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The Effect of Technological Anxiety on Users Adoption of Augmented Reality Applications for Digital Banking Services: UTAUT2 Approach

Rasha Duraid Hanna rasha_duriad@uomosul.edu.iq
Ali Abdulfattah Alshaher a.alshaher@uomosul.edu.iq
University of Mosul

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Corresponding Author : Rasha Duraid Hanna

Abstract : This Research seeks to explore the effects of technostress on intentions to adopt augmented reality (AR) applications in digital banking services, utilizing the UTAUT2 model as a framework to understand key influencing factors. Specifically, the Research examines the Effect technological anxiety, as well as other determinant variables such as performance expectancy, effort expectancy, facilitating conditions, security and privacy concerns, trust, and information quality. The relationships between these variables were analyzed using Structural Equation Modeling (SEM) through AMOS software. This Research targeted a sample of 300 participants, including users from commercial and Islamic banks in Iraq, selected through convenience sampling to ensure diverse representation. The results reveal that technostress significantly and negatively affects intentions to adopt AR applications and reduces performance expectancy. Furthermore, technological anxiety acts as a negative moderator in the relationships between various adoption-related variables. Based on these findings, the Research recommends that organizations work to mitigate technostress and technological anxiety by providing adequate technical support and educating users on the benefits of AR applications. Such efforts can enhance trust and improve the quality of information provided, ultimately supporting higher adoption rates.

Keywords:Technostress, Technological Anxiety, Augmented Reality Applications, Digital Banking Services, Performance Expectancy

Introduction:

Over the past few years, global COVID-19 has metamorphosed consumer cognitions from traditional in-store shopping to e-channels (Alimamy & Gnoth, 2022; Al-Hattami & Gomez Corona, 2021). This pandemic revised the overall landscape of global business and provided wings to the scope of mobile commerce with the propagation in using mobile technology for shopping purposes (Irawan et al., 2020; Fernandes et al., 2020). Among various technologies, augmented reality has come in the limelight as an omnipotent tool being progressively admitted in the fields of marketing, education, tourism, and communication because of its potential profitability and the ability to add value to the user experience.

In recent years, COVID-19 has drastically changed consumer attitudes toward traditional in-store shopping and has further led to heightened preferences for online shopping. Such is the finding the literature notes in passing on the subject of the impact regarding consumer behavior and attitudes toward shopping during and post-COVID-19. The resultant effects of COVID-19 have brought about dynamic changes in the global business environment by fostering an accelerated growth of m-commerce and the general role of mobile technology in shopping. AR technology is one of the newly emerging technologies that has begun gaining acceptance in different sectors, such as marketing, education, tourism, and communication, owing to its potential profitability and user experience-enhancing ability. (Hilken et al., 2018; Javornik et al., 2022).

Hsu et al. (2021) noted that AR is set to grow from a $12.0 billion industry in 2020 to $72.8 billion by 2024, fundamentally changing the way people interact with digital content. This enables a user to experience and evaluate a digital product before making purchase decisions— Kim and Forsythe (2008a) also agree. Indeed, companies like IKEA and YouCam have already introduced AR through mobile applications to create more informative and interactive consumer experiences.

Hsu and others (2021) noted that from $12.0 billion in 2020, AR-influenced sales were expected to reach $72.8 billion by 2024. This truly does represent a change in the way people interact with digital content. It allows users to experience and assess the product virtually before making the purchase decision. Many firms like IKEA and YouCam have already infused AR technology into their mobile applications to develop more informative and interactive consumer experiences. (Zubizarreta et al., 2008a; Javornik et al., 2022).

AR might thus catapult user experience in banking services to make them more interactive and fun in any way that stands as a key application field. Still, the integration of AR into digital banking services has its share of challenges. Studies argue that anxiety over technology is a significant form of neurotic anxiety over new technological tools that will highly influence the adoption of the technologies (Meuter et al., 2003; Oyman et al., 2022). Technological anxiety has a negative impact on the intention to adopt AR applications.

AR could also reshape customer experience in banking service delivery to make it more interactive and fun. First, however, the challenges of adopting AR in digital banking have to be considered. This study contributes to the literature by reviewing that "technological anxiety" (a type of neurotic anxiety toward the use of any new technological tool) significantly affects the adoption of new technologies (Meuter et al., 2003; Oyman et al., 2022). This study posits that technological anxiety has a significant negative influence on intentions to adopt AR applications. (Li & Xu, 2020).

This Research attempts to fill this gap by investigating how augmented reality (AR) immersive experiences influence consumer attitudes and behavioral intention toward adopting AR apps for digital banking services.

The potential influence of user anxiety toward technology on AR service adoption in digital banking has been barely touched upon. The objective of this Research is to explore the influence of techno-stress and technological anxiety on consumer intention to adopt AR applications in digital banking.

It also investigates the influence of tech anxiety on this immersive experience and, in the final analysis, how it comes to bear on user adoption of AR technologies in the banking sector. The findings of this research will be a source of actionable insights for professionals in digital banking so far as effectively implementing and using immersive AR technologies to enhance customer behavior and increase adoption success is concerned.

This Research aims to explore how AR-based immersiveness influences consumer attitudes and intention to adopt AR applications in digital banking services, thereby reducing the gap.

The anxiety research gap is related to the fact that, while AR technologies have the capability of greatly enhancing digital banking services, their impact on user adoption with respect to technological anxiety has not been fully explored. The current study thus seeks to investigate the influence of technostress and technological anxiety on consumer adoption intentions of AR applications in digital banking, as well as identify ways to reduce these barriers for faster adoption.

It also investigates what tech anxiety is (or any fears around technologies) and how that ultimately influences the development and adoption of AR technologies within the banking industry. This study's results will be of interest to those working within digital banking, allowing professionals to better implement and utilize AR technologies for improving customer behavior as well as increasing adoption success.

Problem Statement

Capacity blessings of MAR era, user experience will be more suitable, superior, and more interactive banking services. But this kind of adoption nevertheless faces vast challenges via customers.

