The banking industry is shifting from old traditional banking systems to virtual banking around the world. As it is moving towards online, the issues related to it are also increasing. Most common issues faced by e-banking around the globe are security, fraud, customer awareness, trust, risk, privacy, phishing attacks and government laws. The objective of this study is to highlight the issues faced by e-banking in developing countries like Pakistan. For this purpose, five national banks were selected. Interviews and discussions with the senior managers were conducted and transcribed. The critical issues identified were mostly related to security, regulatory and reversal of wrong transaction. Lack of awareness and knowledge about technical systems are also found as the major concerns of the senior management of these banks. The findings of this research will help the senior management to successfully develop proactive strategies for e-banking in Pakistan.

Key Words: E-banking, Online Banking, Pakistan, Issues of E-Banking.
banking, Tele-banking, smart ATMs, PC-banking and most recently internet banking or e-banking (Wu et al., 2004). In most developing countries, a large number of issues and challenges are related to online transactions which lead online banking towards reducing benefits (Akhtar et al., 2019; Akinci et al., 2004; Lee, 2009; Namahoot & Laohavichien, 2018; Salem et al., 2019; Wang et al., 2003).

This research aims at the exploration of the major pressing issues revolving around the Pakistani e-banking sector, as per the management perspective. There is a little research made so far in this regard. This research may help in understanding more deeply the issues of e-banking in Pakistan, to understand the impact of these issues, to breadth and depth of the services offered and their capitalisation by the local banking business community. The findings of this study will help the banking sector to resolve these issues and to draw proper strategies for eliminating them, to provide an opportunity to find loopholes in the current security system and to give suggestions to improve it.

Literature Review

Electronic banking attracted great popularity in the last few years. The components of this kind of banking like ATM Machines, Internet Banking or e-banking, virtual banking and plastic money-based platforms have been observed to be the digital banking operations custodians at the Pakistani banking sector, which operationalised around 1990s. Furthermore, in terms of rules and government-based management mechanisms are concerned, the Electronic Transaction Ordinance 2002 had been declared mainly to promote the trend of e-banking and its systematic regularisation at large. In recent times, almost every commercial bank in Pakistan has established its own internet banking and ATM networks all over the country. These banks have connected with the ATM networks suitable to themand issued cards with debit and credit features. Moreover, they have launched mobile apps to support e-banking, which have been made secure and compatible with the heterogeneous mobile operating ecosystems currently available (SBP Annual Report).

According to (Kolachi, 2006), almost all of the Pakistani banks are providing the following e-banking services:

Inquiry: This service includes inquiries concerning the cheques, online authenticated-account statements, balance and deposit history.

Payment: This service comprises of direct and credit-card supported payments, transfer of funds, mobile top-ups and utility bill payments.

Request: This feature provides the facility of fixed deposits, demand-draft, cheque-book, ATM-cards, and payment cease requests.

Download: Download feature provides services regarding customer profile, bank manual download, download reschedule rate of different services, statement, guidelines and other information downloads facilities.

Advancement in electronic distribution channels has produced big changes in the financial industry in recent years. These big changes often result in probability contained in some issues. The existing literature highlights different issues faced by e-banking. The table mentioned below highlights all the issues identified through the rigorous literature review.

Table 1: Identified E-Banking Issues

| Authors Reference | EB-I1 | EB-I2 | EB-I3 | EB-I4 | EB-I5 | EB-I6 | EB-I7 |
|-------------------|------|------|------|------|------|------|------|
| (Aladwani, 2001b) | ✔    | ✔    |      |      |      |      |      |
| (Sumra et al., 2011) | ✔    |      |      |      |      |      |      |
| (Suh & Han, 2002) | ✔    | ✔    |      |      |      |      |      |
| (Nitsure, 2003) | ✔    | ✔    | ✔    |      |      |      |      |
| (Kamath et al., 2003) | ✔    | ✔    | ✔    | ✔    |      |      |      |
| (Yousafzai et al., 2003) | ✔    | ✔    |      |      | ✔    |      |      |
| (Sohail & Shanmugham, 2003) | ✔    | ✔    |      |      |      |      | ✔    |
Table 1 represents issues EB-I2 (security) and EB-I1 (Lack of trust), which are highly cited issues by different authors followed by EB-I4 (Technology Acceptance), EB-I3 (Lack of Awareness) and EB-I5 (Infrastructure).

