# Impact of Security and Privacy on Citizens' Satisfaction in EGYPT In Light of Study Government Digital Transformation Services Quality

**by**

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## Abstract

Government digital transformation is essential for most countries around the world. The Egyptian government has achieved good steps in the digital transformation via several initiatives focused on enhancing government service delivery and improving service quality. According to "Egypt's Vision 2030," the vision highlights the importance of enhancing government digital transformation to increase citizen satisfaction. The objectives of research to identify government digital service quality dimensions, the research considers citizens as customers within the marketing view and uses a model that classifies government digital service quality into five dimensions, including ease of interaction, fulfillment, security and privacy, citizen care, and trustworthiness. In this paper will focus on security and privacy and evaluates the relation of it with citizens' satisfaction.

The research used quantitative methodology. The research applied non-probability sample technique with sub-type convenience sampling, as samples were selected from Egyptian citizens. A questionnaire was constructed, and data collected from 384 Egyptian citizens. The research concludes that security and privacy as one of dimensions of government digital service quality positively impact citizen satisfaction.

**Keywords**: Digital Egypt portal, Government digital transformation, E-government, E-government service quality, Citizen satisfaction.

# 1. Introduction

The core idea of government digital transformation depends on the delivery of services to citizens, facilitated via communications and interactions that occur between individuals and government portals. Government digital transformation services allow individuals to utilize the Internet for communications and dealing in a quick, straightforward, and effective way. In earlier times within the traditional system of government individuals were required to reach out to government entities to take services by engaging directly with governmental employees. In the context of government digital transformation services individuals who have a smart mobile or desktop\laptop associated to the Internet can engage in communications and dealing  with government portals, all without the necessity of being personally existing at these governmental' offices. (Pham, Limbu, Le, & Nguyen, 2023).

A lot of research has been conducted to explore the factors that influence customer satisfaction within the e-commerce platform. In the context of government digital service where citizens communicate with government entities via portals, there is a notable lack of research exploring the factors that affect citizens' satisfaction toward government digital services. Citizens have the right to receive the highest standard of digital services from government entities, therefore citizens should be dealing with the government same as customers dealing with enterprises. The conceptual basis regarding the relationship between e-commerce platform service quality and customer satisfaction provides an excellent basis for analyzing the variables that

influence citizens' satisfaction with government digital services. So in this research will use service quality dimensions, including: ease of interaction, fulfillment, security and privacy, customer/citizen care, and trustworthiness to evaluate them with citizens satisfaction (Bui, 2022) (Jiang, 2015).

## 1.1. Problem Statement

In business, the measurement of consumer satisfaction is crucial, as satisfied consumers generally result in higher profitability. However, the government entities do not perform in open markets and dissatisfied citizens do not have the ability to change their governments service provider as business consumers have option to change their service provider. While there are difficulties and concerns regarding the government's necessity to evaluate citizen satisfaction, such efforts are both important and essential. Enhancing government service quality, are critical objectives. In this context, evaluating citizen satisfaction is essential and should significantly contribute to assessing government performance. Consequently, assessing citizen satisfaction regarding service quality is crucial. (Piyasunthornsakul, 2022).

It is crucial to examine the current gap in literature regarding the variables that influence citizen satisfaction in relation to the quality of government digital services. The research at hand presents several theoretical contributions and carries various practical implications.

According to "Egypt's Vision 2030" the vision highlights the importance of enhancing government digital transformation to increase citizen satisfaction. The Egyptian government has achieved good steps in the digital transformation via several initiatives focused on enhancing government

service delivery and improving service quality. Nevertheless, in light of these initiatives, the level of citizen satisfaction with digital government services in Egypt continues to show a varied response. Moreover, there exists a significant gap in scholarly inquiry that systematically examines the direct effects of these initiatives on citizens' satisfaction with government services within the Egyptian environment.

This research aims to fill this gap by examining the relationship between government digital transformation service quality and citizen satisfaction in Egypt. It seeks to offer solid suggestions aimed at improving the effectiveness of Egyptian government digital transformation initiatives.

