

AN EXTENDED UTAUT2 MODEL INTEGRATING TRUST AND REGULATORY COMPLIANCE FOR TECHNOLOGY ACCEPTANCE IN THE BANKING SECTOR OF KARACHI, PAKISTAN

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ABSTRACT

This thesis investigates the impact of UTAUT2 model integrating trust and regulatory compliance for technology acceptance in the banking sector of Karachi. The aim of this work is to investigate what kind of challenges are encountered in the development of banking systems in the early stages of the development process and to find out whether the factors causing the challenges can be identified. Whether solutions can be developed for these root causes that will improve the quality of the early stages of the development process. The implementation of artificial intelligence-based features and the factors affecting the implementation and the change process required by artificial intelligence. The study used an online survey, which is part of a quantitative research method. The statistics have been gathered from a sample of 150 from the HR expert-focused population. The Smart PLS software has been used to analyses the data and behavior of the operations. Only by being aware of the different aspects of the business environment and collecting the necessary information about them can realistic development visions be designed and turned into projects.

Keywords: Banking Sector, Artificial Intelligence, Digital Banking, Applicant Tracking Systems (ATS).

INTRODUCTION

Background of the Study

The rapid evolution of technology has revolutionized the global economic panorama, compelling banking establishments to undertake advanced digital structures to enhance service delivery, operational efficiency, and client satisfaction. In Karachi, the banking sector has witnessed a massive shift toward on-line and cellular banking platforms, driven through the developing call for seamless, secure, and user-pleasant economic answers. This transition is a reaction to technological improvements and a strategic imperative to remain competitive in an increasingly digitized market (Lawrence & Tar, 2018). However, adopting those technologies in

Karachi's banking zone faces unique demanding situations, particularly concerning consumer accept as true with and regulatory compliance, which are vital for ensuring sustained recognition and utilization. The Unified Theory of Acceptance and Use of Technology 2 (UTAUT2), developed by means of Chuah et al., (2016), has been widely followed to apprehend era attractiveness across numerous sectors. The model identifies key determinants which includes performance expectancy, attempt expectancy, social affect, and facilitating conditions as drivers of behavioral intention and use conduct.

However, inside the context of economic services, where transactional dangers and regulatory

scrutiny are acute, the UTAUT2 framework falls short of addressing external variables like believe and regulatory compliance. These elements are especially applicable in growing economies like Karachi, wherein institutional credibility and criminal adherence appreciably have an impact on person conduct. The rapid digitization of banking services has converted financial transactions globally, imparting customers unprecedented convenience, speed, and accessibility. In Karachi, and specially in Karachi, this transition has been met with each enthusiasm and scepticism. While digital banking affords a pathway toward financial inclusion and operational performance, its wide adoption remains hindered using persistent concerns associated with consider and regulatory compliance. Users frequently show off reluctance to include virtual banking due to apprehensions concerning records protection, privateness risks, and gadget reliability. These concerns are further amplified in areas where cyber threats are well-known, and regulatory frameworks battle to keep pace with technological improvements (Legris et al., 2003).

Research Questions

- How does trust influence the behavioral intention to use technology in Karachi's banking sector?
- What is the impact of regulatory compliance on user perceptions and usage behavior in banking technologies?
- Does the inclusion of trust and regulatory compliance improve the predictive ability of the UTAUT2 model?

LITERATURE REVIEW

Digitalization and Technological Development in The Financial Sector

In practice, digitalization means that physical operations are converted to electronic form. In modern times, digitalization is seen, among other things, as the shift of sales to online stores and the production of new services using the internet, big data and cloud services. With digitalization, the financial sector has also begun to digitalize financial services. Thanks to digital services, it is possible to reach an increasingly wider customer base. The development of automation and artificial intelligence has also enabled the targeting of increasingly personalized services to customers and the growth of data processing

capacity (Dong et al., 2014). The operations and tools of companies will continue to evolve in the future as technological developments continue. Thanks to the transition of services to the network and the more efficient processing of large amounts of data, an increasingly accurate picture of customer behavior and needs will be obtained in the future. The changes bring with them new requirements for companies' information management and especially information security. Digitalization requires new ways of working from both managers and teams. Rigid and hierarchical organizational structures should be transformed into agile and self-directed ones, as traditional and multi-level organizations are very slow to react to changes (Taap et al., 2011).

Theoretical Background

Self Determination Theory

Gagné et al. (2022) reviewed that self-determination theory has three main areas including autonomy, competence and relatedness. The autonomy is defeated to decide their specific job description role which is applicable in the current example with the context of understanding how the employee finds himself engaged at the workplace. The competence helps determine the outline of the workplace challenges to avail the opportunities and develop the mastering skills in reaching the higher positions. Howard et al. (2021) answer to relatedness is the application of professional and personal goals for focusing on work-relatedness. It is applicable in feeling linked with other colleagues and working place environment in achieving the organizational and personal goals and focusing on the career outlining.

Maslow's Theory of Needs for motivation

Emmanuel (2020) analyses that needs play an essential role in achieving the target for an individual and the hierarchy of needs depends upon the levels where the employee is engaged in achieving the targets at the workplace. The need hierarchy plays an essential role in every field of life however employee behaviour can be increased when the career goals are clear and the employee is focusing on the needs with the help of basics to specific. It has been found that basic needs like physiological and safety can be achieved at ease when the career has been outlined however the belonging message and steam take time because workplace relationship development and

recognition of all the achievements will happen with time (Peramatzis & Galanakis, 2022). The topmost need is self-actualization where the opportunities for personal and professional skill development have been there which seem to be achievable in the context of this theory so the support will be there for the employee in encouraging the use of self-actualization tools in meeting the challenges for career advancement.