**Trust (EB-I1)**

The E-banking is affected a lot by the lack of peoples’ trust in it. According to Guerrero et al. (2007), trust is the driving force which pushes someone in using the e-banking services. A challenge in this perspective is that the people feel hesitation while using the internet for making their transactions. The customers’ favourable attitude towards the e-banking initiatives has been depicted to be strongly connected to the dynamics of observable ‘trust’ factor. In North Korea, the major issue faced by e-banking is the trust of people in e-banking (Suh & Han, 2002). So ‘trust’ behaved as an obstacle for e-banking. Yousafzai et al. (2003) described two chief antecedents that were studied to be one of the major players in the development of a conceptualised model for ‘Trust’ required from the customer side. First, one is perceived privacy and the second one is perceived security. These variables are related to the bank’s ability to the provision of these to their customers. These two major issues of e-banking put the e-banking usage into the back. With the view of looking at obstacles as the source of competitive advantage and challenge that demands drastic and change and improvement, trust can be a friend for those banks that capitalise on it and a foe for those that negate it (Esfahani, 2019; Van Deventer, 2019).

**Security (EB-I2)**

The other force which pulls the public against e-banking is the security concern. The people are scared about their e-banking transaction’s security which leads to less usage of e-banking services (Nor & Pearson, 2007). Security issues consist of establishing a secure medium which enables data confidentiality as well as integrity for communication between any two economic agents, like entity authentication while opening an account, the problem of registration of a client with the network and for each transaction the matter of transaction authentication (Claessens et al., 2002; Khan et al., 2017). The result of Altintas and Tokol’s (2007) research on Turkish banking shows that there are deficiencies in service quality. E-banking system’s success is based on customer trust, but fraudulent attacks and internet hacks can affect banking service quality to their customers. Moreover, theft of customers’ personal data can affect customers’ confidence in e-banking systems. The operational complexities add fire to the fuel when the technical staff isn’t ready-enough to handle the security issues, their absence of robust-infrastructure and the challenges are emerging in new forms continuously (Liao & Cheung, 2003; Abdullaev, et al., 2019, February; Syniavska et al., 2019).
Lack of Awareness (EB-I3)

Lack of Awareness is one of the important factors in most of the developing countries. According to Sohail and Shanmugham (2003), lack of customers’ awareness of e-banking and customers’ reluctance to change are the factors that significantly affect the usage of e-banking (Shah, 2009; Siyal et al., 2019).

Technology Acceptance (EB-I4)

In most of the emerging countries, the proportion of technology acceptance is very low. The study by Amin (2007) shows that major issues faced by e-banking are the lack of perceived usefulness, lack of perceived ease of use, lack of perceived credibility and computer self-efficacy. Hernández Ortega et al. (2007) also highlighted the issue of user-friendly websites. Notably, a dynamic website supports and steers the viewer and audience towards fetching of their intended information, simultaneously exposing them to the main strengths of the bank and to how the bank can create a difference in their economic transactions. Whereas, most of the banks have complicated websites which lead to the lack of interest in e-banking. Moreover, the basic aim behind the e-banking evolution is the provision of the customer with ease of access to their account. In terms of the major issues reported are the less participation of management and the lack of internet facilities like network specialist and the equipment. Moreover, the rapid changes in internet technology also take part in making complications for e-banking (Aladwani, 2001a). The interlock between the change in technology, technology acceptance dynamics in terms of public at large, and associated challenges make it a tedious task that ranges from strategic alignment to tactical complexities (Echchabi et al., 2019; Koenait et al., 2019; Nui Polatoglu & Ekin, 2001; Pikkarainen et al., 2004; Rahi et al., 2019; Ramesh et al., 2019; Siyal et al., 2019; Wang et al., 2003).