Capacity blessings of MAR generation to enhance person revel in and supply superior, interactive banking services, although adoption via customers nevertheless faces extensive challenges. One of the most demanding situations is technological anxiety, wherein people enjoy fearful difficulty while using technological devices. This tension can consist of concerns related to protection and privacy, ease of use, loss of technical help, and expertise of the generation itself. Studies have shown that the extent of technological anxiety can negatively affect the intention to undertake new technologies, which includes AR programs.

The problem of this examination is to identify and understand the influence of immersive practice on each attitude and embracing goal in the direction of AR applications inside the virtual banking sector. Additionally, the observer is ambitious to have a look at the regulating position of technological anxiety on the association between immersive revel in and adoption purpose. The undertaking lies in how to successfully enforce those technologies to maximize their benefits, decorate consumer attitudes, and increase adoption fees.

Main Research Question

How does technological anxiety in its various dimensions affect the intent to adopt mobile increased realism applications in digital banking services, and how can customer acceptance of these new technologies be improved by understanding and mitigating these concerns?

Research Questions Based on Hypotheses:

1. What are the effects of **technostress** on the intent to adopt mobile augmented reality applications in digital banking services?
2. What are the effects of **technostress** on the level of **technological anxiety** among users?
3. What are the effects of **performance expectancy** on the intent to adopt mobile augmented reality applications in digital banking services?

4. What are the effects of **facilitation conditions** on the intent to adopt mobile augmented reality applications in digital banking services?
5. What are the effects of **security and privacy concerns** on the intent to adopt mobile augmented reality applications in digital banking services?
6. What are the effects of **trust** on the intent to adopt mobile augmented reality applications in digital banking services?
7. What are the effects of **information quality** on the intent to adopt mobile augmented reality applications in digital banking services?
8. Does **technological anxiety** moderate the relationship between **performance expectancy** and the intent to adopt mobile augmented reality applications in digital banking services?
9. Does **technological anxiety** moderate the relationship between **facilitation conditions** and the intent to adopt mobile augmented reality applications in digital banking services?
10. Does **technological anxiety** moderate the relationship between **security and privacy concerns** and the intent to adopt mobile augmented reality applications in digital banking services?
11. Does **technological anxiety** moderate the relationship between **trust** and the intent to adopt mobile augmented reality applications in digital banking services?
12. Does **technological anxiety** moderate the relationship between **information quality** and the intent to adopt mobile augmented reality applications in digital banking services?

Main Objectives of the Research

1. To examine the influence of **technostress** on the intent to adopt mobile augmented reality applications in digital banking facilities.
2. To investigate the consequence of **technological anxiety** on the intent to adopt mobile augmented reality applications in digital banking services.
3. To evaluate the influence of **performance expectancy** on the intent to adopt mobile augmented reality applications in digital banking services.
4. To Research the influence of **facilitation conditions** on the intention to adopt mobile augmented reality applications in digital banking services.
5. To explore the influence of **security and privacy concerns** on the intent to adopt mobile augmented reality applications in digital banking services.
6. To assess the impact of **information quality** on the intent to adopt mobile augmented reality applications in digital banking services.
7. To investigate the effect of **trust** on the intent to adopt mobile augmented reality applications in digital banking services.
8. To Research the **moderating role of technological anxiety** on the relationship between various factors and the intent to adopt mobile augmented reality applications in digital banking services.

Importance of the Research

This take a look at is full-size because it seeks to bridge the cutting-edge research gap through analyzing the impact of technological tension at the aim to undertake mobile augmented reality packages in digital banking offerings. This observation is important for the following reasons:

1.Deeper Understanding of Technological Anxiety: The examination highlights how technostress and technological anxiety affect the attractiveness of cellular augmented truth applications in virtual banking, offering a deeper expertise of this phenomenon and helping design strategies to mitigate those issues.

2.Practical Guidelines: The empirical findings will offer valuable suggestions for practitioners inside the virtual banking zone to effectively and efficaciously observe and utilize augmented fact technologies, improving consumer attitudes and increasing adoption intentions.

3.Improving Digital Banking Services: By information the elements influencing adoption intentions, banking institutions can improve the first-class in their virtual services and increase patron delight.

4.Highlighting Security and Privacy: The look at discusses the effect of protection and privacy worries on adoption intentions, helping establishments improve their safety guidelines and approaches to draw extra customers.

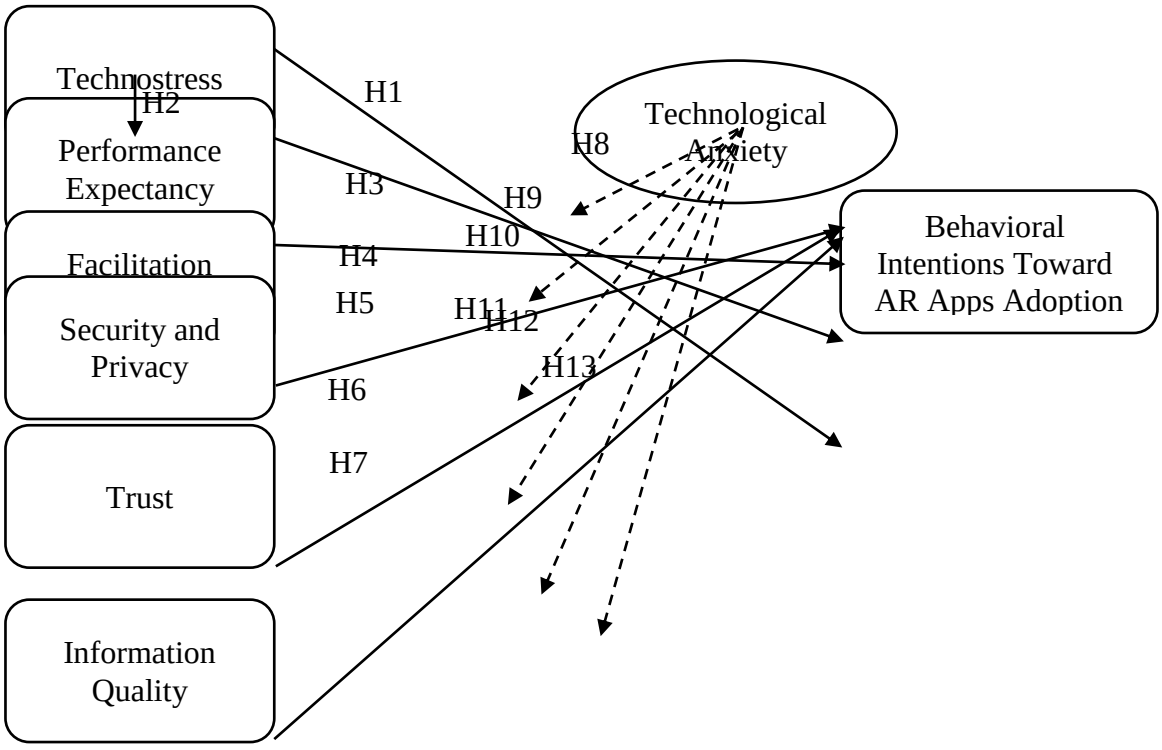
5.Guiding Technological Development: The examine aids in directing technological improvement efforts in the direction of improving ease of use, data pleasant, and technical guide, thereby increasing the probability of consumer adoption of augmented fact technologies.

