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### Digital based Madrasas: The Strategy to Improve the Quality of Madrasah Ibtidaiyah Performance

Hasan Baharun\*

\*Islamic Educational Management Department, Faculty of Islamic Religion, Universitas Nurul Jadid Probolinggo, Indonesia E-mail: ha54nbaharun@gmail.com

#### Almakkiyatul Mukarramah\*\*

\*\*Islamic Educational Management Department, Faculty of Islamic Religion, Universitas Nurul Jadid Probolinggo, Indonesia E-mail: almakkiyah8201@gmail.com

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#### Abstract

This study aims to analyze the internal and external factors that contribute to improving the quality of Islamic elementary schools' performance in Probolinggo Regency, East Java, Indonesia. This is field research using the descriptive analysis method. Data was obtained from observation, interviews, and documentation. The collected data was processed and analyzed through the IE, IFE, and EFE matrices. The results of this study indicate that the internal factors of three Madrasah *Ibtidaivah* are powerful and can overcome their weaknesses in improving the quality of digital-based madrasa performance. In addition, the three Madrasah Ibtidaiyah have relatively high opportunities to overcome challenges and is very responsive in improving the quality of digital-based madrasa performance. Furthermore, alternative strategies are formulated through SWOT analysis to improve the performance quality of digital-based madrasah by implementing intensive strategies through market penetration and product development. Madrasah Ibtidaiyah can penetrate the market more proactively using the IDN Network PortDi (Digital Portal) in carrying out digital-based madrasa performance. The research also suggests that the product development (madrasa's administration and finance) can increase the professionalism of education staff in digital-based madrasah performance.

Keywords: digital madrasa, performance, SWOT, internal and external analysis.

#### Abstrak

Penelitian ini bertujuan untuk menganalisis faktor-faktor internal dan eksternal yang berkontribusi terhadap peningkatan mutu kinerja Madrasah Ibtidaiyah di Kabupaten Probolinggo, Jawa Timur, Indonesia. Penelitian ini merupakan penelitian lapangan dengan menggunakan metode deskriptif analisis. Data diperoleh dari observasi, wawancara, dan dokumentasi. Data yang terkumpul diolah dan dianalisis melalui matriks IE, IFE, dan EFE. Hasil penelitian ini menunjukkan bahwa kemampuan faktor internal dari ketiga Madrasah Ibtidaiyah sangat kuat dan dapat mengatasi kelemahannya dalam meningkatkan kualitas kinerja madrasah berbasis digital. Selain

itu, Madrasah Ibtidaiyah tersebut memiliki peluang yang cukup tinggi untuk mengatasi tantangan dan sangat tanggap dalam mengatasi tantangan dalam meningkatkan kualitas kinerja madrasah berbasis digital. Selanjutnya, alternatif strategi dirumuskan melalui analisis SWOT untuk meningkatkan kualitas kinerja madrasah berbasis digital dengan menerapkan strategi intensif melalui penetrasi pasar dan pengembangan produk. Madrasah Ibtidaiyah tersebut dapat melakukan penetrasi pasar dengan lebih proaktif menggunakan PorDi (Portal Digital) Jaringan IDN dalam melaksanakan kinerja madrasah ibtidaiyah berbasis digital. Pengembangan produk (administrasi madrasah, keuangan madrasah) dapat meningkatkan profesionalitas tenaga kependidikan dalam kinerja madrasah berbasis digital.

Kata kunci: madrasah digital, kinerja, SWOT, analisis internal dan eksternal.

#### **INTRODUCTION**

The world is in an era of progress connected by technology and digital-based communication and information devices (Livingstone, 2019; Hamedoğlu, 2019; Suryana & Muhtar, 2022). It is inevitable that technology plays crucial roles in human life such as in educational, economic, social and cultural aspects, through digitalization-based industrial technology 4.0 (Javaid et al., 2020; Kamil et al., 2021). In the field of education, for example, an educator or educational staff must acquire digital mastery. Madrasas that have been recognized in the national education system must improve by responding that schools in this digital era always embrace such rapid developments in information technology (Abdurrohman et al., 2021).

The management of education carried out by a government or non-governmental organization must always refer to national education standards, which are the benchmarks for the applicable educational process (Assa'idi, 2021; Muhammad et al., 2021). The madrasas in Probolinggo, East Java have tried to improvise, adapt, and innovate to be the best and be able to meet the needs of their community while still referring to central policy, the National Education Standards (SNP) starting from formal graduation, content, process, infrastructure, educators and education staff, management, financing, to assessment standards (Hajar, 2018; Ihsan et al., 2021; Rogers et al., 2022).

With the National Education Standards, primary schools' performance in managing education in Probolinggo Regency, East Java can be more effective and efficient. However, in reality, many madrasas still struggle to meet the established standards (Sulaiman, 2017; Miskiah et al., 2019). Therefore, this is where the policy is needed. In line with this, the Madrasa Directorate of Curriculum, Facilities, Institutions, and Student Affairs (KSKK) has a madrasa's transformation program, one of which is the Digital Transformation program. Following up this program, the Regional Office of the Ministry of Religion of East Java Province has carried out a series of digital madrasa transformation programs since 2021 with Infradigital.

In order to accelerate the digitization of madrasa, the Head of the Religious Education Sector, the Regional Office of the Ministry of Religion of East Java Province, cooperates with InfraDigital to continue providing encouragement, assistance, and motivation for madrasas in East Java to quickly make changes and be supported by adequate IT capabilities. This program is carried out to accelerate the transformation of madrasas into madrasas that are superior and able to compete with other educational institutions. This program carried out training at the Ministry of Religion of Probolinggo Regency in 2022, which was attended by several headmasters and education staff from madrasas that have implemented digitization in assisting managerial performance.

In this digital era, technological advancements are developing very rapidly. This is because the world is entering Industry 4.0, where technology is essential (Yustanti & Novita, 2019; Latif & Hafid, 2021). To get the most out of Industry 4.0 technology, organizations must invest heavily in building capabilities in the following dimensions: data and connectivity, analytics and intelligence, conversion to the physical world, and human-machine interaction (Wening & Santosa, 2020; Fatima & Mascio, 2020). Technology significantly changes human behavior, including education and students in the way they search for, collect, and document information (Hidayat & Khotimah, 2019; Lähdesmäki & Maunula, 2022; Huaping & Binhua, 2022). In this case, the world of education is essential in ensuring students learn and innovate skills in using information technology and media (Muliastrini, 2020; Ihsan et al., 2021).

Mathis and Jackson (2001) stated performance as things that are done and things that are not done by educational staff. Therefore, performance can be seen from several factors, namely; 1) the quality of the work results (assessing whether the work results carried out by educational staff are good or not; 2) The quantity of work in a section given by the leaders to employees; 3) the right time in completing tasks and responsibilities according to the leaders' instructions; 4) discipline at work showing the staff's work ethics; and 5) skills in working with other partners. Performance is influenced by several factors, i.e., skills, motivation, supports, tasks, and organizational relationships.

Madrasa's performance is obtained from the overall performance of interrelated madrasa's resources: principals, educators, education staff, students, and school committees. Improving performance cannot be separated from encouragement from oneself or outside encouragement, one of which is from the school principal or leader (Nurfadilah & Farihah, 2021). Efforts to improve the madrasa's performance in terms of managerial and technological skills are to develop all of its potentials by involving the role of academic staff in it. The performance of academic staff bears the primary responsibility in the transformation of a madrasa by using digital technology that is always able to manage, obtain effective and efficient performance in achieving performance targets, and be able to compete globally in order to adapt to this digitalization era.

Jannah et al., (2021) presented the research results on madrasa's performance and said that digital management significantly affected the performance of education staff. Wahyudi & Sunarsi (2021) also stated that the birth of a technology-based online education delivery system assists maintain the performance in the field of education. The higher the use of digital technology in a madrasa, the higher the performance of the madrasah (Ibrahim et al., 2022). Research conducted by Hakim (2021) revealed that digital technology is a tool capable of supporting the activities/performance of implementing education.

Aditama and Andari (2022) added that educational staff/educators must have practical learning skills or competencies in the Industrial Revolution 4.0 era. Furthermore, Rahmawati (2020) and Slamet et al. (2021) argue that the digitization is very high and digitalization positively affects madrasa's performance. Furthermore, this study reveals the influence of Teacher Digital Literacy and Principal Motivation on Home Study (BDR) success. By using

quantitative research methods, the results of the study show that there is an influence of these two variables on the successful implementation of learning activities at home.

Digitization technology using PortaL (Digital Portal) of the IDN network among madrasas has yet to be widely implemented, especially in Probolinggo Regency. There are only a few madrasas that implement the PorDi and three madrasas in Probolinggo become the site of this research. This is the basis for the researchers to make these three institutions the sites of this research, considering that these madrasa institutions have used and utilized PorDi in their educational and learning activities. Apart from that, this theme is also the uniqueness of this research, considering that research on madrasa's digitalization still needs to be completed and perfected. Therefore, this research is here to complement previous research where researchers used PorDi digital applications as a medium to improve madrasa's performance.

PorDi (Digital Portal) IDN Network is an online application for data collection, administration, and financial management of educational institutions that specialize in digitizing madrasas to regulate, control, and validate hundreds to thousands of educator data, education staff data, student and parent data, facility/infrastructure data in one dashboard in real-time. Based on the phenomena in these madrasas, this study aims to analyze the quality improvement of the performance of digital-based madrasas in the Probolinggo Regency, East Java, Indonesia.

#### **METHODS**

The approach used in this research is qualitative analysis to reveal the meaning behind the phenomenon of using information and technology that is done digitally, which focuses on how to improve the quality of madrasa's performance in three educational institutions in Probolinggo Regency, East Java, Indonesia. The research was conducted in three madrasas that have been utilizing digitization tools in madrasah management activities. This research focuses on solving the problem, and the data collected is compiled, explained, and analyzed.

The data used in this research is primary data. Primary data is in the form of internal and external environmental factors as well as evidence of an increase in madrasas' performance in using digital devices, obtained directly from sources who play a role in improving the performance of digital-based madrasas, consisting of elements from the headmasters, deputy headmasters, Treasurer and Administration, and General Administration.

The instrument used in this research was in the form of planned and structured interviews with selected informants using purposive sampling. Interviews were conducted to obtain descriptive information regarding internal and external environmental factors that contribute to improving madrasas' performance. Meanwhile, observation and documentation were carried out to provide additional data on the results of the questionnaires and interviews that had been conducted.

Data was collected by identifying the factors that contributed to improving the performance of digital-based madrasahs using the format of identifying internal and external environmental factors that contributed to improving the performance of digital-based madrasah.

The collected data was processed and analyzed qualitatively to map internal and external environmental factors that contribute to improving digital based madrasas' performance to map the institutions' position through the IE, IFE, and EFE matrices. The

preparation of madrasas' performance improvements was carried out through 3 analysis stages: input stage, the synchronization stage, and the decision stage. At this stage, a descriptive analysis was carried out on the internal and external environmental factors of the Digital Madrasas as the primary input for the Internal Factor (IFE) and External Factor Evaluation (EFE) matrix analysis.

#### **RESULTS AND DISCUSSION**

The research was conducted in three madrasas in Probolinggo Regency, East Java, Indonesia. The researcher also discusses internal and external strengths, weaknesses, possibilities, and dangers to digital-based madrasah performance. Data on alternate techniques to increase digital madrasah performance follows.

Analyzing internal and external factors (Internal Factor Evaluation/IFE) and their strengths and weaknesses would help improve digital-based *Madrasah Ibtidaiyah* performance in Probolinggo Regency, East Java, Indonesia. Table 1 shows the SWOT Matrix of internal and external environmental aspects that improve digital-based madrasa's performance in *Madrasah Ibtidaiyah*. SWOT analysis was utilized to create strategy-based digital madrasah to increase performance in many madrasas.

	Strengths (S)		Weaknesses (W)
1.	The high commitment of Madrasa's headmasters to improve the quality of Madrasa's	1.	Lack of HR who can use IT (parents/guardians)
	performance by using the IDN Network PorDi (Digital Portal)	2.	Low motivation from operator in inputting data
2.	Digitizing all educator data, education staff data, student and parent data	3.	Low motivation from parents to make non-cash
3.	One platform for all digitization Ecosystems.		payments
4.	Madrasa's payment transactions through Gojek,		
	Tokopedia LinkAja, Banks, Indomart, Alfamart, and others		
5.	Two-way communication media between		
	Educational Institutions and parents/guardians of		
	students in terms of digitizing data, information		
	about madrasah, finances, regulations and		
	assignments		
6.	More effective digital attendance of students and		
	teachers		
	Opportunities (O)		Threats (T)
1.	Financial data is more accurate and accountable online	1.	Operator has more workload.
2.	Administrative data collection is more organized online.	2.	Parents have low motivation to make payments on time
3.	Madrasas have the opportunity to get		(delay).
	rewards/bonuses from the PorDi (Digital Portal)	3.	There are many competitors
	IDN Network for those who are proactive and		in the digitization of
	active in using it		madrasas
4.	Madrasas have the opportunity to win the Best		
	Digital Madrasa Innovation Award at the		

Table 1. SWOT Analysis (Internal and External Factors)

national level.

Sources and documents were analyzed to determine internal strengths and weaknesses to improve the madrasas' performance. Interviews and documentation studies were used to select strengths and weaknesses that fit the facts. Internal elements were assessed to identify strengths and shortcomings that improve digital madrasah functioning.

#### **Internal Factor Evaluation (IFE)**

The pairwise comparison weighting approach calculates the weighted average of each strength and weakness component to map *Madrasah Ibtidaiyah's* position in enhancing digital-based madrasah performance. *Madrasah Ibtidaiyah's* internal status is assessed using the IFE matrix. Table 2 shows IFE results.

No.	<b>Dominant Internal Factors</b>	MI A	MI B	MI C	Amount	Weight	Rating	Rating x weight
_	STRENGTHS							
1	The high commitment of Madrasa's headmasters to improve the quality of Madrasa's performance by using the IDN Network PorDi (Digital Portal)	4	3	3	10	0.14	3.33	0.46
2	Digitizing all educator data, education staff data, student and parent data	4	4	4	12	0.17	4.00	0.67
3	One platform for all digitization Ecosystems	3	2	2	7	0.10	2.33	0.23
4	Madrasah payment transactions through Gojek, Tokopedia LinkAja, Banks, Indomart, Alfamart, and others	3	1	1	5	0.07	1.67	0.12
5	Two-way communication media between Educational Institutions and parents/guardians of students in terms of digitizing data, information about madrasah, finances, regulations and assignments	4	3	3	10	0.14	3.33	0.46
6	More effective digital attendance of students and teachers	4	3	3	10	0.14	3.33	0.46
	TOTAL				54			2.40
	WEAKNESSES							
1	Lack of HR who can use IT (parents/guardians)	3	2	2	7	0.10	2.33	0.23
2	Low motivation from operator in inputting data	3	2	2	7	0.10	2.33	0.23
3	Low motivation from	2	1	1	4	0.06	1.33	0.07

Table 2. Internal Factor Evaluation (IFE)

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parents/guardians to make			
non-cash payments			
TOTAL	18		0.53
OVERALL TOTAL	72	1.00	2.93

According to the Internal Factor Evaluation (IFE) study in Table 2, *Madrasah Ibtidaiyah's* fundamental strength in increasing digital-based madrasas' performance is digitizing all educator, education staff, student, and parent/guardian data with a weight of 0.17, a rating of 4, and a score of 0.67. The biggest drawback is that parents still need to be motivated to make non-cash contributions, with a weight of 0.06, a rating of 1, and a score of 0.07. *Madrasah Ibtidaiyah's* internal factors can boost digital-based madrasa performance since the total weight value is 2.93 (> 2.5). *Madrasah Ibtidaiyah's* strengths can overcome its flaws to improve digital-based madrasah performance.

Moreover, sources and documentation studies were used to identify external factors that can improve digital madrasa performance. Interviews and documentation studies determined opportunity and difficulty variables. To improve digital madrasa performance, external factors were identified.

#### **Evaluation of External Factors (EFE)**

By computing the weighted average of each important external component, *Madrasah Ibtidaiyah* can map its position in increasing digital-based madrasa performance. Pairwise comparison weighting adds external factor evaluation matrix opportunity and challenge elements. *Madrasah Ibtidaiyah's* external conditions were examined using the EFE matrix. Table 3 shows EFE outcomes.

No.	<b>OPORTUNITIES</b>	MI	MI	MI	Amount	Weight	Rating	Rating
		А	В	С				x weight
1	Financial data is more accurate and accountable online	4	1	1	6	0.10	2.00	0.20
2	Administrative data collection is more organized online	4	4	4	12	0.20	4.00	0.79
3	Madrasah have the opportunity to get rewards/bonuses from the IDN for those who actively use the IDN	3	2	2	7	0.11	2.33	0.27
4	Madrasah have the opportunity to win the best Digital Madrasah Innovation Award nationally.	3	2	2	7	0.11	2.33	0.27
5	Minimizes data loss	4	3	3	10	0.16	3.33	0.55
	TOTAL				42			2.07

Table 3. External Factor Evaluation (EFE)

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	THREATS							
1	Operator have more workload	2	2	2	6	0.10	2.00	0.20
2	lack of motivation of parents to make payments on time (delay)	2	1	1	4	0.07	1.33	0.09
3	Many competitors digitize madrasah	3	3	3	9	0.15	3.00	0.44
	TOTAL				19			0.73
	OVERALL TOTAL				61	1.00		2.79

According to the External Factor Evaluation (EFE) study in table 3, *Madrasah Ibtidaiyah's* most excellent chance to improve digital-based madrasa performance is a more organized online administrative data collection with a weight of 0.20, a rating of 4, and a score of 0.79. With a weight of 0.07, a rating of 1, and a score of 0.09, motivating parents to pay online on time is the biggest issue. *Madrasah Ibtidaiyah* has a good chance of enhancing digital-based madrasa performance with a weighted score of 2.79 (>2.5). *Madrasah Ibtidaiyah* responds well to obstacles in enhancing digital-based madrasah performance.

#### Madrasah Ibtidaiyah's Role in Enhancing Performance

Through internal and external environmental factors, *Madrasah Ibtidaiyah* improves their performance. The IFE matrix (Table 2) maps internal environmental factors. The EFE Matrix (Table 3) maps external environmental factors.

To calculate a weighted average score, internal and external factors were weighted and rated. Table 4 shows the position of internal factor capability and *Madrasah Ibtidaiyah's* use of external factors to improve performance (Internal and External Matrix). This step checks the scores in the internal and external matrix quadrants to determine *Madrasah Ibtidaiyah's* performance improvement.

The IFE and EFE matrices gave each an internal score of 2.93 and a total external score of 2.79. The complete internal and external factors' scores were integrated into the Internal and External Matrix to determine *Madrasah Ibtidaiyah's* performance improvement. According to Table 4 *Madrasah Ibtidaiyah* is in quadrant V (hold-and-maintain performance).

It is believed that internal and external factors can suggest *Madrasah Ibtidaiyah's* placement in quadrant V, according to Freddy Rangkuti's SWOT analysis, which maximizes strengths and opportunities while minimizing weaknesses and threats (Rangkuti, 2014). Meanwhile, according to Wheelen & Hunger, when analyzing the environment, it is grouped into a) social environment, b) task environment, and c) internal environment (Wheelen & Hunger, 2003).

What strengths are there, and what weaknesses are attached to madrasas? You can then see the open opportunities for madrasas and finally discover the threats, distractions, obstacles, and challenges faced by Madrasas. Therefore, Hanan (2018) argues that the need to apply strategic management to strengthen the internal and external systems is a dynamic process that takes place continuously within an organization because madrasas are faced with internal and external environment dynamics.

Implementing an intensive strategy through market penetration and product development is the strategy that can be taken to optimize the improvement of the quality of

madrasa performance. This strategy can be taken to improve the quality of the madrasas' performance. *Madrasah Ibtidaiyah* can penetrate the market more proactively using the IDN Network PorDi (Digital Portal) in carrying out digital-based *madrasah ibtidaiyah* performance. Product development (madrasa administration and madrasa finance) can increase the professionalism of education staff in digital-based madrasa performance.

#### Table 4. IE Matrix (Internal and External)

(Position of Madrasah Ibtidaiyah in Improving the Quality of Madrasah Performance)

		Total weighted IFE score				
		Strong	Average 2.0 - 2.99	Weak 1.0 - 1.99		
		3.0 - 4.0				
Total weighted	Tall	Ι	II	III		
EFE value	3.0 - 4.0					
	Currently	IV	V	VI		
	2.0 - 2.99					
	Low	VII	VIII	IX		
	1.0 - 1.99					

#### Digital-based Madrasah Ibtidaiyah Performance Quality Improvement Strategy

Table 5 shows how a SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats) can help improve the madrasas' performance. