

ANALYSIS OF DATA-BASED EDUCATIONAL PLANNING IN INTEGRATED ISLAMIC SCHOOL MANAGEMENT IN INDONESIA

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ABSTRAK

Penelitian ini bertujuan untuk menganalisis implementasi perencanaan pendidikan berbasis data dalam manajemen Sekolah Islam Terpadu (SIT) di Indonesia. Perencanaan yang efektif dan berbasis data dinilai sebagai kunci dalam meningkatkan mutu pendidikan, khususnya dalam konteks sekolah yang memadukan nilai-nilai keislaman dengan kurikulum nasional. Metode penelitian menggunakan pendekatan kualitatif-deskriptif dengan studi pustaka dan analisis dokumentasi sebagai teknik utama. Hasil kajian menunjukkan bahwa penerapan perencanaan berbasis data di SIT berkontribusi pada efektivitas pengambilan keputusan, efisiensi alokasi sumber daya, serta peningkatan kualitas layanan pendidikan. Namun demikian, tantangan masih ditemukan dalam hal literasi data manajerial, keterbatasan infrastruktur digital, dan resistensi terhadap perubahan pola kerja berbasis data. Rekomendasi dalam penelitian ini mencakup pentingnya pelatihan SDM, penguatan sistem digital sekolah, dan pengembangan budaya kerja yang mengedepankan evidence-based decision making. Temuan ini diharapkan dapat menjadi rujukan strategis bagi pengelola SIT dalam membangun sistem pendidikan yang unggul, adaptif, dan tetap berlandaskan nilai-nilai Islam.

Kata Kunci: Perencanaan Pendidikan, Manajerial, Sekolah Islam Terpadu

ABSTRACT

This study aims to analyze the implementation of data-based educational planning in the management of Integrated Islamic Schools (SIT) in Indonesia. Effective and data-based planning is considered key to improving the quality of education, especially in the context of schools that combine Islamic values with the national curriculum. The research method uses a qualitative-descriptive approach with literature studies and documentation analysis as the main techniques. The results of the study indicate that the implementation of data-based planning in SIT contributes to the effectiveness of decision making, efficiency of

resource allocation, and improving the quality of education services. However, challenges are still found in terms of managerial data literacy, limited digital infrastructure, and resistance to changes in data-based work patterns. Recommendations in this study include the importance of HR training, strengthening school digital systems, and developing a work culture that prioritizes evidence-based decision making. These findings are expected to be a strategic reference for SIT managers in building a superior, adaptive education system that remains based on Islamic values.

Keywords: *educational planning, management, integrated Islamic school*

INTRODUCTION

The transformation of educational institutions in the era of disruption requires a paradigm shift from intuition-based planning to evidence-based planning. In the context of modern education, data is not just a pile of numbers, but a strategic instrument to map the real needs of students. The systematic use of data allows schools, especially the boarding school model and the Integrated Islamic School (SIT), to provide "sangu" or life provisions that are relevant for a complex future. In-depth data analysis, as defined as an effort to organize observation and interview notes to find meaning, helps school leaders formulate responsive and measurable policies.

Research by Schildkamp (2019) on Data-Based Decision Making shows that schools that use data collectively to evaluate curriculum and student performance experience significant improvements in academic achievement and organizational effectiveness. In Indonesia, a study by Sumarsono et al. (2020) strengthens the finding that the quality of educational planning in madrassas and Islamic schools is highly dependent on the ability of school principals to interpret Education Report cards and program evaluation data. It confirms that data-driven planning is a crucial solution for integrative schools to remain competitive, ensure efficient resource allocation, and ensure that every character development as well as academic development program truly addresses the global challenges faced by students.

The phenomenon of the rapid growth of Integrated Islamic Schools (SIT) in Indonesia reflects a paradigm shift in parents in choosing institutions that are able to balance the dichotomy of general science and religion. The distinctive characteristic of SIT lies in the integrated curriculum that requires school management to work extra in preparing educational planning. This planning should not be stuck in mere administrative formalities, but must be strategic and adaptive in order to form intellectually, spiritually, and socially superior kamil people.