6.Academic Contributions: They take a look at donates to the present literature on technological tension and the adoption of the latest technologies, allowing destiny researchers to build their studies on dependable and relevant findings.

Hypotheses

1. H1: Technostress negatively affects the intent to adopt mobile increased realism applications in digital banking services.
2. H2: Technostress negatively affects performance expectancy.
3. H3: Performance expectancy positively affects the intent to adopt mobile increased realism applications in digital banking services.
4. H4: Facilitation conditions positively affect the intent to adopt mobile increased realism applications in digital banking services.
5. H5: The intent to adopt mobile increased realism applications in digital banking services is negatively impacted by security and privacy concerns.
6. H6: Trust positively affects the intent to adopt mobile increased realism applications in digital banking services.
7. H7: Information quality positively affects the intent to adopt mobile increased realism applications in digital banking services.
8. H8: Technological anxiety acts as a moderator of the relationship between performance expectancy and intent to adopt mobile increased realism applications in digital banking services.
9. H9: Simplification situations and the adoption intention of mobile augmented reality applications for digital banking services are moderated by technological anxiety.
10. H10: It is so with technological anxiety as a moderator between security and privacy anxieties and intent to adopt mobile AR applications in digital banking services.
11. H11: Trust and the intent to adopt mobile increased realism applications in digital banking services. Technological anxiety may be a confounding variable in the relationship between.
12. H12: It is technological anxiety that acts as a mediator in the association between information quality and intent to adopt mobile augmented reality apps in digital banking services.
13. H13: Technological anxiety negatively affects the intent to adopt mobile increased realism applications in digital banking services..

Research Model



The conceptual framework

Technological anxiety was hypothesized to mediate the relationship between technostress and users' adoption intentions. That is, the model would specifically argue that if technostress is greater among users, then their levels of technological anxiety would be higher and, in turn, negatively influence their intention to adopt augmented reality

applications in digital banking. Such mediation by technological anxiety can explain a more nuanced interaction of psychological factors with technostress as contributors to adoption behaviors.

In this model, technological anxiety is postulated to mediate the relationship between technostress and users' adoption intentions. That is, specifically, the model postulates that higher levels of experienced technostress by users will increase their levels of technological anxiety, positively decreasing their intention to adopt augmented reality applications in digital banking. This mediation effect of technological anxiety enriches the understanding of interactions between psychological factors and technostress in molding adoption behaviors.

Theoretical Background

1. Technostress in Digital Banking

Technostress was first used by Brod (1984) to refer to the stress people feel because they are forced to readjust at every turn of a new technological development. Technostress in digital banking has since become one of the major inhibiting factors" for it do not support them, especially when businesses rely heavily on digital platforms (Tarafdar et al., 2010). Users experiencing technostress describe themselves as frustrated and anxious, especially when digital applications for banking come with complex features or need so many renewals (Saxena et al., 2020). Indeed, it was shown that technostress might decrease satisfaction with decreased performance expectations and finally decrease the intention to adopt new digital tools

Technostress is defined as stress experienced by the individual because of a constant need to readjust to an ever-changing technological environment Technostress in digital banking has been identified as one of the most significant inhibitors of its adoption and usage, especially within a business that heavily depends on such digital avenues Users who experience technostress feel angry and anxious when applications for digital banking become complicated or require frequent renewals The study was supported by an axiom that technostress reduces satisfaction with the performance expectation of an individual and in turn reduces the intention to finally adopt new digital tools (Ayyagari et al., 2011).

2. Technological Anxiety and Its Influence on AR Adoption

Technological anxiety is defined as a psychological state in which an individual feels anxious or uncomfortable when dealing with any technology and it strongly affects the rate of adoption of digitals (Meuter et al., 2003). Being one totally absorbing and interactive, something common in the final form of AR applications may further inflame this anxiety. It was also noticed that high technological anxiety is related to less use of AR applications, as the general trend to require more varied and sometimes complicated interactions between the user and the interface This raises anxiety also discourages the use of AR technology due to increased fear of misuse of personal data in the banking environment and increased general concerns regarding data security and privacy, among others

As described by Meuter et al. (2003), technological anxiety may significantly affect the rates of digital adopters as it represents an uncomfortable or anxious psychological state when users interact with any technology. High levels of technological anxiety are more likely to be provoked especially with the use of augmented reality (AR) technology that is very interactive and immersive. Other studies have shown in recent years that people with high technological anxiety scores present lower acceptance of AR applications in general, mainly due to the perceived effort needed to work with such applications. Additionally, privacy concerns, security issues, and fears regarding data misuse in the context of providing banking services further increase anxiety and discourage adoption of AR. (Mekni & Lemieux, 2014). ; Oyman et al., 2022).

