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Analysis of Business Process Improvement for Mutawwif and Tour Leader Training at Nikmatour Travel Using a Business Process Management Approach

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ABSTRACT

The Umrah travel industry in Indonesia continues to grow rapidly, driving the need for structured and efficient human resource training standards. However, the training process for Mutawwifs and Tour Leaders (TLs) at Nikmatour Travel is still conducted conventionally, with limited face-to-face sessions, unsystematic distribution of materials, and the absence of an automated evaluation mechanism, resulting in inefficiency and uneven competency among field staff. This study aims to analyze and redesign the Mutawwif and TL training business processes at Nikmatour Travel using a Business Process Management (BPM) lifecycle approach combined with Value-Added Analysis (VAA). Data was collected through observations and semi-structured interviews with management, instructors, and training participants at Nikmatour Travel. The as-is process was mapped using BPMN and analyzed with VAA. The analysis results showed that of the ten as-is activities, four were classified as Non-Value-Adding (NVA), five as Business Value-Adding (BVA), and one as Value-Adding (VA). The designed to-be process integrates an e-learning platform, automated notifications, digital evaluations, and real-time competency monitoring, and successfully eliminates all NVA activities. Quantitative estimates indicate a 44.3% reduction in total cycle time, from 18 hours to approximately 10 hours per training cycle, with an average BVA activity efficiency of 65%.

Keyword: Business Process Management, Mutawwif, Tour Leader, training, value-added analysis, digital learning, BPMN

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1. INTRODUCTION

The Umrah travel industry in Indonesia has experienced significant growth over the past decade, in line with the increasing number of pilgrims utilizing travel agency services. This growth has led to increasingly high demands on the quality of service and professionalism of religious travel organizers [11]. The success of innovation in the Umrah business is largely determined by the synergy between technology, government regulations, the quality of human resources, and pilgrims' trust which serve as the main pillars of travel agencies' competitiveness [11]. In this context, the quality of human resources (HR), particularly Mutawwifs and Tour Leaders (TLs), is

a crucial determinant in setting service standards and shaping the spiritual experience of Umrah pilgrims [12]. Humanistic and competent service from guides has been proven to build pilgrim loyalty, whereas competency limitations resulting from inadequate training have a direct impact on the decline in service quality in the field [1], [2]

Nikmatour Travel is an Umrah travel agency that has held an official license from the Ministry of Religious Affairs (KEMENAG) and an A Accreditation from the National Accreditation Committee since 2017. The company is committed to providing Umrah services with competitively priced packages, adequate facilities, a trustworthy team, and the performance of religious rituals in accordance with the Qur'an and Sunnah. Pilgrims' trust and customer loyalty are strategic assets for a travel agency that directly influence the company's value and the sustainability of the Umrah business [12]. To maintain this service quality, competent and consistently trained field staff are required [7, 11].

Under current conditions (as-is), the training process for Mutawwifs and Tour Leaders at Nikmatour Travel is still conducted conventionally. Challenges such as limited training frequency, reliance on in-person schedules, and the absence of an automated evaluation system have the potential to reduce process efficiency and limit the optimization of knowledge transfer. This situation is a concern given that the roles of Mutawwifs and Tour Leaders require multidimensional competencies, including communication skills, leadership, responsibility, and mastery of pilgrim escort duties [7, 8].

