Challenges and Adaptive Response of E-Banking Reality in Ghazi City: District Haripur KPK of Pakistan

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Abstract:

The E-Banking, has been taking the role of traditional banking, is making clients easier to access online services at home and work place, save their time and money as well. Increasing technological uses in banks compel banking customers toward adoptions of E-Banking system. The term "e-banking" refers to a modern banking system in which banks offer their clients quick, nationwide, and international financial services via computer or electronic and internet services around-the-clock. Computers, internet, ATMs, and other electronic channels used to offer new and conventional products to customers electronically for instance electronic banking. Use of online banking becomes a main problem of modern era. The main purpose of this study is to highlight the factors effecting the E-Banking adoption in tehsil Ghazi, District Haripur, KPK Pakistan. There are following factors: trust, security concern, awareness, internet connection, skill of new technology, cost are being check in this study. Data is collected from the questionnaires. A total random sample size of 150 respondents was selected for this study, consisting of 76 males and 74 females. In this study firstly, descriptive analysis was conducted to summarize key findings and provide insights into the distribution of responses across different variables, Secondly, ordinal logistic regression is being regressed one by one to check the causal relationship of dependent variable with independent variables. Overall, the study highlights the importance of enhancing trust, security, and technical skills to promote e-banking adoption in Ghazi City, while also addressing cost-related concerns to make e-banking more accessible and attractive to users.

Keywords: E-Banking, ATM, Ordinal Logistic Regression, Technological Growth.

Introduction:

Internet banking is a service that allows users to do a variety of online banking tasks, such as settling bills, transferring money online, checking account information, making investments, exchanging currencies, effortlessly checking operations and maintaining worldwide access (Rahi et al. 2020). Many firms have involved in this new technology in place of the more traditional

method in order to improve customer service delivery and quality while cutting expenses (Chaimaa, et.al. 2021). Internet banking is an advanced technique used by banks and other financial organizations. The higher adoption of e-banking in daily life indicates the advancement and development of nations and as well as play a great role in Economic growth. On the other side lower adoption of E-banking not just effects the living standard of the people but create strong effect on economic growth as well. Adoption of e-banking refers to accepting the digital changes taking place in the banking sector and adopting it in daily use. Adoption of E-Banking is possible only when there is awareness within the customers about e-banking. The phrase "factors affecting adoption of E-Banking" describes the multiple components or variables that impact the degree to which people or institutions decide to utilize online banking services. The factors affecting Adoption of E-Banking are interrelated with each other's and having a strong relation among them. There is complex relation exist between the adoption of E-Banking and Factors affecting the adoption worldwide. In the modern era technology take place in every field but why some nations face the challenges to adopt new advancement? The study indicates the relationship between the adoption/satisfaction of E-Banking and the factors affect the adoption of E-Banking in tehsil Ghazi, KPK, Pakistan. Study highlight that what are the reasons/factors behind the less adoption of e-banking or what the factors become hurdle while using and adopting E-Banking services in Ghazi?

Use of online banking becomes a main problem of modern era. Numerous studies have been carried out to identify the factors that influence a person's ability to accept different parts of the online banking service. Factor literature indicate that factors such as easy interaction and rapid response have an impact on the adoption of internet banking, as does the availability and continuity of the banking service (Akhter et.al.,2022; Hammoud et al., 2018). Even though E-banking has started in Pakistan, people still use old methods for banking transactions, cash system and other activities because of some problems like their education level trust issues (Sardar, & Shamim, 2010). Consumer demographics, consumer awareness, simplicity of use, 4 security and privacy, cost of E-Banking, resistance to change, and digital access are the main variables influencing the adoption of E-Banking (Siddique, & Saadat, 2013; Alam et al., 2009). The main challenges that Pakistani consumers had in adopting and using mobile banking were lack of knowledge, lack of early trust and compatibility, and perceived danger (Siyal, et.al.,2019). E-banking service is a good activity, it saves people's time and cost and people can use it sitting at home. But unfortunately, the people of Ghazi city are hesitating to use it and those who are using it are also facing problems. As E-Banking has become a big issue for the people of Ghazi city. Despite having the so many advantages of E-Banking the banks customer prefer Traditional banking on E-Banking.

Significance and Objectives:

E-banking adoption is a key driver of economic growth and advancement. By streamlining financial transactions and improving access to banking services, e-banking enhances efficiency, promotes financial inclusion, and supports the formalization of economies. For policymakers, fostering e-banking adoption is essential to achieving sustainable economic growth, as it accelerates digital transformation, boosts productivity, and strengthens the financial infrastructure.

By prioritizing user-friendly and secure e-banking solutions, policymakers can facilitate widespread adoption and drive economic development.

The primary objective of this research is to explore the realities of e-banking within Ghazi city.
1. Highlight the factors, which hinder using e-banking.
2. Explore the impact of factors influence on e-banking.
3. Identifying general recommendations.

Literature Review:
Increasing technological growth because need of banks and their customers to move toward adoptions of new methods of transaction through banks as E-Banking (Lusaya, & Kalumba, 2018). The term "e-banking" refers to a modern banking system in which banks offer their clients quick, nationwide, and international financial services both inside and outside of their branch offices via computer networks or other electronic devices. These services are offered to clients who have these technical devices around-the-clock. Computers, internet, ATMs, and other electronic channels used to offer new and conventional products to customers electronically for instance electronic banking. (Salam et al. 2018). Electronic banking means doing your banking on the computer or the internet without going to a physical bank. Banks are necessary to implement online banking since it is a very practical, economical, and time-saving technology. Even though all banks offer online banking services, such as ATMs, online transfer of money, and online paying bills through relevant mobile apps, users are now cautious to use this highly beneficial platform. (Ali, et.al. 2021). Numerous studies have been carried out to identify the factors that influence a person's ability to accept different parts of the online banking service. Factors literature indicates that Pakistani consumers had in adopting and using mobile banking were lack of knowledge, lack of early trust and compatibility, and perceived danger (Siyal, et.al.,2019). The barriers to adopting e-banking services include security risk, lack of trust, a lack of legal and regulatory framework, a lack of ICT infrastructure, and a lack of competition between domestic and international banks (Sisay, 2021; Bultum 2014).

Consumer demographics, consumer awareness, simplicity of use, security and privacy, cost of E-Banking, resistance to change, and digital access are the main variables influencing the adoption of E-Banking (Siddique, & Saadat, 2013; Alam et al., 2009). Technical challenges and security are the main factors according to the data collect through survey from the respondent of Bangladesh (Islam et.al. 2022). Lack of knowledge, lack of e-banking promotion and security are the challenges in e-banking adoption (Ali et.al. 2021). Study identifies the barriers image barrier, e-banking promotion in regional languages and trust (Arif et.al. 2022). Further indicate lack of knowledge, cost of services and information availability are hurdle in adoption of e-banking (Lusaya and Kalumba 2018). The lack of awareness, security concern and technical issues are found as hurdle while using e-banking (Bhat and Bhat, 2016). Awareness has significant impact on adoption of e-banking in nigeria (Inegbedion, 2018). Further the performance, privacy, security, financial, time, and social hazards conceder the main obstacle in promotion of E-Banking (Khedmatgozar and Shahnazi 2018). Moreover hesitation or lack of knowledge about e-banking has significant impact on adoption of e-banking. The results showed a direct connection between

perceived usefulness and the adoption of technology, influencing customer attitudes toward e-banking (Jan et.al 2020). Rapid improvement in the technological development can increase the use of e-banking services (Traore and loang 2023). Trust, awareness, cost, internet availability and attitude towards use of e-banking has great influence on e-services in banking sector (Abebe 2021). In pakistan the factors trust, security, privacy, knowledge, awareness and convenience to use has significant impact on e-banking satisfaction explain by the study of (Mughal et.al 2012). There are considerable correlation between the customer satisfaction and several characteristics including efficiency, security and privacy, responsiveness and communication (Hammoud et.al. 2018). The PLS finding analysis show the main variables influencing banking customers adoption are attitude, behavior intention, cost, utility, security and privacy (Asadi et.al. 2017). The variables like perceived utility ease of use, and rate of time consumption has significant influence on consumer choice to adopt online banking services (Salam et.al 2018). Factors perceived security risk, usefulness, and convenience of use, social influence, and consumer inventiveness are positively and statistically significantly affect use of online banking (Akhter et.al 2022). There are strong and positive correlation between customer satisfaction and service quality (Sewaka et.al. 2023). Variables including gender, perceived satisfaction, internet speed and brand trust recommend for future study (Akhter et.al 2022). Policymakers can use the finding as reference for creating laws for online banking services and to improve the quality of online banking services (Abebe 2021).

Theoretical Framework:

E-banking adoption signifies adapting to the digital evolution in the banking sector and seamlessly incorporating these innovations into daily financial practices. Adoption of E-Banking is possible only when there is awareness within the customers about e-banking and they are aware of its importance and start working. The higher level of awareness leads to the higher level of adoption. When the more people know about e-banking, the more their trust will build and when their trust comes to ebanking, then they will not be concerned about security, so the higher level of trust leads to lower level of security concerns. When the customers completely aware and trust on e-banking so, then they focused at their costs. If the cost of e-banking is comparatively suitable than traditional banking, then they will adapt it and learn the technical skills required to adapt to ebanking, taking into account their facilities such as internet connectivity. The factors affecting Adoption of E-Banking are interrelated with each other's and having a strong relation among them. When we discuss it further, so it means that when one factor like awareness exists among the customers, so it means they trust upon e-banking services. When they trust on e-banking, so they are less concern about security and want to adopt it. Then they analyze their comparative advantage , means cost of e-banking services compare with 26 traditional banking services and if beneficial for customers then they develop focused upon internet connection, if reliable internet facility exist then the customers increase the adoption of technical skills like use of ATM (Automatic Teller Machine), mobile and computers, So, they are inter-related with each other, we cannot say any customer has complete awareness of ebanking and strongly trust on their services but more concern about security, because when a person trust on e-banking services, it means e-banking must be secure and no chance to show concern about security. So, the adoption of e-banking depends upon these factors when the more awareness, trust, security, low cost, reliable internet connection and

good technical skills, the adoption of E-Banking higher and common. The picture also shows that when lack of awareness exists, then trust become a barrier, more security concerns are raised and customers avoid themselves to adopt e-banking services, so in this case these factors become challenging factors and banks need to take remedial measures about it.
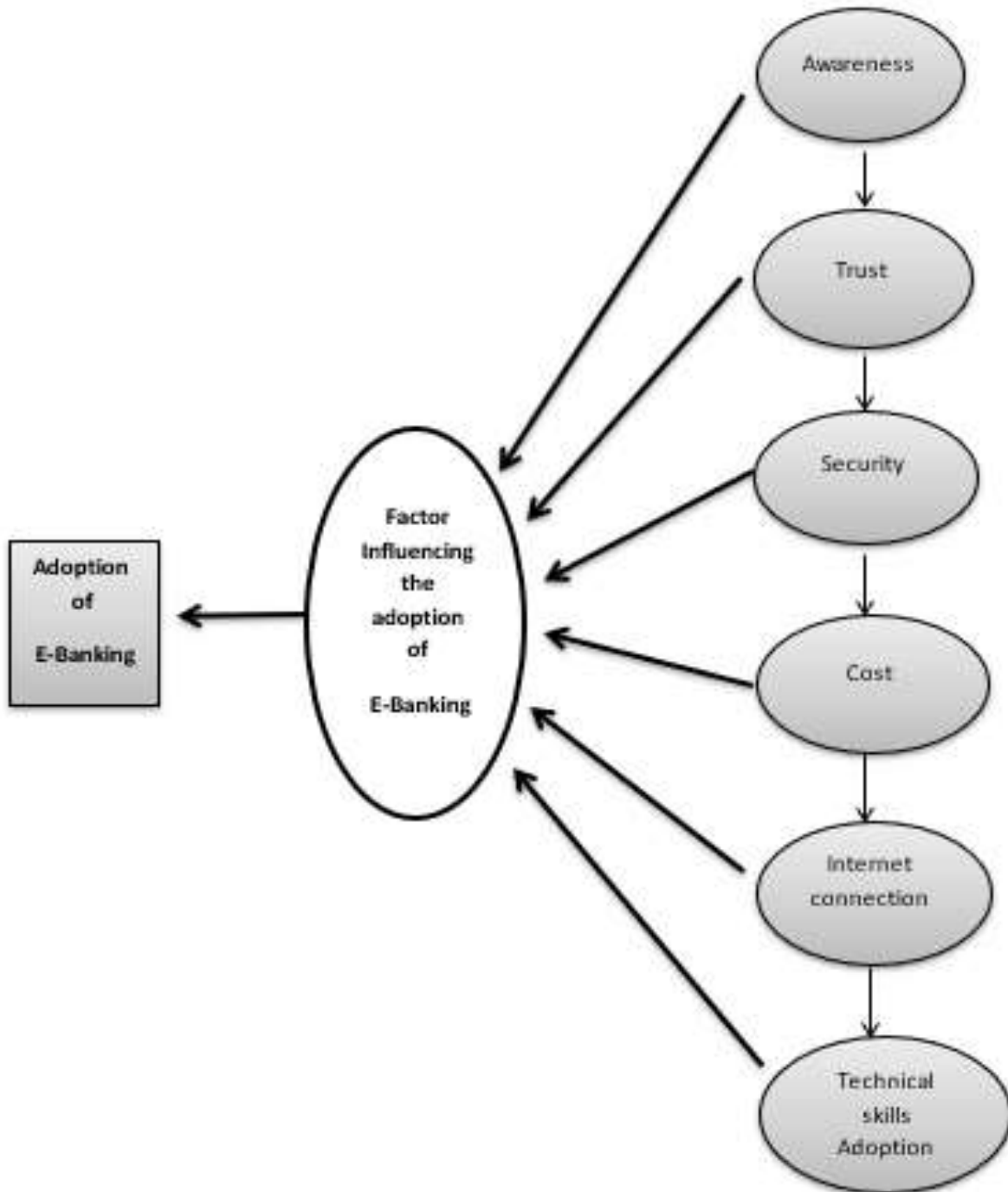

Figure: Model

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E-Banking is a digital way to carry out the banking operation by using the electronic devises either computer, mobile phone, ATM Machines etc. Now we are living in a digital world where the development in money we can see from last few decades. The development of credit money facilitates the customers to done transaction while using credit or debit cards and adopt use of E-Money in their daily routine. The adoption of E-Banking is a complex matter, many factor play significant role to influence adoption of E-Banking. The factor influence adoption of E-Banking are inter-connected with each other like awareness of customers regarding e-banking leads to trust, security, cost, internet connection and adoption of technical skills regarding E-Banking. The high level of awareness, trust, security, leads to the higher level of E-Banking adoption and vice versa.