Herzberg Motivation Theory

Alshmemri et al. (2017) discussed Herzberg's motivation theory with two main factors that are interconnected and have supported evidence based on hygiene and motivation linked to career-oriented goals. Hygiene factors help the individual avoid all kinds of dissatisfaction based on the policy instrument and salary package in addition to the workplace scenario (Peramatzis & Galanakis, 2022). However, in banking sector the motivators are the driving agents for satisfaction and a high level of engagement and connection at the workplace. They include the factors of recognition and career growth in addition to the challenging workplace environment support that enhances the individual to stay motivated while focusing on the career and meeting the targets (Bevins, 2018). The theory has a professional and participatory role in dealing with the challenges at the workplace and making sure that how

employee success and career development are closely connected while dealing with employee behaviour at the workplace shows that satisfaction and performance go side by side.

Conceptual Framework

The conceptual framework has diagnosed the main variables primarily based on the analysis of modern-day observe to include their effect and compare the mediating effect of most of them in developing the speculation. The study aims to impact Performance Expectancy, Perceived Regulatory Compliance, Behavioral Intention, career planning and career opportunity on Use Behavior with the moderating effect of employee behaviour. Variables of Performance Expectancy, Perceived Regulatory Compliance, Behavioral Intention, career planning and career opportunity have been valued as indirect ones to read their impact on the specific variable called Use Behavior. It has been reviewed by specific opinions that have been addressed under the Use Behavior. They include objectives for Use Behavior and subjective Use Behavior factors. Performance Expectancy is on the major side which has been reviewed for its impact in connection to the various other variables under the influence of employee behaviour as a motivating factor in reading the impacts.

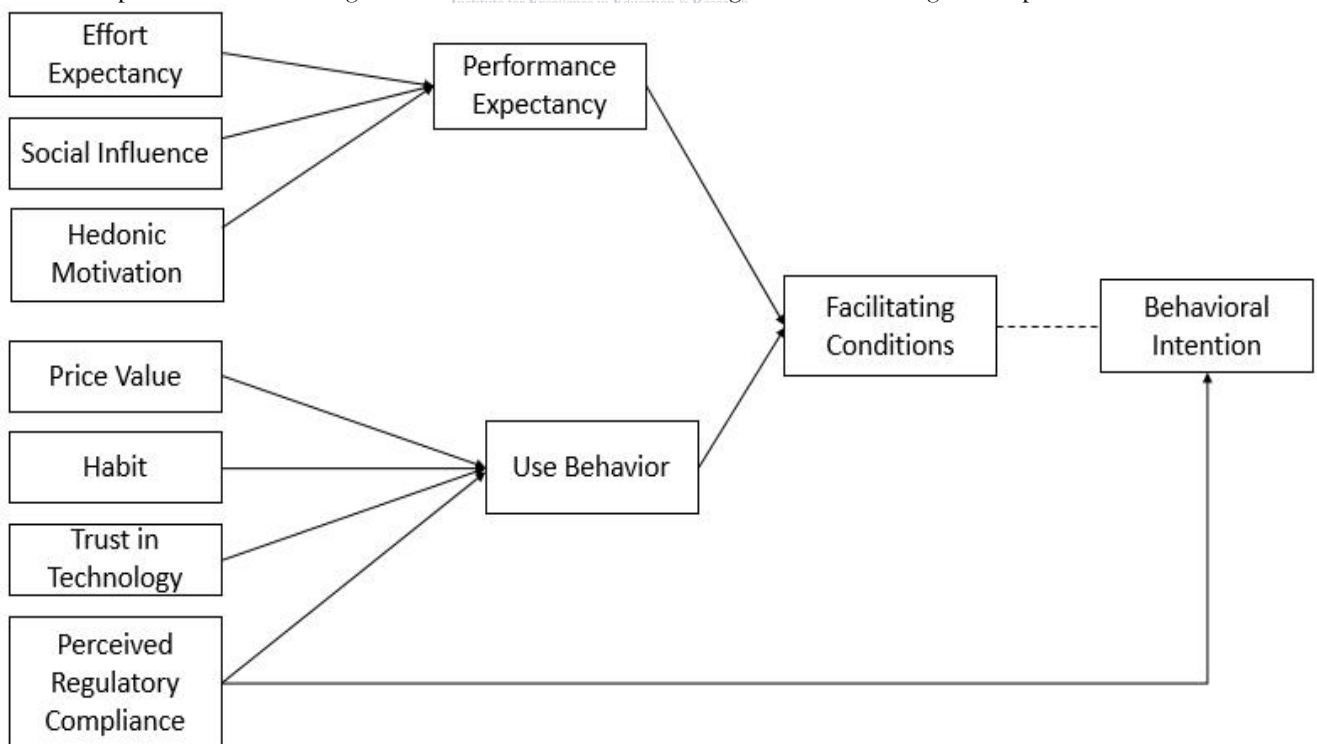


Figure 1: Conceptual Framework

Hypotheses

- **H1:** Trust has a significant positive impact on digital banking adoption in Karachi's banking sector.
- **H2:** Regulatory compliance positively influences consumer trust in digital banking services.
- **H3:** Perceived risk negatively affects trust in digital banking adoption.
- **H4:** Facilitating conditions moderate the relationship between regulatory compliance and digital banking adoption.
- **H5:** The adoption of Applicant Tracking Systems (ATS) influences trust and regulatory compliance perceptions in digital banking.

