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Research Article

Enhancing Operational Performance and Decision-Making through a Digital Data Tracking System

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ABSTRACT

The purpose of this study was to determine the effectiveness and impact of a digital office data tracking system in the performance and decision-making of the selected employees. While manual tracking systems remain functional, their drawbacks, including inefficiency and potential for errors, make them less desirable compared to the modern and convenient digital office tracking system. These reasons prompted the researcher to delve into the advantages and benefits this digital tracking system will provide the Department of Agrarian Reform.

A survey research design was utilized to carry out this study. Findings indicate the majority of the fourteen (14) respondents were either satisfied or extremely satisfied with the current office data tracking system in place.

Keywords*: Decision-making, Operational performance*

Introduction

In today's modern world and rapid technological evolution, companies aim to find innovative solutions to streamline their operations and enhance efficiency. One area that has proven significant transformation is the office management system.

Before the new technological advancement was introduced, companies used traditional data tracking systems. These manual tracking systems, while functional, often prove inconvenient, time-consuming, and prone to errors. The digital office tracking system emerges as a modern and indispensable tool that can lessen, if not eliminate these limitations. These reasons prompted the researcher to delve into the advantages and benefits this digital tracking system will provide the Department of Agrarian Reform which in recent years had been using the old way of data recording of incoming and outgoing documents. During the pandemic season, the agency introduced and implemented the Digital Office Data Tracking System.

This transformation is essential for the department to remain competitive and stay ahead of the curve. It aims to evaluate the effectivity and impact of a Digital Office Data Tracking system in enhancing operational performance and decision-making within the organization, an

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advancement that will guide the office management in the right direction. It can help the records management to streamline all the incoming and outgoing documents in a system where they can easily access the status of routed or pending documents. Welcoming this digital transformation can help keep us with client expectations, improve efficiency, streamline operations and decision-making, save cost, and enhance security, employee productivity, and adaptability in any situation.

This study examines how digital office data tracking systems influence employee effectiveness and productivity. By exploring employees' experiences and perceptions of utilizing these systems, we aim to uncover their role in enhancing performance and contributing to overall organizational success.

This study is relevant to the agency's office management system because it can highlight opportunities for improvement and optimization. By examining the advantages and challenges of digital tracking systems, the agency can make well-informed decisions about their adoption and use.

Digital office data tracking systems have become increasingly accessible and affordable due to rapid technological advancements. The growing complexity of business operations necessitates efficient tracking to meet competitive demands. By adopting these systems, agencies can improve operational efficiency, enhance responsiveness, and potentially increase employee satisfaction by streamlining workflows and reducing administrative burdens.

By investigating the effectiveness and impact of digital office data tracking systems on employee efficiency and productivity, this study provides valuable insights into the agency's office management system which ultimately contribute to the agency's overall success that is timely and fitting for several reasons.

Review of Related Literature

The COVID-19 pandemic has brought the world to an unimaginable level. It has intensified the necessity of workplace digitalization, due to the various restrictions on physical interactions that it imposed. (Kraus et al., 2020; Ang, Wei & Arli, 2021) It brought about changes in consumer behavior, compelling organizations to conduct their businesses in a contactless environment. Digitalization has a direct impact on the performance of services and organizations worldwide. It can significantly enhance organizational efficiency by automating processes, improving data accuracy, and enabling real-time decision-making. Digital office data tracking systems, as a core component of digitalization, can contribute to these efficiency gains. Chen, Y., & Yang, Y. (2022). *The Impact of Digitalization on Organizational Efficiency: A Systematic Review*. This study found that digitalization can significantly enhance organizational efficiency by automating processes, improving data accuracy, and enabling real-time decision-making. Digital office data tracking systems, as a core component of digitalization, can contribute to these efficiency gains.

Digital transformation is a complex process that requires the commitment of all organizational resources: human, physical, organizational, and technological to apply digital technologies throughout the organization, especially in operations (Kutnjak, Pihiri, & Furjan, 2019), and (Stark, 2020) also emphasize that digital transformation is a profound transformation of paradigms. Business competencies, organizational models, business processes, and practices through digital technologies to meet customer needs and satisfaction.

Similarly, the implementation of digital office data tracking systems can lead to increased organizational productivity. By streamlining workflows, reducing errors, and providing timely information, these systems can enhance productivity and efficiency, Kim, J. H., & Park, J. (2021). *The Impact of Digital Transformation on Organizational Productivity: A Meta-Analysis*. This meta-analysis concluded that digital transformation, including the implementation of digital office data tracking systems, can lead to increased organizational productivity. By streamlining workflows, reducing errors, and providing timely information, these systems can enhance productivity and efficiency.

The use of digital office data tracking systems can improve decision-making processes. By providing access to real-time data, analytics, and insights, these systems can support informed decision-making and reduce the time

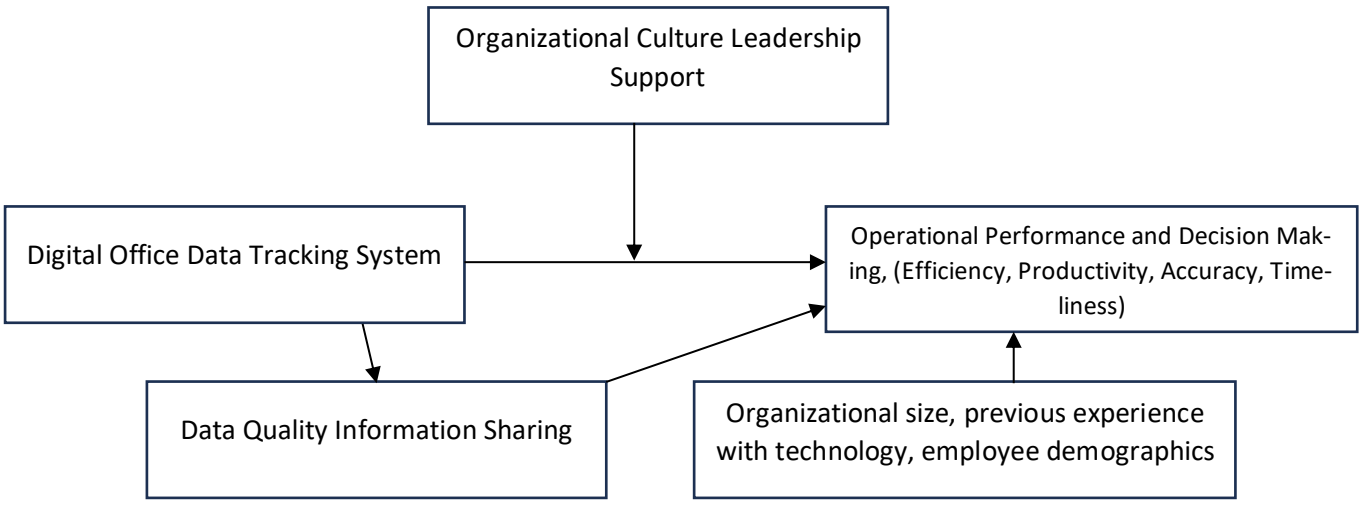
and cost associated with decision-making processes. Al-Qirim, K., & Al-Olayan, A. (2021) *The Role of Digital Transformation in Enhancing Decision-Making Processes.* This study explored how digital transformation, including the use of digital office data tracking systems, can improve decision-making processes. By providing access to real-time data, analytics, and insights, these systems can support informed decision-making and reduce the time and cost associated with decision-making processes. By providing data-driven insights and reducing information asymmetry, these systems can enable organizations to make more informed and effective decisions impacting organizational decision-making. Lee, J. W., & Chen, Y. (2020). *The Impact of Digital Transformation on Organizational Decision-Making: A Systematic Review*. This systematic review found that digital transformation, including the use of digital office data tracking systems, can positively impact organizational decision-making. By providing data-driven insights and reducing information asymmetry, these systems can enable organizations to make more informed and effective decisions. As examined by Wang, Y., & Li, H. (2022), *The Role of Digital Transformation in Improving Organizational Operations: A Systematic Review*. This study examined the impact of digital transformation on organizational operations. Digital office data tracking systems can contribute to improved operations by streamlining processes, reducing costs, and enhancing collaboration. By providing a centralized repository of data and enabling real-time tracking, these systems can optimize workflows and improve operational efficiency. On the role of digital transformation in improving organizational operations, digital office data tracking systems can contribute to improved operations by streamlining processes, reducing costs, enhancing collaboration and operational efficiency.

Overall, these studies provide strong evidence for the effectiveness and impact of digital office data tracking systems on organizational operations and decision-making. They highlight the benefits of these systems in automating processes, improving data accuracy, supporting informed decision-making, and enhancing operational efficiency which is in line with this study.

Theoretical Framework

Theoretical Framework Organizational Information Processing Theory (OIPT): This theory focuses on how organizations process information and use it to make decisions. OIPT can be applied to understand how the DOTS affects information flow, decision-making processes, and overall organizational performance. This theory shows that organizational behavior provides a foundational understanding of information processing within organizations. March, J G.., & March, J. G., & Simon, H.A. (1958). Organizations.

