SYSTEMS OPERATIONS AND INFRASTRUCTURE DIVISION OF THE PHILIPPINE STATISTICS AUTHORITY TOWARDS REAL-TIME SERVICE DELIVERY

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ABSTRACT

Operations and Infrastructure Division in its pursuit of real-time service delivery. The division deliberately integrates its operations with modern technology breakthroughs in response to the changing demands for data. Clarifying the strategic objectives of the division is the main focus of the study. These include utilizing cutting-edge technologies, infrastructure optimization, and process simplification to provide a smooth and quick flow of statistical data. The division uses quantitative research methodology is to provide insights into the patterns and trends of tech support inquiries received by the division for a certain period as the basis for the formulation of the development plan and to see if there are any links between the quantity of tech support questions and other factors like the time of year, certain systems or apps, or changes in the IT infrastructure or operations. It offers information on the actions made to bring the division's operations into line with the main goal of accomplishing real-time service delivery. The division's initiatives have produced measurable benefits, which are highlighted in the results section. These include increased system reliability, faster data processing, and much lower service delivery latency. The positive impact of the adopted adjustments is substantiated by quantifiable metrics and success indicators. The report concludes by considering the critical role that the Systems Operations and Infrastructure Division has played in moving the industry closer to real-time service delivery. It summarizes lessons learned, identifies obstacles overcome, and looks forward to more developments in the field of information distribution. It is an invaluable resource for businesses and governmental bodies looking to improve service delivery methods through technological changes. The Systems Operations and Infrastructure Division of the PSA provides insights into best practices for navigating the changing information management landscape.

Keywords: Information Technology, Infrastructure Optimization, Realtime Service Delivery

INTRODUCTION

Effective public governance in today's digital environment is contingent upon the smooth operation of IT infrastructure and activities. The duty of supervising the IT infrastructure and operations throughout all of its offices falls to the Systems Operations and Infrastructure Division (SOID) of the Philippine Statistics Authority (PSA). The division's tech support team plays a crucial part in this endeavor by providing system users with timely assistance. One key indicator of SOID's

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performance in IT operations and infrastructure is the amount of requests received by the SOID, on the other hand, is a significant measure of the division's IT infrastructure and operational performance.

According to Chauhan, S. (2019) the smooth running of IT infrastructure and operations is critical for public governance systems in today's digital age as described by Sharma, P., & Kumar, D. (2017) and Ahmadi, M., Mohammadi, H., & Saleem, N. (2021). The Public Governance of Systems Operations and Infrastructure Division (SOID) is in charge of administering the public governance systems' IT infrastructure and operations of all the offices in the Philippine Statistics Authority (PSA). The division's tech support team is critical in providing technical help and support to users.

As a result, the purpose of this study is to undertake a quantitative analysis to formulate the development plan based on recent data gathered in the year 2022. The research study aims to give insights into the patterns and trends of technical support questions, as well as to inspire plans for improving the division's IT infrastructure and operations and to show the significance of IT infrastructure and operations in public administration cannot be overstated. These systems are vital to assuring the smooth running of government activities in the digital age, as explained by Zhang, J., & Xie, S. (2019).

OBJECTIVES OF THE STUDY

The specific objectives of this research can be further specified as follows:

1. To analyze the quarterly trends in the number of tech support inquiries received by the SOID.

2. To identify the main reasons for tech support inquiries received by the SOID and their distribution across different quarters.

3. To evaluate the correlation between the number of tech support inquiries and the performance of the public governance

Systems managed by SOID.

METHODOLOGY

This quantitative research methodology aims to provide insights into the patterns and trends of tech support inquiries received by the division for the year 2022 as the basis for the formulation of the development plan and to see if there are any links between the quantity of tech support questions and other factors like the time of year, certain systems or apps, or changes in the IT infrastructure or operations. This methodology outlines the overall approach, methods/techniques of data collection, methods/techniques of data analysis, research quality issues, and research ethics issues.

Overall Approach. Record maintained with SOID The overall approach for this study is to give a quantitative analysis of the amount of technical support questions received by the Systems Operations and Infrastructure Division, with the ultimate objective of strengthening the division's IT infrastructure and operations and improving the user experience, as added by April, A., Charette, A., & Tremblay, S. (2014) and by Almutairi, K., Babiker, Z., & Al-Saati, (2021) on their recent study about IT service management.