3. AR Applications in Digital Banking: Opportunities and Challenges

Integrating augmented reality into the digital bank service offers a unique opportunity to improve user experience through interactive, real-time information overlays that were associated with decision-making and create user experiences of service for. The complexity of AR applications enables several levels of knowledge and readiness for technology. According to Georgiou & Kyza (2018), even though AR may enhance engagement and satisfaction, the navigation of AR interfaces also poses additional unwanted burdens for the users because they are not well experienced with previous technologies for the same interactive digital banking applications involve security and ease-of-use concerns, which might impede adoption:

The implementation of AR in digital banking opens up a great opportunity to enrich user experiences through interactive real-time information overlays that can support decision-making and bring service experiences of their own in for users (Javornik et al., 2016). There is, however, some requisite familiarity and comfort with the technology by the user due to the sophistication of the AR applications. According to Georgiou & Kyza (2018), although AR might enhance engagement and satisfaction, users still usually face some difficulties with appropriate manipulation of AR interfaces, especially because they do not have any kind of previous experience with technologies of the same type. In digital banking, security and ease of use being paramount, barriers like those mentioned above which hinder the adoption (Kim & Forsythe, 2008).

Integration of UTAUT2 Model

1. Overview of the UTAUT2 Model and Its Relevance

The UTAUT2 model of Venkatesh et al. (2012) is actually the revision associated with the original UTAUT model which was developed for assessing technology acceptance and usage behavior. UTAUT2 introduces other new constructs of theories, such as pleasure emotion, cost price, and quality in order to best describe consumer adoption behavior in voluntary settings. UTAUT2 is of supreme importance when it comes to digital banking since it takes into consideration an assortment of factors that play into the user's decision to adopt technology, including performance expectations, effort expectations, social influence, and facilitating conditions.

Venkatesh et al. (2012) UTAUT2 is a developed version of the original UTAUT model developed for the assessment of technology acceptance and usage behavior. UTAUT2 applies new constructs of pleasure emotion, cost price, and quality to more aptly describe consumer adoption behavior in voluntary settings. UTAUT2 is of special value in the case of digital banking as it takes into consideration all other factors that are available to condition a user's decision to adopt technology, specifically including performance expectations, effort expectations, social influence, and facilitating conditions. (Venkatesh). et al., 2012).

2. Key Factors in UTAUT2 Model and Their Impact on AR Adoption

- **Performance expectancy:** The expectancy value is a strong motivator in users' belief that the technology would lead to better performance. Hence, AR applications in digital banking will only be regarded as good if they make things convenient, reduce processing times, or enhance investment choices. Research by Hsu et al., (2021) claim that expectations of performance are principal drivers of AR adoption when the potential for efficiency gains and productivity is salient.
- The confidence of the users that a given technology will enhance their performance is strongly intention to believe. For instance, AR applications in digital banking will be valued if they improve investment decision-making or reduce processing time while ascertaining Hsu et al. (2021) found that perceived usefulness has been a prime influencer in accepting AR, particularly under circumstances where there are obvious benefits in efficiency and productivity gains.
- **Expected effort:** This chart reflects the perceived ease of use of technology. Banking is, of course, important in banking; Higher perceived effort has been found to relate negatively with technostress and therefore adoption (Pantano et al., 2017). If AR applications in digital banking are easy of access, users are likely to embrace them and not find them much invasive and inappropriate
- This chart reflects the perceived ease of use of technology. Effort expectancy is a key issue in banking; Research shows that higher expected effort is associated with lower technostress and therefore the more likely adoption (Pantano et al., 2017). If AR applications in digital baking are easy to access, then users are likely to accept them and find them non-invasive and inappropriate.
- **Social influence**: Often, users look at their peers, family or community and see if a new technology is worth their time of day. Social influences have proved to have significant importance towards the intention of adoption, especially in the cultures where social acceptance and recommendations play a vital role in decision-making.
- Users usually look to the peers, family, or community to see if the new technology is worth adopting. Indeed, social influences have been found to dominate the intentions of adoption in such a way that cultures value more the acceptance and the recommendations in the social frame in the process of making decisions. (Al-Hattami & Gomez Corona, 2021).
- **Facilitating conditions:** Availability of the right resources, support, and infrastructure will act as a motivational factor for the readiness of users to embrace any new technology. For AR, the facilitating conditions would include easy-to-understand instructions, customer support, and user-friendly interfaces, which would reduce technological anxiety and increase adoption.
- Availability of appropriate resources, support, and infrastructure will inculcate a willingness factor for users to embrace any new technology. For AR, the facilitating condition should include proper resources such as detailed instructions, customer support, and user-friendly interfaces, to reduce technology anxiety and enhance adoption. (Zubizarreta et al,2019).

3. The Mediating Role of Technological Anxiety within the UTAUT2 Model

In this research, technological anxiety will be postulated as a mediating variable that influences the relationship between technostress and users' adoption intentions. Studies by Meuter et al. (2003) show that high technological anxiety users are less likely to adopt complicated applications as high technological stress users perceive more significant risks associated with the technology and feel greater difficulty. By proposing technological anxiety as an intervening variable, this study hopes to contribute to a better understanding of the cognitive barriers blocking the adoption of AR in virtual banking. According to Oyman et al. (2022), focused interventions on this anxiety with measures like technical support and user education directly can reduce its negative impact on adoption intentions.

The study proposes technological anxiety as a mediating variable that affects the relationship between technostress and users' adoption intentions. Research by Meuter et al. (2003) shows that high-technology-fear users are less likely

to adopt sophisticated applications because their tension magnifies the perceived complexity and risks related to the technology. By proposing technological anxiety as a mediator, the current study aims to contribute to an improved understanding of the cognitive barriers to AR adoption for virtual banking. According to Oyman et al. (2022), focused interventions that address this anxiety with technical support and user training help reduce the negativity of its impact on adoption intentions.