Infrastructure (EB-I6)

The infrastructure includes all the technological equipment that develops into any eco-system where all the things, software to hardware, are integrated to perform unified tasks with robustness and considerable level of security (Sohail & Shanmugham, 2003; Abid & Noreen, 2006; Yang et al., 2007; S. N. A. Kazmi, 2010; Hussain et al., 2017). The maximisation of value from the e-banking operations on the online platform is provided to the marketers and business promoters (Domazet & Neogradi, 2019). Hence, infrastructure has a triangular role in e-baking by behaving as a performance bottleneck, asset and an opportunity for value capitalisation.

IT Self-Efficacy (EB-I7)

The system must be well-established enough as per the needs of the bank(s) so that the managers could rely on the system in the time of security breach, transactional load and meeting the needs of the customer demands. IT based self-efficacy reflects the perception of the management and operational capability of the system to handle the addition of new business processes, inculcation of legality in terms of step-by-step procedure, and protection against the frauds and cyber-attacks (Esfahani, 2019; Hussain et al., 2017; S. N. A. Kazmi, 2010; Khurana, 2019; Ojeniyi & Abdulhamid, 2019).

Management and Regulations (EB-I5)

The management of the technological shift of the banks is a tricky thing as well as there are many traps of weaknesses that have been laid down by lack of awareness, e-banking security conditions, trust in the new mechanism and alike problems. In the absence of the locally developed best practices of management, the managers have to rely on the global best practices that have been imported (computability with the local working environment) and get applauded in connection to the technology that is considered as foreign (having no local success story) (Akhtar et al., 2019; Rehman et al., 2019; Shah, 2009; Sharma, 2011). As far as the legality of the operation is concerned, the SBP as being the regularity body and custodian for the standardization of banking norms in Pakistan, is very concerned and has forwarded a series of regulations that are supported by trainings and workshops when required. Along with this, Electronic Transaction Ordinance 2002 is well in place ever since its inception (See SBP Annual Report; (S. N. A. Kazmi, 2010; Shah, 2009; Yang et al., 2007; Yousafzai et al., 2003).
Methodology

The interview approach was adapted to explore the major challenges to e-banking with focus on the managerial perspective and how they look at the things. The interviews sessions were arranged with the top line and the middle-level managers of different banks providing their E-banking services in Pakistan. The baseline for the articulation of the interview guide came from the literature review stage, which resulted in the systematic emergence of the issues namely: Security, Fraud, and User friendliness, Trust, Risk, Privacy and Phishing. Furthermore, these issues were farmed into the questions in the way that the respondents would not feel that we are doing window-shopping or get a sense of secrecy-mining by the researchers. The interview questions were gradually validated and updated as we came to know about more issues related to e-banking in Pakistan. Interviews include both formal and informal interviews. All the interviews were recorded to avoid any error while writing the interviews and to ensure the authentication of data. The main thing to find the issues which are faced frequently in Pakistan. First, the information regarding the history of the bank, its services and the working of these services were collected from the manager. Then, all the questions regarding the issues of e-banking were inquired from the manager. Managers were requested to respond to all the questions with the best possible knowledge that they have got related to these questions. The top and middle-level managers were selected because they face the issue directly and they provide more information as compared with the lower level managers. Five banks were selected for this study, including both the local and international banks currently working in Pakistan.

Results

Table 2,3,4,5 & 6 demonstrate different issues faced by e-banking in Pakistan. Responses from different managers are summarized in the table mentioned below. Connectivity, security, Computer literacy/ IT self-efficacy, Lack of customer awareness, difficulty in making the reverse of a wrong transaction, regulatory, infrastructure and risk are the main factor which create hurdles for e-banking.