The dependent variable is Adoption of E-Banking and;

$$Adoption\ of\ E-banking = f(Factors\ influence\ adoption)$$

Which is given as:

$$AEB = f(\text{LA, TS, TB, SC, HC, IC})$$

The econometric specification of above given function is as:

$$(AEB) = \beta_{0+}\beta_1 LA + \beta_2 TS + \beta_3 TB + \beta_4 SC + \beta_5 HC + \beta_6 IC + u_t$$

Where, LA stands for (Lack of Awareness), TS (Adoption of Technical Skills), TB (Trust Barrier), SC (Security Concern), HC (High cost) and IC (Availability of Internet Connection). Awareness means to know about something, awareness about E-Banking means customers aware about the use of electronic devices to carry out banking operations. Where the trust means how much customers trust on E-Transaction of money, the high-level trust indicates the high level of adoption. The Security indicate that degree of trust on financial records and how much customer trustworthy regarding hacking activities in E-Banking. Cost shows the total amount which bear by customers to purchase electronic devices and services. The low-level cost indicates high level of adoption. Moreover, regardless these factors customer evaluate their facilities like internet connection and adopt new technical skills.

Technique:
In this study, firstly, descriptive analysis is being done by using frequency, percentage and Pie chart. Secondly, ordinal logistic regression is being regressed one by one to check the causal relationship of dependent variable with independent variables. This model is being run because the dependent is in categorical form of response.

Data and Methodology
In the analysis of this study, the ordinal logistic regression is being used due to categorical response of dependent variable of adoption of e-banking in Ghazi city, district Haripur, by using SPSS software. Both qualitative and quantitative data was collected through the primary sources to establish the relationship between the variables.

Study Population:
The study population consists of banking customers of city Ghazi, Haripur district of KPK province of Pakistan.

Sample size:
The sample size chosen for this study were consisting on 150 customers of the bank in Ghazi city, Haripur district. The technique simple random sampling was used to collect the data. In this data 74 females and 76 male respondents were participating. The respondent belongs from different categories such as government employees, private employee, bank employee, sole proprietor, and even students above age of 18 were participate in the study. The education level of most of the participant was bachelors some are primary passed, higher secondary educated and even PHD scholars were taken as a respondent in the study.

Research instruments:
This study used the self-administered questionnaires based on both open ended and close ended question casing all the variables in the study. In this questionnaire, a five-point Likert scale was used to make easy the processing and analysis of the data. The scale was marked 1-5 where; 1 representing strongly 'disagree' and 5 representing strongly 'agree'.

Data Analysis:
Data collected from the questionnaires was analyzed using statistical software i.e SPSS (Statistical Package for the Social Sciences). Descriptive analysis was conducted to summarize key findings and provide insights into the distribution of responses across different variables. Additionally, ordinal logistic regression was applied to examine the factors influencing customer satisfaction and the likelihood of adopting e-banking services. This analytical approach aims to uncover significant patterns and relationships within the data, offering valuable insights for policymakers and financial institutions aiming to enhance E-Banking services in Ghazi City.

Results of Ordered Logistic Regression:
In the analysis of this study, the ordinal logistic regression is being used due to categorical response of dependent variable of adoption of e-banking in Ghazi city, district Haripur, by using SPSS software. In the below table, the negative value (-5.98) of coefficient indicates that the inverse relationship exists between adoption of e-banking and cooperation that means the decrease of cooperation shows the less likelihood of satisfaction of adoption of e-banking. This suggests that poor cooperation of bank staff in the adoption of e-banking environment leads to a marked decline in customer satisfaction. The P-value (0.000) shows significant and highly reliable result of variable cooperation with adoption of e-banking in the given model. The 95% confidence interval, ranging from -8.659 to -3.30, further supports the robustness of this finding, indicating that the negative impact of cooperation on satisfaction is consistently strong. In the model, the Pseudo R-Square value is 0.136 that shows goodness of fit of model in which the cooperation plays a significant role in adoption of e-banking in Ghazi city. Nonetheless, the Chi-Square value is 39.327 that show the overall fitness of the model to reinforce the importance of cooperation as a key factor influencing customer satisfaction in adoption of e-banking in city Ghazi.

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Table: Results of Ordinal Logistic Regression:

Adoption Of E-Banking								
variables	Estimate	Pseudo R-Square	-2 log-likelihood	Chi square	Std. Error	Sig	95% confidence interval	
							Lower bound	Upper bound
cooperative	-5.98	0.136	62.849	39.327	1.367	0.000	-8.659	-3.30
Education	17.533	0.078	59.971	22.068	0.000	0.000	17.533	17.533
Employment	19.772	0.45	43.195	14.663	0.000	0.000	19.772	19.772
Frequency	1.570	0.030	48.798	18.209	0.854	0.66	-.103	3.244
Issues	0.755	0.069	51.667	12.631	0.508	0.137	-.241	1.752
Improvement	1.306	0.75	57.712	17.378	0.627	0.037	.078	2.537
Long	0.469	0.006	45.854	20.899	0.471	0.319	-.454	1.393
Operations	-2.714	0.142	39.838	10.418	0.623	0.000	-3.934	-1.494
Trust	1.935	0.137	45.262	11.974	1.141	0.090	-0.302	4.173
Security	-5.792	0.138	48.390	24.642	1.371	0.000	-8.480	-3.105
Threats	-2.993	0.028	53.508	20.090	1.400	0.033	-5.736	-0.429
Measures	-4.585	0.075	55.498	22.020	1.282	0.000	-7.098	-2.072
Knowledge	-0.344	0.035	48.928	15.093	0.344	0.302	-0.998	0.309
Hesitation	-5.925	0.169	45.529	14.139	1.393	0.000	-8.655	-3.194
Technology	0.164	0.013	57.768	22.184	0.366	0.654	-0.554	0.883
Skills	19.438	0.025	44.708	10.798	0.000	.	19.438	19.438
Awareness	-4.072	0.117	68.720	35.147	1.040	0.000	-6.110	-2.034
Internet	2.271	0.181	58.171	28.298	0.551	0.000	1.176	3.367
Expensive	-2.263	0.140	53.419	14.324	0.786	0.004	-3.804	-0.721
Cost	1.495	0.058	53.752	15.367	0.499	0.003	0.518	2.473
Time	19.082	0.090	40.397	11.826	0.000	.	19.082	19.082

The analysis indicates a positive relationship between higher education levels and satisfaction with e-banking adoption, supported by a highly significant p-value (0.000) and a Pseudo R-Square of 0.078, showing a good model fit. Employment level also positively influences satisfaction, with a significant p-value (0.000) and a stronger model fit (Pseudo R-Square of 0.45). Frequency of use has a weak correlation, with a high p-value (0.66), suggesting limited significance, and a low model fit (Pseudo R-Square of 0.030). Customer issues are linked to higher satisfaction but with less significance (p-value of 0.137) and a modest fit (Pseudo R-Square of 0.069). Improvements in e-banking services significantly impact satisfaction (p-value of 0.037), and the model fits well (Pseudo R-Square of 0.75). Long-term usage shows a weak correlation with satisfaction (p-value of 0.319) and a low model fit (Pseudo R-Square of 0.006). In conclusion, education, employment,

and service improvements are key factors influencing satisfaction in e-banking adoption, while frequency, issues, and long-term usage are less significant. The analysis using ordinal logistic regression reveals several key factors influencing customer satisfaction with e-banking adoption in Ghazi City. The negative coefficient (-2.714) for banking operations indicates a strong inverse relationship with satisfaction, meaning poor banking operations lead to decreased satisfaction. The p-value (0.000) confirms the significance of this factor, with a Pseudo R-Square of 0.142 suggesting a good model fit. The Chi-Square value of 10.418 reinforces the importance of banking operations in customer satisfaction. The positive coefficient (1.935) for trust level shows that higher customer trust leads to greater satisfaction, with a p-value (0.090) indicating significance. The Pseudo R-Square of 0.137 suggests a decent model fit, while the Chi-Square value of 11.974 emphasizes the importance of trust. For security, the negative coefficient (-5.792) indicates that poor security results in decreased satisfaction, with a significant p-value (0.000). The Pseudo R-Square of 0.138 shows the model fits well, and the Chi-Square value of 24.642 highlights security's crucial role in satisfaction. Lastly, the negative coefficient (-2.993) for cyber threats reveals that lower levels of cybercrime threats correlate with higher satisfaction, with a p-value (0.033) confirming significance. The Pseudo R-Square value of 0.028 shows a weaker fit compared to other factors, but the Chi-Square value of 20.090 reinforces the importance of threats in shaping customer satisfaction. Overall, banking operations, trust, security, and cyber threats significantly impact customer satisfaction in the adoption of e-banking in Ghazi City. The analysis of this study using ordinal logistic regression shows several significant factors influencing customer satisfaction with e-banking adoption in Ghazi City. A negative coefficient (-4.585) for security measures indicates that poor security leads to decreased satisfaction, with a p-value of 0.000 confirming its importance. The confidence interval (-7.098 to -2.072) supports the robustness of this result, and the Pseudo R-Square value of 0.075 indicates a good model fit. The Chi-Square value of 22.020 further emphasizes the significance of security measures.

For knowledge, the negative coefficient (-0.344) suggests that poor knowledge of customers leads to decreased satisfaction, although the p-value (0.302) indicates weaker significance. The confidence interval (-0.998 to -0.309) supports the finding, and the Chi-Square value of 15.093 reinforces the role of knowledge in satisfaction. Hesitation has a negative coefficient (-5.925), suggesting that customers' hesitation leads to lower satisfaction. The p-value (0.000) and confidence interval (-8.655 to -3.194) confirm the strength of this relationship. The Pseudo R-Square value of 0.169 and Chi-Square value of 14.139 highlight hesitation's critical role in satisfaction. The positive coefficient (0.164) for customer technology shows that higher technology levels correlate with greater satisfaction, although the p-value (0.654) suggests a less significant effect. The confidence interval (-0.554 to 0.883) supports the finding, with a Pseudo R-Square value of 0.013 and a Chi-Square value of 22.184 indicating model fitness. Skills of customers, with a positive coefficient (19.438), strongly correlate with higher satisfaction. The p-value (0.000) confirms its significance, with a confidence interval of 19.438 to 19.438 supporting the consistency of this relationship. The Pseudo R-Square value of 0.025 and Chi-Square value of 10.798 confirm the role of customer skills. Finally, awareness has a negative coefficient (-4.072), indicating that lower awareness leads to lower satisfaction, with a p-value of 0.000 confirming its