RESULTS AND DISCUSSION

1. Exploring Quarterly Trends in Tech Support Inquiries: Implications for Public Governance System Performance

The SOID made investments and resources in network infrastructure upgrades to meet the growing demand for real-time service delivery. They have set up fast and dependable network connections, both for their internal systems and for connecting with customers who use their services. The responsiveness of the

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systems has been greatly enhanced by this infrastructure update, enabling users to access information and services without needless delays.

The division has also put advanced monitoring technologies in place to make sure that the real-time aspect of service delivery is realized. These technologies continuously scan the infrastructure and systems for any anomalies or performance problems. The division will be able to maintain optimal system performance and reduce service outages by anticipating future issues and proactively identifying and fixing them. Their operations now include real-time updates and data synchronization as essential elements, ensuring that users always have access to the most up-to-date and correct data as shown below.

1. Development Plan Questions and Strategies

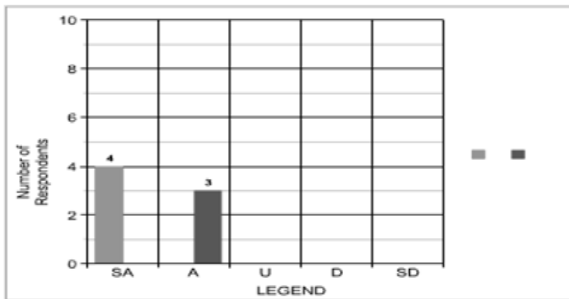Q1. Is the SOID employed can easily understand the system process?

Figure 1. Graphical Representation of Question 1

The system operation and infrastructure division is strongly agreed by 40 out of 70 respondents or its employees. Therefore, the division can easily understand the system process.
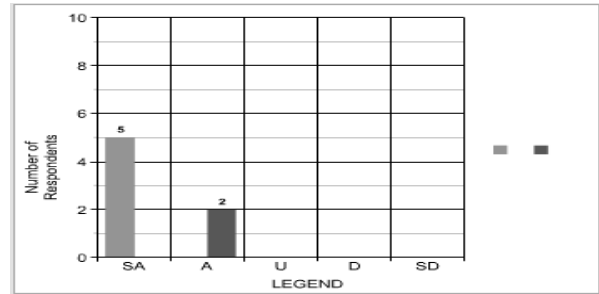
Q2. Does the SOID employ an ICT Specialist

Figure 2. Graphical Representation of Question 2.

The division employed ICT specialist is being agreed by majority of the 70 respondents which is 50 out of 70. Therefore, the division can perform various ICT functions.

Q3. Did the SOID provide any type of training to develop ICT-related skills of the persons employed?
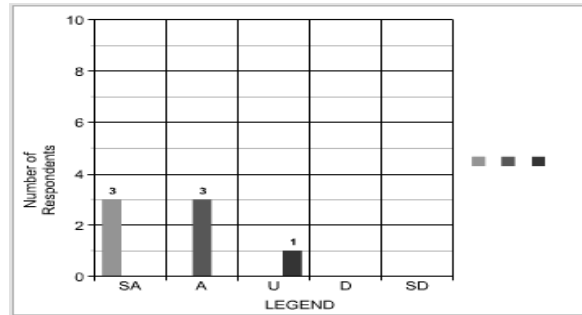

Figure 3. Graphical Representation of Question 3.

The division's use of DSL is strongly agreed and agreed by 60 out of 70 respondents. Therefore, the system can perform its goals and functions by using DSL.

Q4. Does the division use DSL or any other type of fixed broadband connection to the Internet?