Conceptual Framework



Statement of the Problem

General Problem

This study aims to evaluate the efficiency and impact of the Digital Office Data Tracking System on enhancing operational performance and decision-making within the organization. The research will investigate the system's effectiveness in terms of key performance indicators, as well as its challenges, benefits, and influence on organizational processes.

Specific Problems

To achieve the purpose of this study, the following questions need to be addressed.

1. What is the user satisfaction level with the Digital Office Data Tracking System, and how does it influence system usage and performance?
2. What is the level of effectiveness of the Digital Office Data Tracking System in terms of response time, accuracy of information, efficiency, and productivity?
3. What are the potential challenges and limitations of implementing the Digital Office Data Tracking System?
4. What are the suggestions and recommendations in the implementation of the Digital Office Data Tracking System?
5. How does the Digital Office Data Tracking System improve decision-making processes within the organization.
6. What cost savings or financial impact has the implementation of the Digital Office Data Tracking System generated for the organization?
7. How adaptable is the Digital Office Data Tracking System in terms of scaling for future organizational needs or technology advancements?

Significance of the Study

A digital office data tracking system offers significant advantages over traditional manual methods. Automating data entry, reducing errors, and providing real-time access to information improves efficiency and productivity. The system also ensures data accuracy, supports informed decision-making, and reduces costs associated with paper-based processes. Additionally, it enhances security and compliance by protecting sensitive data and ensuring adherence to industry regulations.

Scope and Limitations

This study aims to evaluate the efficiency and impact of the Digital Office Data Tracking System in enhancing operational performance and decision-making. The employees of the Department of Agrarian Reform Provincial office who were using the Digital Office Data Tracking System were the respondents of the study. The research is also focused on the system's effectiveness in terms of key performance indicators, as well as its challenges, benefits, and influence on organizational processes. This study employed the use of the descriptive research method.

Definition of Terms

Streamline operations. Refers to the improvement of the efficiency of a certain process within an organization.

Decision-making. The action or process of making decisions, especially important ones.

Save Cost. Serving to reduce expenses, especially in business.

Enhance Security. Refers to the process of improving security measures through methods such as environmental security design, perimeter security, barriers, and deployment of security officers to protect against unauthorized entry and potential threats.

Employee productivity. The quantifiable measure of an employee's output or efficiency in completing their assigned tasks or responsibilities within a specific period

Methodology

Research Design

This study utilized the descriptive type of research design using a questionnaire checklist for data gathering. The respondents from the Department of Agrarian Reform Provincial Office were chosen purposively to measure the efficiency and impact of a digital office data tracking system in enhancing operational performance and decision-making.

The qualitative and quantitative method of research is used to interpret the research findings also the researchers used the percentage

and weighted mean as statistical treatment in the study.

Population and Sampling

The population considered the fourteen (14) records custodian per Division of the Department of Agrarian Reform Provincial Office of Rizal who used the Office Data Tracking System of ODTS. After the distribution of survey questionnaire, all fourteen (14) records custodian answered the said questionnaire and the researcher was able to retrieve all the filled up questionnaire.

Respondents of the Study

The respondents of the study were the fourteen (14) record custodian per Division of the Department of Agrarian reform Provincial Office of Rizal. The fourteen records custodian were composed of regular and Contract of Service employees.

Research Instrument

The researchers used questionnaire to survey the respondents from Department of Agrarian Reform Provincial office of Rizal about the effectiveness and Impact of Office Data Tracking System. The questionnaire was developed based on the Study objectives. The professor review the researchers draft questionnaire and give comments, suggestions and recommendations to make the survey questionnaires more effective. The questionnaire are consisted of seven Category. The 1st part of the questionnaires focused on the Level of effectiveness and its Level of Satisfaction on its aspects, the 2nd part focus on the level of effectives in terms of Response Time, the 3rd part is focused on the accuracy of information, 4th part focused on the level of Efficiency, the 5th part focused on the level of Productivity of the Office Data Tracking System, while part six of the questionnaire focused on the financial impact of the Office Data Tracking System, while the last part of the questionnaire focused on the future organizational needs or technological advancement.

Ethical Considerations

The researchers ask permission to the fourteen (14) respondents of the Department of Agrarian Reform Provincial Office of Rizal. The answers of the respondents have been kept confidentially and not been shown to anyone. The comments and suggestions of the respondents is given important ethical consideration and well respected.

The Records and tabulation of all the data is done in professional way. This is to provide genuine result for the researcher without any manipulation.

Data Gathering Procedure

The collection of data will take place at the Department of Agrarian Reform Provincial Office with 14 respondents of the selected employees. Respondents should complete survey questionnaire with 7 Key Components and depending on the study's two variables.

Statistical Treatment of Data

The researchers used the percentage and weighted mean as statistical treatment in the study.

Results

Table 1. Digital Office Data Tracking System and its Level of Satisfaction on Its Aspects

Aspect	Weighted Average	Verbal Interpretation	Rank
Ease of Use	4.17	Satisfied	2
System Performance	3.94	Satisfied	5
Information Accuracy	4.00	Satisfied	3
Impact on Productivity	3.87	Satisfied	6
Support and Maintenance	3.96	Satisfied	4
Overall Satisfaction	4.21	Very Satisfied	1

The Table shows that Overall Satisfaction on the use of Digital Office Data Tracking System ranks 1, with a weighted average of 4.21 and with a verbal interpretation of very satisfied. On the other hand, the aspects like Ease of Use and Information Accuracy rank 2 and 3, with 4.17 and 4.00 weighted average, respectively and with verbal interpretation of satisfied. Talking about Support and Maintenance, System Performance and Impact on Productivity, the Respondents are also satisfied on using the DODTS with respect to these Aspects with 3.96, 3.94 and 3.87 weighted average, respectively.

Implications of Findings

Overall Satisfaction:

High User Acceptance: The high overall satisfaction level (weighted average of 4.21) indicates strong user acceptance and positive perceptions of the Digital Office Data Tracking System (DOTS).

Positive Influence on Usage: Satisfied users are more likely to continue using the system regularly and promote its use to others within the organization.

Ease of Use and Information Accuracy:

Importance for Adoption: Ease of use and information accuracy are critical factors for system adoption and ongoing usage. The DOTS's relatively high ratings in these areas suggest that it is user-friendly and provides reliable data.

Areas for Improvement: While the ratings for ease of use and information accuracy are positive, there is still room for improvement to further enhance user satisfaction and system effectiveness.

Support and Maintenance, System Performance, and Impact on Productivity:

Positive Influence on User Experience: Satisfaction with support and maintenance, system performance, and the DOTS's impact on productivity indicates that these factors contribute to a positive user experience.

Continuous Improvement: Maintaining high levels of satisfaction in these areas requires ongoing efforts to ensure the system's reliability, efficiency, and effectiveness in supporting users' tasks.

Overall, the findings suggest that the DOTS is a valuable tool that is well-received by users. However, there is still potential to enhance the system's performance and user experience by focusing on areas such as ease of use, information accuracy, and support and maintenance

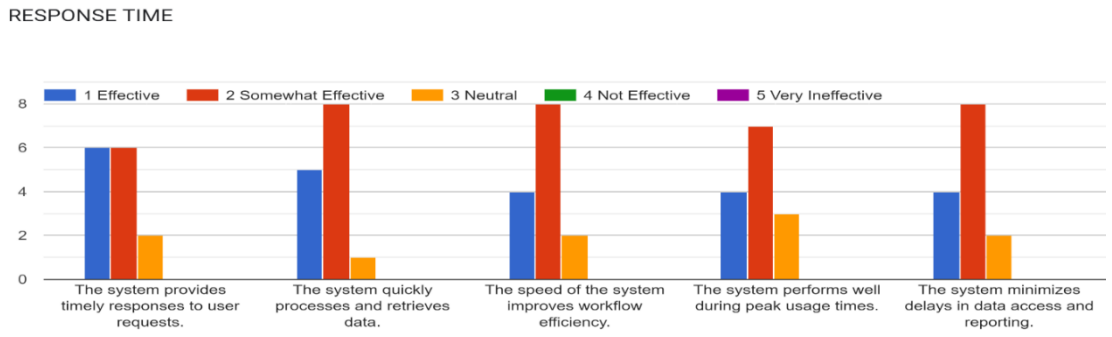


Figure 1. Level of Satisfaction in terms of Response Time

Based on the evaluation of the ODTS' effectiveness, a significant majority of respondents (43%) found the system highly effective in providing timely responses to user requests. Additionally, 36% rated the system as very effective in quickly processing and retrieving data.

Furthermore, 29% of respondents agreed that the system's speed improves workflow efficiency and maintains high performance during peak usage times. The same percentage also noted the system's effectiveness in minimizing delays in data access and reporting.