strong impact. The confidence interval (-6.110 to -2.034) and Pseudo R-Square value of 0.117 further support this result. The Chi-Square value of 35.147 reinforces the importance of awareness in customer satisfaction for e-banking adoption. The analysis of this study using ordinal logistic regression reveals several key factors influencing customer satisfaction with e-banking adoption in Ghazi City. A positive coefficient (2.271) for internet connection suggests that higher internet connectivity increases satisfaction with e-banking adoption. The p-value (0.000) and the confidence interval (1.176 to 3.367) confirm the significance of internet connectivity, with a Pseudo R-Square value of 0.181 highlighting the model's fit and reinforcing the importance of internet access in enhancing satisfaction. The Chi-Square value of 28.298 further supports this finding. The negative coefficient (-2.263) for expenses indicates that lower expenses correlate with lower satisfaction. The p-value (0.004) and the confidence interval (-3.804 to -0.721) support the negative impact of expenses on satisfaction. The Pseudo R-Square value of 0.140 and the Chi-Square value of 14.324 confirm the significance of expenses in e-banking adoption. For the cost of e-banking, the positive coefficient (1.495) suggests that higher costs increase satisfaction. The p-value (0.003) and the confidence interval (0.518 to 2.473) confirm the robustness of this relationship. The Pseudo R-Square value of 0.058 and the Chi-Square value of 15.367 demonstrate the significance of cost in the adoption process. The coefficient (19.082) for time spent indicates that more time dedicated to e-banking adoption correlates with higher satisfaction. The p-value (0.000) and confidence interval (19.082 to 19.082) indicate a strong and consistent impact. The Pseudo R-Square value of 0.090 and Chi-Square value of 11.826 further confirm the importance of time in influencing satisfaction with e-banking adoption.

Conclusion:

The study is going to be concluded in the light of objectives. The main focus of the study is the adoption of E-Banking in tehsil Ghazi District Haripur. There are many factors in which first is the cost discourage the most of the respondent say no issue of cost while using E-Banking. Internet connection is considered reliable by respondent. Respondents give a mix response regarding complete awareness of the mobile. The skill of new technology makes the most of the respondents easy to use E-Banking technology. The most of the respondent are strictly agree that lack of the knowledge is the main problem of using E-Banking. There was a strong response of the respondents that the provision of the security is primarily required for using the E-Banking. All these factors created major strong trust's response among the respondent. There for overall this study created conducive and favorable environment to use E-Banking is the costless, time saving and trustable system, while addressing all the given challenges available to E-Banking in Ghazi city, district Haripur. Overall, the study highlights the importance of enhancing trust, security, and technical skills to promote e-banking adoption in Ghazi City, while also addressing cost-related concerns to make e-banking more accessible and attractive to users. Moreover, in this study, the ordinal logistic regression model is regressed because dependent variable is in ordinal form. In the results, there are education of customers, employment of customers, frequently use of banking, issues prevails in e-banking, long time period of use of e-banking, improvement in e-banking services, trust on e-banking, technology use in e-banking, skills require to use technology in e-banking operations, internet reliability require to customers while using e-banking, cost of e-

banking services and e-banking have the ability to save time variables, which have positive significant correlation with the satisfaction in adoption of e-banking, while rest of other variables such as cooperation of banking staff, operations carrying by online banking are trust worthy, security exist in financial transaction, threats of the fraud, e-banking provide sufficient security measures, customers have complete knowledge about e-banking, customers feel hesitation while using e-banking, e-banking are more expensive, and awareness of customers about e-banking have negative correlation with the satisfaction of adoption of e-banking. Overall customers are satisfied in adoption of e-banking in the city Ghazi.

Recommendation:

- Banks should focus on building and maintaining trust with their customers. This can be achieved through transparent communication, reliable service delivery, and consistent performance. Implement customer feedback mechanisms to address concerns promptly and effectively.
- Invest in advanced security technologies to protect customers' personal and financial information. Regularly update security protocols to guard against emerging cyber threats. Educate customers on safe e-banking practices to minimize the risk of fraud and scams.
- Conduct awareness campaigns highlighting the benefits and convenience of e-banking. Use real-life examples and testimonials to show how e-banking can save time and effort.
- Collaborate with internet service providers to improve the reliability and speed of internet connections. Provide offline support options for customers facing internet connectivity issues.
- Review and reduce fees associated with e-banking services to make them more affordable. Offer special promotions or discounts to encourage more customers to try e-banking. Consider implementing a tiered pricing model to cater to different customer segment.

References:

Asadi, S. et.al., (2017). "Customers perspectives on adoption of cloud computing in banking sector". *Information Technology and Management*, *18*, 305-330.

Arif, I. et.al., (2020). "Barriers in adoption of internet banking: A structural equation modeling Neural network approach". *Technology in Society*, *61*, 101231.