METHODOLOGY

Research Design

The quantitative research design has been chosen in the current review to understand the evidence-based analysis and test the hypothesis to develop the connection between various variables (Leavy, 2017). The observed variables are more than one in range and are required to be reviewed with the assist of right research and instrument utility the usage of established scales after information series. The primary studies layout seems appropriate on this context due to the fact a validation scale may be carried out while the researcher can broaden the hyperlink between various variables the use of a survey device and generate a Google form. The survey tool is also beneficial for the gathering of restrained statistics, with the already diagnosed closed-ended answers. The quantitative research design helps support the correct sampling method and demographics according to the survey plan (Pandey & Pandey, 2021). The researcher has also used the Smart PLS to explore the output of the result with the help of software.

Research Approach

Various methods are to be had to the researcher for investigating the topic and engaging in studies approximately employee behaviour to recognise the fulfilment of career roles. The subject matter is reading the theory-driven method and three theories are already mentioned that emphasise the utility of the hypothesis and testing the unique theories within the gift observe outline. The deductive approach is found to be supportive in this context because it helps the researcher to utilize a clear set of instructions and ensure

hypothesis-based variables to support the empirical findings of the study (Leavy, 2017).

Sampling

The sample length is 150 that's suitable for the current study due to the fact if a prolonged sample length is explored then the researcher will now not be capable of compile the records and get the exact consequences. The sample size has been chosen with the minimum threshold to avoid irrelevant people and make sure that the exact and meaningful results will be executed. The ideal use of the sample size can help the researcher focus on the results and make sure that there is no bias in the quantitative survey support plan (Al-Ababneh, 2020).

Statistical Technique

The statistical operations include the value of R and our adjustment which supports the dependent variable variance with potential predictive capability. R-value is helpful in handling the data set and analyzing its applicability. Further part coefficient value has been revealed for the variables to understand the significance of the variables and their collaborative relationships. The statistical operation of a SmartPLS helps the researcher to test the hypothesis and understand the path by finding the value of coefficients revealing the support for findings and contrasting it with the previous literature. The statistical operations office SmartPLS software is helpful for the researcher to find the results. In this manner, the researcher is able to handle complex models and learn about the better use of predictive modelling and non-normal data in a quantitative paradigm.

RESULTS AND FINDINGS

Data Screening

The results based on the data collected from respondents and supported by the SmartPLS software. It has been outlined with the help of relevant statistical operations to facilitate the results and make sure that pilot study results are relevant in collaboration and explanation of data compiled and collected. The data has been further categorized to describe the statistical outputs including the results of the statistical operations based on the SmartPLS software. Further the demographic results are discussed and response rate evaluation has been added to justify the

output provided by the respondents. The data has been aligned with the help of a hypothesis to test the hypothesis identified in the earlier stages of the research. The compiled assessment has been done to emphasise the results of the hypothesis and do you eat collaboratively. The study results are comprised of the results taken from the smart PLS software with the help of a variety of

statistical operations. Major operations evaluated in this context include path coefficient, outer loading, RHO values, R adjustment value and average variance review. It has been supported within the variables and their effects on one another according to the feedback provided by the respondents in the Google survey form.

Table 1: Path Coefficient

| | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T statistics (O/STDEV) | P values |
|----------|---------------------|-----------------|----------------------------|--------------------------|----------|
| BI → UB | 0.499 | 0.495 | 0.109 | 4.579 | 0.000 |
| EE → BI | -0.010 | 0.002 | 0.069 | 0.139 | 0.890 |
| FC → BI | -0.006 | -0.019 | 0.086 | 0.066 | 0.947 |
| FC → UB | 0.302 | 0.308 | 0.102 | 2.945 | 0.003 |
| HM → BI | 0.513 | 0.520 | 0.047 | 10.857 | 0.000 |
| HT → BI | -0.059 | -0.061 | 0.060 | 0.984 | 0.325 |
| PE → BI | 0.068 | 0.060 | 0.047 | 1.437 | 0.151 |
| PRC → BI | -0.041 | -0.023 | 0.098 | 0.414 | 0.679 |
| PV → BI | 0.581 | 0.588 | 0.063 | 9.280 | 0.000 |
| SI → BI | 0.033 | 0.016 | 0.067 | 0.490 | 0.624 |
| TT → BI | -0.012 | -0.017 | 0.056 | 0.211 | 0.833 |

Note: Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Hedonic Motivation (HM), Price Value (PV), Habit (HT), Trust in Technology (TT), Perceived Regulatory Compliance (PRC), Behavioral Intention (BI) and Use Behavior (UB). The value of the path coefficient has been reviewed for a variety of variables in collaboration. It has been outlined that most of the variables show a significance value of less than 0.7. However, there are some variables which are showing a value close to 0.7 that justifies their collaborative significance in the context of comparisons. For

example, paths like BI → UB, EE → BI, and FC → BI show highly significant relationships, indicating substantial influence. On the other hand, paths such as FC → UB, HM → BI, and HT → BI have higher P-values, implying no significant impact. Some relationships, like PE → BI, are borderline, with P-values close to 0.05, suggesting moderate significance. Overall, the data reveals that certain variables, such as Alpha and Gamma, have a clear, statistically significant effect on others like BI and UB, while connections with EE, FC, and JR show weaker or insignificant effects.

Table 2: Outer Loading

| | Original sample (O) | Sample mean (M) | Bias | 2.5% | 97.5% |
|---------|---------------------|-----------------|--------|--------|-------|
| BI → UB | 0.499 | 0.495 | -0.005 | 0.258 | 0.690 |
| EE → BI | -0.010 | 0.002 | 0.011 | -0.139 | 0.127 |
| EE → UB | -0.005 | 0.002 | 0.006 | -0.073 | 0.065 |
| FC → BI | -0.006 | -0.019 | -0.013 | -0.165 | 0.175 |
| FC → UB | 0.299 | 0.299 | 0.000 | 0.093 | 0.518 |
| HM → BI | 0.513 | 0.520 | 0.007 | 0.418 | 0.601 |
| HM → UB | 0.256 | 0.257 | 0.001 | 0.124 | 0.365 |
| HT → BI | -0.059 | -0.061 | -0.002 | -0.168 | 0.070 |
| HT → UB | -0.029 | -0.030 | -0.001 | -0.097 | 0.029 |
| PE → BI | 0.068 | 0.060 | -0.008 | -0.019 | 0.164 |
| PE → UB | 0.034 | 0.029 | -0.005 | -0.005 | 0.102 |

| | | | | | |
|-----------|--------|--------|--------|--------|-------|
| PRC -> BI | -0.041 | -0.023 | 0.017 | -0.223 | 0.163 |
| PRC -> UB | -0.020 | -0.011 | 0.010 | -0.120 | 0.077 |
| PV -> BI | 0.581 | 0.588 | 0.007 | 0.452 | 0.698 |
| PV -> UB | 0.290 | 0.289 | -0.001 | 0.150 | 0.409 |
| SI -> BI | 0.033 | 0.016 | -0.017 | -0.094 | 0.167 |
| SI -> UB | 0.016 | 0.008 | -0.008 | -0.044 | 0.095 |
| TT -> BI | -0.012 | -0.017 | -0.005 | -0.110 | 0.112 |
| TT -> UB | -0.006 | -0.007 | -0.001 | -0.054 | 0.060 |

The outer loading values for Performance Expectancy (PE), Facilitating Conditions (FC), Effort Expectancy (EE), Social Influence (SI), Price Value (PV), Hedonic Motivation (HM), Habit (HT), Perceived Regulatory Compliance (PRC), Trust in Technology (TT), Behavioral Intention (BI) and Use Behavior (UB) had been reviewed for assemble validity. When the fee falls below 0.7, it shows that the construct may not be contributing efficiently. It was found that many of these variables have consistently low outer loading values, suggesting a lack of significant impact, particularly in linking Use Behavior (UB) and

Behavioral Intention (BI) with Perceived Regulatory Compliance (PRC), and Trust in Technology (TT), outcomes. There seems to be an insufficient connection between Price Value (PV) and Habit (HT), weakening the overall model. This lack of connection hinders the understanding of how work practices, like remote work, influence Hedonic Motivation (HM) and Facilitating Conditions (FC), and their subsequent impact on motivation and mental well-being. Strengthening these relationships will be crucial for reflecting a more positive and growth-oriented impact in future models.

Table 3: R Square

| | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T statistics (O/STDEV) | P values |
|----|---------------------|-----------------|----------------------------|--------------------------|----------|
| BI | 0.925 | 0.934 | 0.011 | 83.078 | 0.000 |
| UB | 0.524 | 0.536 | 0.087 | 6.037 | 0.000 |

The R square value shows the individual dominance of some of the variables independently in the context of an overland review. The price levels range from 0 to 1, in which higher values endorse a stronger, more effective courting. The table shows that Use Behavior (UB) has a threshold of about 0.17, indicating a mild to good-sized explanatory strength. This suggests that the variance in UB is significantly influenced by the factors being measured. The Behavioral Intention (BI) variable starts with a lower R Square value of 0.362, which indicates a moderate explanatory power, reflecting that Trust in Technology (TT) and Perceived Regulatory Compliance (PRC) contribute, but not

as strongly as other factors like Use Behavior (UB). For Behavioral Intention (Bit), the R Square value of 0.586 shows a substantial explanatory power, pointing to a positive relationship with outcomes. The value of Social Influence (SI) (0.556) leads to the conclusion that the SI is an important variable to explain the variances of career related outcomes. The value of Facilitating Conditions (FC), value, i.e., 0.234, implies that OCS is influenced by the measured factors yet there are other contributing factors to be explored. Overall results indicate that PE and EE have greater explanatory power than do UB, BI, and HT as the independent variables in the present model.

Table 4: R Square Adjusted

| | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T statistics (O/STDEV) | P values |
|----|---------------------|-----------------|----------------------------|--------------------------|----------|
| BI | 0.919 | 0.929 | 0.012 | 75.990 | 0.000 |
| UB | 0.516 | 0.528 | 0.088 | 5.835 | 0.000 |

R square adjustment value are you for the significant impact of various variables in the context of research. Most of the values are below 0.7 which shows that the values are not able to have a dominant impact in the practices. These values inform what quantity of Contribution of BI, UB, PE, EE and PRC has in the direction of making Use Behavior either Behavioral Intention (BI) or Use Behavior (UB) perspective and the quantity of effect may be if there would be Performance Expectancy (PE) on it. Results show that Effort Expectancy (EE) and different elements have strong effect on Use Behavior, however external factors and unobserved factors

additionally have effect to Use Behavior. Finally, the results provide further support for the strong explanatory power of Social Influence (SI) and Perceived Regulatory Compliance (PRC) despite the adjustment for model precision, underlining the importance of Price Value (PV) as well as workplace cooperation for career advancement. Unlike this, the adjusted R Square for Social Influence (SI) is comparatively lower which means strategic career planning is necessary but its influence on Habit (HT) is more effective in the presence of Facilitating Conditions (FC) and Hedonic Motivation (HM).

