, 2016). Moreover, there are some draft laws pertaining to cybercrime issues where it is notably that electronic signature and digital transactions have been left in drawers at the Lebanese Parliament for over 16 years (Mansour, 2016).

#### *Opportunity*

Banks in Lebanon have already invested more than \$250 million in the technology sector, which is more than expected after only two years of the initiative being in place. In addition to

encouraging bank funding, developing the ecosystem of the technology sector in Lebanon is well supported (Fitzgeorge-Parker, 2015). Moreover, Lebanon has been recognized as a reliable center for banking activities in the MENA region. It possesses one of the region's most sophisticated financial infrastructures, capable of providing sophisticated banking services to customers throughout the world. Banking represents a sizeable sector of the Lebanese economy, approximately 6.2%. As a result, the banking community has taken a proactive and leading role in self-policing and promoting its stability and sustainability (ABL, 2013).

According to the World Bank (2014), the number of internet users in Lebanon increased from 13.3 to 80.4% of the population between 2005 and 2014 which created opportunities for Lebanese banks to expand to wider customers. Also, the Lebanese banking system is relatively advanced and well-managed and there is a huge amount of money and resources that has been projected in this vein by all Lebanese banks; approximately \$150 million were invested to implement the Internet banking services (Tarhini et al., 2016).

### *Threats*

Despite the above mentioned advantages, the adoption of e-banking is subject to many threats mainly that large groups of consumers have shown unwillingness to use e-banking services. Consumers may have serious concerns about using internet technology for banking; much of their concerns illuminates customer's perceptions of the degree of ease associated with such use, the perceptions of the required skills, infrastructures (e.g. computers, internet, etc.), uncertainty such as security risks and trust; the service effectiveness and the knowledge about transferring online (World Bank, 2014).

Some customers avoid e-banking as they perceive it as being easily susceptible to fraud. Concerns about security and safety of the transactions over the internet, instigates the hesitation of using digital banking services. Customers are reluctant to use digital banking due to hacking of important personal information (Saadeh & Mikhael, 2016). On the other hand, numerous questions regarding Lebanon's economic system and its stability and continued growth during the last several years, have been raised. It has been assumed that this relative stability has been the product not of wise and sound macroeconomic fiscal policy, but rather the exploitation of the Lebanese financial structure and the banking system by regional and international actors engaged in criminal activity (ABL, 2013).

However, e-banking is still a relatively new phenomenon in Lebanon and its adoption by the customers is reported to be low. Previous statistics showed that only 3.7% of the Lebanese population used e-banking services in 2008 while during the same period, statistics from the Federal Deposit Insurance indicates that about 74% of Americans already adopted e-banking services in 2006. This reality implies that e-banking in Lebanon is still an innovation and lag very far behind compared to counterparties in other countries. Such a low adoption rate is troublesome for banking institutions. Furthermore, lot of Lebanese people prefer the traditional ways (ATM, personal contact) of attaining financial services when doing business which raise concerns about the low adoption rate of e-banking. Without knowing these factors, bank managers are likely to continue floundering, wasting time and resources (Tarhini et al., 2016; Alalwan et al., 2014; Itani, 2008; Toufaily et al., 2009).

Moreover, an adequate level of infrastructure is required before adopting digital banking. This includes issues such as mobile and internet coverage especially that Internet in Lebanon is slow and Internet mobile tariffs are high (Saadeh & Mikhael, 2016). Besides, Lebanon is under direct threat from Cybercrime which become one of most serious digital crimes that threaten the banking sector and financial transactions of individuals and companies. The number of online financial

embezzlement was 84 transactions and this caused a loss of \$12 million in 2015. Cybercrime in Lebanon caused \$12 million in losses in 2015(Mansour, 2016).

**SWOT/TOWS Matrix**

To enhance the security of e-banking, several policies or strategies can be implemented to provide security and privacy of customers that will motivate and increase the trust of clients to use online banking. Also, Bank regulators should have a supervising role to ensure that banks have appropriate practices in place to guarantee the confidentiality of data, as well as the integrity of the system and the data. To sustain a competitive advantage, the Lebanese Banking industry needs to gather information, ascertain customer value, determine the best means to implement e-learning and follow what other countries done for a successful e-banking experience.

In addition, it is essential for banks to understand the future changes in information, training and development that suit the global environment. After all, banks can alert their customers about the adopted protection policies and security measures through all available media, to build trust relationship between the bank and the client (Saadeh & Mikhael, 2016; Charbaji, 2005). Based on the presented SWOT analysis and literature discussed above, Table 2 summarizes some of the proposed strategies as a SWOT/TOWS Matrix in which policy makers can adopt for better implementation of e-banking in Lebanon.

**SO-** strategies: when Banks utilize and reinforce its internal *strengths* in order to exploit the available *opportunities* in the external environment.

**WO-** strategies: when Banks reduce the internal *weaknesses* that may act as a barrier for the implementation or diffusion of the external *opportunities*.

**ST-** strategies: when Banks use the internal *strengths* as a tool to minimize the external factors that are *threatening* its performance or competitiveness.

**WT-** strategies: when Banks eliminate the internal *weaknesses* to avoid any breakthrough or prevalence of the external *threats*.

**Table 2.** SWOT/TOWS Matrix

SO	WO
<ul style="list-style-type: none"> <li>- Benefit from the distribution of Banks in MENA region                             <ul style="list-style-type: none"> <li>o Larger marketing campaigns</li> <li>o More internet users</li> <li>o Better policies and internet infrastructure</li> </ul> </li> <li>- Support Perceived enjoyment: improve screen design and easy navigation through Banks website</li> </ul>	<ul style="list-style-type: none"> <li>- Design a mobile banking application that fits the current internet features in Lebanon</li> <li>- Attract consumer attention to internet services,</li> <li>- decrease the lack of awareness to increase the trust in e-banking</li> <li>- Provide free testing and trail through sales promotion, and public relations tools.</li> <li>- perceived usefulness: banks should notify consumers about features, rewards and benefits of e-banking</li> </ul>
ST	WT



- 
- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>- Improve application and security protocols,</li> <li>- Form an acceptance state towards e-banking                             <ul style="list-style-type: none"> <li>o Showing the time convenience and the increased productivity</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>- Issue laws and norms to strengthen banks in fighting cybercrime                             <ul style="list-style-type: none"> <li>o Stronger web security systems</li> <li>o Act to abolish any third-party disturbances</li> </ul> </li> <li>- Support a culture of e-learning</li> </ul> |
|--|--|
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## CONCLUSIONS

As the banking sector is one of the core drivers of the Lebanese economy, it is essential to critically understand and support the development of the e-banking services. The government support is essential to maintain a secure and legal environment with more developed internet infrastructure, and the people cooperation is important to better implementation through being engaged in e-learning and awareness campaigns. Most vital, banks in Lebanon have to show commitment in being advanced and provide the best services for clients. Finally, the SWOT analysis and TOWS matrix must be studied regularly in the future to keep up-to-date with the emerging innovations in this area.

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