## 1.2. Research Importance

"Egypt's Vision 2030" emphasizes the significance of promoting government digital transformation for improving citizen satisfaction in Egypt. The Egyptian government has achieved significant progress in digital transformation through various initiatives aimed at enhancing the delivery of government services and enhancing their quality.

The research presents a different approach by considering the citizen as a customer and use model classified E-government service quality into five dimensions, including: ease of interaction, fulfillment, security and privacy, citizen care, and trustworthiness and evaluate the relation of security and privacy with citizens satisfaction. As well the research for citizens satisfaction with Egypt digital portal has rarely been the focus of researchers. The findings of the research can be used in digital government service quality enhancement and as a guide continual enhancement of Egyptian government services.

## 1.3. Conceptual Model

The following figure shows the conceptual model of the research was developed by researcher based on the analysis of the literature and pervious research studies.

**Figure 1**

Research Conceptual Model
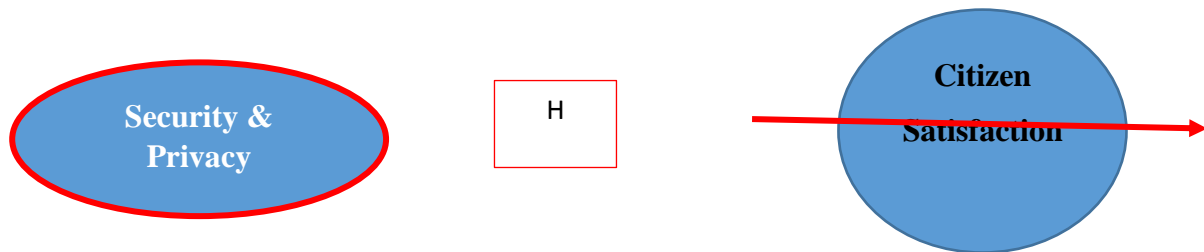


## 2.0 . literature review

### 2.1. E-Government in Egypt

The Ministry of Communications and Information Technology (MCIT) and the Ministry of State for Administrative Development (MSAD) collaborated to establish Egypt's e-Government initiative. There were two phases to this program developing and accepting the e-Government strategy, executing and evaluating projects, and beginning the geographical and sectorial deployment of selected initiatives were all included in the first phase (2001–2007). The second stage (2007–2012) intended to establish government administrative bodies and extend nationally successful pilot initiatives. In January 2004, the Egyptian government launched the www.egypt.gov.eg e-Government website however now became digital.gov.eg as shown in figure1 after enactment and provides 168 services such as notarization, renewing

driving licenses, issuance of E-Visas, Health Insurance, and a lot of Civil Status Services through Digital Egypt Portal, shown in Appendix A (Safaa, 2018).

The Egyptian government's digital transformation plan was introduced by President Abdel Fattah El-Sisi according to the 2030 vision, the procedures will be reengineered, government institutions will transition to new business models, and citizens will receive E-services. 24x7. as the citizen is the core element of comprehensive sustainable development, implementing government, eliminating corruption, increasing citizen satisfaction, and saving time and money via the use of Omni channels in a smart, efficient, and effective digital approach (Moussa & Tarek, 2023).

## 2.2. E-government service quality

(Shareef, Archer, & Dwivedi, 2015) Relates E-government services to E-commerce services as they have the same characteristics. So, the research considered citizens as customers within the marketing view; however, E-government services targeted a large scale than E-commerce. E-government does not target a profit unlike E-commerce, and E-government services deal with all citizens equally without segmentation. This model classified E-government service quality into five dimensions, including: ease of interaction, fulfillment, security and privacy, customer/citizen care, and trustworthiness (Pham, Limbu, Le, & Nguyen, 2023)

- **Ease of interaction** specifically refers to how easy it is for individuals to communicate with E-government portal. This dimension is relevant to portal design, technology, software, information management, retrieval, data gathering, and form downloads.

- **Fulfillment** refers to the degree to which E-government services satisfy citizens' expectations and criteria for E-government availability and delivery.

- **Security and privacy** refer to the level how much citizens believe in E-government portals as safe for leaking personal and financial information in dealings with the E-government, and that these portals are not shared with other entities or misused for inappropriate functions.

- **Customer/citizen** care represents the degree that government employee support representatives are responsive, effective and efficient in dealing with and solving citizen concerns and issues.

- **Trustworthiness** indicates the amount to which E-government portals can provide confidence in individuals' attitudes, safety, and honesty. (Pham, Limbu, Le, & Nguyen, 2023)

The following table contains brief about theoretical model design.

**Table 1.** Theoretical Model Design (Shareef, Archer, & Dwivedi, 2015)

| Name of Variable | Definition | Measurement Items | Source (with modifications) |
|---|---|---|---|
| Ease of Interaction | The extent to which the overall interactions of citizens with the website — in terms of website design, technology, software, organization of information, information searching, information gathering, and forms downloading — is easy and manageable | 1. Learning to interact with the website is easy for me. 2. This site is simple to use. 3. The website is flexible to interact with. 4. It is easy to navigate the website. 5. Interactions with the website are clear and, understandable. 6. I can easily do my tasks while using the website. 7. It enables me to complete a transaction quickly. 8. It is easy to download required | Carter and Bélanger, 2005; Evans and Yen, 2006; Parasurama, Zeithaml, and Malhotra, 2005; Santos, 2003. Schaupp and Bélanger, 2005; Shareef et al., 2011; Wolfinbarger and Gilly, 2003; Yao and Murphy, 2007. |

| | | so that citizens perceive their competence in and comfortable ability for using the website | documents from the website. 9. This site is well organized. | |
|---|---|---|---|---|
| Fulfillment | The extent to which eGov fulfills the expectations and requirements of citizens regarding public service availability and delivery | 10. All the required services are available in the eGov website. 11. Information is up to date. 12. All the required forms are available in the eGov website. 13. The eGov website delivers services when promised. 14. Through the eGov website, I can complete my task within a suitable time frame. 15. The website quickly provides services. 16. The website sends out the required documents when ordered. 17. The website is appropriate for my needs. 18. The website fits well with the way that I like to gather information. 19. The website gives a wider choice of interactions with different functions compared to interactions with the physical government office. 20. The website helps to accomplish tasks quickly. | Bauer, Falk, and Hammerschmidt, 2006.Chen and Thurmaier, 2005; Collier and Bienstock, 2006. Parasurama, Zeithaml, and Malhotra, 2005. Ritz 2009; Shareef etal., 2011; Yoo and Donthu, 2001 | |
| Security and Privacy | The extent to which citizens perceive the eGov website is safe to disclose personal and financial information during interaction and transaction with websites, and the website does not disclose or share | 21. The website is safe to interact with for financial purposes. 22. The website has adequate security features. 23. The website protects information about my credit card. 24. The security policy at the website is clearly stated. 25. I would hesitate to provide information to the website. 26. The website protects my | Chen and Thurmaier, 2005; Collier and Bienstock, 2006. Devaraj, Fan, and Kohli, 2002; Janda, Trocchia, and Gwinner, 2002; Shareef et al, 2011; Yao and Murphy, | |

| | | disclosed information. 27. The website does not share my personal information with other sites. | 2007. |
|---|---|---|---|
| Customer Care | The extent to which customer care personnel of eGov effectively, efficiently, promptly, and sympathetically takes care and solves affairs and disputes of citizens. | 28. The website remembers/ recognizes me as a valuable customer. 29. The customer care of the website addresses my specific needs. 30. The website takes prompt action when I encounter problems performing my tasks. 31. Online customer care is available at all times. 32. The customer care of the website responds very quickly. | Janda, Trocchia, and Gwinner, 2002. Parasurama, Zeithaml, and Malhotra, 2005. Shareef et al., 2011. Wangpipatwong, Chutimaskul, and Papasratorn, 2005. Wolfinbarger and Gilly, 2003 |
| Trustworthiness | The extent to which the eGov website is able to provide attitudinal confidence for reliability, credibility, safety, and integrity among citizens | 33. The website is, overall, reliable in providing service. 34. What I do through this website is guaranteed. 35. I have confidence in the performance of the website 36. The government will take full responsibility for any type of insecurity during interactions/transactions at the website. 37. Legal and technological policies of the site adequately protect me from problems on the Internet. | Balasubramanian, Konana, and Menon, 2003; Collier and Bienstock, 2006. Fassnacht and Koese, 2006; Kim, 2010. Shareef et al., 2011 |

