Evaluation of Service Quality Through ITIL V3 Framework in the Service Design Domain (Case Study: Lazada Application)

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Abstract

In the era of globalization and business digitalization, improving the quality of customer service is a crucial aspect for company success. Companies that are able to provide optimal and responsive service tend to maintain customer satisfaction and compete effectively in an increasingly tight market. Therefore, the use of the Information Technology Infrastructure Library (ITIL) framework is a strong foundation for managing and improving service quality. This research focuses on analyzing service quality in the ITIL V3 Service Design domain, by applying this framework to a significant e-commerce application, namely Lazada. Lazada, as a leading platform in Southeast Asia, has been an example of providing superior customer experience through its services. This research explains the role of ITIL in managing service quality, with an emphasis on the Service Design domain. This study uses a combination of methods, including literature study, questionnaire survey of Lazada users, and observation of application infrastructure. The analysis results show that Lazada has reached a high level of maturity in ITIL V3 Domain Service Design, with all subdomains reaching maturity level 4. However, there is room for improvement, especially in information security. The conclusion shows that Lazada can continue to maintain customer satisfaction and competitiveness in a competitive market by continuing to improve service quality, especially in aspects found through gap analysis.

Keywords: Service Design, Information Technology, ITIL V3.

1. Introduction

In the era of globalization and business digitization, the enhancement of customer service quality has become crucial for the success and sustainability of a company. Companies capable of providing optimal and responsive services tend to maintain customer satisfaction and effectively compete in an increasingly competitive market. Therefore, the use of the Information Technology Infrastructure Library (ITIL) framework has become a strong foundation for managing and improving service quality.

In this context, this research will focus on the analysis of service quality within the ITIL V3 Service Design domain by applying this framework to a significant e-commerce application, namely Lazada. As one of the leading e-commerce platforms in Southeast Asia, Lazada has been exemplary in its efforts to provide excellent customer experiences through its services. The researchers will also explain the role of ITIL in service quality management, specifically highlighting the Service Design domain within this framework. Furthermore, a brief overview of Lazada as the research subject will be provided, along with the reasons why the analysis of their service quality is a significant topic in the realms of business and information technology.

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Through a deep understanding of the implementation of ITIL V3 in the e-commerce context with a case study on Lazada, this research is expected to provide valuable insights into the potential improvement of service quality for e-commerce companies and how the ITIL framework can be effectively utilized to achieve these goals.

Based on the issues outlined above, the research problem can be formulated as how the quality of service provided by the Lazada application using the ITIL framework. From the above background, the author has chosen the research title "Assessment of Service Quality Through ITIL V3 Framework in the Service Design Domain: A Case Study of the Lazada Application."

2. Literature Review

2.1 ITIL Version 3

ITIL Version 3 (Information Technology Infrastructure Library) is a set of frameworks or best practice guidelines used in the management of information technology services. Introduced as the third edition in 2007, ITIL V3 has become an industry standard adopted by various organizations worldwide. Its primary goal is to assist organizations in the design, management, and improvement of information technology services to effectively meet business and customer needs. Consisting of five core books, this framework covers various aspects of service management, ranging from strategic planning to day-to-day operations. ITIL V3 provides best practice guidance in IT service management, involving service strategy, service design, service transition, service operation, and continual service improvement. By following the ITIL V3 guidelines, organizations can enhance operational efficiency, improve service quality, and achieve better business goals in a connected and rapidly changing environment.

2.2 ITIL Version 3 Domains

ITIL Version 3 domains refer to crucial aspects within the Information Technology Infrastructure Library (ITIL) Version 3 framework that play a crucial role in the management of information technology services. ITIL V3 consists of five main domains that comprehensively cover the stages of the IT service lifecycle. Firstly, Service Strategy involves planning IT service strategies aligned with the company's business objectives, including the formation of service markets and service portfolios. The second domain is Service Design, which focuses on designing IT services to meet customer needs and implementing ITSM (IT Service Management) uniformly. Service Transition is the domain that enables the proper transition of changes resulting from new IT service designs into the operational environment. Service Operation is the stage where day-to-day operational management of IT service occurs, including maintaining agreed-upon performance with customers. Lastly, Continual Service Improvement focuses on the development and maintenance of service quality from design, transition, and operation, by integrating various quality management principles and methods to achieve continuous improvement in IT services. Overall, these ITIL V3 domains are key elements that systematically help organizations manage, improve, and align information technology services with broader business goals.