Table 1. MCB Issues Chart

| Issues chart: MCB Bank Ltd | Connectivity | Security | Computer illiteracy | Lack of Customer awareness | Reversal of wrong transaction | Regulatory | Infrastructure | Risk |
|----------------------------|--------------|----------|---------------------|--------------------------|-----------------------------|------------|-----------------|------|
| Manager 1                  | *            |          |                     |                          |                             |            |                 |      |
| Manager 2                  | *            | *        |                     | *                        |                             |            |                 |      |
| Manager 3                  | *            |          | *                   | *                        | *                           |            |                 |      |
| Manager 4                  |              | *        |                     |                          |                             |            |                 |      |

Table 2 demonstrates the responses retrieved from five managers from different branches of MCB Ltd. These responses show that lack of customer awareness is one of the top problematic factors which creates hurdles for e-business adoption aimed at MCB users. After that security, Connectivity, computer illiteracy are also considered important issues for e-business success.
Table 3. HBL Bank Issues Chart

| Issues chart: Habib Bank Ltd | Connectivity | Security | Computer illiteracy | Lack of Customer awareness | Reversal of wrong transaction | Regulatory | Infrastructure | Risk |
|-----------------------------|--------------|----------|---------------------|---------------------------|-------------------------------|------------|----------------|------|
| Manager 1                   | *            | *        |                     | *                         |                               |            |                |      |
| Manager 2                   | *            |          | *                   |                           |                               |            |                |      |
| Manager 3                   | *            |          |                     | *                         |                               |            |                |      |
| Manager 4                   | *            | *        |                     |                           |                               |            |                |      |

Table 3 highlighted the responses acquired from HBL managers. These outcomes show that people hesitate to adopt e-banking services due to account security issues. This shows that HBL users have lack of trust in banking security features for online transactions. In addition to the security issues, HBL managers consider lack of customer awareness and computer illiteracy to be among the other important issues for e-banking.

Table 4. Askari Bank Issues Chart

| Issues chart: Askari Bank Ltd | Connectivity | Security | Computer illiteracy | Lack of Customer awareness | Reversal of wrong transaction | Regulatory | Infrastructure | Risk |
|-------------------------------|--------------|----------|---------------------|---------------------------|-------------------------------|------------|----------------|------|
| Manager 1                    | *            |          |                     |                           |                               |            |                |      |
| Manager 2                    | *            | *        | *                   |                           |                               |            |                |      |
| Manager 3                    | *            | *        | *                   | *                         |                               |            |                |      |
| Manager 4                    | *            |          |                     | *                         | *                             |            |                |      |

Table 4 showed responses from managers of Askari bank. These responses shows resemblance with MCB managers. Both consider lack of customer awareness is top issue for E-banking adoption and success in Pakistan. Customer illiteracy, security and infrastructure are least important issues for Askari bank.

Table 5. UBL Issues Chart

| Issues chart: United Bank Ltd | Connectivity | Security | Computer illiteracy | Lack of Customer awareness | Reversal of wrong transaction | Regulatory | Infrastructure | Risk |
|-------------------------------|--------------|----------|---------------------|---------------------------|-------------------------------|------------|----------------|------|
| Manager 1                    | *            |          |                     |                           |                               |            |                |      |
| Manager 2                    | *            | *        | *                   |                           | *                             |            |                |      |
| Manager 3                    | *            |          |                     | *                         |                               |            |                |      |
| Manager 4                    | *            | *        |                     | *                         | *                             |            |                |      |