Ali, et.al., (2021). Challenges for online banking in customers perspective: a review. *Int. J. Bus. Educ. Manag. Stud*, *5*(1), 37-57.

Akbar, et.al., (2020). Examining the factors influencing adoption of e-banking services in Chennai City. *Serbian Journal of Management*, *15*(2), 181-192.

Almansour, B., and Elkrghli, S. (2023). Factors Influencing Customer Satisfaction on E-Banking Services: A Study of Libyan Banks. *International Journal of Technology, Innovation and Management (IJTIM)*, *3*(1), 34-42.

Akhter, et.al., (2022). Determining factors of intention to adopt internet banking services: A study on commercial bank users in Bangladesh. *Banks and Bank Systems*, *17*(1), 125-136.

Abid, H., & Noreen, U. (2006). Ready to E-bank: An exploratory research on adoption of e banking and e-readiness in customers among commercial banks in Pakistan. *Spider*, *31*(2), 1-31.

_____
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Azouzi ,D. (2009). The adoption of electronic banking in Tunisia: an exploratory study. Journal of Internet Banking and Commerce, 14(3), 1-11.

Aliyu, A. A., & Tasmin, R. B. (2012, March). Information and Communication Technology in Nigerian Banks: Analysis of Services and Consumer Reactions. In *proceedings of 3rd International Conference in Business and Economic Research (3rd ICBER 2012) MARCH* (pp. 150-164).

Berhe, K. (2022). Challenges and Opportunities of Electronic Banking in Ethiopian Banking Industry: The Case of CBE NIFAS Silk District.

Butt, M. et.al., (2018). "E-banking system in Pakistan and its Impact on Customers Satisfaction: A Case Study of full-fledged Islamic Banks". *COMSATS Journal of Islamic Finance*, *3*(2), 63-87.

Bhatt, A., & Bhatt, S. (2016). "Factors affecting customer's adoption of mobile banking services". *Journal of Internet Banking and Commerce*, *21*(1), 1-22.

Chaimaa, B. et.al., (2021)." E-banking overview: concepts, challenges and solutions". *Wireless Personal Communications*, *117*, 1059-1078.

C. Martins, T. Oliveira, A. Popovič Understanding the internet banking adoption: A unified theory of acceptance and use of technology and perceived risk application International Journal of Information Management, 34 (1) (2014), pp. 1-13, 10.1016/j.ijinfomgt.2013.06.002

Daniel, E. (1999) Provision of electronic banking in the UK and the Republic of Ireland. International Journal of Bank Marketing, 17(2):72-82.

Drigă, I., & Isac, C. (2014). E-banking services–features, challenges and benefits. *Annals of the University of Petroşani. Economics, 14*, 49–58.

Datta, S. K. (2010). Acceptance of e-banking among adult customers: An empirical investigation in India. *Journal of Internet banking and Commerce*, *15*(2), 1.

Ennew, C., & Sekhon, H. S. (2014). Trust and trustworthiness in retail financial services: An analytical framework and empirical evidence. In *The Routledge Companion to Financial Services Marketing* (pp. 148-165). Routledge.

F.D. DavisPerceived usefulness, perceived ease of use, and user acceptance of information technology MIS Quarterly, 13 (3) (1989), pp. 319-340, 10.2307/249008

Fathima, Y. A., & Muthumani, S. (2015). User acceptance of banking technology with special reference to internet banking. *Journal of Theoretical & Applied Information Technology*, *73*(1).

Gautam, D. K., and Sah, G. K. (2023). Online banking service practices and its impact on e customer satisfaction and e-customer loyalty in developing country of South Asia-Nepal. *SAGE Open*, *13*(3), 21582440231185580.

Hammoud, J., Bizri, R. M., & El Baba, I. (2018). The impact of e-banking service quality on customer satisfaction: Evidence from the Lebanese banking sector. *Sage Open*, *8*(3), 2158244018790633.

Inegbedion, H. E. (2018). "Factors that influence customers' attitude toward electronic banking in Nigeria". *Journal of Internet Commerce*, *17*(4), 325-338.

Islam, er.al., (2022). The Effects of Cyber Threats and Technical Problems on Customer's Attitude Towards E-Banking Services. *Oblik i finansi*, *96*, 58-67.

Islam, et.al., (2022). The Effects of Cyber Threats and Technical Problems on Customer's Attitude Towards E-Banking Services. *Oblik i finansi*, *96*, 58-67.

Jayasiri, N. K., & Kariyawasam, N. J. (2016). Awareness and usage of internet banking facilities in Sri Lanka.

Khedmatgozar, H. R., and Shahnazi, A. (2018). "The role of dimensions of perceived risk in adoption of corporate internet banking by customers in Iran". *Electronic Commerce Research*, *18*(2), 389-412

Keivani, et.al., (2012). A General View on the E-banking. *International Proceedings of Economics Development & Research*, *43*, p62.

Kamat, A. (2019). Challenges of robotic process automation adoption in banking and financial services. *International Journal of Research and Analytical Reviews*, *6*(2), 597-606.

