

RESEARCH TITLE

Digital Transformation and Citizen Engagement: Evaluating the Impact of E-Government on Customer Satisfaction in Manshiyat Bani Hasan Municipality

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HNSJ, 2024, 5(2); <https://doi.org/10.53796/hnsj52/23>

Published at 01/02/2024

Accepted at 21/01/2024

Abstract

This research investigates the impact of e-government implementation on customer satisfaction in Manshiyat Bani Hasan municipality. The study aims to evaluate the transition from traditional service delivery to digital platforms and its effect on the user experience. A quantitative approach was adopted, utilizing a survey method to collect data from a sample of 38 residents. The survey encompassed questions about ease of information access, efficiency of service delivery, trust and security in data handling, and overall satisfaction with e-government services.

The findings reveal that the e-government services are generally perceived as user-friendly and efficient, with an average ease of access score of 2.1 and a service delivery efficiency score of 2.2. However, concerns regarding data security and privacy are evident, as indicated by a neutral average score of 3.1 in trust and security. Despite these concerns, the overall satisfaction with e-government services is high, with an average score of 2.0, suggesting that the benefits of digital transformation in public service delivery are recognized by the citizens.

The study highlights the importance of user-friendly design and efficient service delivery in e-government platforms, while also underscoring the need for robust security measures to build trust among users. These insights are crucial for policymakers and administrators in Manshiyat Bani Hasan municipality to enhance the effectiveness of e-government initiatives and to ensure sustainable digital transformation in public services. The research contributes to the growing body of literature on e-government and provides practical implications for improving digital governance in similar municipal contexts.

Key Words: E-Government, Customer Satisfaction, Digital Transformation, Public Service Delivery

"التحول الرقمي والمشاركة المدنية: تقييم تأثير الحكومة الإلكترونية على رضا العملاء في بلدية منشية بني حسن"

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HNSJ, 2024, 5(2); <https://doi.org/10.53796/hnsj52/23>

تاريخ القبول: 2024/01/21

تاريخ النشر: 2024/02/01

المستخلص

تستكشف هذه الدراسة تأثير تطبيق الحكومة الإلكترونية على رضا العملاء في بلدية منشية بني حسن. تهدف الدراسة إلى تقييم الانتقال من تقديم الخدمات التقليدية إلى المنصات الرقمية وتأثيره على تجربة المستخدم. تم اعتماد نهج كمي، باستخدام طريقة المسح لجمع البيانات من عينة مكونة من 38 ساكنًا. شمل الاستطلاع أسئلة حول سهولة الوصول إلى المعلومات، وكفاءة تقديم الخدمة، والثقة والأمان في التعامل مع البيانات، والرضا العام عن خدمات الحكومة الإلكترونية. تكشف النتائج أن خدمات الحكومة الإلكترونية يُنظر إليها عمومًا على أنها سهلة الاستخدام وفعالة، حيث بلغ متوسط درجة سهولة الوصول 2.1 ومتوسط درجة كفاءة تقديم الخدمة 2.2. ومع ذلك، هناك مخاوف بشأن أمان البيانات وخصوصيتها، كما يتضح من متوسط الدرجة المحايدة 3.1 في الثقة والأمان. على الرغم من هذه المخاوف، فإن الرضا العام عن خدمات الحكومة الإلكترونية مرتفع، حيث بلغ متوسط الدرجة 2.0، مما يشير إلى أن المواطنين يدركون فوائد التحول الرقمي في تقديم الخدمات العامة.

تسلط الدراسة الضوء على أهمية التصميم السهل الاستخدام وكفاءة تقديم الخدمة في منصات الحكومة الإلكترونية، مع التأكيد أيضًا على ضرورة وجود تدابير أمان قوية لبناء الثقة بين المستخدمين. توفر هذه الرؤى أهمية لصانعي السياسات والمدراء في بلدية منشية بني حسن لتعزيز فعالية مبادرات الحكومة الإلكترونية وضمان التحول الرقمي المستدام في الخدمات العامة. تسهم البحث في توسيع نطاق الأدبيات حول الحكومة الإلكترونية وتقديم تطبيقات عملية لتحسين الحوكمة الرقمية في سياقات بلدية مماثلة.

الكلمات المفتاحية: الحكومة الإلكترونية، رضا العملاء، التحول الرقمي، تقديم الخدمات العامة

1. Introduction:

The advent of e-government represents a transformative shift in public administration, leveraging information and communication technologies (ICT) to enhance the efficiency, accessibility, and quality of government services (Dawes, 2008). This digital transformation is not merely a technological upgrade but a fundamental change in the way governments interact with citizens and deliver services (Layne & Lee, 2001).