Table 5 demonstrated responses from UBL managers regarding the issues related to e-banking. UBL managers consider computer illiteracy, lack of customer awareness and risk at the top issues faced for e-banking adoption and success. Connectivity, reversal of wrong transaction and security consider least important factors.
Table 6: Meezan Bank Issues Chart

| Issues chart: Meezan Bank Ltd | Connectivity | Security | Computer illiteracy | Lack of Customer awareness | Reversal of wrong transaction | Regulatory | Infrastructure | Risk |
|-------------------------------|--------------|----------|---------------------|---------------------------|-------------------------------|------------|----------------|------|
| Manager 1                    | *            | *        | *                   | *                         |                               |            |                |      |
| Manager 2                    | *            | *        | *                   | *                         |                               |            |                |      |
| Manager 3                    | *            |          | *                   | *                         |                               |            |                |      |
| Manager 4                    | *            |          | *                   | *                         |                               |            |                |      |

Table 6 highlighted the responses from Meezan bank managers. These responses consider the lack of customer awareness and security issues as the top ranked factors for e-banking success or failure aimed for Meezan bank users. Computer illiteracy, connectivity and infrastructure are considered to be the least important factors.

Conclusion

E-banking is growing rapidly around the world. It is making its place due to its benefits like time-saving, ease of access and availability of services at any time. Even at the stage of being a transitional-developing economy, the banks have felt the pressing need of e-banking alternatives in order to maximise their services value-mix, while minimising their operational cost. Its increasing appreciation and usage are affected due to some issues related to this field. As long as its functioning is expending the issues related to this are also increasing. The current study highlights the different critical issues and ranked in the descending order of the frequency of their occurrence as shown in Table 7.

Table 7: Issues Ranking

| Issues                              | Frequency | Ranked |
|-------------------------------------|-----------|--------|
| Lack of Customer awareness          | 14        | Ranked# 1 |
| Security                            | 11        | Ranked# 2 |
| Computer illiteracy                 | 10        | Ranked# 3 |
| Connectivity                        | 07        | Ranked# 4 |
| Regulatory                          | 05        | Ranked# 5 |
| Risk                                | 05        | Ranked# 5 |
| Infrastructure                       | 04        | Ranked# 6 |
| Reversal of wrong transaction       | 03        | Ranked# 7 |

The issue related to the lack of customer awareness is found to be the most critical issue and it has the highest frequency of occurrence i.e. 14, ranked # 1 in all identified issues. This means that out of 20 managers, 14 contemplates that the biggest problem of e-banking success in Pakistan is lack of customer awareness. Similarly, security issues, ranked # 2, is found to be the second most critical e-banking issues. Customer literacy/ IT self-efficacy ranked # 3 having frequency 10, shows that 50 % of managers consider customer literacy factor more problematic for e-banking success. In the same way connectivity issue ranked # 4, regulatory and risk ranked # 5 due to the same frequency of occurrence and on last Reversal of the wrong transaction is ranked # 6. Figure 1 represents different identified issues along with their percentage of occurrence.
Figure 1: Identified Issues

The details regarding the occurrence of these issues illustrated in the figure 1 have been discussed as follows:

**Customer Awareness**

Lack of customer awareness about e-banking is one of the prime triggers that initiate the sense of need by the public at large, even though some of the major players in the business community and IT based entrepreneurs demand it in clear words. In contrast the common public and illiterate businessmen have not got the idea as how e-banking can facilitate them in their matters. Moreover, the element of embracing the things as they are do generally come from the elders and senior citizens as well (da Rocha & Martins, 2019).

**Security**

 Altogether, the banks have been facing more or less the same degree of issues like fraud and lesser security of e-accounts, which result in the lesser trust of people in e-banking, the risk involved in e-banking environment, the customers’ sensitivity about their privacy, the phishing/hacking attacks by the hackers and Govt. laws, which are sometimes not in favour of e-banking. Recently, the media hype created by the reporters on the issue of banking frauds related to ATMs and other technology-related crimes had a lot of negative impact on e-banking adoption. These securities circumstances have created a notable level of mistrust in e-banking activities.