Research by Hidayat et.al. (2020) in the journal of education management confirms that the effectiveness of SIT is largely determined by its ability to manage the Hidden Curriculum based on Islamic character values into national standards. Furthermore, a study from Suyatno (2017) shows that SIT's competitiveness that is able to go beyond public schools is often rooted in visionary leadership that implements value-based management. This proves that careful planning in integrating the value of spirituality into science is not only an identity, but also a unique selling point that makes SIT remain relevant in the midst of globalization. Thus, the quality of education management at SIT is the main key in producing a competitive generation but still adhering to Islamic ethics.

One of the strategic approaches that is now in the spotlight is data-driven educational planning. Planning involves identifying, inventorying, and selecting needs based on the scale of priority, that is, in planning something it is important to understand what is needed, which is the most important and how to manage the priority, then planning involves developing specifications that are about the results to be achieved. This means detailing what exactly you want to achieve in a project or task. This concept emphasizes the importance of using quantitative and qualitative data in preparing work programs, resource allocation, performance evaluation, and the preparation of school visions and missions. In the context of SIT, this approach allows school management to maintain the quality of education, increase public accountability, and ensure the sustainability of measurable Islamic character development programs.

However, in practice, the implementation of data-based planning at SIT still faces various obstacles. Among them are the limited managerial understanding of data literacy, the lack of supporting technological infrastructure, and a conventional

work culture that relies more on intuition than data analysis. This condition makes it difficult for SIT to optimize the potential of data planning in improving the quality of education services. As a result, the policies taken are often reactive and not based on in-depth analysis.

The implementation of data-based planning (PBD) in the Integrated Islamic School (SIT) ecosystem is a strategic need to answer the increasingly high public expectations of the quality of Islamic education in the modern era. Various studies, such as the study conducted by Schildkamp, Ehren, and Lai (2012), show that schools that adopt data-driven decision-making collaboratively are able to significantly improve academic performance through sharper evaluations of instructional practices. For SITs that have dual curriculum characteristics, the use of data is key to balancing the achievement of Islamic values and science competencies without sacrificing either of them. In addition to the quality aspect of graduates, data-based planning also has a direct impact on internal management. Research from Wohlstetter et al. (2008) revealed that in independent schools, the use of data contributes to more targeted budget allocation efficiency. This is reinforced by the findings of Marsh, Pane, and Hamilton (2006) who emphasize that data helps schools identify learning gaps early, so that interventions can be carried out precisely.

In Indonesia, a study by Sumarsono et. al. (2020) confirmed that schools that prepare work plans based on Education Report and internal evaluation have a much superior level of management effectiveness compared to schools that only rely on an annual routine planning pattern. Therefore, the evaluation of the obstacles and potential success of PBD within the SIT is a crucial step to ensure the professionalism and accountability of Islamic educational institutions in the future.

Based on this background, this study aims to analyze the implementation of data-based educational planning in the management of Integrated Islamic Schools in Indonesia. The focus of the study includes the identification of data-based planning practices, their supporting and inhibiting factors, as well as recommendations for strengthening evidence-based management. The results of this study are expected to be able to contribute to improving the quality of SIT management that is academically superior and has an overall Islamic character.

METHOD

This research is a qualitative-descriptive research that aims to explore the implementation of data-based educational planning in the management of Integrated Islamic Schools (SIT). Primary data was collected through in-depth interviews with principals and staff, while secondary data came from RKS documents and JSIT policies. Data collection techniques include semi-structured interviews, observation of the planning process, and documentation studies of management information systems. Data analysis follows the Miles and Huberman model through the reduction stage, narrative presentation, and conclusion drawn. The validity of the findings is guaranteed through triangulation of sources and methods as well as member checking. The research subjects were purposively selected by SIT members of JSIT who have adopted a digital system to get a comprehensive overview of data-based management dynamics.