Source: (Shareef, Archer, & Dwivedi, 2015)

## 2.3. Citizen satisfaction

Citizen satisfaction, according to (Brown, Venkatesh, Kuruzovic, & Massey, 2008) is defined as the emotions connected with the e-Government services quality delivered. Citizen satisfaction with e-Government was stated by (Irani, 2012) as "the outcome of evaluating the procedure and result of e-

Government services quality based on citizens' beliefs". Citizen satisfaction with provided services from the government can be characterized as an after-the-fact assessment of a service's quality, which maybe excellent, average, or poor. Citizen satisfaction has been regarded as one of the most critical markers for determining success (Alkraiji & Ameen, 2021).

If citizens' satisfaction and provided e-Government services relation is low, e-Government programs will fail, however, there is no consensus among existing studies on the exact tools to assess citizen satisfaction with e-Government services. The issue is that citizen satisfaction is a multifaceted concept whose dimensions can only be established by the extent to which a government understands the needs and concerns of its residents (Alkraiji, 2020).

The Egyptian government's digital transformation plan was introduced three years ago by President Abdel Fattah El-Sisi. The procedures will be reengineered, Government ministries will transition to new business models, and citizens will receive E-services. 24x7. as the citizen is the core business of comprehensive sustainable development, implementing government, eliminating corruption, increasing citizen satisfaction, and saving time and money via the use of Omni channels in a smart, efficient, and effective digital approach (Ghoneim, 2021).

## 2.4.   Service Quality and Citizens Satisfaction

Service quality and citizen satisfaction relationship have been considered frequently in the academic community. In particular, researchers explored in practice the effect of service quality parameters on the general level from citizen's satisfaction across provided services. However, there are contradicting results about the link between service quality and citizen

satisfaction. In the instance of the government, some findings supported the large positive influence of the public service quality characteristics on citizen satisfaction. For example, (Khan, 2015), Research conducted in a Pakistani public housing authority showed that there is a strong and positive link between total service quality and citizen satisfaction. As well in Indonesia addressing government organizations, it was likewise shown that all the five service quality characteristics have a positive significant impact on citizens' satisfaction (Psomas, 2020).

E-government service quality is one of the methods to measure citizen satisfaction with e-government's portal by evaluating portal capabilities and how it easy to interact with. The measurement is done through analyzing the way that citizen receives the service and assessing the difference between citizen expectations and the provided services according to e-government service quality dimension (ease of interaction, fulfillment, security and privacy, customer/citizen care, and trustworthiness) (Mulyana & Jamaludin, 2023).

## 3.0. Research methodology

This research explains the relation between government digital service quality and citizen satisfaction, and defined, validate and test hypotheses within conceptual model. So according to previous definitions the objective of this research is explanatory as it provides an explanation and prediction of the relationships between the defined variables and hypotheses of the conceptual model.

## 3.1. Research Design

It is crucial to decide the research design before choosing research methodology or gathering and analyzing data. The main components of research design are discussed in the following sections.

### 3.1.1. Research purpose

This research explains the relation between government digital service quality and citizen satisfaction, and defined, validate and test hypotheses within conceptual model. So according to previous definitions the objective of this research is explanatory as it provides an explanation and prediction of the relationships between the defined variables and hypotheses of the conceptual model.

### 3.1.2. Unit of Analysis

The research investigates the impact of security and privacy and citizen satisfaction so the citizen is the target, who will be the unit analysis.

### 3.1.3 Data Collection Methods

Primary data and secondary data are the two main sources of data used in research. The two types of sources are crucial for the research to meet its purpose and answer questions as well testing relationship among the variables in the research.

## 3.2. Research Approach

This research used quantitative research approach for the following reasons:

- This research investigated the impact of security and privacy on citizen satisfaction which is a phenomenon described in this research through validating a developed conceptual model and testing associated hypotheses.

- As discussed above the positivism is suitable approach for this research, so it is using quantitative method and the conceptual model construct upon existing theoretical models.
- As long as the target audience its citizens in Egypt, the quantitative method is most appropriate approach for gathering amount of the target population.