Table 2. Level of Effectiveness of Digital Office Data Tracking System In Terms of Response Time

Response Time	Weighted Average	Verbal Interpretation	Rank
The system provides timely responses to user requests.	4.29	Effective	1.5
The system quickly processes and retrieves data.	4.29	Effective	1.5
The speed of the system improves workflow efficiency.	4.14	Somewhat Effective	3
The system performs well during peak usage times.	4.07	Somewhat Effective	4
The system minimizes delays in data access and repoting.	3.07	Neutral	5
	3.97	Somewhat Effective	

In terms of the level of effectiveness of the Digital Office Data Tracking System with respect to Response Time, Table 2 shows that the Respondents agreed that the system provides timely responses, and quickly processes and retrieves data, are found to be effective, with a weighted average of 4.29, and both ranked 1.5. It was also revealed that the speed of the system improves the workflow efficiency, and performs well during peak usage times with a weighted average of 4.14 and 4.07, respectively, were somewhat effective. However, on minimizing delays in data access and reporting, Respondents said they are neutral on this issue, with 3.07 weighted average.

Implications Based on Findings

Adaptability:

Flexibility and Scalability: The high levels of satisfaction with the Digital Office Data Tracking System (DOTS) in terms of response time, processing speed, and workflow efficiency suggest that the system is adaptable and scalable to meet future organizational needs.

Technological Integration: The DOTS's ability to integrate with other systems and adapt to changing technological advancements is likely a contributing factor to its effectiveness and user satisfaction.

Effectiveness:

Strong Performance: The DOTS has demonstrated strong performance in terms of response time, accuracy of information, efficiency, and productivity.

Areas for Improvement: While the system is generally effective, there is room for improvement in minimizing delays in data access and reporting. This could involve optimizing data storage and retrieval processes or investing in additional system resources.

Overall, the findings suggest that the DOTS is a highly adaptable and effective tool that can support the organization's evolving needs. Continued efforts to optimize the system's performance and ensure its compatibility with future technological advancements will be crucial for maintaining its effectiveness and value.

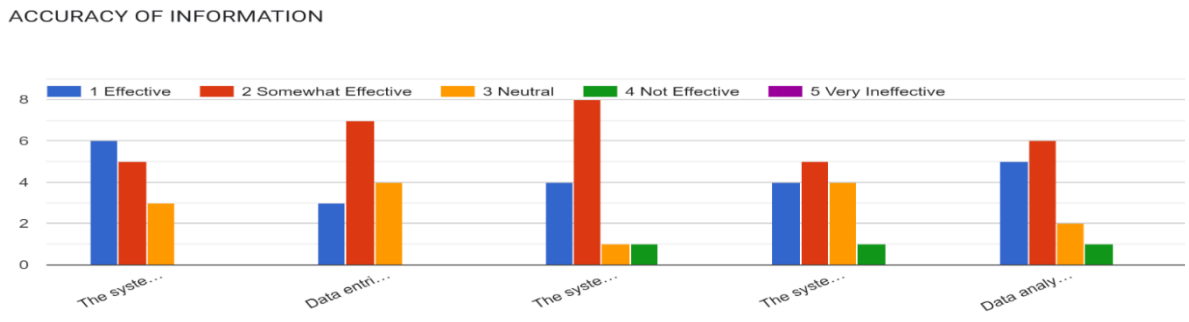


Figure 2. Level of Satisfaction in terms of Accuracy of information

Based on the evaluation of the ODTS's effectiveness, a significant majority (43%) of respondents found the system highly effective in consistently providing accurate data. Additionally, 21% noted the system's effectiveness in ensuring error-free data entries.

Furthermore, 29% of respondents agreed that the system effectively maintains data integrity, reliability, and minimizes discrepancies. Finally, 36% perceived that the system is highly effective in providing precise and correct information for data analysis and reporting.

Table 3. Level of Effectiveness of Digital Office Data Tracking System In Terms of Accuracy of Information

Accuracy of Information	Weighted Average	Verbal Interpretation	Rank
The system consistently provides accurate data.	4.21	Effective	1
Data entries in the system are free from errors.	3.93	Somewhat Effective	4
The system ensures data integrity and reliability.	4.07	Somewhat Effective	2.5
The system helps in minimizing data discrepancies.	3.86	Somewhat Effective	5
Data analysis and reporting are based on precise and correct information.	4.07	Somewhat Effective	2.5
	4.03	Somewhat Effective	

As per Accuracy of Information of the DODTS, the Respondents have the same opinion of somewhat effective on ensuring data integrity and reliability, as well as on data analysis and reporting that are based on precise and correct information which have both 4.07 weighted average. On the other hand, the issue on minimizing data discrepancies and error free on data entries, ranked 4 and 5 with 3.93 and 3.86 weighted average, respectively, Respondents also felt they are somewhat effective. However, talking about the system on providing accurate data ranked 1, with a weighted average of 4.21, shows that it is effective as perceived by the Respondents.

Based on the responses, the Digital Office Data Tracking System (DOTS) generally performs well in terms of accuracy, but there are specific areas where improvements can be made.

Data Entry Accuracy: The system is rated highly effective in preventing data entry errors, indicating that the design and implementation of data entry processes are effective.

System Accuracy: The system itself is generally perceived as accurate, with a majority of respondents rating it as effective or somewhat effective in preventing system-generated errors.

Data Analysis Accuracy: There is a slight decrease in the perceived accuracy of data analysis, suggesting that while the system is generally accurate, there may be areas where improvements can be made in the analysis and reporting processes.

Areas for Improvement:

Data Analysis Accuracy: The lower ratings for data analysis accuracy suggest that the system could benefit from enhancements to its analytical capabilities, such as improved algorithms or additional tools for data visualization and interpretation.

User Training: Providing additional training to users on best practices for data entry and analysis could help to further improve the accuracy of information generated by the DOTS.

Overall, the DOTS demonstrates a strong ability to maintain data accuracy, but ongoing efforts to refine data analysis capabilities and provide user training can help to enhance its overall performance.

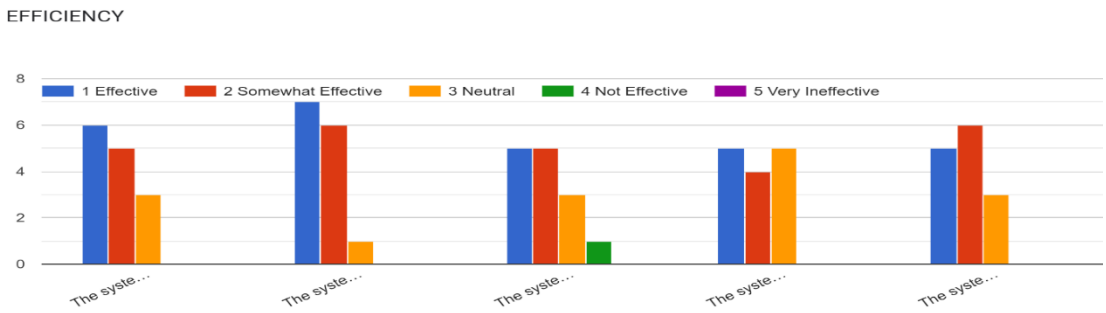


Figure 3. Level of Satisfaction in terms of Efficiency

Based on the result of the evaluation with regards to efficiency of the ODTS and forty-three (43%) percent of the respondents agreed that the system streamlines workflow processes is effective.

The system's reduction of the time required in completing the task is effective as 50% of the respondents agreed.

However, thirty six percent (36%) agreed on the system's automation on repetitive tasks, as well as the integration with other office systems to enhance overall efficiency is effective. The same percentage agree

Twenty nine percent (29%) of the total respondents were answer somewhat effective and another 36% percent were answer effective in integrates well with other office system, enhancing overall efficiency.

On the other hand, thirty six percent (36%) of the total respondents responded the system is effective in reducing the need for manual intervention.

Table 4. Level of Effectiveness of Digital Office Data Tracking System In Terms of Efficiency

Efficiency	Weighted Average	Verbal Interpretation	Rank
The system streamlines workflow processes.	4.21	Effective	2
The system reduces the time required to complete tasks.	4.43	Effective	1
The system automates repetitive tasks effectively.	4.00	Somewhat Effective	4.5
The system integrates well with other office systems, enhancing overall efficiency.	4.00	Somewhat Effective	4.5
The system reduces the need for manual intervention	4.14	Somewhat Effective	3
	4.16	**Somewhat Effective**	

On the system's Efficiency, the Respondents believed that using DODTS is effective as it reduces the time required in completing the task, as reflected by the weighted average of 4.43. According also to the Respondents, the system helps streamline work process, ranked number 2 with a weighted average of 4.21, and also found out that it is effective. About reduction of the need for manual intervention, it ranked 3 with a weighted average of 4.14, while the system's automation of repetitive tasks and integration with other office applications, they both ranked 4.5 with weighted average of 4.00, the Respondents perceived them as somewhat effective.