1.1 Emergence of E-Government

E-government emerged as a response to the increasing demands for more efficient and transparent government operations and the growing ubiquity of the internet and digital technologies in the late 20th century (Heeks & Bailur, 2007). It encompasses a range of activities, from digitizing existing government services to creating new online platforms for citizen engagement (Bwalya & Mutula, 2016).

1.2 Impact on Public Administration

The impact of e-government on public administration is profound. It has the potential to streamline processes, reduce costs, and improve the speed and quality of service delivery (Ndou, 2004). Moreover, e-government initiatives can enhance transparency and accountability by making government operations more visible and accessible to citizens (Welch et al., 2005).

1.3 E-Citizen-Centric Services

A key aspect of e-government is its focus on citizen-centric services. This approach prioritizes the needs and experiences of citizens, aiming to make interactions with the government more convenient and user-friendly (Thomas & Streib, 2003). The shift towards citizen-centric services is a response to increasing public expectations for higher service standards in the digital age (West, 2004).

1.4 Challenges and Opportunities

Despite its potential, the implementation of e-government comes with challenges. These include issues related to digital divide, privacy and security concerns, and the need for organizational change within government entities (Jaeger & Thompson, 2003). However, these challenges also present opportunities for innovation and improvement in public service delivery (Gil-Garcia & Pardo, 2005).

1.5 E-Government in Developing Contexts

In developing contexts, such as Manshyyat Bani Hasan municipality, the adoption of e-government presents unique challenges and opportunities. Limited ICT infrastructure, varying levels of digital literacy among citizens, and resource constraints are common challenges (Bhatnagar, 2004). However, e-government in these settings can also drive significant improvements in governance and public service delivery, contributing to broader development goals (Heeks, 2002).

In summary, this research aims to provide a focused and insightful analysis of the impact of e-government on customer satisfaction in Manshyyat Bani Hasan municipality, offering valuable contributions to both practice and academic literature in the field of digital governance.

2. Literature Review

The literature on e-government and customer satisfaction presents a diverse range of studies, focusing on various aspects of digital transformation in public service delivery and its impact on citizen satisfaction.

2.1 Digital Transformation in Public Service

Wang and Ma (2022) explored the digital transformation of citizens' evaluations of public service delivery in China. They found that digital interfaces, particularly mobile applications, significantly facilitated citizen evaluations and improved satisfaction compared to offline channels. This study underscores the importance of user-friendly digital platforms in enhancing citizen engagement and satisfaction (Wang & Ma, 2022).

2.2 E-Government in Rural Areas

Akter, Uddin, and Himu (2023) conducted a study on users' perceptions and satisfaction in public service delivery through Union Digital Centers in Bangladesh. Their research highlighted the crucial role of ICT in government service provision, especially in rural areas. The study recommended increasing awareness, training, and improving office conditions to ensure effective service delivery (Akter, Uddin, & Himu, 2023).

2.3 Impact on Government Employees

Fleischer and Wanckel (2023) investigated the effects of digital transformation on government employees' job satisfaction, focusing on the concept of "digital overload." Their findings revealed that digital overload negatively affected job autonomy and, consequently, job satisfaction. This study highlights the need to consider the well-being of government employees in the digital transformation process (Fleischer & Wanckel, 2023).

2.4 E-Government during the COVID-19 Pandemic

Galushi and Malatji (2022) addressed the challenges and opportunities of digital public administration and e-governance in South Africa during the COVID-19 pandemic. They emphasized that while digital transformation aims to enhance service delivery, it also poses challenges, particularly for the poor in rural areas. The study highlighted the importance of inclusive governance in the context of digital transformation (Galushi & Malatji, 2022).

2.5 Synthesis

These studies collectively provide a comprehensive understanding of the multifaceted nature of e-government and its impact on customer satisfaction. They highlight the importance of user-friendly digital interfaces, the need for inclusive and equitable access to digital services, the impact of digital transformation on government employees, and the challenges and opportunities presented by the COVID-19 pandemic. This body of literature underscores the complexity of implementing e-government initiatives and the necessity of addressing both technological and human factors to achieve high levels of customer satisfaction.

3. Methodology

3.1 Research Design

The study adopts a quantitative research design to evaluate the impact of e-government on customer satisfaction. This approach is chosen for its effectiveness in providing measurable and comparable results that can be statistically analyzed.