## 3.3. Sampling selection

Sampling is the process for gathering the necessary data for research from a specific ratio of the projected population. The researcher is unable to access all projected population in order to gather this data. It is crucial to select the most suitable sample in order to apply the results to all population. The sample selection process in this research has been conducted as the following:

### 3.3.1. Population

The research target population is citizens who registered in digital Egypt portal so, total population 8,003,557 citizens (MCIT, 2024).

### 3.3.2. Sample Technique

In this research non- probability sample technique with sub-type convenience sampling, as samples were selected from Egyptian citizens as the research capture citizens' satisfaction. The participants were chosen based on the respondents' willingness and availability to participate.

### 3.3.3. Sample Size

The Krejcie and Morgan table is a commonly used tool for determining sample sizes between researchers. This table is essential to any defined population and does not necessitate any calculations. The Krejcie and Morgan

table recommends that a sample size of 384 is acceptable for a population of 1,000,000 or extra. Therefore, 384 has been referred to as the "magic" amount in research and has been applied in hundreds of thousands of articles (Memon, et al., 2020).

As this research targeted Egyptian citizen who registered and use digital Egypt portal that total population 8,003,557 citizens (MCIT, 2024), Since the total population more than 1,000,000 then sample size will be 384 citizens.

### 3.3.4. Data Collection Tool

The data collection tool is classified into two types: interviews and questionnaires. Quantitative methodology often used questionnaires; however qualitative methodology used interviews. Along as this research use quantitative methodology, questionnaires are a proper data collection tool. The target demographics are anticipated to respond to questionnaires that contain several kinds of questions. This research uses multiple choice list within structured questionnaire to allow citizens to choose a suitable answer.

## 3.4. Hypotheses Development

This study examines citizens satisfaction in Egypt and Security and Privacy, in order to assess their impact on citizen satisfaction.

The researcher develops hypothesis according to literature review to test impact of the selected security and privacy on citizen satisfaction in Egypt.

### 3.4.1. Security\Privacy and Citizen Satisfaction

Security and privacy refer to citizens' perception to their security when using the service through digital portal. To be technically secure, there must be honesty, privacy, and identity that does not record. Security also includes using new technologies that can make people more likely to use the internet

safely, like cryptography and digital signatures that keep citizens safe from scams, hackers, and "phishing." Also, showed that security has a good effect on how citizens satisfied with online services (Mulyana & Jamaludin, 2023). According to the previously mentioned literature studies, the third hypothesis is proposed as:

H3: Impact of Security and privacy are positively related to citizen satisfaction.

## 4.0. Data Analysis

### 4.1. Cronbach Alpha Report

Table 2 Reliability Statistics

| Variable | Cronbach's Alpha |
|---|---|
| Security and Privacy | 0.925 |

## 4.2 Normality test

Table 3 Tests of Normality

| Tests of Normality | | | |
|---|---|---|---|
| | Shapiro-Wilk | | |
| | Statistic | Df | Sig. |
| Security and Privacy | 0.964 | 384 | 0.000 |
| Citizen Satisfaction | 0.967 | 384 | 0.000 |

## 4.3. Correlation Test Analysis

Table 4 Correlation between Citizen Satisfaction and other variables

| Correlations | | Security and Privacy | Citizen Satisfaction |
|---|---|---|---|
| Citizen Satisfaction | Pearson Correlation | .690[**] | 1 |
| | Sig. (2-tailed) | 0.000 | |
| | N | 384 | 384 |

The results shown in table 4 indicate a statistically significant positive correlation between citizen satisfaction and ease of interaction which means a higher Citizen Satisfaction   is associated with higher Ease of Interaction in this sample.

The results shown in table 4 indicates a statistically significant positive correlation between citizen satisfaction and Security and Privacy which means a higher citizen satisfaction is associated with higher security and privacy in this sample.

The correlation between citizen satisfaction   and security and privacy is considered to be strong since the correlation coefficient ($r = .690$, $p < .000$).

## 4.4. Regression Analysis

Table 5 Security and privacy: Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | |
|---|---|---|---|---|---|
| 1 | .690[a] | 0.476 | 0.475 | 0.65773 | |

a. Predictors: (Constant), Security and privacy

Table 6 Security and privacy: ANOVA

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 150.140 | 1 | 150.140 | 347.057 | .000[b] |
| | Residual | 165.256 | 382 | 0.433 | | |
| | Total | 315.396 | 383 | | | |

a. Dependent Variable: Citizen Satisfaction

b. Predictors: (Constant), Security and privacy

Table 7 Security and privacy: Coefficients

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.446 | 0.159 | | 2.801 | 0.005 |
| | Security | 0.810 | 0.043 | 0.690 | 18.629 | 0.000 |

a. Dependent Variable: Citizen Satisfaction

The researcher carried out a simple linear regression test to assess the effect on Citizen Satisfaction (outcome variable) based on Security and privacy (predictor variable), the results shown in table 5 and 6 indicates a significant regression equation (F $(1, 382) = 347.057$, $p < .001$), and $R^2$ of 0.476. This means that Security and privacy explains 47.6% of the variance in Citizen Satisfaction.

As shown in table 7 the unstandardized regression coefficient (B = 0.810, $p < .001$) which indicates that for every one unit increase in Security and privacy, there will be 0.810 unit increase in Citizen Satisfaction in case of consider all other variables are constant.

## 5.0. Discussion and Recommendations

### 5.1. Discussion of the Results

Hypothesis: Impact of Security and privacy are positively related to citizen satisfaction.

The analytical findings demonstrate that Security and privacy account for 46.6% of the variation in citizen satisfaction, indicating a significant relationship. This suggests that enhancements in Security and privacy could lead to increased citizen satisfaction. The reliability of the fulfillment was assessed through Cronbach's alpha, which produced a score of 0.925, signifying good reliability. The unstandardized regression coefficient (B = 0.810, $p < .001$) indicates that a one-unit increase in perceived advantages is associated with a 0.810 unit increase in citizen satisfaction, holding all other variables constant. The correlation between Security and privacy and citizen satisfaction is solid indicated by a correlation coefficient of ($r = 0.690$, with p

< .0). The findings highlight the importance and breadth of the influence of security and privacy on citizen satisfaction. Moreover, this discovery corresponds with the notion that security and privacy reflect how citizens belief government websites or portals as secure for sharing private and financial data during communications and transactions with the government. It is crucial that these portals are not disclosed or shared with other organizations or misused, as this enhances citizens' satisfaction with digital government portals.

## 5.2. Research Recommendations

### 5.2.1 Objective Performance indicators

The research results show that the positive relationship between citizen satisfaction and dimensions of digital portal service quality so enhance this dimension leads to enhance citizen satisfaction. So, the researcher identifies objective performance indicators (OPIs) for the digital transformation service quality dimension. OPIs used to assess performance service quality dimension. These indicators help government to reach their goal in delivering the service and by regularly tracking these OPIs government can assess performance of delivered services and identify the area of enhancement.

### 5.2.1.1. Privacy and security OPIs

- Frequency of Security Breaches: Count of security incidents.
- Citizens Trust in Security: Proportion of individuals who feel assured in engaging for financial transactions.
- Acceptance of Multi-Factor Authentication: Number of MFA usage.

## 5.3. Recommendation

According to the result of the data analysis, the researcher develops recommendations. These recommendations provide feasible solution that can enhance the government digital portal.

Table 8 Recommendations

| Hypothesis | Result | Recommendations |
|---|---|---|
| H: Impact of Security and privacy are positively related to citizen satisfaction. | Security and privacy positively impacted citizens satisfaction | 1.Establish comprehensive encryption protocols to ensure security of information.<br>2. Enhance public understanding of cybersecurity standards with launch public security awareness through different types of media and social media platform.<br>3. Implement periodic cybersecurity scan to identify vulnerabilities. |

## 5.4. Research limitations

Although the research findings present important insights into the government digital transformation service quality and citizens satisfaction, it is crucial to recognize the research's limitations. The research has aimed for a sample that reflects the target population. The electronic questionnaire was sent randomly to Egyptian citizens residing via email, WhatsApp, and LinkedIn. Therefore, it seems that those who participated were internet users and well educated, while questionnaire reached citizens across various regions of Egypt and included a diverse range of backgrounds. Based on the best efforts in distributing the questionnaire throughout Egypt, the collected sample reflects a good demographic diversity. The identified limitations give options for future research, which will enhance and integrate the areas of digital transformation in government service quality and citizen satisfaction.