Implications of High Ratings on Efficiency

The high ratings for the Digital Office Data Tracking System (DOTS) in terms of efficiency indicate several positive implications:

Improved Workflow: The system's effectiveness in reducing task completion time and

streamlining workflows can lead to increased productivity and efficiency within the organization.

Reduced Manual Effort: The system's automation of repetitive tasks and reduction of manual intervention can free up employees' time to focus on higher-value activities.

Enhanced Decision-Making: By streamlining processes and providing timely information, the DOTS can support more informed and efficient decision-making.

Cost Savings: Increased efficiency can lead to cost savings through reduced labor costs and improved resource allocation.

Areas for Improvement:

While the DOTS has demonstrated effectiveness in several areas, there is still room for improvement in minimizing delays in data access and reporting. Addressing this area could further enhance the system's overall efficiency and user satisfaction.

In conclusion, the high ratings for efficiency suggest that the DOTS is a valuable tool for improving operational efficiency and supporting organizational goals. By addressing the identified areas for improvement, the organization can maximize the system's benefits and further enhance its effectiveness.

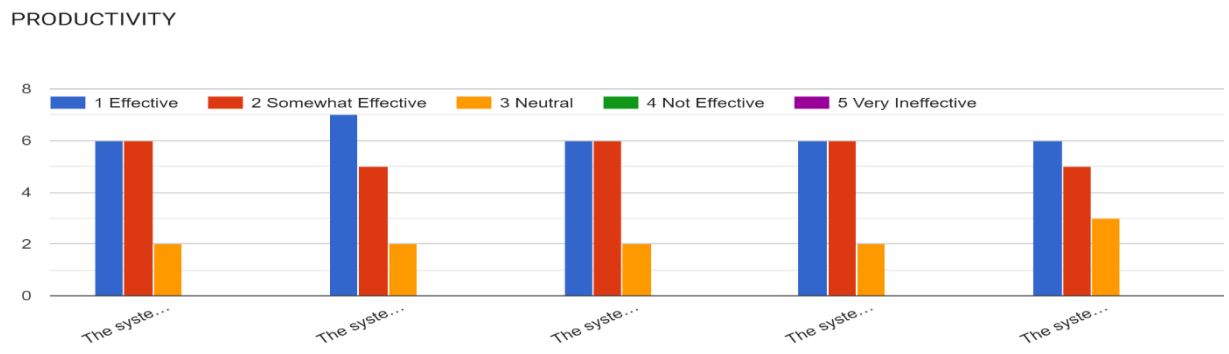


Figure 4. Level of Satisfaction in terms of Productivity

Based on the evaluation of the ODTS's impact on productivity, a significant majority (43%) of respondents found the system positively influenced individual productivity. Additionally, 50% noted the system's effectiveness in enhancing overall team productivity.

Furthermore, 43% of respondents agreed that the system helped users manage and prioritize tasks more effectively, contributed to achieving organizational goals and objectives, and supported better decision-making by providing timely and relevant data.

Table 5. Level of Effectiveness of Digital Office Data Tracking System In Terms of Productivity

Productivity	Weighted Average	Verbal Interpretation	Rank
The system has a positive impact on individual productivity.	4.29	Effective	3
The system enhances overall team productivity.	4.36	Effective	1
The system helps users manage and prioritize tasks more effectively.	4.29	Effective	3
The system contributes to achieving organizational goals and objectives efficiently.	4.29	Effective	3
The system supports better decision-making by providing timely and relevant data.	4.21	Effective	5
	4.29	Effective	

As to Productivity it is very clear that using the DODTS is effective as shown by Table 5. The Respondents agreed that the system enhances the productivity of the overall team, ranked 1 as revealed by the weighted average of 4.36. Speaking of individual production, there is a positive impact using the system, ranked 3 as disclosed by the Respondents with a weighted average of 4.29 and verbal interpretation of effective.

Respondents also took note that the system helps users manage and prioritize tasks more effectively, and contributes to achieving organizational goals and objectives efficiently, also ranked 3, both with a 4.29 weighted average and effective as its verbal interpretation.

As perceived by the Respondents the system supports better decision-making as it provides timely and relevant data, as shown by the weighted average of 4.21, though it is last in rank, it still appeared that using DODTS is effective.

Implications of High Ratings on Productivity

The high ratings for the Digital Office Data Tracking System (DOTS) in terms of productivity indicate several positive implications:

Enhanced Individual and Team Productivity: The DOTS has been shown to positively impact both individual and team productivity, suggesting that it can improve efficiency and output across the organization.

Improved Task Management: The system's ability to help users manage and prioritize tasks more effectively can lead to better time management and reduced workload.

Goal Achievement: The DOTS's contribution to achieving organizational goals and objectives efficiently demonstrates its value in supporting strategic initiatives.

Informed Decision-Making: The system's ability to provide timely and relevant data can support better decision-making, leading to more effective resource allocation and problem-solving.

Areas for Improvement:

While the DOTS has shown positive impacts on productivity, there is still potential for improvement in certain areas. For example, exploring ways to further enhance the system's capabilities for task management and automation could lead to even greater efficiency gains.

Overall, the high ratings for productivity suggest that the DOTS is a valuable tool for improving organizational performance and achieving goals. By addressing areas for improvement and maximizing the system's potential, organizations can further enhance its impact on productivity and efficiency.

3. What are the potential challenges and limitations of implementing the Digital Office Data Tracking System?

TECHNICAL ISSUE

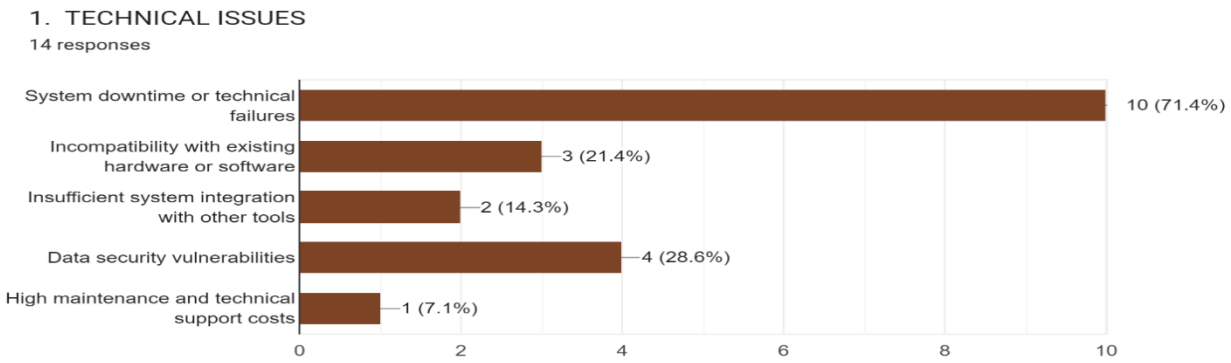


Figure 5. Level of Satisfaction in terms of technical issue

Based on the provided data, the most significant technical issue reported by users of the ODTS system is system downtime or technical failures. This issue was identified by a majority of respondents (71.4%).

Other notable technical issues included:

Incompatibility with existing hardware or software: 21.4% of respondents reported this issue.

Insufficient system integration with other tools: 14.3% of respondents reported this issue.

Data security vulnerabilities: 28.6% of respondents reported this issue.

High maintenance and technical support costs: 7.1% of respondents reported this issue.

These findings highlight the need for improved system reliability, compatibility, integration, and security measures to address the concerns of users. Additionally, strategies to reduce maintenance and support costs may be necessary to ensure the system's long-term sustainability.

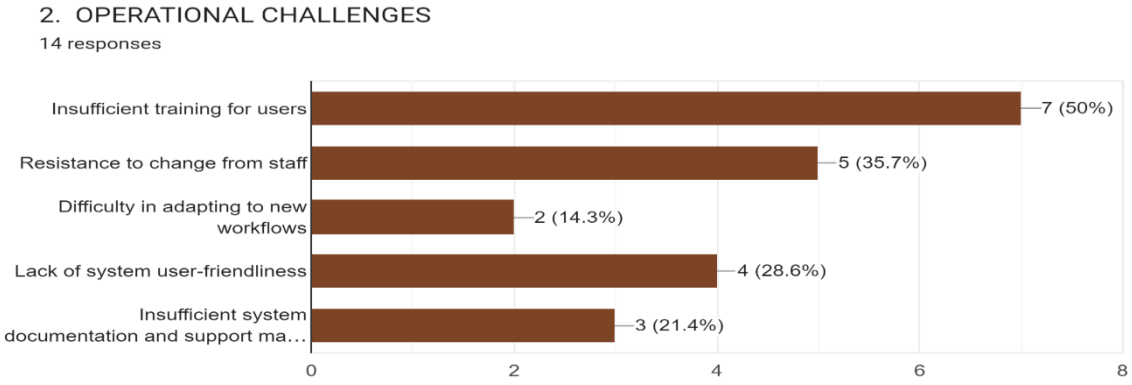


Figure 6. Level of Satisfaction in terms of Operational Challenges

Based on the provided data, the most significant operational challenge faced by users of the ODTS system is insufficient training for users. This issue was identified by a majority of respondents (50%).