3.2 Data Collection Method

The primary data for this study will be collected through a survey. The survey will consist of four questions designed to assess various dimensions of customer satisfaction with e-government services in Manshyat Bani Hasan municipality.

3.3 Survey Instrument

The survey will include both closed-ended and Likert-scale questions. The questions will focus on:

1. The ease of use and accessibility of e-government services.
2. The perceived efficiency and time-saving aspects of these services.
3. The level of trust and security felt by users while using e-government services.
4. Overall satisfaction with the e-government services provided.

3.4 Sampling Method

A purposive sampling method will be used to select participants for the survey. The target population will be citizens of Manshyat Bani Hasan municipality who have used e-government services. The sample size will be determined based on the population size, using a statistical sampling formula to ensure representativeness.

3.5 Data Collection Procedure

Data collection will be conducted through supervised meetings with customers. These meetings will be organized in collaboration with the municipal office to ensure a diverse and representative sample of e-government service users. Participants will be briefed about the purpose of the study and assured of the confidentiality of their responses.

3.6 Data Analysis

The collected data will be analyzed using the average of answers, a statistical method suitable for examining the relationship between categorical variables.

3.7 Ethical Considerations

The study will adhere to ethical research standards, including obtaining informed consent from all participants, ensuring the confidentiality and anonymity of responses, and using the data solely for research purposes.

3.8 Limitations

The study may face limitations such as response bias and the limited scope of the survey questions. Additionally, the findings may not be generalizable beyond the municipality of Manshyyat Bani Hasan.

3.9 Expected Outcome

The expected outcome of this research is to provide empirical evidence on the impact of e-government on customer satisfaction in Manshyyat Bani Hasan municipality. The findings will offer insights for policymakers and administrators to improve e-government services and enhance citizen satisfaction.

4. Results and Discussions

4.1 Sample Size Calculation

The total population of Manshyat Bani Hasan is 14,180 (Ministry of Interior, 2023), we can use a sample size calculator or apply a formula. The formula for calculating sample size, when the population is finite (Cochran, 1977), is:

$$n = \frac{N \times Z^2 \times p \times (1 - p)}{(N - 1) \times E^2 + Z^2 \times p \times (1 - p)}$$

Where:

- n = sample size
- N = total population size (12,244 in this case)
- Z = Z-score (based on confidence level)
- p = estimated proportion of the attribute present in the population (0.5 is used for maximum variability)
- E = margin of error

Assuming a 95% confidence level (which is standard for social science research) and a 5% margin of error, the Z-score (Z) is 1.96. If we don't have a specific estimate for p , we use 0.5 as it provides the maximum sample size.

Plugging these values into the formula:

$$n = \frac{14180 \times 1.96^2 \times 0.5 \times 0.5}{(14180 - 1) \times 0.05^2 + 1.96^2 \times 0.5 \times 0.5} \approx 37.4$$

Rounding up, the sample size needed for a population of 12,244 with a 95% confidence level and a 5% margin of error is approximately 38.

4.2 Survey Tool Development

The survey tool contains 6 main sections as shown in Table 1.

Table 1: Survey Structure

Section	Questions
1. Demographic Questions	How old are you? What is your gender? What is your level of education?
2. Usage of E-Government Services	Have you used any e-government services provided by Manshyyat Bani Hasan municipality? (Yes/No)
3. Ease of Use and Accessibility	How easy was it to find information about the e-government services you needed? (Very Easy, Easy, Neutral, Difficult, Very Difficult)
4. Efficiency and Time-Saving	How satisfied are you with the speed of service delivery through e-government platforms? (Very Satisfied, Satisfied, Neutral, Dissatisfied, Very Dissatisfied)
5. Trust and Security	How confident are you in the security and privacy of your data when using e-government services? (Very Easy, Easy, Neutral, Difficult, Very Difficult)
6. Overall Satisfaction	Overall, how satisfied are you with the e-government services provided by Manshyyat Bani Hasan municipality? (Very Satisfied, Satisfied, Neutral, Dissatisfied, Very Dissatisfied)

4.2 Demographic Information

In the conducted study, a total of 38 respondents consented to participate in the supervised survey. The gender distribution of the participants was as follows: 23 males, constituting 60.5% of the sample, and 15 females, representing 39.5%. The mean age of the respondents was 40 years, Figure 1.