## 5.5 Future Research

Based on the previous limitations, this research provides several recommendations for future research that might improve and strengthen this topic.

1. The impact of government digital transformation portal service quality on engagement and loyalty.
2. Utilize different methodologies, including a mixed-method or qualitative approach, to achieve a deeper insight to the relationships among government digital transformation service quality and satisfaction, engagement, and loyalty.
3. Implementing qualitative research techniques, such as in-depth interviews and focus group discussions with citizens, could have significantly enhanced this study.
4. Growing the sample size may mitigate any potential bias in the findings towards a specific direction. Therefore, future studies that emphasize official questionnaires executed by government entities could encourage greater citizen participation.

## 5.6 Conclusion

This research aims at studying the impact of government digital transformation services quality on citizens' satisfaction in Egypt. This research is conducted on sample size of Egyptian citizens to measure their satisfaction from the government digital transformation quality service. The result indicates the government digital transformation quality service significantly and positively impact the citizens satisfaction.

# References

Alkraiji, A. (2020). Citizen Satisfaction With Mandatory E-Government Services: A Conceptual Frameworkand an Empirical Validation. *IEEE Access, 8*, 117253-117265. doi:10.1109/ACCESS.2020.3004541

Alkraiji, A., & Ameen, N. (2021). The impact of service quality, trust and satisfaction on young citizen loyalty towards government e-services. *Information Technology & People*.

Bosco, F. A., Aguinis, H., Singh, K., Field, J. G., & Pierce, C. A. (2015). Correlational effect size benchmarks. *journal of Applied Psychology, 100*(2), 431.

Brown, A., Venkatesh, V., Kuruzovic, J., & Massey, P. (2008). Expectation confirmation: An examination of three competing models. *Organizational Behavior and Human Decision Processes, 105*(1), 52-66. doi:10.1016/j.obhdp.2006.09.008

Bui, N. &. (2022). Predicting Customer Loyalty in the Mobile Banking Setting: An Integrated Approach. *International Journal of E-Services and Mobile Applications, 14*, 1-22. . doi:10.4018/IJESMA.296576.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences.*

Cohen, J., P., Cohen, West, S., & Aiken, L. (2003). *Applied Multiple Regression/Correlation Analysis.*

Field, A. (2009). *Discovering Statistics Using SPSS.*

Ghasemi, A., & Zahediasl, S. (2012). Normality tests for statistical analysis: a guide for nonstatisticians. *International journal of endocrinology and metabolism, 10*(2), 486.

Ghoneim, D. A. (2021). Egypt Digitalization In Alignment with Egypt vision 2030 for SDGS. *IDSC.*

Hair, j., Black, W., Babin, B., & RE., A. (2010). *Multivariate Data Analysis: A Global Perspective.*

Irani, Z. W.- H.- A. (2012). An analysis of methodologies utilised in e-government research; A user satisfaction perspective. *Journal of Enterprise Information Management, 25*(3), 298-313. doi:10.1108/17410391211224417

Jiang, A. &. (2015). Customer-perceived value and loyalty: how do key service quality dimensions matter in the context of B2C e-commerce? *Service Business., 10*(2). doi:10.1007/s11628-015-0269-y.

Khan, M. B. (2015). Customer satisfaction at public sector: a case study of Pakistan housing authority. *Pakistan Journal of Social Sciences, 35*(2), 1037-1050.

MCIT. (2024, July 7). *Digital Egypt Portal*. Retrieved May 30, 2024, from Digital Egypt: https://digital.gov.eg/

Memon, M., Ting, H., Cheah, J.-H., Ramayah, T., Chuah, F., & Cham, T.-H. (.-x. (2020). Sample Size for Survey Research: Review and Recommendations. *Journal of Applied Structural Equation Modeling, 4*(2), i – xx. doi:10.47263/JASEM.4(2)01

Mohd Arof, K. &. (2018). Contractor's Performance Appraisal System in the Malaysian Construction Industry: Current Practice, Perception and Understanding. *International Journal of Engineering & Technology. 7. 46. 1, 46*(1), 7. doi: 10.14419/ijet.v7i3.9.15272.