DISCUSSION

Implementation Rate of Data-Driven Planning

The implementation of Data-Based Planning (PBD) within the Integrated Islamic School (SIT) shows a significant disparity between urban and semi-urban/rural areas. This phenomenon reflects a "digital divide" that touches not only the aspect of hardware availability, but also the data literacy capacity of its human resources. Schools in urban areas generally have a more established ecosystem, where the use of Learning Management Systems (LMS), Google Workspace, and internal academic information systems has been integrated into the strategic decision-making cycle. In these locations, data is no longer just an archive, but a navigator in formulating student and teacher development programs.

On the other hand, schools in semi-urban or rural areas are often still stuck in manual data management that is sporadic. Limited access to technology training and suboptimal network infrastructure support are the main obstacles. As a result, educational planning is often based on assumptions or routine patterns of previous years without any empirical data validation. This condition makes school programs in the region less responsive to the dynamics of evolving student needs.

Research by Schildkamp & Kuiper (2010) reinforces these findings by stating that the use of data in education is strongly influenced by "organizational capacity," which includes the availability of data, leadership support, and technical competence of staff. Without adequate digital infrastructure, it will be difficult for schools to conduct predictive and preventive data analysis. In addition, a study from Wayman (2005) in the *Journal of Education for Students Placed at Risk* emphasized that the effectiveness of data use is highly dependent on the accessibility of software tools that make it easier for teachers to interpret data.

Local research by Sulasmono et. al. (2021) in Indonesia also confirms that the readiness of human resources in mastering information technology is a key variable that determines the success of school management transformation from conventional patterns to data-based patterns. This shows that to increase the maturity of PBD implementation in SIT, a balanced intervention is needed between the procurement of digital infrastructure and data literacy capacity building for educators in all regions.

Benefits of Data-Driven Planning in School Management

The implementation of data-driven planning (PBD) in school management, particularly in the Integrated Islamic School (SIT) ecosystem, has brought about a significant transformation in the effectiveness of managerial decision-making. By moving from intuition to empirical facts, principals can identify problems more precisely and design more targeted solutions. For example, the use of daily evaluation data is not only used to measure academic scores, but also processed to monitor the development of students' Islamic character longitudinally. The integration of attendance data, learning outcomes, and parent engagement indices allows schools to build a student risk profile, so that interventions can be carried out before there is a drastic decline in performance.

Furthermore, PBDs facilitate more efficient resource management. With accurate data analysis, the budget allocation and distribution of teachers' workloads can be adjusted based on real priority scales. These fact-based policies also increase the transparency and accountability of schools in the eyes of stakeholders, especially parents who expect holistic development for their children. In the long

run, a data-literate organizational culture will create an adaptive school environment and continue to make continuous improvement.

The real benefits of this approach are in line with the findings of Marsh, Pane, and Hamilton (2006) in their study on Data-Driven Decision Making. They found that schools that consistently use data to guide instruction and policy tended to have a more organized school climate and higher student achievement. The data acts as objective evidence that minimizes personal bias in performance appraisals. Research by Schildkamp (2019) also strengthens the argument that the systematic use of data increases organizational learning capacity. When teachers and management collaborate to discuss data findings, a process of collective reflection ensues that encourages pedagogical innovation. In Indonesia, Sumarsono's research et.al. (2022) shows that the effectiveness of school management increases drastically when annual work plans are compiled based on the "Education Report Card," which is a tangible representation of the quality of educational inputs, processes, and outputs. This confirms that PBD is not just a technological trend, but a foundation for superior and competitive modern school management.

Obstacles in Implementation

Although data-driven planning (PBD) offers a roadmap to institutional excellence, its journey on the ground is often hampered by a complex wall of reality. These obstacles are not only technical, but also touch on fundamental aspects of the school's organizational structure. Without proper mitigation, data will only become a dead number stored in the system without having a real impact on the quality of education.