Previous research on the implementation of Business Process Management (BPM) at Umrah travel agencies has primarily focused on the digitization of administrative processes such as registration and visa processing [2, 3]. Studies on SMEs indicate that while the BPM Lifecycle framework is theoretically understood, its practical application remains highly fragmented and inconsistent due to organizational resource constraints and low awareness of BPM's benefits [14]. No research has specifically examined the redesign of human resources training business processes using a BPM Lifecycle approach combined with Value-Added Analysis (VAA) in the context of Umrah travel. A BPM approach based on value-added analysis and selective automation has proven capable of improving process efficiency and service quality within complex organizational environments [15]. There is a fundamental research gap regarding the optimization of religious tourism HR training processes, particularly in identifying non-value-added activities and designing more efficient process models. This study contributes to filling this gap by presenting a structured VAA analysis and a validated to-be process model. Based on these issues, this study was conducted with the objective of analyzing and redesigning the business processes for Mutawwif and Tour Leader training at Nikmatour Travel. The analysis was conducted using a BPM Lifecycle approach combined with Value-Added Analysis. In light of these issues, this study was conducted with the aim of analyzing and redesigning the business processes for training Mutawwifs and Tour Leaders at Nikmatour Travel. The analysis was conducted using the BPM Lifecycle approach combined with Value-Added Analysis (VAA), and validated by comparing the as-is and to-be processes [1, 6].

2. METHODS

This study employed a qualitative approach using observation and semi-structured interviews with stakeholders of Nikmatour Travel. The interviews were conducted online via Zoom on November 11, 2025.

2.1. BPM Lifecycle

The BPM Lifecycle is a framework that structures workflow improvement within an organization through six main phases [6]: (1) Process Identification: identifying training process

operations in a step-by-step manner; (2) Process Discovery: mapping the as-is training business process; (3) Process Analysis: conducting a qualitative analysis using VAA to identify weaknesses; (4) Process Redesign: designing a to-be process model that integrates continuous learning and automation; (5) Process Implementation: preparing a digital platform to distribute e-learning modules; and (6) Process Monitoring: using the digital training platform as a reference for continuous self-certification. Consistent application of the BPM cycle enables organizations to identify inefficiencies, streamline operations, and continuously improve performance in alignment with the organization's strategic objectives [15]. In the context of SMEs and service organizations, the monitoring phase and the process identification phase are often neglected, resulting in non-sustainable improvements [14].

2.2. Value-Added Analysis (VAA)

VAA determines whether an operational activity adds value or not. NVA activities are wasteful processes that consume time and resources without providing value to customers, and ideally can be eliminated through system improvements [13]. Three classifications of activities are used [6, 10, 13]:

- Value-Adding (VA): adds direct value to pilgrims.
- Business Value-Adding (BVA): adds internal business value.
- Non-Value-Adding (NVA): does not add value; can potentially be eliminated or reduced through digitization.

2.3. Business Process Modelling Notation (BPMN) dan Simulasi

BPMN is an international standard from the Object Management Group (OMG) for business process modeling using a graphical notation that depicts activities, events, flows, branches, and swimlanes [2]. Modeling is performed using Visual Paradigm software. The BPMN to-be model serves as a blueprint for improvement, enabling a structured comparison between the as-is and to-be conditions to concretely measure the benefits of optimization [15]. Quantitative estimates are performed to measure the impact of process changes in terms of reduced cycle time and increased efficiency [1, 3].

3. RESULTS AND DISCUSSION

Based on observations and interviews with management, training instructors, and participants (mutawwifs and tour leaders) at Nikmatour Travel, a number of issues were identified in the ongoing training process. These issues are presented in Table 1.

Table 1. Identifying Issues in the Training Process

No.	Issue	Risk
1	Training is conducted entirely in person with limited frequency	Participants cannot review the material; competencies do not develop continuously
2	Training materials are distributed manually and only during sessions	Materials are not distributed evenly and cannot be accessed again by participants
3	Attendance confirmation and schedule coordination are done manuall	Participant tardiness and absences are not systematically detected
4	Competency evaluations are conducted in writing and corrected manually	Assessments are inconsistent and not stored as a competency record
5	There is no continuous monitoring of mutawwif and tour leader competencies	Competency gaps among participants are not identified by management [4]

3.1 As-Is Business Process

The current (as-is) business process for training mutawwifs and tour leaders has been modeled using BPMN and involves three swimlanes: Travel Management, Training Instructors, and Participants. The purpose of this modeling is to produce a visual representation, standardized using BPMN notation, of the entire process flow that actually takes place in the field, thereby providing a basis for the systematic identification of issues [2].