Other notable operational challenges included:

Resistance to change from staff: 35.7% of respondents reported this issue.

Difficulty in adapting to new workflows: 14.3% of respondents reported this issue.

Lack of system user-friendliness: 28.6% of respondents reported this issue.

Insufficient system documentation and support materials: 21.4% of respondents reported this issue.

These findings highlight the need for improved training programs, effective change management strategies, and enhanced user support to address users' concerns. Additionally, efforts to improve the system's user-friendliness and provide comprehensive documentation can help mitigate op erational challenges that the administration should look into.

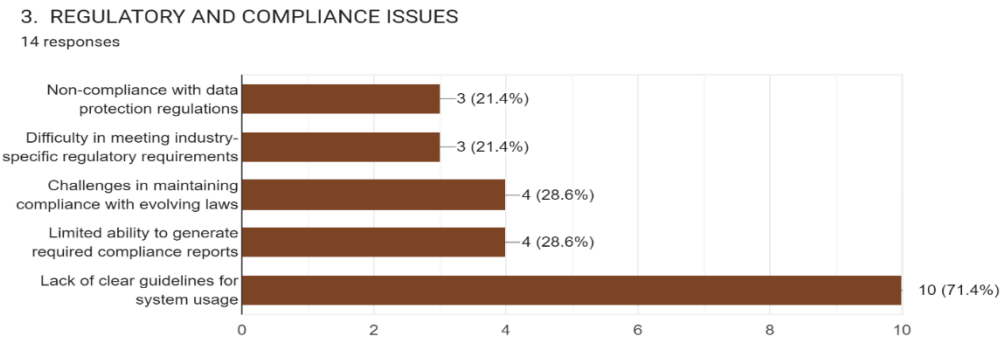


Figure 7. Level of Satisfaction in terms of Regulatory and compliance issues

Based on the provided data, the most significant regulatory and compliance issue faced by users of the ODTS system is the lack of clear guidelines for system usage. This issue was identified by a majority of respondents (71.4%).

Other notable regulatory and compliance challenges included:

Non-compliance with data protection regulations: 21.4% of respondents reported this issue.

Difficulty in meeting industry-specific regulatory requirements: 21.4% of respondents reported this issue.

Challenges in maintaining compliance with evolving laws: 28.6% of respondents reported this issue.

Limited ability to generate required compliance reports: 28.6% of respondents reported this issue.

These findings highlight the need for improved guidance, support, and tools to assist users in complying with relevant regulations and industry standards. Additionally, efforts to address challenges related to data protection, industry-specific requirements, and evolving legal frameworks are essential to ensure the system's ongoing compliance.

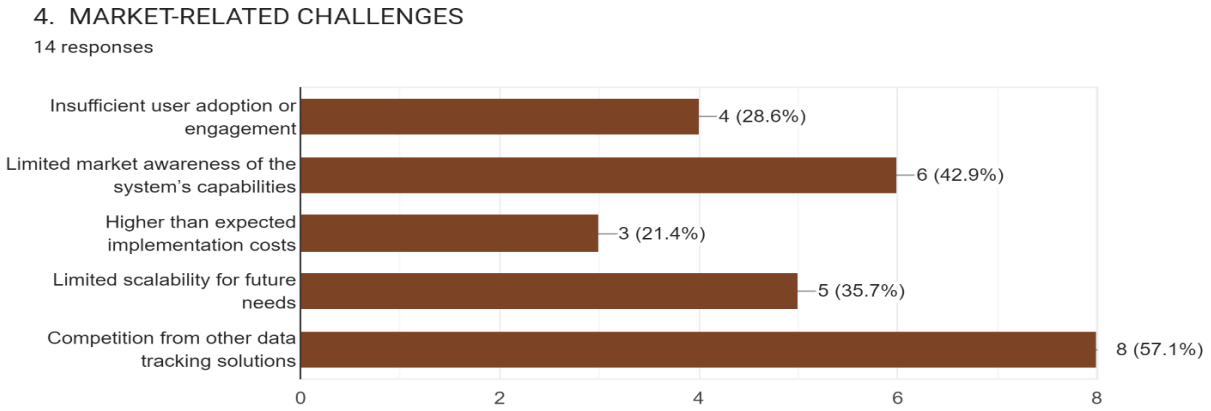


Figure 8. Level of Satisfaction in terms of Market-Related Challenges

Aside from technical and operational challenges as well as compliance issues, there are also market-related challenges that need to be addressed, like competition from other data tracking solutions which garnered 57% as perceived by the respondents. Forty-three percent (43%) said limited market awareness of the system's capabilities needs also some attention while limited scalability for future needs and insufficient user adoption or engagement have perceived by 35.7% and 28% of the respondents respectively as other market-related challenges that need to think about. Higher implementation costs need to be taken into account also as 21% agreed on that particular market-related issue.

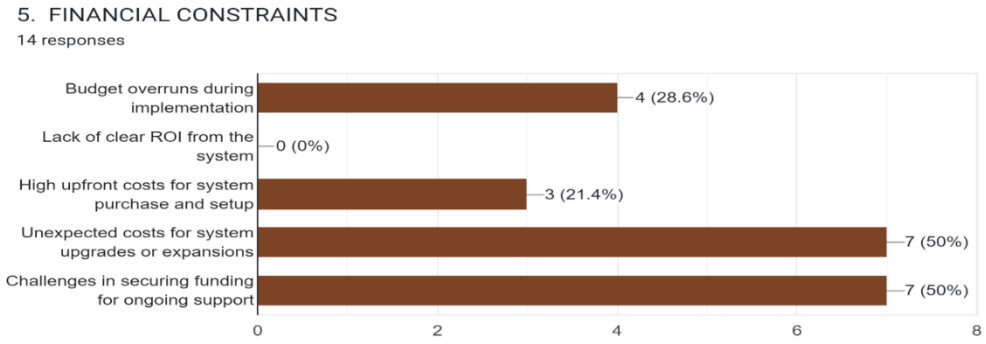


Figure 9. Level of Satisfaction in terms of Financial Constraints

If we are talking about financial constraints, unexpected costs for system upgrades and challenges in securing funding for ongoing support, 50% agreed that those constraints are some of the biggest challenges in implementing the ODTS. Twenty eight percent (28%) says budget overruns during implementation need to be given regard, as well as the high upfront costs for system purchase and set up, as perceived by 21% of the respondents.

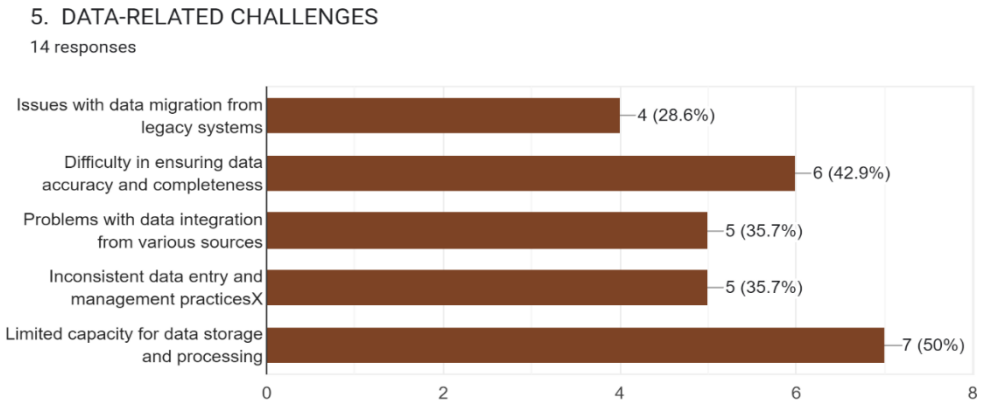


Figure 10. Level of Satisfaction in terms of Data Challenges

One of the biggest challenges that should be given a considerable amount of attention are those data-related challenges. The limited capacity for date storage and processing is the top priority as perceived by the 50% of the respondents. While 43% say that difficulty in ensuring data accuracy and completeness is also a big data-related challenge. On the other hand, problems with data integration from various sources and inconsistent data entry and management practices have 36% of the respondents who consider this issue that need to be addressed. Only 28% perceived the issue on data migration from legacy system say that this issue needs to be addressed also.

4. What are the suggestions and recommendations in the implementation of the Digital Office Data Tracking System?

Based on the provided feedback, here are some recommendations for improving the training and support provided to users of the Digital Office Data Tracking System (ODTS):

1. Clear Goals and Objectives

Define specific learning outcomes: Clearly articulate the skills, knowledge, and understanding employees should gain from the training.

Align training with organizational goals: Ensure that training objectives support broader organizational goals and strategies.

2. Comprehensive Training Programs

Structured approach: Develop training programs that follow a systematic, step-by-step process to ensure effective knowledge transfer.

