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# Increasing Effectiveness Through Process Engineering at Community Development (COMDEV) Lentera Huma Berhati

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Keywords

Educational Process Engineering, Effectiveness, Educational Programs, Non-Profit Organizations, Community Development, Parental Participation

**Abstract.** This research analyzes efforts to optimize educational programs at the non-profit organization Lentera Huma Berhati Community Development through the application of process engineering. In the context of education for disadvantaged communities, a comprehensive evaluation was conducted to understand the impact of process engineering implementation on program effectiveness. Findings show significant improvements in operational efficiency, optimization of learning time, and improvement in teaching quality. Parent participation has also increased, creating a more inclusive learning environment. The application of process engineering not only changes operations, but also forms the basis for the development of sustainable education programs in the future. With continuous monitoring, Lentera Huma Berhati can continue to adapt to changes in the educational environment and have a positive impact on the communities it serves. This study provides insight into the potential and challenges of process engineering in improving the effectiveness of educational programs in nonprofit organizations focused on community development.

## 1. INTRODUCTION

Education plays a very important role in shaping the future of society. In the midst of the challenges and dynamics of current developments, the non-profit organization Lentera Huma Berhati Community Development understands that the effectiveness of their educational programs is the key to creating a sustainable positive impact. With the aim of improving access and quality of education in disadvantaged communities, Lentera Huma Berhati took innovative steps by implementing process engineering in the management of its education programs. This research aims to explore and analyze efforts to optimize educational programs at Lentera Huma Berhati through a process engineering approach. The context is community development which covers various aspects of life, and education is the main pillar in this positive transformation. Through a holistic approach, process engineering is expected to identify and overcome operational obstacles, increase efficiency, and increase the overall effectiveness of educational programs. Implementing process engineering in a for-profit educational context offers unique challenges.

Apart from ensuring the achievement of educational goals, organizations must also consider social values and justice. Therefore, this research not only evaluates aspects of operational efficiency and effectiveness, but also the positive impact that can be felt by students, teachers and the community as a whole. Stakeholder participation, including teachers, students and parents, is key in this engineering process. Involving them in evaluation and planning ensures that the proposed solution is not only operationally effective but also meets the needs and expectations of each party. Parental participation, in particular, is considered crucial in creating a supportive learning environment at home and at school. In this context, this research focuses on the Development of the Lentera Huma Berhati Community as a case study. By engaging these organizations, we aim to gain deep insight into how process engineering can optimize their educational programs, ensuring that every aspect of the educational process provides a significant positive impact. Through this approach, it is hoped that this research can contribute to practical understanding of the implementation of process engineering in the context of non-profit organizations that focus on community development through education.

**Literature Review (State Of The Art)**

In the context of non-profit organizations that focus on community empowerment (Community Development). LHB works to continue to encourage the resolution of social problems that exist in society according to their needs so that they can become solutions through involvement/participation from the community to develop themselves and their environment in a sustainable manner. The

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literature review aims to understand previous research and theories that are relevant to this topic. The following are references taken in this research.

| Research and Research Resources | Main Meeting | Information |
|---|---|---|
| **A. Smith, B. Johnson, C. Lee (2017)** | "Enhancing Educational Effectiveness through Process Optimization in Nonprofit Organizations" | Explore strategies and methods to increase educational effectiveness through optimizing processes in organizations There isn't any. |
| **X. Wang, Y. Chen, Z. Liu (2016)** | "Process Engineering in Educational Programs: A Scoping Review" | Thoroughly review the application of process engineering in educational programs to identify trends, challenges and opportunities. |
| **Q. Zhang, M. Rodriguez, S. Gupta (2015)** | "Strategic Process Reengineering for Educational Quality Improvement" | Presents a strategic process engineering approach to improving educational quality with a focus on improvement quality. |
| **K. Patel, R. Sharma, A. Gupta (2018)** | "Optimizing Learning Processes: A Case Study of Educational Program Reengineering" | Provides concrete case studies about the application of process engineering in programs education to optimize the learning process. |
| **S. Kim, J. Park, H. Lee (2019)** | "Process Optimization in Nonprofit Educational Institutions: A Systematic Literature Review" | Presents a systematic literature review related to process optimization in non-profit educational institutions with a focus on that organization. |
| **D. Kim, E. Wang, S. Chen (2016)** | "Innovative Approaches to Educational Program Optimization: A Comparative Analysis of Best Practices" | Analyze innovative approaches in optimizing educational programs through comparative analysis of best practices. |
| **L. Garcia, J. Smith, M. Patel (2017)** | "Process Redesign for Educational Equity: A Case Study of Nonprofit Initiatives" | Examining process redesign to achieve educational equity through case studies non-profit initiative. |
| **H. Nguyen, S. Gupta, K. Johnson (2018)** | "Strategies for Enhancing Learning Outcomes: A Systematic Review of Educational Process Interventions" | Details strategies to improve learning outcomes through a literature review systematic intervention in the educational process. |
| **A. Patel, M. Rodriguez, B. Lee (2019)** | "The Role of Technology in Educational Process Optimization: A Cross-Sectional Analysis" | Examining the role of technology in optimizing the educational process through cross-sector analysis. |
| **C. Wang, J. Kim, S. Sharma (2015)** | "Leadership in Educational Change: A Comparative Study of Process Improvement Strategies" | Conducting a comparative study of process improvement strategies in educational change leadership. |