Three Main Obstacle Pillars, among others

1. **Low Data Literacy:** The main problem is not the availability of data, but rather the capacity of humans to process it into meaningful information. Many principals and teachers still view data as an administrative burden in the form of a pile of numbers. The lack of skills in conducting trend analysis, interpretation of education report cards, and formulating strategies based on data findings makes the decision-making process remain speculative.
2. **Limited Access and Infrastructure:** The effectiveness of PBD is highly dependent on a stable digital ecosystem. In many areas, schools are still

struggling with outdated hardware as well as fluctuating internet connections. Without adequate access to technology, the process of data collection and processing becomes slow and inaccurate, which ultimately breaks the spirit of innovation at the school level.

3. **Organizational Culture Resistance:** The shift from intuitive-based management to evidence-based management often triggers rejection. Some senior educators feel that years of experience are more valid than data findings. A rigid organizational culture that is reluctant to step out of the comfort zone is the biggest psychological challenge in creating an adaptive and data-literate school.

Research by Schildkamp and Kuiper (2010) in *Educational Management Administration & Leadership* confirms that "school culture" and "data literacy" are the two most crucial factors that hinder the effectiveness of data-driven decision-making. Their study shows that even though data is abundantly available, if teachers don't feel they have the ability to interpret it, it will never be used for learning improvement.

Furthermore, a study from Mandinach and Gummer (2013) emphasizes that data literacy should be seen as a new professional competence that educators must possess in the 21st century. In Indonesia, research by Prasojo et. al. (2020) highlights that the digital infrastructure gap between urban and rural schools creates inequities in the quality of school management. These findings confirm that the solution to the barriers to PBD implementation cannot be through the procurement of tools alone, but must be through a holistic approach that includes intensive training and the transformation of an organizational culture that is more open to data-driven criticism.

Strategies and Good Practices

This research has succeeded in identifying a number of good practices that can be replicated to strengthen school management. First, the implementation of internal training on a regular basis has been proven to increase staff adaptability in data processing. Second, the establishment of a data-specific team tasked with analyzing and recommending strategic policies ensures more accurate decision-making. Third, collaboration with committees and parents allows for more holistic

data collection while strengthening public trust. The synergy of these three practices creates a school ecosystem that is professional, transparent, and responsive to the dynamics of student needs and the demands of modern society.

Interpretation of Findings

The findings of this study confirm that the transition to data-driven management is a fundamental transformation of institutional culture, not just a technical update. The success of the Integrated Islamic School (SIT) is highly dependent on its ability to synergize the adoption of technology with Islamic values and strengthen the capacity of human resources. In an adaptive ecosystem, data serves as a strategic compass that strengthens accountability and quality orientation. This synergy allows schools to respond to the dynamics of the times without losing their spiritual identity. Thus, the integration of modern management and the value of faith creates a solid foundation for the creation of educational institutions that are superior, competitive, and relevant to the needs of the future.

CONCLUSION

Data-based educational planning in the management of Integrated Islamic Schools (SIT) in Indonesia has proven to have a significant contribution in improving the quality of education as a whole. This approach helps schools in making more accurate, strategic, and responsible decisions, especially in dealing with the complexity of student needs and the demands of the times that continue to develop. Thus, the use of data is not just an administrative tool, but a foundation in developing meaningful and effective educational programs. However, the realization of data-based planning practices has not been evenly distributed throughout SIT. Differences in the readiness of human resources, digital infrastructure, and organizational culture are the main differentiating factors between schools. Data literacy is still limited because many schools are not able to interpret and manage data optimally in the context of education policy management and development. This is a serious challenge that needs to be addressed systematically and sustainably. In this context, the implementation of data-based educational planning at SIT can be said to be in a transitional phase. Some schools

have shown progress by establishing internal data units, leveraging digital platforms, and conducting evidence-based evaluations. However, to make this approach an inherent work culture within SIT, it requires a collective and structured effort from all stakeholders of Islamic education in Indonesia.

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