Avoid standalone training: Implement ongoing training initiatives rather than one-off sessions to address evolving needs and maintain knowledge levels.

3. Enhanced Training Materials

Digital hand-outs: Provide user-friendly digital hand-outs that clearly outline standard procedures and requirements for using the ODTS.

Account creation: Ensure that all users have their own accounts to access the system and receive personalized training.

4. User-Friendly Interface

Simplify the system: Continuously evaluate and improve the system's user interface to make it more intuitive and easier to navigate.

5. Technical Support and Internet Usage

Train handlers: Provide training to technical support personnel to ensure they can effectively assist users with system-related issues.

Address internet connectivity: Work with IT or network administrators to ensure reliable internet connectivity for all users.

6. Storage Capacity

Evaluate storage needs: Assess the system's storage capacity and consider increasing it if necessary to accommodate growing data volumes.

7. Ongoing Training and Assessment

Regular assessments: Conduct periodic assessments to identify specific training needs based on user roles, experience levels, and common challenges.

Hands-on workshops: Offer practical workshops where users can learn by doing and receive personalized guidance.

Clear guidelines: Provide clear guidelines and instructions for using the ODTS to support implementation and ongoing usage.

By implementing these recommendations, the ODTS can be better equipped to provide effective training and support to its users, leading to improved system adoption, usage, and overall satisfaction.

Based on the provided feedback, here are some recommendations for adding new features or functionalities to the Digital Office Data Tracking System (ODTS) to better meet user needs and enhance operational efficiency:

1. User Accounts and Access Control

Require individual accounts: Ensure that each user has their own account to track usage, permissions, and data access.

Implement role-based access: Assign different levels of access to users based on their roles and responsibilities.

2. System Performance

Optimize ODTS number generation: Explore ways to improve the speed and efficiency of generating ODTS numbers.

Regular updates and innovations: Continuously update and improve the system to incorporate new technologies and features.

3. Data Quality

Prioritize data accuracy and reliability: Implement measures to ensure the accuracy, reliability, and integrity of data stored in the system.

4. Communication and Collaboration

Integrated communication platform: Provide a built-in communication platform for users to ask questions, report issues, and collaborate on projects.

Offline tracking capabilities: Allow users to track data and perform basic tasks offline, especially for users with limited internet access.

5. Access Controls

Selective editing permissions: Grant specific editing permissions to authorized personnel, preventing unauthorized changes to data.

Prevent accidental data deletion: Implement safeguards to prevent accidental deletion of important data.

6. Technical Requirements

Strong internet connection: Ensure the system is designed to function optimally with a reliable internet connection.

Data generation capabilities: Explore options for automating data generation or importing data from external sources.

7. Advanced Features

Advanced analytics and reporting: Provide users with the ability to create personalized dashboards, analyze data, and generate custom reports.

Automated reporting: Automate the generation of regular reports based on predefined criteria.

Enhanced collaboration tools: Incorporate features like real-time collaboration, document sharing, and task management to improve teamwork.

Mobile accessibility: Ensure the system is fully compatible with mobile devices, allowing users to access data and perform tasks on the go.

Offline functionality: Provide offline capabilities for users who need to access data or perform tasks when internet connectivity is limited.

By implementing these recommendations, the ODTS can be further enhanced to meet the evolving needs of users, improve operational efficiency, and provide a more comprehensive and valuable tool for organizations.

3. What strategies can be implemented to overcome the challenges and limitations encountered during the adoption and use of the Digital Office Data Tracking System?

Based on the provided feedback, here are some recommendations for improving the Digital Office Data Tracking System (ODTS) in terms of safety, compliance, and user experience:

1. Safety and Compliance

Continuous system upgrades: Regularly update and improve the system to address security vulnerabilities and ensure compliance with evolving regulations.

Monitoring and development: Continuously monitor the system for issues reported by users and make necessary adjustments to improve performance and compliance.

2. Training and Support

Internal training: Provide regular training programs to enhance employees' understanding of the ODTS and its features.

Handler training: Train technical support personnel to effectively address user queries and issues.

Local troubleshooting support: Ensure that local technical support is available to assist users with system-related problems.

3. System Improvements

Prioritize updates: Continuously update the system to address known issues, improve functionality, and enhance user experience.

Paperless operations: Strive towards a paperless environment by maximizing the system's capabilities for document management and workflow automation.

Strong internet connection: Ensure reliable internet connectivity for optimal system performance and access.

4. Addressing Challenges

Based on the provided feedback, here are some recommendations for addressing common challenges and improving user adoption of the Digital Office Data Tracking System (ODTS):

1. User Training and Support

Comprehensive training: Develop and deliver comprehensive training programs that cover all system features, functionalities, and best practices.

Ongoing support: Provide ongoing support through various channels, such as help desks, online resources, and user forums.

Mentorship programs: Implement mentorship programs to pair new users with experienced ones, facilitating knowledge transfer and guidance.

2. Change Management

Effective communication: Clearly communicate the benefits of the ODTS, address concerns, and address resistance to change.

Stakeholder involvement: Involve key stakeholders in the implementation process to gain their support and buy-in.

Incentives: Offer incentives or rewards to encourage adoption and usage of the system.

3. Data Quality and Integrity

Data standards: Establish clear data standards and guidelines to ensure data consistency and accuracy.

Data validation: Implement data validation rules to prevent errors and inconsistencies.

Regular audits: Conduct regular data audits to identify and address data quality issues.

Guidelines and training: Provide clear guidelines and training for users on data entry, management, and quality assurance.

By implementing these recommendations, organizations can effectively address common challenges associated with the adoption and use of the ODTS, leading to improved user satisfaction, system utilization, and overall benefits.

5. How does the Digital Office Data Tracking System improve decision-making processes within the organization?

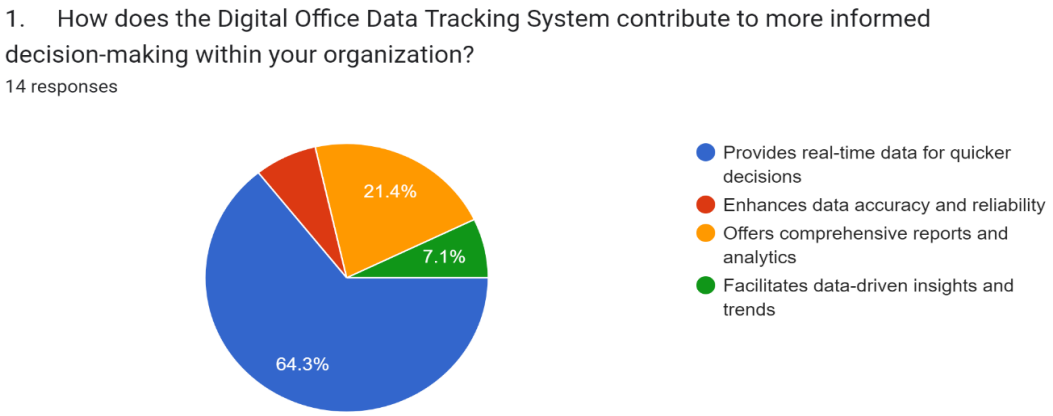


Figure 11. Percentage of the system in decision-making within the organization

Based on the provided data, the most significant contribution of the Digital Office Data Tracking System (ODTS) to more informed decision-making is its ability to facilitate data-driven insights and trends. This was identified by a majority of respondents (64.3%).

Other notable contributions include:

Provides real-time data for quicker decisions: 21.4% of respondents reported this benefit.

Enhances data accuracy and reliability: 21.4% of respondents reported this benefit.

Offers comprehensive reports and analytics: 7.1% of respondents reported this benefit.

These findings highlight the value of the ODTS in providing timely, accurate, and insightful data that supports effective decision-making processes within the organization. The system's ability to facilitate data-driven insights and trends is particularly valuable for making informed choices based on evidence and analysis.

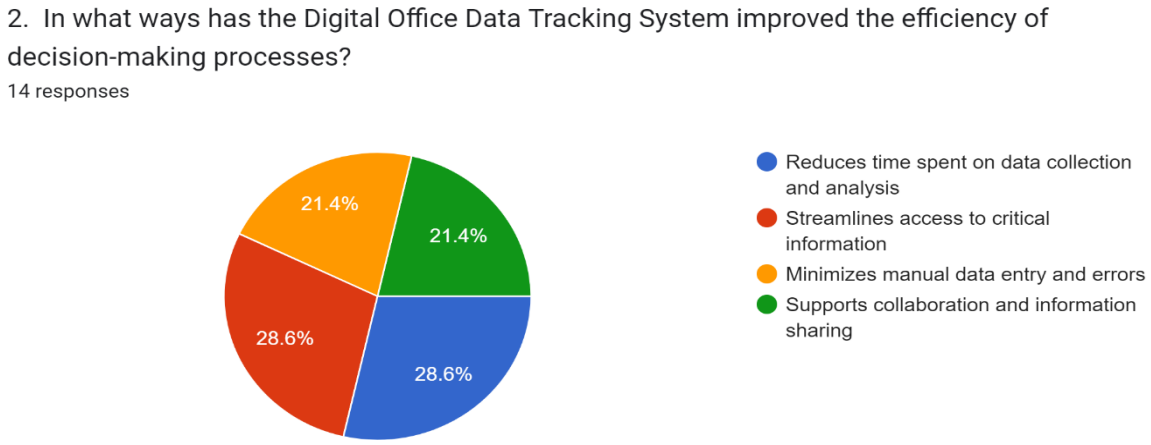


Figure 12. Percentage of the system to improved the efficiency of decision-making process

Based on the provided data, the Digital Office Data Tracking System (ODTS) has significantly improved the efficiency of decision-making processes in several ways.