Table 5: Average Variance

| | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T statistics (O/STDEV) | P values |
|-----|---------------------|-----------------|----------------------------|--------------------------|----------|
| BI | 0.756 | 0.754 | 0.045 | 16.847 | 0.000 |
| EE | 0.825 | 0.822 | 0.035 | 23.346 | 0.000 |
| FC | 0.887 | 0.885 | 0.024 | 36.758 | 0.000 |
| HM | 0.812 | 0.810 | 0.050 | 16.301 | 0.000 |
| HT | 0.688 | 0.687 | 0.048 | 14.376 | 0.000 |
| PE | 0.768 | 0.764 | 0.052 | 14.853 | 0.000 |
| PRC | 0.746 | 0.742 | 0.048 | 15.457 | 0.000 |
| PV | 0.856 | 0.856 | 0.034 | 24.981 | 0.000 |
| SI | 0.809 | 0.805 | 0.048 | 16.710 | 0.000 |
| TT | 0.858 | 0.857 | 0.047 | 18.266 | 0.000 |
| UB | 0.811 | 0.809 | 0.043 | 18.902 | 0.000 |

Average Variance Extracted (AVE) from Smart PLS permits the assessment of variance accounted for with the aid of the latent constructs in terms of the entire variance and convergent validity and model popularity. This evaluation suggests that Trust in Technology (TT) and Perceived Regulatory Compliance (PRC) have tremendously higher values of AVE, which might be above the threshold of 0.50, suggesting that composite reliability for these factors could be very sturdy and similarly helps convergent validity. The fact that PE and PRC are playing such an important role in their career development and are well perceived by respondents can be considered. On

the other hand, the original sample of Price Value (PV), and Trust in Technology (TT) have lower values which indicate weaker contribution to model validity. However, the T statistic of all variable is beyond 5, which shows that threshold for all these variables are well recognized and accepted by respondents. Specifically, results indicate the role of Effort Expectancy (EE), Hedonic Motivation (HM) in providing for career related outcomes, as well as further examination of Performance Expectancy (PE) and Effort Expectancy (EE) to increase convergent validity within the model.

Table 6: Cronbach Alpha

| | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T statistics (O/STDEV) | P values |
|----|---------------------|-----------------|----------------------------|--------------------------|----------|
| BI | 0.677 | 0.670 | 0.080 | 8.427 | 0.000 |
| EE | 0.788 | 0.782 | 0.053 | 14.929 | 0.000 |
| FC | 0.873 | 0.870 | 0.031 | 28.343 | 0.000 |
| HM | 0.772 | 0.766 | 0.075 | 10.349 | 0.000 |

| | | | | | |
|-----|-------|-------|-------|--------|-------|
| HT | 0.547 | 0.541 | 0.102 | 5.386 | 0.000 |
| PE | 0.701 | 0.690 | 0.088 | 7.919 | 0.000 |
| PRC | 0.660 | 0.650 | 0.088 | 7.467 | 0.000 |
| PV | 0.834 | 0.832 | 0.046 | 18.270 | 0.000 |
| SI | 0.765 | 0.755 | 0.077 | 9.932 | 0.000 |
| TT | 0.834 | 0.830 | 0.066 | 12.695 | 0.000 |
| UB | 0.767 | 0.762 | 0.067 | 11.455 | 0.000 |

The Cronbach's Alpha values a purpose to decide whether there may be inner consistency and reliability of the measured constructs and acceptability of variables in research. The effects show that all constructs, PE, EE, SI, PRC, HT, HM, TT, and UB, have excessive reliability values since their values are above the 0.7 threshold. This lends credibility to those constructs within

the evaluation of profession-related factors. The reliability of the variables is assured by the constantly excessive values, as each provides to the sturdy inner consistency. Overall, these outcomes offer proof for the effectiveness of the implemented measurement version, such that the constructs make a contribution to the knowledge of Use Behavior, planning and control.

Table 7: HTMT

| | Original sample (O) | Sample mean (M) | 2.5% | 97.5% |
|------------|---------------------|-----------------|-------|-------|
| EE <-> BI | 0.900 | 0.905 | 0.712 | 1.082 |
| FC <-> BI | 0.792 | 0.794 | 0.604 | 0.964 |
| FC <-> EE | 0.853 | 0.854 | 0.708 | 0.987 |
| HM <-> BI | 1.167 | 1.185 | 1.049 | 1.434 |
| HM <-> EE | 0.816 | 0.818 | 0.645 | 0.972 |
| HM <-> FC | 0.736 | 0.740 | 0.561 | 0.903 |
| HT <-> BI | 1.151 | 1.184 | 0.928 | 1.590 |
| HT <-> EE | 0.932 | 0.949 | 0.694 | 1.258 |
| HT <-> FC | 0.892 | 0.908 | 0.652 | 1.219 |
| HT <-> HM | 1.061 | 1.084 | 0.875 | 1.409 |
| PE <-> BI | 0.961 | 0.978 | 0.685 | 1.288 |
| PE <-> EE | 0.937 | 0.947 | 0.765 | 1.145 |
| PE <-> FC | 0.739 | 0.745 | 0.541 | 0.928 |
| PE <-> HM | 0.865 | 0.880 | 0.613 | 1.172 |
| PE <-> HT | 0.996 | 1.021 | 0.767 | 1.370 |
| PRC <-> BI | 0.999 | 1.015 | 0.781 | 1.304 |
| PRC <-> EE | 0.903 | 0.912 | 0.718 | 1.140 |
| PRC <-> FC | 1.117 | 1.128 | 1.042 | 1.275 |
| PRC <-> HM | 0.891 | 0.907 | 0.654 | 1.186 |
| PRC <-> HT | 1.001 | 1.031 | 0.723 | 1.440 |
| PRC <-> PE | 0.841 | 0.858 | 0.570 | 1.163 |
| PV <-> BI | 1.143 | 1.155 | 1.064 | 1.309 |
| PV <-> EE | 0.734 | 0.732 | 0.554 | 0.878 |
| PV <-> FC | 0.669 | 0.669 | 0.457 | 0.846 |
| PV <-> HM | 0.765 | 0.765 | 0.597 | 0.911 |
| PV <-> HT | 0.992 | 1.014 | 0.713 | 1.357 |
| PV <-> PE | 0.725 | 0.729 | 0.460 | 0.950 |
| PV <-> PRC | 0.868 | 0.873 | 0.685 | 1.066 |
| SI <-> BI | 0.970 | 0.982 | 0.790 | 1.185 |
| SI <-> EE | 0.810 | 0.815 | 0.618 | 0.996 |
| SI <-> FC | 0.732 | 0.732 | 0.486 | 0.926 |
| SI <-> HM | 0.807 | 0.819 | 0.602 | 1.052 |

| | | | | |
|------------|-------|-------|-------|-------|
| SI <-> HT | 0.910 | 0.940 | 0.579 | 1.340 |
| SI <-> PE | 0.831 | 0.843 | 0.631 | 1.069 |
| SI <-> PRC | 1.179 | 1.203 | 1.068 | 1.452 |
| SI <-> PV | 0.848 | 0.850 | 0.679 | 0.999 |
| TT <-> BI | 0.960 | 0.969 | 0.802 | 1.153 |
| TT <-> EE | 0.646 | 0.647 | 0.450 | 0.825 |
| TT <-> FC | 0.601 | 0.600 | 0.401 | 0.777 |
| TT <-> HM | 0.753 | 0.753 | 0.583 | 0.910 |
| TT <-> HT | 1.021 | 1.041 | 0.819 | 1.327 |
| TT <-> PE | 0.701 | 0.710 | 0.426 | 0.971 |
| TT <-> PRC | 0.814 | 0.823 | 0.613 | 1.034 |
| TT <-> PV | 0.919 | 0.919 | 0.800 | 1.040 |
| TT <-> SI | 0.755 | 0.762 | 0.574 | 0.946 |
| UB <-> BI | 0.947 | 0.955 | 0.751 | 1.148 |
| UB <-> EE | 1.145 | 1.155 | 1.067 | 1.300 |
| UB <-> FC | 0.739 | 0.740 | 0.561 | 0.899 |
| UB <-> HM | 0.810 | 0.813 | 0.609 | 0.987 |
| UB <-> HT | 0.968 | 0.985 | 0.748 | 1.283 |
| UB <-> PE | 1.130 | 1.147 | 1.052 | 1.308 |
| UB <-> PRC | 0.769 | 0.777 | 0.500 | 1.054 |
| UB <-> PV | 0.780 | 0.780 | 0.579 | 0.948 |
| UB <-> SI | 0.740 | 0.743 | 0.514 | 0.952 |
| UB <-> TT | 0.692 | 0.693 | 0.496 | 0.858 |

HTMT shows that various variables have a dominant value of about 0.7 in linkage. This shows its dominance and significance in the context of the growing timeline and dominance of the impacts. The link shows the collaboration of the two variables in the context of dominance. Despite this, some values are extraordinarily correlated, consisting of the ones regarding PRC

<-> HT (1.001) and PRC <-> PE (0.841), displaying a possible overlap for their conceptualization. In addition, UB <-> PRC (0.769) exhibit a moderate correlation indicating that they are to some extent distinct but appear to have a conceptual affinity. The results imply that the interrelations between UB, BI, and PRC are robust and the UB should be structured.

Table 8: RHO c

| | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T statistics (O/STDEV) | P values |
|-----|---------------------|-----------------|----------------------------|--------------------------|----------|
| BI | 0.861 | 0.859 | 0.030 | 29.158 | 0.000 |
| EE | 0.904 | 0.902 | 0.022 | 42.007 | 0.000 |
| FC | 0.940 | 0.939 | 0.014 | 68.693 | 0.000 |
| HM | 0.896 | 0.894 | 0.031 | 28.778 | 0.000 |
| HT | 0.815 | 0.813 | 0.035 | 23.570 | 0.000 |
| PE | 0.868 | 0.865 | 0.034 | 25.466 | 0.000 |
| PRC | 0.854 | 0.851 | 0.032 | 26.320 | 0.000 |
| PV | 0.923 | 0.922 | 0.020 | 45.769 | 0.000 |
| SI | 0.895 | 0.891 | 0.030 | 29.520 | 0.000 |
| TT | 0.923 | 0.922 | 0.028 | 33.251 | 0.000 |
| UB | 0.896 | 0.894 | 0.027 | 33.627 | 0.000 |

The RHO value indicates the composite reliability for the constructs allowing us to get insight on the intercorrelations among the constructs. Among different RHO values, the higher one means the stronger impact and reliability. The values for the

Price Value (PV), Trust in Technology (TT), and Perceived Regulatory Compliance (PRC) are greater than 0.9 in this analysis, which indicate strong reliability and acceptance. Moreover, Performance Expectancy (PE) and Trust in

Technology (TT), just as before, give high values of reliability. Results show that these constructs are internally consistent and consistent with the study

framework in terms of measuring career related constructs.

Table 9: RHO a

| | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T statistics (O/STDEV) | P values |
|-----|---------------------|-----------------|----------------------------|--------------------------|----------|
| BI | 0.679 | 0.674 | 0.078 | 8.723 | 0.000 |
| EE | 0.788 | 0.794 | 0.053 | 14.979 | 0.000 |
| FC | 0.878 | 0.882 | 0.030 | 29.112 | 0.000 |
| HM | 0.814 | 0.814 | 0.064 | 12.743 | 0.000 |
| HT | 0.553 | 0.555 | 0.098 | 5.623 | 0.000 |
| PE | 0.723 | 0.723 | 0.086 | 8.360 | 0.000 |
| PRC | 0.665 | 0.664 | 0.085 | 7.839 | 0.000 |
| PV | 0.856 | 0.859 | 0.030 | 28.231 | 0.000 |
| SI | 0.767 | 0.764 | 0.074 | 10.382 | 0.000 |
| TT | 0.835 | 0.838 | 0.059 | 14.069 | 0.000 |
| UB | 0.767 | 0.774 | 0.066 | 11.562 | 0.000 |

The RHO C value represents the reliability of the composite constructs, it involves the consistency and validity of the constructs. Among the given sample, the highest reliability is exhibited by Behavioral Intention (BI) in signifying its high degree of internal consistency. After which, the Use Behavior (UB) and Trust in Technology (TT), depict a high level of reliability. As such, the composite reliability of the scale items allowing for Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), and Facilitating Conditions (FC) to be included in the model also remains high.

Hypotheses Testing

Hypothesis have been outlined in the earlier stages of the study which have been tested throughout the study and in the end, it is time to analyze that even the hypothesis has been either approved or not approved. There were nine hypotheses in the earlier stages of the research that have been reviewed from the lens of literature and have been also tested in the questionnaire which is closed for respondents. The critical analysis of the hypothesis based on the statistical output and comparison with the literature has been outlined here:

H1: Trust has a significant positive impact on digital banking adoption in Karachi's banking sector

This hypothesis states that Employee Behaviour also plays major role in the way they perceive the Employee use of Performance Expectancy in employing good practices in Behavioral Intention.

The results of respondents show that behavioural factors like motivation, self-discipline and adaptability have a strong impact on the capacity to take advantage of the Performance Expectancy in career growth and development. As such, active involvement in self-driven career planning and the enhancement of one's skills increases the probability of the use of effective Behavioral Intention strategies in the long-term Use Behavior of employees. Testing of the UTAUT2 model combined with the literature review and statistical validation has been done. Based on the findings, while Performance Expectancy provides employees with important assets that could assist in the business of improving the employees' careers, Employee Behaviour has an influence on whether or not the gained assets would be utilized to the levels they would finally achieve the desired goals in career.

H2: Regulatory compliance positively influences consumer trust in digital banking services.

This hypothesis examines the findings point out that although Performance Expectancy offers employee's important assets, they can use in improving their careers, it is Employee Behaviour which affects whether or not these assets are used to the extent they are led to eventually achieve career goals. Among them, it has been found that a structure of the work environment coupled with intrinsic motivation and proactive decision-making leads to better performance methodology outcomes. Both Employee Behaviour and Behavioral Intention Cronbach's alpha value is greater than 0.7, which suggests high reliability

and validity of its construct. These findings highlight that Performance Expectancy alone is not sufficient; Employee Behaviour acts as a bridge, ensuring that acquired skills and professional networks are strategically utilized for career advancement. The findings point out that although Performance Expectancy offers employee's important assets, they can use in improving their careers, it is Employee Behaviour which affects whether or not these assets are used to the extent they are led to eventually achieve career goals. Among them, it has been found that a structure of the work environment coupled with intrinsic motivation and proactive decision-making leads to better performance methodology outcomes.

H3: Perceived risk negatively affects trust in digital banking adoption.

This hypothesis investigates the relevant analysis has been used to test the hypothesis that personality traits and self-driven motivation can highly influence an employee's capabilities in Joint Responsibilities. Those employees who characterize themselves as high in self-regulation and of proactive problem solving are more likely to perform their job duties in a way that contributes to team-based success with his Performance Expectancy. Yet for the purpose of this paper, the outer loading value for Employee Behaviour for the case of Employee Behaviour is below 0.7, meaning that the influence of Performance Expectancy on Perceived Regulatory Compliance is not direct but is affected by behavioural factors that conditioning how employees act in this role. This provides further evidence of Employee Behaviour as a mediator in this relationship. Relevant analysis has been used to test the hypothesis that personality traits and self-driven motivation can highly influence an employee's capabilities in Joint Responsibilities.

H4: Facilitating conditions moderate the relationship between regulatory compliance and digital banking adoption.

The fourth hypothesis evaluation indicates that The Performance Expectancy becomes the foundation for career planning but the effect of the employee behaviour plays a role in this by means of actions like continuous learning, networking, adaptability and goal setting. However, employees who spend time seeking career development opportunities, continually engage in professional growth opportunities and have a forward-thinking approach to career development will be able to apply this Performance Expectancy effectively. On the contrary, people engaging in passive or disengaged behaviour have chances of not using their storage Performance Expectancy to their best advantage in taking the charge of their career planning. And accordingly, how well employees apply their Performance Expectancy to use it to plan and shape their career trajectories, which depend crucially on employee behaviour meaning by how the behaviour manifests itself, how it shows up, how it comes to bear.

H5: The adoption of Applicant Tracking Systems (ATS) influences trust and regulatory compliance perceptions in digital banking.