Figure 1. As-Is Basic Diagram

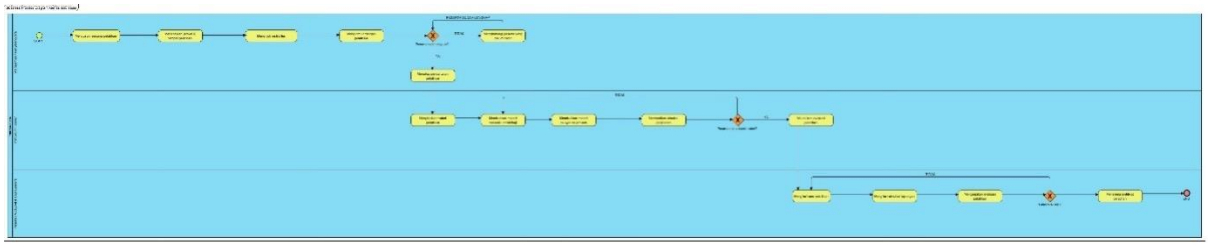


Figure 1 shows the basic flow of the training process. The process begins with Travel Management, which plans the training, identifies participants, compiles a list of instructors, and sets the schedule. In the Training Instructor lane, activities include preparing materials, identifying topics, communicating the schedule, and evaluating training outcomes. In the Participant lane, activities include attending in-person sessions, taking written evaluation tests, and receiving assessment results. There are exclusive gateways at the stages of attendance confirmation and participant graduation.

Figure 2. As-Is Advance Diargram

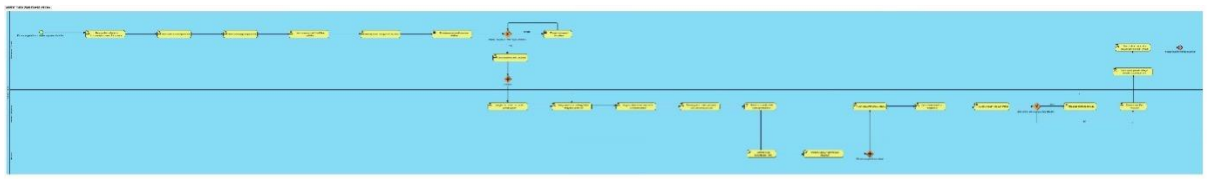


Figure 2 shows a more comprehensive as-is model with additional flow paths for the conditions of participant absence and evaluation failure. In the event of a participant's absence, the process is halted without a structured recovery mechanism. In the event of a participant's failure, there is no defined remediation path within the process.

Overall, the as-is process consists of ten main activities. In the event of a participant's absence, the process is terminated without a structured recovery mechanism. In the event of a participant failing, there is no defined remediation path within the process.

3.2 Process Analysis

3.2.1 Value-Added Analysis

A value-added analysis was conducted to classify each activity into the VA, BVA, and NVA categories [6]. The results of the classification are presented in Table 2. Of the ten identified activities, there were four NVA activities (40%), five BVA activities (50%), and one VA activity (10%). The significant proportion of NVA activities indicates inefficiencies in the as-is process, consistent with the findings of Ramadhan and Nuryana [1] that identifying non-value-added activities is a crucial step before process redesign is carried out. A study by Nabila et al. [13] on vehicle sales services showed a similar pattern, where a single NVA activity alone consumed 73.62% of the total process time, confirming that a single unaddressed point of waste

has a massive impact on the overall service lead time. Compared to the study by Salsabilah et al. [6], which identified 17 NVA activities (14.9%) out of a total of 114 activities in conference management, the 40% NVA proportion in Nikmatour Travel's training process indicates a more urgent need for improvement. This finding is also consistent with the results of Nur'Syamsiyah et al. [11], who noted that limited technological proficiency among staff is the greatest barrier to innovation in umrah business processes; therefore, process redesign must be accompanied by systematic capacity-building for staff.