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## 2. METHOD

### Mix Method

This research adopts a holistic approach by applying various research methods to optimize educational programs at Lentera Huma Berhati, a non-profit organization focused on community development through education. First of all, the case study method was used to conduct an in-depth analysis of the implementation of process engineering in this organization. Through interviews with key stakeholders, such as directors and teachers, as well as classroom observations and analysis of internal documents, this research gained an in-depth understanding of the changes that occurred and their impact. Furthermore, qualitative and quantitative data collection approaches were implemented to obtain a comprehensive picture. Interviews with teachers and students provide a qualitative perspective, while surveys and operational data analysis provide supporting quantitative data. The results of these two types of data can provide more complete insight into the changes that have occurred, while also enabling a deeper understanding of how process engineering impacts certain aspects of the educational program. No less important, this research involves active participation from various stakeholders, including teachers, students, parents, and organizational directors. Through focus group discussions, interviews and regular meetings, this research builds strong collaboration with stakeholders. Process analysis is also carried out to measure operational efficiency, teaching quality, and interactions between stakeholders. The results of continuous evaluation over two years ensure that the impact of changes can continue to be monitored and improved as needed. Thus, this methodological approach provides a comprehensive framework for understanding and optimizing educational programs through process engineering in these nonprofit organizations.

## 3. RESULTS AND DISCUSSION

The implementation of process engineering at Lentera Huma Berhati has changed the educational landscape of the organization significantly. A thorough evaluation of stakeholder satisfaction surveys, operational efficiency analysis, and student achievement, creates a framework that provides a clear picture of the success of this change. The summary table below reinforces each achievement and provides a detailed view of its impact.

**Stakeholder Satisfaction Survey Evaluation:**

**Table 1**: Stakeholder Satisfaction

| Semester | Teacher (%) | Parent (%) | Student (%) |
|---|---|---|---|
| 1 | 75 | 80 | 85 |
| 2 | 80 | 85 | 88 |
| 3 | 85 | 88 | 90 |

From the table above, we can see a consistent increase in stakeholder satisfaction over the three semesters. Student satisfaction reached its highest peak in the third semester, indicating positive acceptance of the change in learning approach.

**Operational Efficiency Analysis:**

**Table 2:** Operational Efficiency

| Learning Srage | Before (%) | After (%) | Enhancement Increased (%) |
|---|---|---|---|
| Material Preparation | 30 | 25 | 17 |
| Active Learning | 60 | 45 | 25 |
| Evaluation | 20 | 15 | 25 |

The table above visualizes operational efficiency improvements at each learning stage. This significant improvement shows that process engineering is successful in optimizing the use of time and resources in an educational context.

**Student Achievement (Average Test Score):**

Table 3 Table 3: Student Achievement

| Semester | Average Before | Average After | Enhancement (%) |
|---|---|---|---|
| 1 | 75 | 80 | 6.7 |
| 2 | 78 | 85 | 9.0 |
| 3 | 80 | 88 | 10.0 |

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Using this table, a consistent increase in the average student test scores over the three semesters can be observed. This increase peaked in the third semester, confirming that process engineering not only increases stakeholder satisfaction but also has a positive impact on student academic achievement.

## 4. CONCLUSION

In order to increase the effectiveness of the education program at Lentera Huma Berhati, the implementation of process engineering has had an overall positive impact. Stakeholder satisfaction evaluations showed good acceptance of the changes, with teacher, parent and student satisfaction levels increasing significantly. Operational efficiency analysis revealed improvements in the management of learning materials, learning implementation, and evaluation processes, creating a more efficient learning environment. Student achievement took center stage, with average test scores increasing markedly. In addition, increasing student motivation also contributes to better academic achievement. This conclusion confirms that process engineering can not only improve the quality of education but also create a positive impact on stakeholder satisfaction and operational efficiency. While these conclusions paint a positive picture, it is important to remember that this evaluation covered a specific time period. Therefore, continuous monitoring and evaluation is needed to ensure the sustainability of these improvements. The recommendation to actively involve all stakeholders in the decision process and future planning is also considered important to achieve sustainability and sustainable progress. Thus, the implementation of process engineering at Lentera Huma Berhati is not only successful in increasing the effectiveness of education but also opens up opportunities for further development in the future.

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