Conclusion of Theoretical Framework

This Research applies a holistic view of the factors enabling and inhibiting the adoption of AR in digital banking according to the UTAUT2 model. Both technical stress and technical anxiety emerge as significant psychological barriers, and the dimensions of the UTAUT2 model create a framework through which such issues can be considered and even addressed. Conditions related to simplicity, user trust, benefits visibility, and transparency can work toward mitigating the effects of anxiety and thus DRB to effectively push for AR applications and ensure their use

This study applied the UTAUT2 model to view, from a comprehensive perspective, the driving and inhibiting factors regarding AR adoption in digital banking. Both technical stress and technical anxiety emerge as significant psychological barriers; the dimensions of the UTAUT2 model act as a frame for the analysis and addressing of these issues. Conditions of simplicity along with user trust and benefit transparency can mitigate the vicarious anxiety effect and allow digital banks to successfully push AR applications for ensured adoption by the user

Research Methodology

The cause of this examine is to explore the effect of technological tension on the aim to undertake mobile augmented reality applications in virtual banking offerings. To attain this goal, a comprehensive studies technique was hired, which includes survey layout and records evaluation the use of AMOS software program.

The research targeted users of digital banking services who have experience with augmented reality applications. The sample size consisted of 300 participants, selected through a convenience sampling method from the main research population."

This takes a look at goals to discover the effect of technological tension on the goal to undertake cellular augmented fact (MAR) applications in digital banking offerings. To acquire this goal, a comprehensive studies methodology was employed, which incorporates survey design and facts evaluation of the usage of AMOS software.

Survey Design

Components of the Survey:

1.Demographic Section:

oIncludes inquiries to acquire statistics approximately individuals together with age, gender, instructional level, and profits.

2.**Technostress Measurement:**

oContains gadgets measuring numerous aspects of technostress, inclusive of issues about privacy and safety.

3.Performance Expectancy, Trust, Facilitation Conditions, and Information Quality:

oMeasures members' expectations of the performance of MAR applications, the situations that facilitate their use, the extent of accept as true with inside the era, and the excellent of data provided.

4.Technological Anxiety and Behavioral Intention:

oAssesses the level of technological anxiety and the goal to undertake MAR programs.

Scale of Measurement:

- A 5-point Likert scale stayed used, extending as of 1 (toughly disagree) to 5 (strongly agree).
- Data Collection and Measurement Tools

Established scales were adapted for each variable to ensure validity and reliability. For example, the technological anxiety scale was based on prior validated measures, such as those developed by Meuter et al. (2003). This approach ensured that each construct was accurately represented and aligned with established research standards.

Sample Research

Sample Size:

The data was collected from a variety of digital banks in Iraq, including both commercial and Islamic banks that offer digital banking services.

The research targeted users of digital banking services who have experience with augmented reality applications. The sample size consisted of 300 participants, selected through a convenience sampling method from the main research population."**Sampling Method**:

- Convenience specimen stayed used to select contributors with experience in using digital banking services.

Data Collection

Methods:

- Surveys were distributed online and through face-to-face interviews to ensure a diverse sample.

Data Analysis

The Research utilized a five-point Likert scale to measure all variables. Technological anxiety was measured using a scale developed based on prior studies, such as Meuter et al. (2003), while the adoption intentions were assessed using a modified UTAUT scale following the framework of Venkatesh et al. (2012**)."**

AMOS Software:

- AMOS (Analysis of Moment Structures) was used for information investigation and hypothesis analysis. AMOS is a statistical software that can perform structural equation modeling (SEM), allowing the inspection of relations between variables and the validation of the proposed model.

Analytical Procedures:

1. **Confirmatory Factor Analysis (CFA)**:
   - Used to verify the validity of the quantity model.
2. **Structural Equation Modeling (SEM)**:
   - Used to test direct and indirect associations between independent variables (e.g., technostress, performance expectancy, security, facilitation conditions, and privacy, trust, information quality) and the dependent variable (behavioral intention), along with the moderating role of technological anxiety.

Ethical Considerations

Informed Consent:

•Informed consent had been gotten from all contributors prior to information collection.

Data Confidentiality:

•Preserved the anonymity of the data and used this exclusively for research purposes.

The use of AMOS will ensure an accurate analysis involving very intricate relationships between variables and help confirm the research hypotheses. Its features in structural equation modeling will clearly define how technological anxiety influences adoption intentions, enabling the researchers to make a data-based, reliable set of recommendations.

Confirmatory Factor Analysis of Research Tools

Confirmatory Factor Analysis of Dimensions of the Variable (Technostress):

AMOS software was applied to carry out Confirmatory Factor Analysis concerning the dimensions of the Technostress variable. Confirmatory Factor Analysis is directed at appraising model fit and sample contrast in this area. Figure 2 below represents confirmatory factor analysis for Technostress variable dimensions:

Table 1 Goodness-of-fit indicators for these dimensions

Table (1): Goodness-of-Fit Indicators for Technostress Model

Measure	Estimate
CMIN	48.231
DF	24
CMIN/DF	2.010
GFI	0.946
CFI	0.862
TLI	0.793
RMR	0.066
RMSEA	0.071

Source: Designed and ready through the researcher founded on the outputs of the AMOS statistical program.

- This indicates an acceptable fit: CMIN/DF value was 2.010.
- The Goodness of Fit Index (GFI) value was 0.946, representative an excellent model fit.
- The Comparative Fit Index (CFI) value reached 0.862, which is close to 1, showing a good model fit.
- The Tucker-Lewis Index (TLI) value was 0.793, falling within the typical range, indicating that the model has a good fit.
- The Root Mean Square Residual (RMR) value was 0.066, and the smaller this indicator, the better the fit.
- The RMSEA value was 0.071; values below 0.05 are better, but values between 0.05 and 0.08 are considered acceptable.

The results showed that some of the model indicators achieved an acceptable level, while others were very good. The results also demonstrated a relationship between the Technostress variable and its dimensions (technology-related workload, technology complexity, and lack of technical support) and their underlying factors. Furthermore, the saturation degree of each of these three dimensions with the items listed under them was greater than 0.40.