**Connectivity**

Connectivity problem, as reflected in the figure, is another problem that inhibits propagation of user-friendly environment. Interestingly, this issue has behaved as a two-way sword because both the customers and banking community have experienced its detrimental effects. The customers are not using the compatible mediums devices with the network, so they face this connectivity problem. Form banks point of view, it is because of some fault in the network like sometimes the network cable from ISP is not functioning properly.

**Computer Illiteracy**

Computer literacy stands for one being able to complete the task on a computer without any assistance. In developing countries like Pakistan, computer illiteracy becomes one of the critical issues. People are experiencing
the vacillating situation in terms of adopting the new system, as they are unaware of how to use it. Most of the population does not know about the associated benefits. Furthermore, another main reason for computer illiteracy is the country’s literacy rate i.e. less than 45%. Almost half of the population does not know how to read and write. The question is how they can use computers to perform banking transactions. This means that smart and simple steps have to be introduced for e-banking and service booths have to be established, physically or virtually as per the business need and consideration of cost factors.

**Regulatory Issue**

As being one of the major players in the banking sector, MCB bank which is providing E-banking services is facing an issue of the clash with the regulatory policy from the state bank of Pakistan. As most of the banks which provide a limited number of e-services like balance inquiry, bills payment, online cheque book request, but this bank provides the facility of online funds transfer during which there are chances of hacking or fraud. In these situations both the parties claim the State Bank of Pakistan for this. That’s why the State Bank does not allow this bank to provide such kind of services.

**Risk**

The existing research shows that risk tolerance has a notable effect on the growth of e-banking in the USA. The issues highlighted had been the tolerance level of people about the risk while experiencing the e-banking service-products. As per the analysis, tolerance level of young ones is more than that of older. The old people do not take too much risk in using the internet for their banking transactions which leads to the lack of trust of old people in e-banking. In Pakistan, where uncertainty is very high people always hesitate to take the risk as most people consider e-banking to be risky.

Transaction reversal and infrastructure had been one of the most indicators in terms of e-banking issue in Pakistan. Further research is needed on them by having a comparative analysis of banking sectors of other nations along with the inculcation of cultural as well as leadership dynamics.

**Limitations and Future Studies**

- The research has only catered the managerial perceptions of the top and middle managerial rank holders from the 5 selected banks, based on the historical development of the respective ones, as the qualitative studies are not normally able to handle many organizations or the public at large. So, the selection of the companies from a different perspective could give more depth to the present problem at hand.
- The cultural and leadership styles were not included as it would amplify the research study beyond its scope. Therefore, further studies in Pakistan and cross-cultural perspectives are needed (Changchit et al., 2019; Tam & Oliveira, 2019).
- The comparison between the developed, developing and underdeveloped countries is also a missing link (Malaquias & Hwang, 2019).
- The Islamic banking sector can be the focus of the future studies, even though, the banks selected have Islamic banking branches and some specialize in Islamic banking operations (Bidabad & Allahyarifard, 2019; Echchabi et al., 2019; Mohd Thas Thaker et al., 2019; Raza & Hanif, 2011).
- The technical perspectives from the point of neural networks and FinTech also a point of value for consideration (Jünger & Mietzner, 2019; Shahabi & Faeyz Razi, 2019).

**Recommendations**

- IT awareness programs must be held at schools/colleges/university levels and should be the part and parcel of the curriculum.
• There is a need to improve banking. E-banking security systems’ breaches have a negative impact on the use of e-banking. The security services can be outsourced by the banking sector, in order to gain specialised service maintenance.

• There must be an IT regulatory policy, concerning all banking transactions scenario as well as enabling customer service related options.

• A minimum number of branches for each bank must be increased to maintain excellent competition.

• To improve e-banking knowledge, initially, these facilities must be free or charged as minimum as possible to attract the customers and get them used to it.

• IT hardware duty must be reduced to ensure usage at a high level (root level) by reducing the connectivity issues.
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