



Training Needs Analysis Using Quiz Based Microlearning For Team Leader

Andi Anugrah^{1,2*}, Basuki Wibawa³ and Eveline Siregar⁴

^{1,3,4} University State of Jakarta, Jakarta, Indonesia

² Telexindo Bizmart, Jakarta Selatan, Indonesia

*1andi_9902922001@mhs.unj.ac.id, 3bwibawa@unj.ac.id,
4esiregar@unj.ac.id

Abstract. This study aims to review the potential quiz-based microlearning application for Team Leader Contact Center training. Thus, these findings can be a reference to design and use microlearning in training programs. This study analyzed the success rate of introduction using quiz-based microlearning to several learning topics. Participants are given several topics to study and are accompanied by quizzes to measure their level of mastery. There were 62 participants to use the application. With descriptive analysis method, there were 52 participants (83.87%) who scored 80 and above, while 10 participants (16.13%) scored below 80. Analysis of the types of material showed that topics with cases analysis is material with a low level of mastery, only 12 participants (19.35%) were able to complete all the material correctly. Furthermore, the quiz with calculation was completed by 22 participants (35.48%). It was concluded that some of the main advantages of quiz-based microlearning are (a) it allows it to be used in professional training, (b) it allows repeated learning, and (c) it motivates participants to try. The design of quiz based microlearning to help students learn in the right direction through valid knowledge with ethical considerations.

Keywords: Microlearning, Quiz-Based Learning, Training Need Analysis, Contact Center.

1 Introduction

Team Leader Contact Center as the person in charge of contact center services in a business organization or company [1]. Team leader is responsible for managing the customer service team that handles calls, emails, or chats from customers. Team Leader Contact Center is directly involved in the service process and helps complete the service [2]. For this reason, the Team Leader Contact Center requires ongoing training to support their ability to lead service teams. With limited time for the team leader to leave contact center service operations, efforts are needed to continue to develop the team leader's capabilities. With various changes in products, procedures

and conditions, training methods are needed that can meet the changing demands of customers. In this effort, contact center organizations can choose and implement innovative learning methods such as Quiz-Based Microlearning.

Quiz-Based Microlearning offers several benefits that suit the needs of the organization as well as being the right solution to answer the questions and training problems needed. Team Leader Contact Center who works in shift 24 hour a day and 7 days a week to provide continuous and responsive customer service over that period requires flexibility in learning. Quiz-Based Microlearning can provide training that is interactive, customizable, and accessible to trainees anytime and anywhere [3]. Microlearning learning strategy is an effective approach to improve students' independent learning skills [4]. The use of appropriate learning models is necessary for optimal learning outcomes [5] as well as relevant learning arrangements and teaching strategies to achieve learning outcomes [6].

From a work-based learning perspective, microlearning has been considered as one of the main topics in talent development [7]. Quiz-Based Microlearning can assist organizations in providing effective and efficient training. For this reason, stakeholders are responsible for exploring how to design and use microlearning to help learning in the right direction through valid knowledge with ethical considerations [8]. When implementing Quiz-Based Microlearning, you can use various types of content, such as videos, applications, gamification, infographics, and quizzes [9]. To find out which training needs are appropriate, before implementing Quiz-Based Microlearning, it is necessary to conduct a Training Need Analysis (TNA).

Before choosing the training to be used, it is necessary to carry out a Training Need Analysis (TNA) to find out the training needs that suit the needs of the organization and employees. TNA is the first stage in the training process and involves procedures for determining that training can address the problems that have been identified [10]. TNA is conducted to identify or solve problems and to determine that training is the right solution [11].

In the context of implementing Quiz-Based Microlearning, TNA will serve as a solid foundation for designing and developing relevant and effective training content. By analyzing the training needs, organizations can identify the topics that should be included in the quiz, the appropriate level of difficulty, and the appropriate delivery style to facilitate an efficient and effective learning process.

In this article, the author will explore the importance of Training Need Analysis and its stages in implementing Quiz-Based Microlearning for Contact Center Team Leaders. This review will discuss the relevant stages of TNA, as well as the benefits and challenges that organizations may face. In addition, it will highlight the role of technology in facilitating the implementation of Quiz-Based Microlearning.

With a deep understanding of the importance of TNA and the advantages of Quiz-Based Microlearning, contact center organizations can design and implement effective training programs, significantly increase employee knowledge and skills to strengthen competitive capabilities amidst changing and rapidly growing demands.

2 Method

The approach used in this study is to test the use of the Quiz-Based Microlearning application in various learning materials needed by Team Leaders. The analysis uses descriptive statistical analysis based on quantitative data from the results of the introduction of the Quiz-Based Microlearning application. The quantitative method is an approach to test objective theories by examining the relationships between variables [12]. In this study, it analyzes the success rate of introduction using Quiz-Based Microlearning on several learning materials, namely text-based quizzes, pictures, cases, and calculations. Participants are given several topics to study and each topic are accompanied by quizzes to measure their level of mastery. There were 62 participants who attended an introduction to the use of the Quiz-Based Microlearning application in Team Leader training materials. With the descriptive analysis method, it is possible to evaluate the learning topics needed in the training.

3 Results and Discussion

Based on the results of data and information analysis carried out, the Training Need Analysis (TNA) process in the Quiz-Based Microlearning Implementation for Team Leader Contact Center is running as it should. As shown in table 1, the results of the Quiz-Based Microlearning introduction test showed that 52 participants (83.87%) scored 80 and above, while 10 participants (16.13%) scored below 80.

Table 1. Result of participants in the introduction of Quiz-Based Microlearning

Test Result	Number of Participants	%
< 60	2	3,23%
60 - 69	3	4,84%
70 - 79	5	8,06%
80 - 89	27	43,55%
90 - 100	25	40,32%

Analysis of the types of material studied and the quizzes displayed showed that the topic with the service case analysis was material with a low mastery level, only 12 participants (19.35%) were able to complete all the material correctly. Furthermore, the calculation material for quality assessment was only completed by 22 participants (35.48%), while the calculation material for performance measurement was completed by 35 participants (56.45%). The material regarding service procedures was completed properly by 47 participants (75.81%) indicating that the delivery of learning materials regarding procedures was easier than other materials.

Table 2. Test result of training material topics.

Topic	< 60	60	80	100	Total	%
Service Analysis	7	15	28	12	62	19,35%
Quality Assessment	10	8	22	22	62	35,48%
Performance Measurement	1	6	20	35	62	56,45%
Team Leader Duties	2	10	15	35	62	56,45%
Service Skills	4	3	19	36	62	58,06%
Competency of Team Leaders	4	9	9	40	62	64,52%
Contact Center Service	5	1	14	42	62	67,74%
Contact Center introduction	1	5	13	43	62	69,35%
Service Procedure	2	1	12	47	62	75,81%

Thus, the Quiz-Based Microlearning method can be a solution to maximize the training process. By considering its efficiency and effectiveness, a training strategy with Quiz-Based Microlearning can be chosen as the appropriate method for Team Leader Contact Center. This strategy has answered the limitations and problems of the Team Leader Contact Center learning needs. As for the results of the analysis of the characteristics of the participants in general, it can be concluded that some of the main advantages of quiz-based microlearning are: (a) with limited time for contact center Team Leader, quiz-based microlearning allows it to be used in professional training; (b) with the limitation of the contact center Team Leader to leave the service location, quiz-based microlearning allows it to be used for repeated learning; And (c) with the need to obtain actual and relevant service information, quiz-based microlearning can motivate participants to try.

As a result of TNA being able to identify the needs of the trainees, further adjustments need to be made in the implementation of Quiz-Based Microlearning. The training program needs to be adapted to the specific needs and characteristics of the participants. The Contact Center Team Leader training program can be implemented with training materials including (1) Introduction to Contact Center; (2) Team Leader Duties; (3) Team Leader Competency; (4) Contact Center Services; (5) Service Skills; (6) Service Procedures; (7) Performance Measurement; (8) Quality Assessment; and (9) Service Analysis.

The target participants of the Team Leader Contact Center training program can be identified and recommended for implementing the Inbound Team Leader, Back Office Team Leader, Digital Team Leader, and Outbound Team Leader. Training materials can be structured using the Quiz-Based Microlearning application. Training modules can be provided in the form of quizzes accompanied by learning video material, or in the form of writing, pictures, or illustrations.

These results are in line with the results of research conducted that the Quiz-Based Microlearning strategy is easy to implement, instructors can engage students in effective use [13]. The learning impact increased significantly after watching videos with

quiz questions [14]. The use of scenario-based microlearning strategies as an alternative approach in teaching and self-learning skills of students [4].

4 Conclusion

Trials of Quiz-Based Microlearning learning strategies on Contact Center Team Leader training materials through the Training Need Analysis (TNA) process have been successfully carried out. The TNA process in implementing Quiz-Based Microlearning for Contact Center Team Leaders has helped identify training needs, develop appropriate training programs, and provide solutions to maximize the training process for Contact Center Team Leaders. Adjustment of the training program based on TNA results is expected to improve service quality and competence of the Team Leader Contact Center.

This study contributes significantly in context as a reference in the Implementation of Quiz-Based Microlearning in business organizations or companies. TNA is an important foundation in identifying performance gaps, setting appropriate training objectives, ensuring appropriate participant characteristics, identifying needed resources, evaluating the potential for an effective delivery system, and developing overall planning. This study has highlighted the implementation of an effective Quiz-Based Microlearning strategy to improve the competence of the Contact Center Team Leader so that it can become one of the foundations in developing other practitioners in the Contact Center organization.

Based on the findings and analysis in this study, the authors recommend further development or studies to conduct further studies on methodologies and other approaches that can be effectively integrated into the TNA process for quiz-based microlearning.

5 Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

6 Funding.

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

References

1. Schwarzkopf, R. (2020). Competence Profile Of An Ideal Leader In A Selling Center: An Exploratory Analysis. *PEOPLE: International Journal of Social Sciences*, 6(2), 423–435. <https://doi.org/10.20319/pijss.2020.62.423435>.
2. Raithel, K., van Knippenberg, D., & Stam, D. (2021). Team Leadership and Team Cultural Diversity: The Moderating Effects of Leader Cultural Background and Leader Team Tenure. *Journal of Leadership & Organizational Studies*, 28, 261 - 272.
3. Triana, A. J., White-Dzuro, C. G., Siktberg, J., Fowler, B. D., & Miller, B. (2021). Quiz-Based Microlearning at Scale: a Rapid Educational Response to COVID-19. *Medical Science Educator*, 31, 1731–1733. <https://doi.org/10.1007/s40670-021-01406-8>.
4. Zulueta, L.F., & Panoy, J.F. (2022). Scenario-Based Microlearning Strategy for Improved Basic Science Process Skills in Self-Directed Learning. *International Journal of Science, Technology, Engineering and Mathematics*.
5. Siregar, E., & Aswan, D. (2019). Development of Blended Learning for Optimization Courses in Education Technology Master Program. *Advances in Social Science, Education and Humanities Research*, 372, 235-241.
6. Chaeruman, U. A., Wibawa, B., & Syahrial, Z. (2020). Development of an Instructional System Design Model as a Guideline for Lecturers in Creating a Course Using Blended Learning Approach. *International Journal of Interactive Mobile Technologies (IJIM)*, 14(14), 164–181. <https://doi.org/10.3991/ijim.v14i14.14411>
7. Moore, A. (2017, November 1). 2017 Trends. *ATD*. Retrieved June 20, 2023, from <https://www.td.org/magazines/td-magazine/2017-trends>
8. Leong, K., Sung, A., Au, D. and Blanchard, C. (2021), "A review of the trend of micro-learning", *Journal of Work-Applied Management*, Vol. 13 No. 1, pp. 88-102. <https://doi.org/10.1108/JWAM-10-2020-0044>
9. Nur Fitria, Tira. (2022). Microlearning in Teaching and Learning Process: A Review. *CENDEKIA: Jurnal Ilmu Sosial, Bahasa dan Pendidikan*. 2. 114-135. 10.55606/cendekia.v2i4.473.
10. Bansal, A., & Tripathi, J. P. (2017). A Literature Review on Training Need Analysis. *IOSR Journal of Business and Management*, 19(10), 50-56. DOI: 10.9790/487X-1910065056
11. Morrison, M. (2017, January 19). How to do a training needs analysis - TNA. *RapidBI*. Retrieved June 20, 2023, from <https://rapidbi.com/how-to-do-a-training-needs-analysis-tna/>
12. Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. SAGE Publications.
13. Gallagher, K.M. (2020). Using “Make & Take Quizzes” to Improve Exam Performance and Engage Students in Effective Study Strategies. *Teaching of Psychology*, 49, 124 - 129.
14. Rice, P., Beeson, P., & Blackmore-Wright, J. (2019). Evaluating the Impact of a Quiz Question within an Educational Video. *TechTrends* volume, 63, 522–532. <https://doi.org/10.1007/s11528-019-00374-6>.

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