Confirmatory Factor Analysis of the Dimensions of the Variable (Technological Anxiety):

The AMOS software was used to conduct a confirmatory factor analysis on the dimensions of the Technological Anxiety variable. This analysis is essential for evaluating how well the model represents the data and for comparing

multiple samples in this area. The following figure displays the confirmatory factor analysis of the dimensions of the Technological Anxiety variable:
The key indicators of the model's fit to these dimensions are summarized in the following table:

Table (2): Goodness-of-Fit Indicators for the Technological Anxiety Model

Amount	Estimation
CMIN	92.300
DF	50
CMIN/DF	1.846
GFI	0.928
CFI	0.965
TLI	0.954
RMR	0.030
RMSEA	0.065

Source: Designed and ready through the researcher founded on the outputs of the AMOS statistical program.
The following observations can be made:

- The value of CMIN/DF was 1.846, which is less than 3, representative that the model has an acceptable fit.
- The GFI value stayed 0.928, suggesting an excellent model fit.
- The CFI value was 0.965, which is very close to 1, indicating a high-quality model fit.
- The TLI value stood 0.954, indicating a very good fit for the model.
- The RMR value stood 0.030, and the smaller this indicator, the better the fit.
- The RMSEA value was 0.065; values below 0.05 are better, but values between 0.05 and 0.08 are considered acceptable.

The results showed that some of the model indicators were at an acceptable level, while others were very good. The analysis also confirmed the relationship between the dimensions of the Technological Anxiety variable and their underlying factors. The level of saturation for each of these dimensions with its items was over 0.40.

Confirmatory Factor Analysis of the Dimensions of the Variable (Behavioral Intentions):

AMOS was used in the confirmation factor analysis of the dimensions of the variable Behavioral Intentions Toward AR Apps Adoption, which involve such dimensions as Performance Expectancy, Ease of Use, Facilitation Conditions, and Privacy and Security Satisfaction. This kind of analysis is important to check how much a model is capable of representing data and comparing several models in this domain.
The most crucial indicators for these dimensions' fit are tabulated as:

Table (3): Goodness-of-fit indicators for the behavioral intentions model

Amount	Estimation
CMIN	229.969
DF	85
CMIN/DF	2.706
GFI	0.863
CFI	0.901
TLI	0.878
RMR	0.052
RMSEA	0.072

Source: Designed and ready through the researcher founded on the outputs of the AMOS statistical program.
The following observations can be made:

- The value of CMIN/DF was 2.706, which is less than 3, indicating that the model has an acceptable fit.
- The GFI value was 0.863, indicating an acceptable fit for the model.
- The CFI value was 0.901, which proposes a good model fit.
- The TLI value was 0.878, indicating that the model is within an acceptable range.
- The RMR value was 0.052, suggesting a good fit.
- The RMSEA value was 0.072; values below 0.05 are better, but values between 0.05 and 0.08 are considered acceptable.

The results indicate that while some indicators of the model were acceptable, others were very good. The analysis confirmed relationships between the dimensions of the Behavioral Intentions variable (Performance Expectancy, Ease of Use, Facilitation Conditions, and Privacy and Security Satisfaction) and underlying factors. The saturation degree of each of these dimensions with the corresponding items was greater than 0.40.

Structural Equation Modeling of the Studied Hypotheses

AMOS software was used, based on the maximum likelihood method, to Research the relationship between independent variables such as **Technostress**, **Performance Expectancy**, **Security ,Facilitation Conditions**, **and Privacy Concerns**, **Trust**, **Information**

Quality, and the mediating variable **Technological Anxiety**, and the dependent variable **Behavioral Intentions Toward AR Apps Adoption**. The model's fit in representing the data and testing the listed hypotheses was evaluated.

Studied Hypotheses:

- **H1**: Technostress negatively affects the intent to adopt mobile increased realism applications in digital banking services.
- **H2**: Technostress negatively affects performance expectancy.
- **H3**: Performance expectancy positively affects the intent to adopt mobile increased realism applications in digital banking services.
- **H4**: Facilitation conditions positively affect the intent to adopt mobile increased realism applications in digital banking services.
- **H5**: Security and privacy concerns negatively affect the intent to adopt mobile increased realism applications in digital banking services.
- **H6**: Trust positively affects the intent to adopt mobile increased realism applications in digital banking services.
- **H7**: Information quality positively affects the intent to adopt mobile increased realism applications in digital banking services.
- **H8**: Technological anxiety moderates the association between performance expectancy and the intent to adopt mobile increased realism applications in digital banking services.
- **H9**: Technological anxiety moderates the association between facilitation conditions and the intent to adopt mobile increased realism applications in digital banking services.
- **H10**: Technological anxiety moderates the relationship between security and privacy concerns and the intent to adopt mobile increased realism applications in digital banking services.
- **H11**: Technological anxiety moderates the association between trust and the intent to adopt mobile increased realism applications in digital banking services.
- **H12**: Technological anxiety moderates the association between information quality and the intent to adopt mobile increased realism applications in digital banking services.
- **H13**: Technological anxiety negatively affects the intention to adopt mobile augmented reality applications in digital banking services.

Analysis of the Results:

Proposed Structural Model:

The following figure shows the fallouts of the statistical examination of the projected structural model between the independent variables (such as Technostress, Performance Expectancy, etc.), the mediating variable (Technological Anxiety), and the dependent variable (Behavioral Intentions Toward AR Apps Adoption).