The most significant contributions identified by respondents are:

Streamlines access to critical information: 28.6% of respondents reported this benefit.

Reduces time spent on data collection and analysis: 28.6% of respondents reported this benefit.

Other notable contributions include:

Minimizes manual data entry and errors: 21.4% of respondents reported this benefit.

Supports collaboration and information sharing: 21.4% of respondents reported this benefit.

These findings highlight the value of the ODTS in streamlining data access, reducing manual tasks, and facilitating collaboration, all of which contribute to more efficient decision-making.

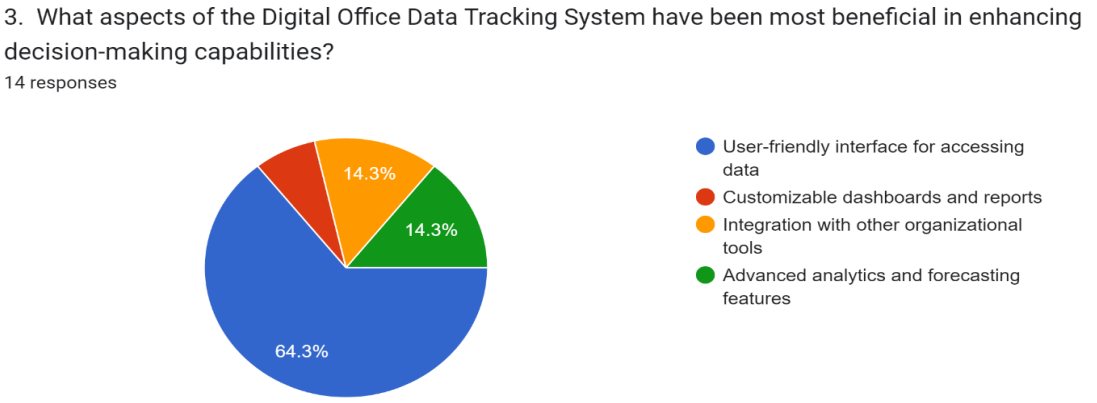


Figure 13. Percentage of the system in who had been beneficial in enhancing decision-making capabilities

Based on the provided data, the most beneficial aspect of the Digital Office Data Tracking System (ODTS) in enhancing decision-making capabilities is its advanced analytics and forecasting features. This was identified by a majority of respondents (64.3%).

Other notable beneficial aspects include:

User-friendly interface for accessing data: 14.3% of respondents reported this benefit.

Customizable dashboards and reports: 14.3% of respondents reported this benefit.

Integration with other organizational tools: 14.3% of respondents reported this benefit.

These findings highlight the value of the ODTS in providing advanced data analysis capabilities, allowing users to gain deeper insights, identify trends, and make more informed predictions. The system's ability to integrate with other tools and offer customizable reporting options further enhances its usefulness for decision-making.

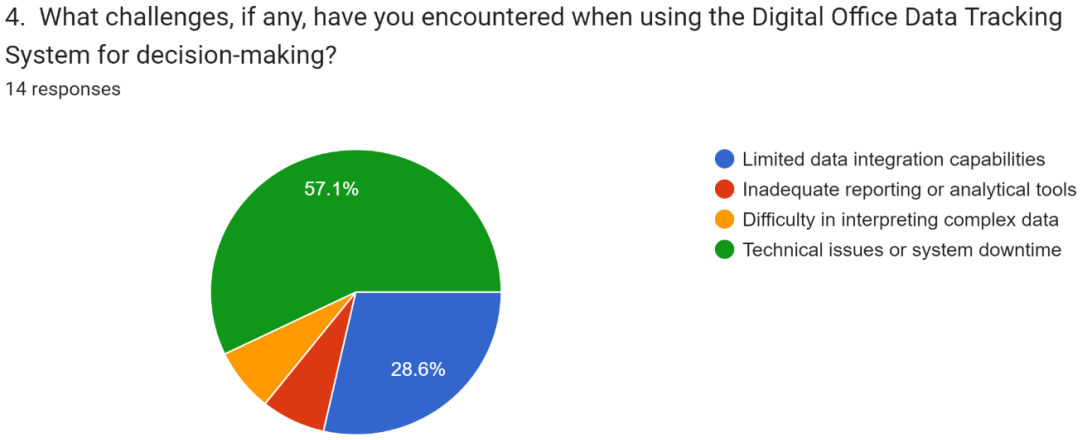


Figure 13. Percentage of the system encountered when using the Digital Data Tracking System for decision-making

Based on the provided data, the most significant challenge encountered by users of the Digital Office Data Tracking System (ODTS) for decision-making is limited data integration capabilities. This issue was identified by a majority of respondents (57.1%).

Other notable challenges include:

Inadequate reporting or analytical tools: 28.6% of respondents reported this issue.

Difficulty in interpreting complex data: 28.6% of respondents reported this issue.

Technical issues or system downtime: 28.6% of respondents reported this issue.

These findings highlight the need for improvements in data integration, reporting tools, and user support to address the challenges faced by users in making informed decisions using the ODTS.

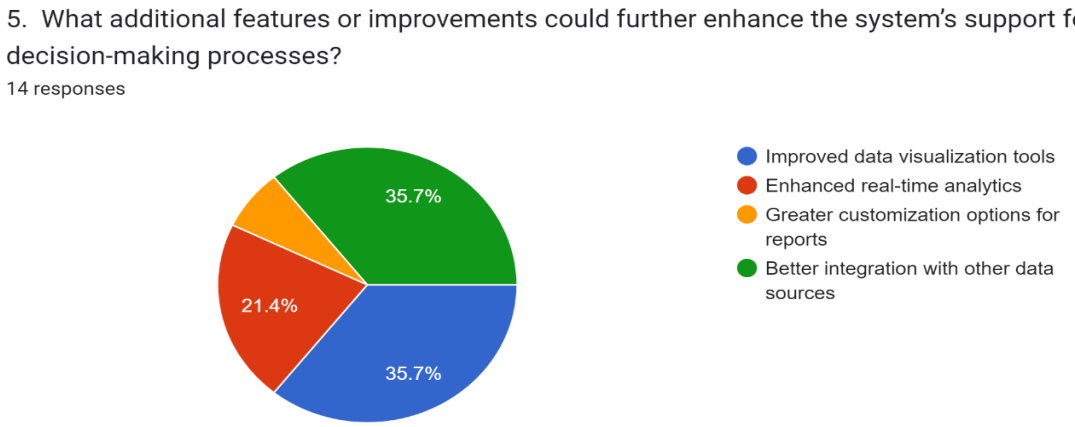


Figure 14. Percentage of the system to improves for further enhancement to the system's support f decision-making processes

Based on the provided data, users identified several additional features or improvements that could further enhance the Digital Office Data Tracking System's (ODTS) support for decision-making processes.

The most significant areas for improvement identified by respondents are:

Improved data visualization tools: 35.7% of respondents highlighted the need for enhanced data visualization capabilities to better understand and interpret data.

Enhanced real-time analytics: 35.7% of respondents emphasized the importance of real-time analytics to support timely decision-making.

Other areas for improvement mentioned by respondents include:

Greater customization options for reports: 21.4% of respondents suggested that more customization options for reports would enhance their usefulness.

Better integration with other data sources: 21.4% of respondents indicated the need for improved integration with other data sources to provide a more comprehensive view of information.

By addressing these recommendations, the ODTS can be further enhanced to provide more effective support for decision-making, enabling users to make better-informed choices and drive organizational success.

6. What cost savings or financial impact has the implementation of the Digital Office Data Tracking System generated for the organization?