The division use of DSL is strongly agreed by 50 out of 70 respondents. Therefore, the system can perform its goals and functions by using DSL.
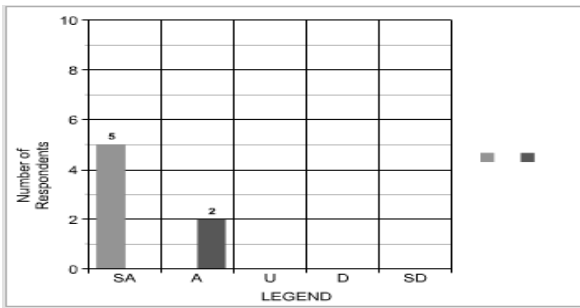
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Figure 4. Graphical Representation of Question 4

Q5. Does the SOID use a mobile broadband connection to the internet via a portable device using mobile telephone networks (4G / 5G)?
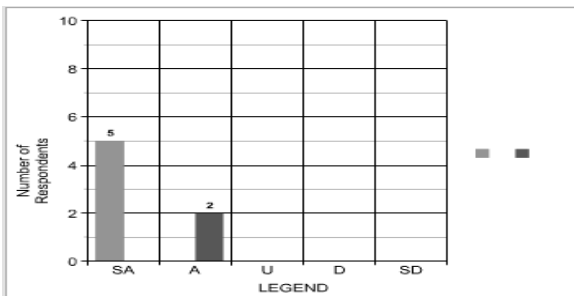

Figure 5. Graphical Representation of Question 5

The division efficiency uses a 4G/5G in the mobile broadband connection of their system is strongly agreed by 50 out of 70 respondents. Therefore, the system is efficient.

Q6. Do any SOID employees have remote access to the enterprise's e-mail system, documents or applications?
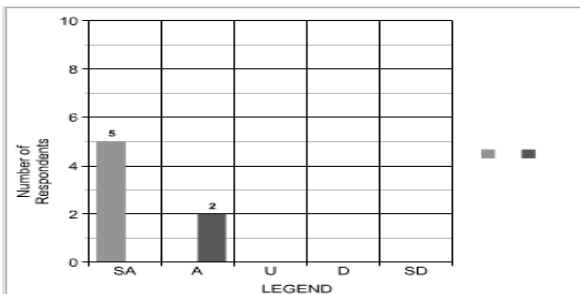

Figure 6. Graphical Representation of Question 6

The SOID employees confirmed that they have remote access and strongly agreed with 50 out of 70 respondents. Therefore, they also have an ease of access in remoting their systems, documents, and applications.

Q7. Does the SOID avail of any cloud computing services used over the internet?
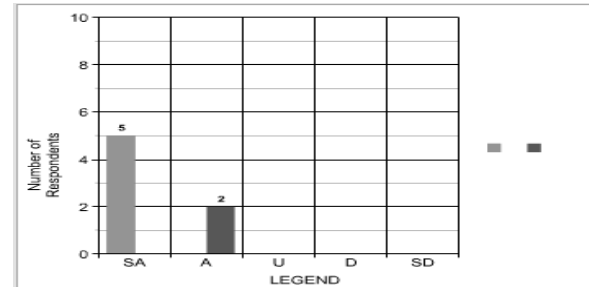

Figure 7. Graphical Representation of Question 7.

The division availed cloud computing services is strongly agreed by 50 out of 70 respondents. Therefore, the division can handle cloud computing services.

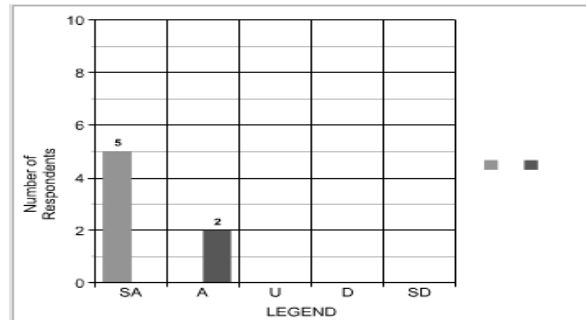Q8. Does the SOID analyze big data from any other sources?

Figure 8. Graphical Representation of Question 8.

The division analyzing big data from other sources is strongly agreed by 50 out of 70 respondents. Therefore, SOID analyzes big data from different sources.

Q9. Did the division place orders for goods or services via a website or "apps?
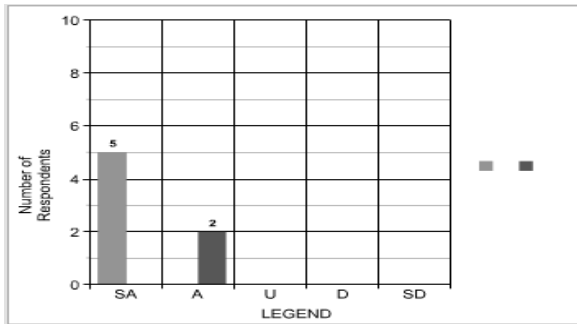

Figure 9. Graphical Representation of Question 9

The division places its order or goods services on its website or app strongly agreed by 50 out of 70 respondents. Therefore, the system can place its orders or goods or services on its website and apps.