Figure (4): Statistical Examination of the Proposed Structural Model Between the Different Variables

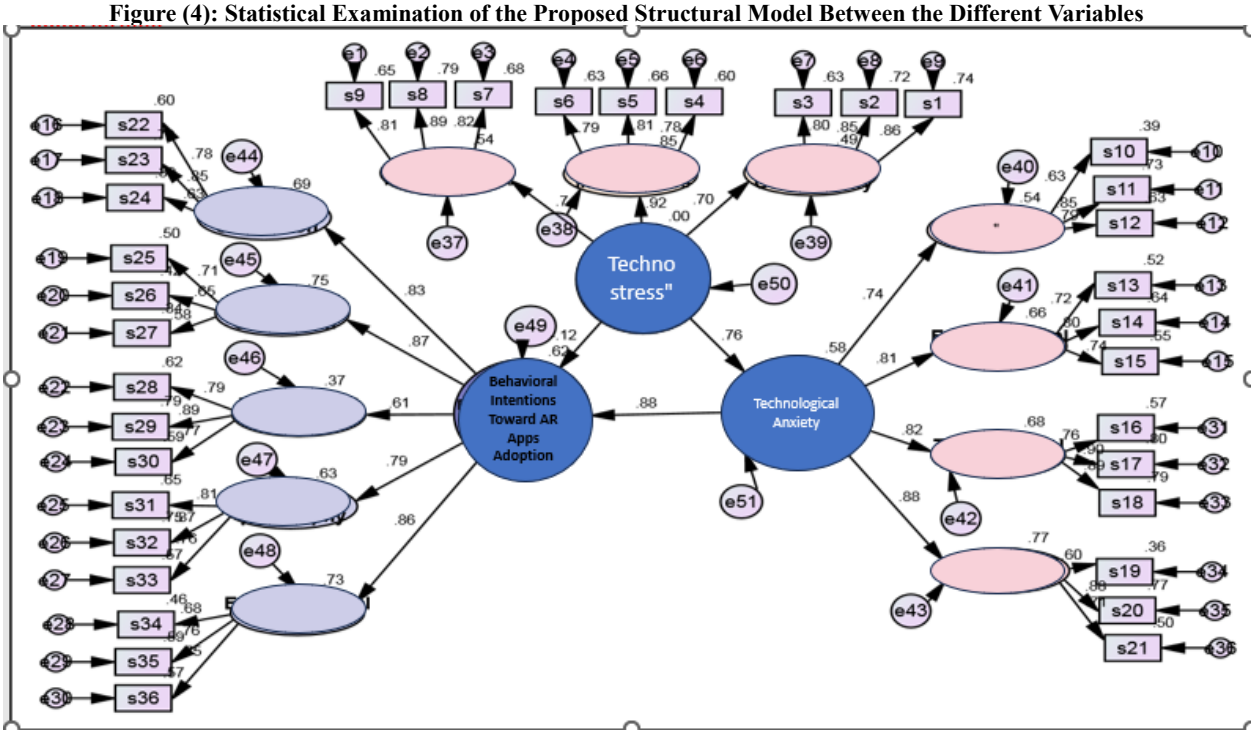


Table of Hypotheses Testing Results:

Path	Estimate	Estimates of Regression Weights	S.E	P VALUE	Hypothesis
Technostress ≫ Behavioral Intentions	-0.120	-0.104	0.115	0.043	**H1**
Technostress ≫ Performance Expectancy	-0.761	-0.446	0.081	0.000	**H2**
Performance Expectancy ≫ Behavioral Intentions	0.701	0.389	0.074	0.000	**H3**
Facilitation Conditions ≫ Behavioral Intentions	0.581	0.349	0.097	0.001	**H4**
Security and Privacy ≫ Behavioral Intentions	-0.341	-0.231	0.124	0.023	**H5**
Trust ≫ Behavioral Intentions	0.601	0.421	0.095	0.010	**H6**
Information Quality ≫ Behavioral Intentions	0.480	0.378	0.110	0.005	**H7**
Technological Anxiety * Performance Expectancy ≫ Behavioral Intentions	-0.450	-0.212	0.098	0.015	**H8**
Technological Anxiety * Facilitation Conditions ≫ Behavioral Intentions	-0.380	-0.189	0.113	0.020	**H9**
Technological Anxiety * Security and Privacy ≫ Behavioral Intentions	-0.415	-0.205	0.107	0.025	**H10**
Technological Anxiety * Trust ≫ Behavioral Intentions	-0.440	-0.219	0.099	0.018	**H11**
Technological Anxiety * Information Quality ≫ Behavioral Intentions	-0.420	-0.201	0.104	0.022	**H12**
Technological Anxiety ≫ Behavioral Intentions	-0.450	-0.212	0.130	0.012	**H13**

Interpretation of Results Based on Hypotheses:

- **H1**: Technostress negatively and significantly affects the intent to adopt mobile increased realism applications in digital banking services ($P < 0.05$), supporting hypothesis H1.
- **H2**: Technostress negatively and significantly affects performance expectancy ($P < 0.05$), supporting hypothesis H2.
- **H3**: Performance expectancy positively and considerably affects the intent to adopt mobile increased realism applications ($P < 0.05$), supporting hypothesis H3.
- **H4**: Facilitation conditions positively affect the intent to adopt mobile increased realism applications ($P < 0.05$), supporting hypothesis H4.
- **H5**: Security and privacy concerns negatively affect intent to adopt mobile increased realism applications ($P < 0.05$), supporting hypothesis H5.
- **H6**: Trust positively affects the intent to adopt mobile increased realism applications ($P < 0.05$), supporting hypothesis H6.
- **H7**: Information quality positively affects the intent to adopt mobile increased realism applications ($P < 0.05$), supporting hypothesis H7.
- **H8**: Technological anxiety negatively moderates the association between performance expectancy and the intent to adopt mobile augmented reality applications ($P < 0.05$), supporting hypothesis H8.
- **H9**: Technological anxiety negatively moderates the association between facilitation conditions and the intent to adopt mobile augmented reality applications ($P < 0.05$), supporting hypothesis H9.
- **H10**: Technological anxiety negatively moderates the relationship between security and privacy concerns and the intention to adopt mobile augmented reality applications ($P < 0.05$), supporting hypothesis H10.
- **H11**: Technological anxiety negatively moderates the association between trust and the intention to adopt mobile augmented reality applications ($P < 0.05$), supporting hypothesis H11.
- **H12**: Technological anxiety negatively moderates the association between information quality and the intent to adopt mobile augmented reality applications ($P < 0.05$), supporting hypothesis H12.
- **H13**: Technological anxiety negatively and significantly affects the intent to adopt mobile increased realism applications ($P < 0.05$), supporting hypothesis H13.