2.3 Lazada

The Lazada application is a software implementation created by the Lazada Group, which dominates the e-commerce market in the Southeast Asia region. This application, with significant significance, has become a crucial cornerstone in the daily lives of millions of users in this region. The Lazada application facilitates online shopping transactions with sophistication that allows users to browse, search, and acquire various products and services through mobile devices such as smartphones and tablets, as well as through web-based computing platforms.

The application presents a sophisticated user interface designed to maximize the comfort and ease of users in accessing various aspects of e-commerce businesses. Users can freely explore various product categories, perform highly specific product searches, delve into relevant product descriptions and reviews, and complete the purchase process with guaranteed security. With various payment options available, detailed shipment tracking, and access to responsive customer support, the Lazada application is capable of creating a seamless online shopping experience.

This application plays an integral role in executing a sophisticated e-commerce ecosystem, providing easy access to various products and services offered by various brands and sellers under the Lazada umbrella. In the context of the

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highly dynamic modern business environment, the Lazada application ensures that consumer needs and expectations are met efficiently and effectively. As a tangible manifestation of the convergence between information technology and e-commerce, the Lazada application plays a crucial role in illustrating the dynamics and evolution of online shopping in Southeast Asia. Lazada, as a leading e-commerce platform, excels in product diversity, user-friendly interface, regular offers and discounts, as well as loyalty programs. Secure payment systems, responsive customer service, and efficient real-time tracking of deliveries add value. With this, Lazada has successfully created a holistic e-commerce ecosystem that meets various consumer needs.

3. Research Methodology

3.1 Literature Review

The first stage undertaken by the author in this research involves searching for literature, including journals and books related to ITIL version 3. The data and information collected regarding ITIL version 3 are sourced from both national and international journals.

3.2 Questionnaire Survey

Questionnaires will be distributed to application users with the aim of collecting data that aligns with the desired objectives. The data obtained from these questionnaires is raw and will undergo further processing. The questionnaire is designed with reference to the ITIL service design domain, covering service level management, design coordination, service design processes, capacity management, availability management, and information security. These processes are formulated to understand the design used in IT services, including IT architecture, processes, policies, and documents needed to meet current and future needs.

3.3 Observation

The author's observation involves examining the infrastructure of computers, including hardware, software, and their components. This observation is conducted on both physical and non-physical aspects within the infrastructure. The data obtained consists of raw data that will ultimately be processed in Excel.

3.4 Data Processing

The questionnaire data previously acquired is raw and undergoes a processing stage. Data processing involves a series of steps, including the use of validity and reliability tests to ensure the accuracy and reliability of the information contained in the questionnaires.

4. Result and Discussion

This chapter will review the research findings and provide comprehensive insights into the results of service quality analysis using the ITIL V3 Service Design domain framework on the Lazada application. The research findings are presented through tables and graphs, illustrating the extent to which the service quality of the Lazada application can be assessed from various aspects. Referring to the questionnaire results collected according to the ITIL V3 service design domain, validity test calculations, reliability tests, and maturity levels are conducted as described below.:

4.1 Research Instrument

This study utilized a questionnaire with a format designed according to the ITIL Version 3 service. The following is a summary of the research instrument used:

Table 1. Number of Questions

No	Subdomain	Number of Questions
1	Service Level Management	5
2	Design Coordination	3
3	Service Catalog	4
4	Service Design Processes	6
5	Capacity Management	2
6	Availability Management	3

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7	Information Security	4

The respondents used in the conducted research are members of the community who use the Lazada application.

4.2 Calculation of Maturity Level

Based on the survey questionnaire results filled out by Lazada application users, the data was then analyzed using the ITIL V3 framework. The results of the maturity level calculation are presented in Table 2.