Kaleem, A. & Ahmed, S. (2008). Bankers' Perceptions of Electronic Banking in Pakistan. Journal of Internet Banking and Commerce, 13(1).

Lee, E. J., & Lee, J. (2000). Haven't adopted electronic financial services yet? The acceptance and diffusion of electronic banking technologies. *Journal of financial Counseling and Planning*, *11*(1), 49.

Lusaya, S., and Kalumba, B. (2018). "The challenges of adopting the use of e-banking to the customers: The case of Kasama district banking customers". *Scholar Journal of Applied Sciences and Research*, *1*(2), 26-31.

Mughal, M. M., Ali, K., & Khan, A. J. (2012). Accepting of E-banking among Banking Customers of Pakistan. *Information Management and Business Review*, *4*(6), 332-339.

Moga, L. M., Nor, K. M., Neculita, M., & Khani, N. (2012). Trust and Security in E-banking Adoption in Romania. *Communications of the IBIMA*, *2012*, 1.

M.M. Abbad E-banking in JordanBehaviour & Information Technology, 32 (7) (2013), pp. 681 694, 10.1080/0144929X.2011.586725

Melnikovas, A. (2018). Towards an Explicit Research Methodology: Adapting Research Onion Model for Futures Studies. *Journal of futures Studies*, *23*(2).

Omotayo, F. O. (2020). Use and non-use of Internet banking among elderly people in Nigeria. *International Journal of Social Sciences and Management*, *7*(2), 42-54.

Ogedengbe, F. A., and Abdul-Talib, Y. Y. (2020). Factors influencing electronic banking continuance usage intention in developing economies: A study of Nigeria. *International Journal of Business Information Systems*, *35*(1), 63-87.

Poon, W. C. (2008). Users' adoption of e-banking services: The Malaysian perspective. *Journal of Business & Industrial Marketing, 23*(1), 59–69.

Premarathne, W., & Gunatilake, M. M. (2016). Consumer adoption of internet banking in Sri Lanka. *International Journal of Advanced Research*, *4*(11), 758-765.

Rogers, E. M., & Shoemaker, F. F. (1971). Communication of Innovations; A Cross-Cultural Approach.

Rogers, E. M. (1995). Diffusion of innovations, 4th ed., The Free Press, New York.

Rahi, S.et.al., (2020). "Factors propelling the adoption of internet banking: the role of e-customer service, website design, brand image and customer satisfaction". *International Journal of Business Information Systems*, *33*(4), 549-569.

_____

Salam, M. A., Talukder, S. C., & Sen, T. Factors that Influence the Adoption of E-Banking: A Case Study on the Perspectives of Commercial Banks'Customers. *Journal of Jessore University of Science and Technology ISSN*, *2521*, 5493.

Sisay, M. (2021). *Factors affecting E-Banking Services Adoption in NIB International Bank SC: Customers Perspectives* (Doctoral dissertation, St. Mary's University).

Sardar, K and Shamim, S. (2010). *Electronic banking & e-readiness adoption by commercial banks in Pakistan*.

Siddique, M., and Saadat, A. (2013). Investigating the Effects of Demographics on Customer Acceptance of EBanking in Dera Ismil Khan, KPK, Pakistan: A Survey of Sample Clientele. *International Journal of Current Research and Review*, *5*(7), 9-16.

Siyal, et.al., (2019). M-banking barriers in Pakistan: a customer perspective of adoption and continuity intention. *Data Technologies and Applications*, *53*(1), 58-84.

Shamsuddoha, M. (2008). Electronic banking in Bangladesh. *Journal of Business Solutions, 1*(2), 1–11.

Salehi, M., Ali, M., & Zhila, A. (2008). Islamic banking practice and satisfaction: Empirical evidence from Iran. *ACRM Journal of Business and Management Research, 3*(2), 35–41.

Singh, N. (2023). Impact of e-banking: Prior and after effects on banking activities. *Journal of Pharmaceutical Negative Results*, 310-317.

Sewaka, S., Anggraini, K., Mas'adi, M., Nurhadi, A., & Arianto, N. (2023). The efect of customer satisfaction and service quality of banking products on loyalty of bank customer in Tangerang. International Journal of Artifcial Intelligence Research. https://doi.org/10.29099/ijair.v6i1.295

Sohail, M. S., & Shanmugham, B. (2003). E-banking and customer preferences in Malaysia: An empirical investigation. *Information sciences*, *150*(3-4), 207-217.

Stein Smith, S. (2019). Implications of next step blockchain applications for accounting and legal practitioners: A case study. *Australasian Accounting, Business and Finance Journal*, *12*(4), 77-90.

Turban, E., King, D., Lee, J., & Viehland, D. (2004). *Electronic commerce: a managerial perspective 2004*. Pearson Education.

Uslaner, E. M. (2002). The moral foundations of trust. *Available at SSRN 824504*.

Yang, Y (1997). the security of electronic banking, a research presented at the national formation systems security conference U.S.A

Yates, S. R. (2020). Factors associated with electronic banking adoption. *Journal of Financial Counseling and Planning*, *31*(1), 101-114.