Goodness-of-Fit Indicators:

Table (5): Goodness-of-Fit Indicators for the Statistical Examination of the Structural Model

Amount	Estimation
CMIN	1094.730
DF	579
CMIN/DF	1.891
GFI	0.777
CFI	0.878
TLI	0.867
RMR	0.051
RMSEA	0.067

Source: Designed and ready through the researcher founded on the outputs of the AMOS statistical program.

Interpretation of Goodness-of-Fit Indicators:

- **CMIN/DF**: The ratio was less than 3, indicating a good model fit.
- **GFI**: A value of 0.777 indicates an acceptable model fit.
- **CFI**: A value of 0.878 indicates a good fit.
- **TLI**: A value of 0.867 falls within the acceptable range of quality.
- **RMR**: A value of 0.051 indicates a good fit.
- **RMSEA**: A value of 0.067 is considered acceptable, indicating that the model reasonably reflects the data.

These indicators confirm that the model is well-fitted to the information and supports the tested hypotheses.

Interpretation of Results:

Based on the statistical analysis and the proposed structural model, the results related to the studied hypotheses can be interpreted as follows:

1. **H1: Impact of Technostress on Adoption Intentions:**

The findings prove that there is an important negative influence of Technostress on the intent to adopt mobile AR applications for digital banking services. This means that people with high levels of experiencing Technostress would not adopt these applications.

2. **H2: Influence of Technostress on Performance Expectancy:**

Technostress was found to harm Performance Expectancy. This means the higher the Technostress level one feels, the lower his/ her expectations on AR applications being effective or efficient which in turn negatively influences their intention to adopt these applications.

3. **H3: Influence of Performance Expectancy on Adoption Intentions:**

The findings indicate that Performance Expectancy has a positive influence on the intent to adopt AR apps, and it is, therefore, possible that those people who expect high performance through AR apps would be more likely to adopt them.

4. **H4: Influence of Facilitation Conditions on Adoption Intentions:**

Facilitation Conditions — Resources and support being made available has a positive influence on the intent to adopt AR apps. This means that when individuals feel they have the needed support and resources, their propensity towards these adoptions is even higher..

5. **H5: Impact of Security and Privacy Concerns on Adoption Intentions:**

The research found that Security and Privacy Concerns have a negative influence on the intent to adopt AR apps. Thus, individuals who are more concerned regarding the security and privacy of their data would be less likely to adopt AR apps in digital banking.

6. **H6: Impact of Trust on Adoption Intentions:**

Trust was institute to be a important antecedent enhancing the intent to adopt AR apps. Having faith in security, and confidence in the reliability and trustworthiness of both the AR apps and service providers further solidifies individuals' readiness to adopt these technologies.

7. **H7: Influence of Data Quality on Adoption Intentions:**

Results show that Information Quality has a positive influence on AR application adoption intent. This means that if the information is of high quality concerning AR applications, it will attract consumers to adopt these technologies by being very informative.

8. **H8-H12: Moderating Role of Technological Anxiety:**

Technological Anxiety was found to have a negative moderation effect on Performance Expectancy, Security Facilitating Conditions, and Privacy Concerns, Trust, Information Quality, and their Adoption Intentions. This means that the more an individual perceives these factors positively, the higher the Technological Anxiety would diminish his intention to adopt AR applications.

9. **H13: Direct Impact of Technological Anxiety on Adoption Intentions:**

The research unveiled that Technological Anxiety does have a negative impact on its own right and significantly affects the intention to adopt AR apps. High-technology-anxious subjects will not likely adopt AR apps in digital banking.

- **Recommendations:**

Following are some general tips that could evolve from the resulting analysis:

1. **Mitigating Technostress:**

Strategies that organizations should implement to reduce Technostress amongst potential users include providing comprehensive training that is later enhanced in its user-friendly designs coupled with offering continuous technical support; in so doing, the adoption rate of AR applications could be improved.

2. **Enhancing Performance Expectancy:**

Marketing and educational efforts should highlight the performance of AR apps to users. Emphasize the benefits so that users' expectations can be enhanced through adoption intention by clearly communicating the efficiency and effectiveness of these technologies.

3. **Strengthening Facilitation Conditions:**

Ensure that those individuals adopting AR applications can easily access the resources and system of support necessary. This may include the guidelines in use, the customer service, and the infrastructure related to AR technology.

4. **Addressing Security and Privacy Concerns:**

The security and privacy features of AR apps should be at the top of service providers' concerns. This can be achieved by openly communicating on data protection practices and implementing proper security — which would otherwise harmlessly be strong enough reasons to allay concerns for the users and encourage adoption. Also, it would craft an environment where its use would turn out to be more than opportune.

5. **Building Trust:**

Both in the establishment and in the maintenance of confidence, companies that offer AR applications in digital banking should have a major focus on providing uniform and reliable service, being open about their operations, and not falling short of the promises made to the users.

6. **Improving Information Quality:**

Accurate, detailed, and easily comprehensible information on AR apps is vital. The quality of information can cause a positive or negative perception on the technology and also influence the adoption-willingness of the users.

7. **Managing Technological Anxiety:**

Organizations should build strategies on Technological Anxiety with a vision to address or decrease it by providing user-friendly interfaces, offering anxiety-reducing resources, and developing a supportive environment that fosters experimentation and learning without the fear of failure.

Addressing these factors will go a long way toward the adoption of mobile AR applications by digital banking services, hence greater levels of user satisfaction and competitive advantage.

Conclusion:

The conclusion of this research is intended to help the reader understand why the findings are significant and why the research should matter to them after they have finished reading the paper. By examining the effects of technostress and technological anxiety on the adoption of augmented reality (AR) applications in digital banking, this Research provides insights that can aid banking professionals and decision-makers in implementing strategies to enhance user experience and improve the adoption rate of innovative technologies. These findings are critical for those aiming to reduce barriers to technology adoption and optimize the use of AR in improving digital banking services.

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