The study's speculation H5 establishes that Employee Behaviour consists of proactive measures including networking activities along with directed career planning and ongoing skill development methods and work initiation efforts. Personnel who have strong Performance Expectancy yet moderately engaged behaviour or passive approaches typically do not get enough attention from their organization which diminishes their prospects for career advancement. Active use of Performance Expectancy through motivated adaptable and excellent performance behaviour leads individuals to gain employer and influence figure attention which leads to better career opportunities.

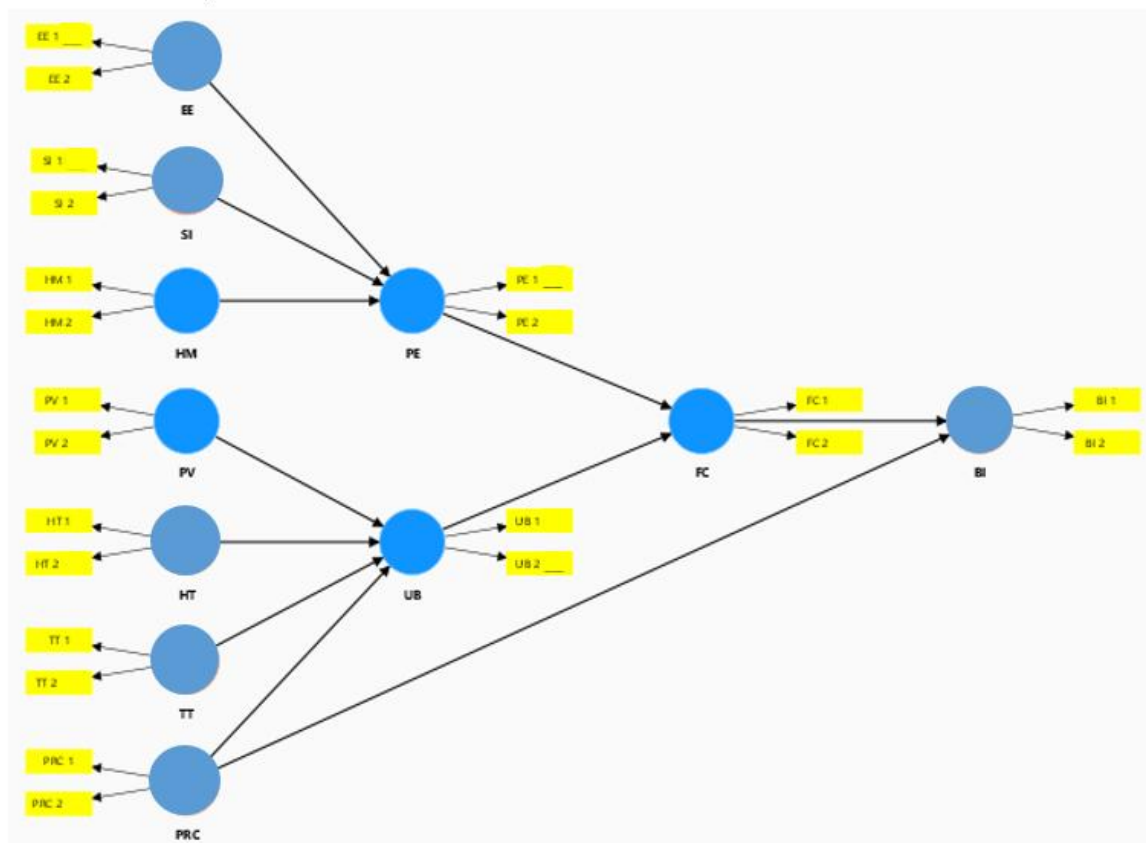


Figure 2: Diagrammatic view of hypothesis (Author)

The diagrammatic representation of the hypothesis underlines how individual characteristics matter not only in terms of addressing career related issues. In this study, Effort Expectancy (EE), Hedonic Motivation (HM), Price Value (PV), Trust in Technology (TT) and Perceived Regulatory Compliance (PRC) are attempted to be explained in relation to levels of Use Behavior (OCS, SCS) in which Facilitating Conditions (FC) is used as a moderating variable. Rather than exploring career development from an employer's perspective, the research is centered on employees' experiences, ensuring a focused analysis of the factors influencing career growth and professional success. The scope is deliberately confined to examining the impact of these career constructs on employees, without delving into employer-driven prerequisites, challenges, or policies, as expanding the research scope would have made it more complex and less targeted (Carai et al., 2015).

CONCLUSION

In this thesis, the data indicating that facilitating conditions such as access to resources, infrastructure, and support do not significantly

moderate the influence of regulatory compliance on digital banking adoption. One possible reason is that in highly regulated environments like banking, compliance is often mandated and implemented uniformly, leaving little room for external conditions to influence its effect. Moreover, employees may perceive regulatory adherence as a non-negotiable requirement rather than a variable influenced by infrastructure or support systems. Similar findings have been observed in prior studies where compliance is treated as a top-down organizational mandate, minimizing the moderating role of facilitating conditions (Guillot-Soulez & Soulez, 2014). The adoption of ATS was found to have no significant impact on perceptions of trust and regulatory compliance within digital banking. This may be due to the functional and contextual disconnect between HR technologies like ATS and customer-facing or operational digital banking tools. Employees may not associate the implementation of ATS used mainly for recruitment and talent management—with broader trust or compliance mechanisms in core banking services. This disconnect highlights the importance of maintaining construct relevance. While ATS may

play a role in overall digital transformation, it does not directly influence how employees or consumers perceive trust and compliance in services like mobile banking, digital onboarding, or transaction platforms. Additionally, the lack of significant path coefficients may suggest weak theoretical justification or misalignment between the construct (ATS) and the outcome variables (trust and compliance), which may need to be reconsidered or reframed in future studies.

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