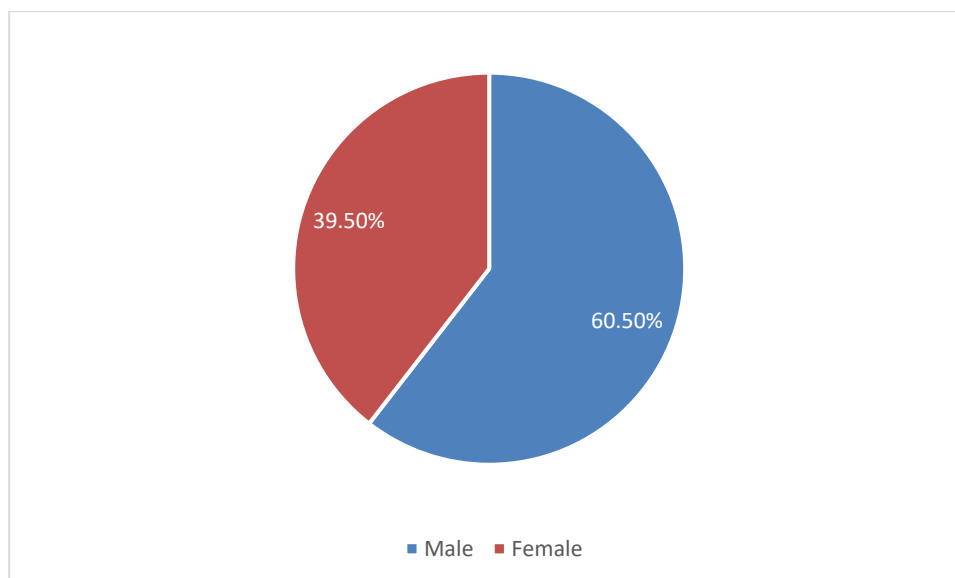


Figure 1: Gender Information

The educational qualifications of the participants varied, with 6 holding high school diplomas, 10 possessing diplomas (post-secondary non-tertiary education), 6 having bachelor's degrees, 9 with master's degrees, and 7 with doctoral degrees. These demographic details are summarized in Table 2. All participants used e-government services provided by Manshyyat Bani Hasan municipality.

Table 2: Participants Information

Gender	High School	Diploma	Bachelor	Master	Ph.D.
Male	4	6	2	7	4
Female	2	4	4	2	3

4.3 Question Analysis

a) Evaluation of Information Accessibility in E-Government Services (Question 1):

The mean score for the question "How easy was it to find information about the e-government services you needed?" was calculated to be 2.1. This indicates that the usability of e-government services provided by Manshyyat Bani Hasan municipality is relatively straightforward, suggesting that most individuals can utilize these services without requiring prior experience.

b) Assessment of Service Delivery Speed (Question 2):

For the query "How satisfied are you with the speed of service delivery through e-government platforms?", the average response was 2.2. This score implies that participants perceive the service delivery via e-government platforms to be quicker compared to traditional methods.

c) Perceptions of Trust and Security in E-Government Services (Question 3):

In response to the question "How confident are you in the security and privacy of your data when using e-government services?", the average score was 3.1, reflecting a neutral stance among participants. This suggests that there is a general ambivalence regarding the security and privacy of personal information in e-government services, indicating a lack of trust and concerns about potential data compromise.

d) Overall Satisfaction with E-Government Services (Question 4):

Regarding overall satisfaction, participants generally viewed the e-government services in Manshyyat Bani Hasan positively. This is evidenced by the average score of 2.0 in response to the question "Overall, how satisfied are you with the e-government services provided by Manshyyat Bani Hasan municipality?". This score indicates a general satisfaction with the services rendered, reflecting the effectiveness and acceptability of the e-government initiatives in the municipality.

5. Conclusion

Based on the analysis of the survey data collected from 38 participants in Manshyyat Bani Hasan municipality, several key conclusions can be drawn regarding the impact of e-government services on customer satisfaction:

- Ease of Information Accessibility:** The average score of 2.1 for the first question suggests that the e-government services are relatively user-friendly. Most users find it somewhat easy to locate the information they need, indicating that the e-government platform is accessible even to those without extensive prior experience with digital services.
- Efficiency in Service Delivery:** The response to the second question, with an average score of 2.2, reflects a positive perception of the efficiency of e-government services. Participants generally feel that the service delivery through e-government platforms is faster compared to traditional methods, highlighting the efficiency gains achieved through digital transformation.
- Concerns about Trust and Security:** The neutral average score of 3.1 in response to the question about trust and security in e-government services indicates a significant area of

concern. This ambivalence suggests that while users are not overwhelmingly distrustful, they are not entirely confident about the security and privacy of their data. This finding points to the need for enhanced security measures and better communication about privacy protections to build trust among users.