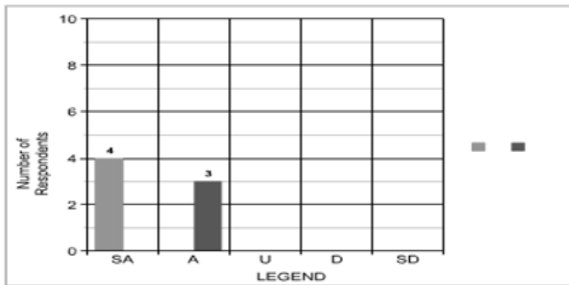Q10 Did the division conduct concurrent system maintenance with their system and applications?

Figure 10. Graphical Representation of Question 10

The division can maintain their system and applications and the maintainability of their system is strongly agreed by 40 out of 70 respondents. Therefore, can concurrently conduct system maintenance.

2. Summary of Findings

This summary of findings above in Table 1 is a review of how effective the development plan of system operations and infrastructure division of

(PSA) is towards anytime real-time service delivery.

Table 1
Overall SOID Development Findings to Real-Time Service Delivery

CRITERIA	SA	A	UD	D	SD	TOT
1. SOID employed can easily understand the system process	40	30	0	0	0	70
2. Does the SOID employ an ICT Specialist	50	20	0	0	0	70
3. Did the SOID provide any type of training to develop ICT-related skills of the persons employed?	30	30	10	0	0	70
4. Does the division use DSL or any other type of fixed broadband connection to the internet?	50	20	0	0	0	70
5. Does the SOID use a mobile broadband connection to the internet via a portable device using mobile telephone networks (4G / 5G)?	50	20	0	0	0	70
6. Do any SOID employees have remote access to the enterprise's e-mail system, documents, or applications?	60	10	0	0	0	70
7. Does the SOID avail of any cloud computing services used over the internet?	50	20	0	0	0	70
8. Does the SOID analyze big data from any other sources?	50	20	0	0	0	70
9. Did the SOID *place* orders for goods or services via a website or "apps	40	30	0	0	0	70
10. Did the SOID conduct concurrent system maintenance with their system and applications?	40	30	0	0	0	70

CONCLUSION

Implementing an ICT (Information and Communication Technology) plan in the SOID (Strategic Operations and Information Division) division requires careful consideration of various key success factors. Here are five key factors that contribute to the successful implementation of an ICT plan:

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Strong Leadership and Commitment: One of the critical success factors in implementing an ICT plan is the presence of strong leadership and commitment from top-level management. Leaders should actively support and promote the plan, allocate necessary resources, and encourage employee participation to ensure a smooth implementation process.

Maintaining and monitoring an ICT plan is an ongoing process. By following these recommendations, the SOID division can ensure that the ICT plan remains aligned with organizational goals, adapts to changing technology landscapes, and delivers optimal results.

RECOMMENDATION

A close review of the SOID development plan in maintaining and towards real-time real-time service delivery.

A review of the key success factors in implementing the ICT plan in the SOID division:

1. Regular Performance Evaluation
2. Continuous Improvement
3. Continuous Risk Assessment
4. Effective Communication and Stakeholder Engagement and
5. Technology Lifecycle Managemen

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Mr. Aristophanes "Aris" Ramos has established himself as a skilled computer operator and IT support personnel. Ramos, currently employed at the SOID - Philippine Statistics Authority (PSA) since 2003, has been diligently monitoring the data communications network to ensure its availability to all system users. He has successfully resolved various data communications problems, demonstrating his expertise in handling issues such as data transmission failures. With his extensive work experience, technical proficiency, and dedication to continuous learning.

Aristophanes C. Ramos has become a respected IT professional in the field of computer operations and research. His valuable contributions to the Windows-based Vital Statistics System research, combined with his attendance at various conferences and training events, solidify his position as a competent and reliable expert in the industry.

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