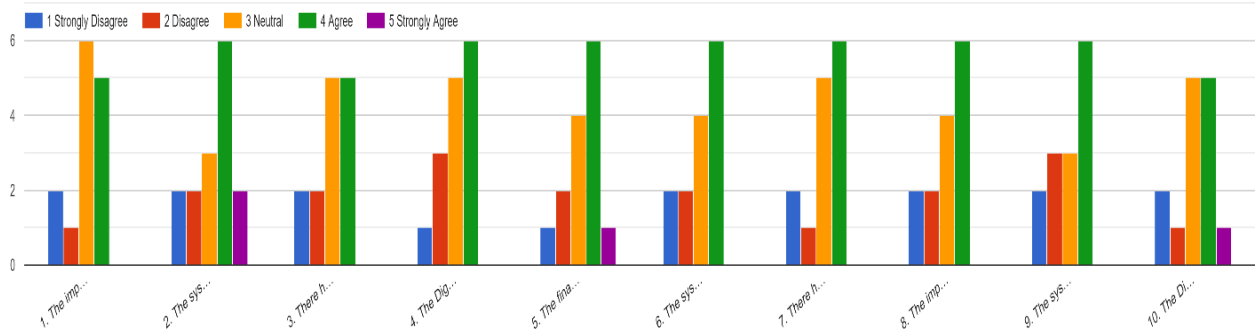


Figure 15. Level of Satisfaction in terms Financial Impact

ODTS implementation has significantly impacted operational costs and financial performance. A majority of respondents (43%) reported a reduction in labor costs due to the system's efficiency. This, in turn, has led to improved budget management and cost control.

Moreover, ODTS has reduced the need for additional financial resources or external services. By streamlining processes and optimizing resource allocation, the system has realized measurable savings in time and resources. These combined factors have positively impacted overall financial performance.

In summary, the implementation of ODTS has contributed to significant reductions in operational costs through its efficiency and effectiveness.

Table 6. Level of Agreement of Implementing Digital Office Data Tracking System on Financial Impact

Level of Agreement	Weighted Average	Verbal Interpretation	Rank
1. The implementation of the Digital Office Data Tracking System has led to a reduction in operational costs.	3.00	Neutral	7
2. The system has resulted in decreased labor costs by automating manual data processes.	3.43	Agree	1
3. There has been a noticeable improvement in financial efficiency due to the system's data management capabilities.	2.93	Neutral	9.5
4. The Digital Office Data Tracking System has contributed to better budget management and cost control.	3.07	Neutral	4.5
5. The financial benefits of the system outweigh the initial investment and implementation costs.	3.29	Neutral	2
6. The system has reduced the need for additional financial resources or external services.	3.00	Neutral	7
7. There have been measurable savings in time and resources due to the system's efficiency.	3.07	Neutral	4.5
8. The implementation of the system has positively impacted overall financial performance.	3.00	Neutral	7
9. The system has led to more accurate financial forecasting and budgeting.	2.93	Neutral	9.5

Level of Agreement	Weighted Average	Verbal Interpretation	Rank
10. The Digital Office Data Tracking System has provided clear insights into cost-saving opportunities.	3.14	Neutral	3
Average	3.09	Neutral	

Table 6 shows the level of agreement of implementing Digital Office Data Tracking System on Financial Impact. A decrease on labor costs by automating manual data processing, ranked 1 as agreed by the Respondents with a weighted average of 3.43.

The findings in Table 6 suggest that the Digital Office Data Tracking System (DOTS) has generated significant financial benefits for the organization.

Reduced Labor Costs: The primary financial impact identified by respondents was a decrease in labor costs due to the automation of manual data processing. This indicates that the DOTS has streamlined operations and reduced the need for manual labor, leading to cost savings.

Potential for Further Savings: While the data presented focuses on labor cost savings, it's possible that the DOTS has also generated other financial benefits, such as improved efficiency, reduced errors, and enhanced decision-making. Further analysis could explore these potential areas of cost savings.

Overall, the findings suggest that the DOTS is a valuable investment that can contribute to financial efficiency and cost savings for the organization. To maximize its financial benefits, it is important to continue monitoring and optimizing the system's performance and exploring additional opportunities for cost reduction.

7.7. How adaptable is the Digital Office Data Tracking System in terms of scaling for future organizational needs or technology advancements?

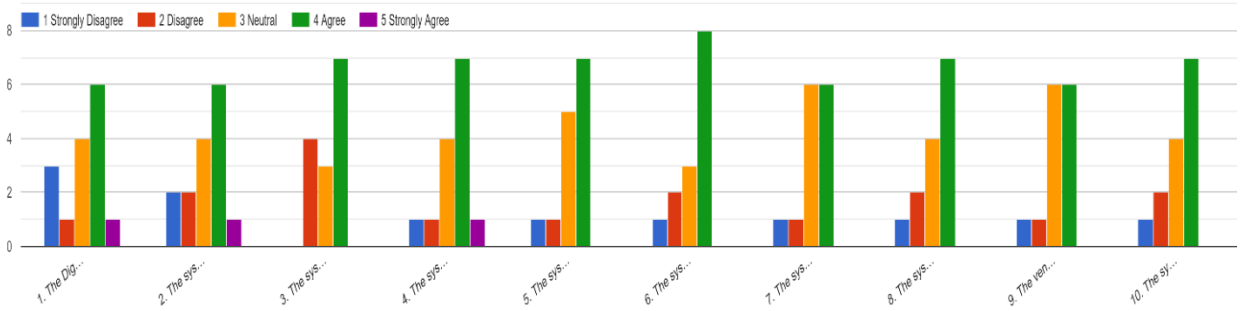


Figure 16. Level of Satisfaction in terms Needs or Technology Advancements

High Integration Capability: 57% of respondents indicated that ODTS is highly flexible and adaptable, allowing for seamless integration with other software and tools.

Scalability: 50% of respondents confirmed that the system's performance has been tested and proven effective under varying scales of operations. This demonstrates its scalability and ability to handle diverse operational needs.

Positive Feedback on Design and Support: 43% of respondents expressed neutral opinions regarding the system design. However, the same percentage agreed that the system's features ensure long-term usability and that the vendor provides regular updates and support to maintain compatibility with new technologies.

Areas for Improvement: While the majority of respondents were satisfied, 7% disagreed with certain aspects such as the frequency of system updates, documentation, and guidelines for future upgrades and scalability. These areas represent potential opportunities for improvement to enhance the overall user experience and system longevity.

Table 7. Level of Agreement of Implementing Digital Office Data Tracking System for Future Organizational Needs or Technology Advancements

Level of Agreement	Weighted Average	Verbal Interpretation	Rank
1. The Digital Office Data Tracking System can easily be scaled to accommodate increased data volume.	3.21	Neutral	7
2. The system is flexible enough to integrate with new technologies as they become available.	3.29	Neutral	3.5
3. The system's architecture supports future upgrades and expansions with minimal disruption.	2.21	Disagree	10
4. The system can be customized to meet evolving organizational needs without requiring major overhauls.	3.43	Agree	1.5
5. The system is designed to adapt to changes in industry standards and technological advancements.	3.43	Agree	1.5
6. The system allows for easy integration with other software and tools that may be adopted in the future.	3.29	Neutral	3.5
7. The system's design incorporates scalability features that ensure long-term usability.	3.21	Neutral	7
8. The system has been tested for performance under varying scales of operation.	3.21	Neutral	7
9. The vendor provides regular updates and support to keep the system compatible with new technologies.	3.21	Neutral	7
10. The system's documentation includes guidelines for future upgrades and scalability	3.21	Neutral	7
Average	3.17	Neutral	

Table 7 shows the Level of Agreement of Implementing Digital Office Data Tracking System for Future Organizational Needs or Technology Advancements. It shows that Respondents agreed that the system can be customized to meet evolving organizational needs without requiring major overhauls. They also agreed that the system is designed to adapt to changes in industry standards and technological advancements. There is a weighted average of 3.43 and ranked 1.5 on both issues.

The Respondents show disagreement on the system's architecture supports on future upgrade and expansions with minimal disruption with a weighted average of 2.21 and ranked 10.

Implications of Findings on Adaptability

The findings in Table 7 suggest that the Digital Office Data Tracking System (DOTS) is adaptable and can support the organization's future needs and technological advancements.

Customization and Flexibility: The system's ability to be customized without major overhauls indicates that it is adaptable to changing organizational requirements. This flexibility can help ensure that the DOTS remains relevant and effective over time.

Technological Advancements: The system's design, which allows for adaptation to changes in industry standards and technological advancements, suggests that it can keep pace with

evolving technology landscape and avoid becoming obsolete.

Areas for Improvement:

System Architecture: While the DOTS is generally adaptable, the lower rating for its ability to support future upgrades and expansions with minimal disruption suggests that there may be areas where the system's architecture could be improved to enhance its scalability and flexibility.

Overall, the findings suggest that the DOTS is a well-designed system that can adapt to future organizational needs and technological advancements. However, ongoing efforts to improve the system's architecture and ensure its scalability will be crucial for maintaining its effectiveness in the long term.

Discussions

Conclusion

The Digital Office Data Tracking System has proven to be a valuable tool for the organization, enhancing operational efficiency, improving decision-making, and contributing to overall productivity. The system's user-friendly interface, accurate information, and positive impact on productivity have contributed to its high level of user satisfaction. While the DOTS has demonstrated significant benefits, there is still room for improvement in certain areas, such as data analysis accuracy and addressing technical challenges. Ongoing efforts to enhance the system's capabilities and address user concerns will be crucial for maximizing its potential and ensuring its long-term success.

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