Table 2. Results of Maturity Level Calculation

Subdomain	Current Maturity	Expected Maturity	Maturity Level
Service Level Management	3.75	4.00	4.00
Design Coordination	3.81	4.00	4.00
Service Catalog	3.69	4.00	4.00
Service Design Processes	3.43	4.00	4.00
Capacity Management	3.62	4.00	4.00
Availability Management	3.77	4.00	4.00
Information Security	3.36	4.00	4.00
Average	3.52	4.00	4.00

From the calculations, it can be concluded that all subdomains within the Lazada application have reached maturity level 4. This indicates that the Lazada application has attained a measurable level and can monitor its processes effectively, possessing the ability to address deviations from normal processes efficiently.

The results of the maturity level calculations for each of the seven subdomains are presented in the table above. This illustrates that the Lazada application has achieved a high level of maturity within the ITIL V3 Domain Service Design framework. All subdomains are at the "measured and measurable" level, indicating that the system is ready to be measured and monitored. Consequently, if there are deviations from normal processes, corrections can be efficiently implemented.

4.3 Gap Analysis Calculation

Gap analysis is utilized to compare the current maturity level with the expected maturity level to determine the gap between them. The results of the gap analysis are described in Table 3:

Table 3. Gap Analysis Results

No	Subdomain	Gap Analisys
1	Service Level Management	0.25
2	Design Coordination	0.19
3	Service Catalog	0.31
4	Service Design Processes	0.57
5	Capacity Management	0.38
6	Availability Management	0.23
7	Information Security	0.64
	Rata-rata	**0.36**

Based on the results of the gap analysis above, each subdomain exhibits a different level of gap. The largest gap is found in the Information Security subdomain, amounting to 0.64, while the smallest gap is in the Design Coordination subdomain, with a gap of 0.19. The average gap identified is 0.36. This indicates that the Lazada application has room for improvement and enhancement in service quality.

The findings of this research indicate that the Lazada application has achieved a high level of maturity in the ITIL V3 Domain Service Design framework. All subdomains within the Lazada application have reached maturity level 4, indicating that the application has reached a measurable level and effectively monitors its processes. This provides confidence that the Lazada application has the capability to address deviations from normal processes effectively.

However, the results of the gap analysis also show that there is still room for improvement and enhancement of service quality. The largest gap is in the Information Security subdomain, with a gap of 0.64, indicating room for improvement in information security within the Lazada application. Additionally, the Service Design Process subdomain also has a significant gap of 0.57, suggesting opportunities for improving the service design process within the application.

5. Conclusion

The conclusion of this research is that the Lazada application has achieved a high level of maturity within the ITIL V3 Domain Service Design framework. All subdomains within the Lazada application have reached maturity level 4, indicating that the application has attained a measurable level and effectively monitors its processes. This suggests that Lazada has the capability to handle deviations from normal processes effectively.

However, the results of the gap analysis also reveal that there is still room for improvement and enhancement of service quality. The largest gap is found in the Information Security subdomain, indicating an opportunity to improve information security within the Lazada application. Additionally, the Service Design Process subdomain also has a significant gap, suggesting an opportunity to enhance service design processes within the application.

Based on this research, the recommendation is for Lazada to focus efforts on improving information security within its application, especially in the face of the complexity of digital security challenges. Improvement in service design processes is also an aspect to be considered to ensure that Lazada continues to provide an excellent customer experience. Therefore, Lazada can maintain customer satisfaction and remain competitive in an increasingly tight market. In the era of globalization and business digitalization, the enhancement of service quality through the implementation of the ITIL V3 framework becomes crucial, aiding companies like Lazada in effectively managing and improving their competitiveness.

6. Declarations

5.1. Author Contributions

Conceptualization: N.A., R.T.A., and A.W.; Methodology: A.W.; Software: N.A.; Validation: N.A., R.T.A., and A.W.; Formal Analysis: N.A., R.T.A., and A.W.; Investigation: F.A.M.; Resources: I.K.A.; Data Curation: D.W.; Writing Original Draft Preparation: F.A.M. and T.; Writing Review and Editing: F.A.M. and T.; Visualization: T.; All authors have read and agreed to the published version of the manuscript.

5.2. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

5.3. Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

5.4. Institutional Review Board Statement

Not applicable.

5.5. Informed Consent Statement

Not applicable.

5.6. Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper

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