Table 2. Classification of Value-Added Analysis for the As-Is Process

No.	Activity	Classification	Description
1	Plan the training	BVA	Organizationally necessary
2	Identify training participants	BVA	Necessary, but can be automated
3	Compile a list of instructors	BVA	Necessary, can be integrated into the system
4	Communicate the schedule manually	NVA	Can be replaced by automated notifications
5	Prepare and distribute physical materials	NVA	Redundant; can be replaced by a digital platform
6	Confirm attendance manually	NVA	Inefficient process, prone to delays
7	Conduct in-person sessions	VA	Provides direct value to participants' competencies
8	Identify training topics and materials	BVA	Necessary, can be standardized digitally

3.3 To-Be Business Process

Based on the results of the process analysis, a target business process model was designed that fully integrates a digital training platform [6]. The target model consists of three interconnected BPMN diagrams: the main process, the sub-process for conducting digital training, and the looping mechanism for competency remediation.

3.3.1 Key To-Be Processes

Figure 3. To-Be Advance Diagram

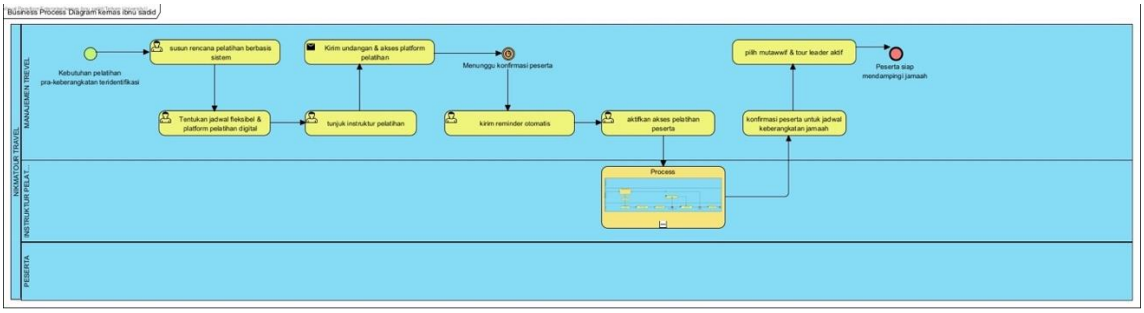
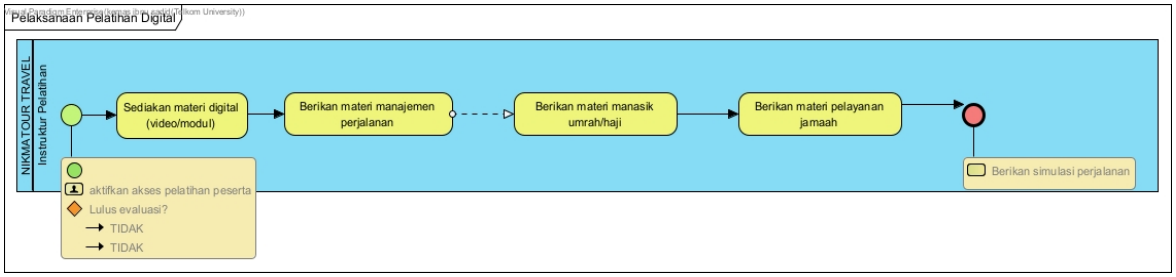


Figure 3 illustrates the main "to-be" process with three swimlanes. The process begins with Travel Management, which involves creating a system-based training plan, determining a flexible schedule and digital platform, and appointing instructors. The system then automatically sends invitations and platform access to participants. After the confirmation waiting period ends, the system sends an automatic reminder and activates participants' training

access. Once the digital training sub-process is complete, management confirms the pilgrims' departure schedule and selects an active mutawwif and tour leader.

3.3.2 Sub-Processes for Implementing Digital Training

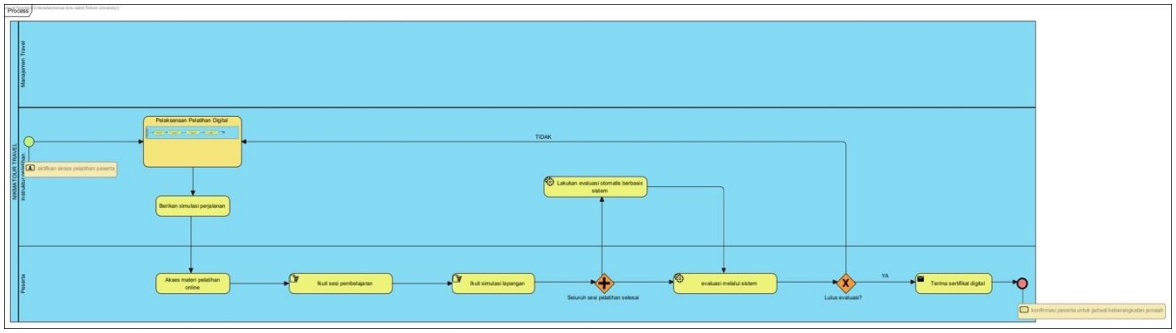
Figure 4. Sub-Processes Diagram



The Digital Training Implementation sub-process consists of four sequential activities: (1) providing digital materials in the form of videos and modules, (2) providing travel management materials, (3) providing Umrah/Hajj ritual materials, and (4) providing pilgrim service materials. This e-learning approach aligns with the recommendations of Chirilda and Suendri [3] that the digitization of BPMN-based business processes can significantly improve service time efficiency. This is also supported by Nur'Syamsiyah et al. [11], who assert that the quality of human resources obtained through systematic and continuous training is the most decisive enabler of innovation in the Umrah business. Selective automation that maintains flexibility in process design has been shown to improve both process efficiency and quality simultaneously without sacrificing core service value [15].

3.3.3 Looping Mechanisms and Evaluation

Figure 5. Looping Diagram



After all digital training sessions are completed, participants undergo a system-based automated evaluation. An exclusive gateway determines two paths: if they pass, participants receive a digital certificate; if they fail, participants are redirected to the training sub-process to repeat the learning. This mechanism ensures that minimum competency standards are met before participants are assigned to assist pilgrims, consistent with the findings of Kristiyuana et al. [4] that the quality of the mutawwif and tour leader's competencies directly determines pilgrim loyalty.

3.4 Comparison of As-Is and To-Be Processes

The target process successfully eliminated all non-value-added (NVA) activities and significantly increased the proportion of value-added (VA) activities. This improvement pattern is consistent with the results of the process redesign reported by Ramadhan and Nuryana [1], in

which the target process resulted in a measurable reduction in cycle time and an overall increase in operational efficiency. The digitization of the training platform also supports improved service quality for pilgrims, which in turn strengthens pilgrims' trust and loyalty as the primary assets of the Umrah travel agency [12]. From a BPM adoption perspective, the success of the to-be process implementation heavily depends on organizational cultural support, role clarity, and internal ownership of the automation initiative [14].

Table 3. Comparison of As-Is and To-Be Business Processes

Aspect	As-Is	To-Be
Number of core activities	10	12 (+ 4 sub-process activities)
Non-value-added (NVA) activities	4 (40%)	0 (0%)
Value-added (VA) activities	1 (10%)	5 (41.7%)
Material distribution channels	Manual/printed	Automated digital (LMS)
Evaluation mechanisms	Written manual	System-based automation
Remediation pathways	Not available	Available (automatic looping)
Competency monitoring	Not available	Real-time digital dashboard
Participant certification	Not standardized	Automated digital certificates

3.5 Quantative Impact Estimation Through Business Process Simulation

To complement the qualitative analysis and validate the effectiveness of the to-be process model, a quantitative impact assessment was conducted based on a comparison of the durations of as-is and to-be activities. This estimation approach refers to the study by Rosalina et al. [9], which demonstrated a 48.9% improvement in time efficiency in the SME booking process, as well as Tawar and Pangestu [10], who recorded a total time savings of 13.99% in university internship services.

Estimates of the duration of each activity are based on interview data with Nikmatour Travel stakeholders, following the same approach used by Ramadhan and Nuryana [1] in their study of broiler chicken production. Table 4 presents a comparison of the duration per activity between the as-is and to-be processes.

Based on the simulation results, the proposed process reduces the total training cycle time by 44.3%, from 1,080 minutes (18 hours) to 602 minutes (~10 hours) per training cycle. The largest reductions occurred in NVA activities: manual attendance confirmation was reduced by 100% through system automation, physical material distribution was reduced by 96% through the LMS platform, and manual evaluation correction was reduced by 94% through an automated grading system. These results are comparable to the findings of Rosalina et al. [9], who recorded a 48.9% reduction in ordering time and a 20.77% reduction in delivery time through process digitization at catering SMEs.

For BVA activities, efficiency was also achieved through system integration: participant identification decreased by 75% as it could be done via a centralized database, while training planning decreased by 50% because templates and schedules were already stored in the system. The duration of VA activities (conducting training sessions) was maintained because the core

value of training lies in the quality of interaction between instructors and participants, not solely in time efficiency. Overall, the average efficiency for BVA activities reached 65%, far exceeding the average efficiency in the study by Tawar and Pangestu [10] of 13.99%, which was due to the large proportion of manual activities in Nikmatour Travel's as-is process.

Table 4. Estimated Comparison of Activity Durations: As-Is vs. To-Be

No.	Activity	Classification	As-Is Duration (min)	To-Be Duration (min)	Efficiency
1	Plan the training	BVA	90	45	50%
2	Identify training participants	BVA	60	15	75%
3	Compile a list of instructors	BVA	30	10	67%
4	Manually communicate the schedule	NVA	60	2	97%
5	Prepare and distribute physical materials	NVA	120	5	96%
6	Manually confirm attendance	NVA	30	0*	100%
7	Conduct in-person/digital sessions	VA	480	480	0%
8	Identify topics and materials	BVA	60	30	50%
9	Conduct written evaluations and provide manual feedback	NVA	90	5	94%
10	Report results to management	BVA	60	10	83%
	Total		**1.080 mnt (18 hours)**	**602 mnt (~10 hours)**	**44,3%**

4. CONCLUSION

The mapping and improvement of the Mutawwif and Tour Leader training business processes at Nikmatour Travel using a Business Process Management (BPM) approach were successfully completed. Of the ten as-is process activities analyzed, four were identified as NVA (40%), five as BVA (50%), and one as VA (10%). With the BPM approach, the training business process became more structured, with a more detailed workflow and a looping mechanism for competency remediation.

Quantitative estimates indicate a total cycle time reduction of 44.3%, from 18 hours to approximately 10 hours per training cycle. All four NVA activities were successfully eliminated,

with the greatest savings in manual attendance confirmation (100%), physical material distribution (96%), and manual evaluation correction (94%). BVA activities also achieved an average efficiency of 65% through digital system integration.

The implementation of the resulting “to-be” business process model takes the form of a design for an integrated digital training platform that can serve as a reference for Nikmatour Travel in conducting future training for mutawwifs and tour leaders. The accuracy of system-based automated evaluation helps ensure that every participant meets the minimum competency standards before being assigned to accompany pilgrims, thereby maintaining the quality of the Umrah experience [4]. Enhancing human resource competencies through structured and continuous training is the foundation of innovation that supports pilgrims’ trust and the long-term reputation of the Umrah business [11], [12]. The elimination of NVA activities, as done in this study, aligns with the ABM principle that time waste at a single process point can have a dominant impact on the overall service lead time [13]. For this improvement to be sustainable, the organization needs to ensure role clarity, management support, and training for all stakeholders involved in the new process [14].

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