Moussa, A., & Tarek, S. (2023). Digital Transformation and its Impact in Egypt: A Comprehensive Literature Review. *International Journal of Professional Business Review, 8*. doi:10.26668/businessreview/2023.v8i8.2755

Mulyana, Y., & Jamaludin, M. (2023). Effects of government electronic service quality on citizen satisfaction with integrated service delivery in urban areas. *International Journal of Public Policy and Administration Research*. doi:10. 24-33. 10.18488/74.v1

Mulyana, Y., & Jamaludin, M. (2023). Effects of government electronic service quality on citizen satisfaction with integrated service delivery in urban areas. *International Journal of Public Policy and Administration Research, 10*(1), 24-33. doi:10.18488/74.v10i1.3293

Nolan, S. A., & Heinzen, T. (2011). *Statistics for the behavioral sciences.*

Nunnally, J. C. (1978). Psychometric theory. *New York: McGraw-Hill.*

Pallant, J. (2005). *SPSS Survival Manual, 2nd Ed. Buckingham.*

Pham, L., Limbu, Y. B., Le, M. T., & Nguyen, N. L. (2023). E-government service quality, perceived value, satisfaction, and loyalty: evidence from a newly

emerging country. *Journal of Public Policy, 43*(4), 812–833. doi:10.1017/S0143814X23000296

Piyasunthornsakul, P. a. (2022). Evaluating the Citizen Satisfaction on Service Quality Using the SERVQUAL Model: The Case of Kaeng Khol Municipality, Thailand. *Journal of Management in Business, Healthcare, and Education, 1*(2), 1-19. Retrieved from https://ssrn.com/abstract=4005048

Psomas, E. B. (2020). Determining the impact of service quality on citizens' satisfaction and the role of citizens' demographics. The case of the Greek citizen's service centers. *The TQM Journal, Vol. ahead-of-pr*.

Safaa, H. (2018). Evaluating the Performance of e-Government in Egypt:A Public-Value Approach. *International Journal of Online Marketing*, 20.

Sekaran, U. (2003). Research methods for business:. *a skill-building approach*.

Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach. John.*

Shareef, M., Archer, N., & Dwivedi, Y. (2015). An empirical investigation of electronic government service quality: from the demand-side stakeholder perspective. *Total Quality Management & Business Excellence, 26*(3-4), 339-354. doi:10.1080/14783363.2013.832477

المستخلص:

يُعد التحول الرقمي الحكومي أمراً بالغ الأهمية لمعظم الدول حول العالم. وقد قطعت الحكومة المصرية شوطًا جيدا في التحول الرقمي عبر مبادرات عديدة تُركز على تحسين تقديم الخدمات الحكومية وتحسين جودتها. ووفقًا لرؤية مصر 2030، تُبرز هذه الرؤية أهمية تعزيز التحول الرقمي الحكومي لزيادة رضا المواطنين. يهدف البحث إلى تحديد أبعاد جودة الخدمة للتحول الرقمي الحكومي، حيث يُنظر إلى المواطنين كعملاء في منظور التسويق، ويستخدم نموذجًا يُصنف جودة خدمات الحكومة الإلكترونية إلى خمسة أبعاد، هي: سهولة التفاعل، والإنجاز، والأمان والخصوصية، ورعاية المواطنين، والثقة. والتركيز في هذه الورقة البحثية علي الأمان و الخصوصية وتقييم علاقتها برضا المواطنين.

اعتمد البحث على منهجية كمية، وطبق أسلوب العينة غير الاحتمالية مع عينة فرعية من نوع الراحة، حيث تم اختيار العينات من المواطنين المصريين. تم إعداد استبيان وجُمعت البيانات من 384 مواطنًا مصريًا. وخلص البحث إلى أن الأمان والخصوصية كأحد أبعاد جودة الخدمات الحكومية الرقمية تؤثر إيجاباً على رضا المواطنين.

**الكلمات المفتاحية:** بوابة مصر الرقمية، التحول الرقمي الحكومي، الحكومة الإلكترونية، جودة الخدمات الحكومية، رضا المواطنين.