4. **Overall Satisfaction with E-Government Services:** The overall satisfaction with e-government services in Manshyyat Bani Hasan is generally positive, as indicated by the average score of 2.0 in the final question. This suggests that, despite some concerns, the majority of users are satisfied with the e-government services provided. It reflects the success of the municipality in implementing e-government initiatives that meet the needs and expectations of its citizens.

6. Implications and Recommendations:

- **Enhance User Experience:** Continuous efforts should be made to improve the user interface and accessibility of e-government services to maintain and increase ease of use.
- **Focus on Efficiency:** The positive perception of service delivery speed should be sustained and further enhanced by streamlining processes and integrating more services into the e-government platform.
- **Address Security Concerns:** Given the neutral stance on trust and security, it is imperative to strengthen data protection measures and communicate these effectively to the public to build confidence in the system.
- **Monitor Satisfaction Levels:** Regular surveys and feedback mechanisms should be implemented to continually assess user satisfaction and adapt services to evolving user needs and technological advancements.

In conclusion, the findings of this study indicate that the e-government initiatives in Manshyyat Bani Hasan municipality have been largely successful in enhancing service delivery and user satisfaction. However, there is a clear need for ongoing improvements, particularly in the areas of data security and user trust, to ensure the long-term success and sustainability of these digital governance efforts.

7. References

1. Akter, S., Uddin, M. N., & Himu, F. H. (2023). Users' Perception and Satisfaction in Public Service Delivery through Union Digital Canters in Bangladesh: A Case Study on Gobra, Gopalganj Areas.
2. Bhatnagar, S. (2004). *E-Government: From Vision to Implementation*. Sage Publications.
3. Bwalya, K. J., & Mutula, S. (2016). *E-government implementation and practice in developing countries*. IGI Global.
4. Cochran, W. G. (1977). *Sampling Techniques* (3rd ed.). New York: John Wiley & Sons.
5. Dawes, S. S. (2008). The evolution and continuing challenges of e-governance. *Public Administration Review*, 68(S1), S86-S102.
6. Fleischer, J., & Wanckel, C. (2023). Job Satisfaction and the Digital Transformation of the Public Sector: The Mediating Role of Job Autonomy.
7. Galushi, L. T., & Malatji, T. (2022). Digital Public Administration and Inclusive Governance at the South African Local Government, in *Depth Analysis of E-Government and Service Delivery in Musina Local Municipality*.
8. Gil-Garcia, J. R., & Pardo, T. A. (2005). E-government success factors: Mapping practical tools to theoretical foundations. *Government Information Quarterly*, 22(2), 187-216.
9. Heeks, R. (2002). E-government in Africa: Promise and practice. *Information Polity*, 7(2-3), 97-114.
10. Heeks, R., & Bailur, S. (2007). Analyzing e-government research: Perspectives, philosophies, theories, methods, and practice. *Government Information Quarterly*, 24(2), 243-265.
11. Jaeger, P. T., & Thompson, K. M. (2003). E-government around the world: Lessons, challenges, and future directions. *Government Information Quarterly*, 20(4), 389-394.

12. Layne, K., & Lee, J. (2001). Developing fully functional E-government: A four stage model. *Government Information Quarterly*, 18(2), 122-136.
13. Ministry of Interior, Manshyat Bani Hasan District. (2023). Accessed December 2023. URL.
14. Ndou, V. (2004). E-government for developing countries: Opportunities and challenges. *The Electronic Journal of Information Systems in Developing Countries*, 18(1), 1-24.
15. Thomas, J. C., & Streib, G. (2003). The new face of government: Citizen-initiated contacts in the era of e-government. *Journal of Public Administration Research and Theory*, 13(1), 83-102.
16. Wang, C., & Ma, L. (2022). Digital transformation of citizens' evaluations of public service delivery: evidence from China.
17. Welch, E. W., Hinnant, C. C., & Moon, M. J. (2005). Linking citizen satisfaction with e-government and trust in government. *Journal of Public Administration Research and Theory*, 15(3), 371-391.
18. West, D. M. (2004). E-government and the transformation of service delivery and citizen attitudes. *Public Administration Review*, 64(1), 15-27.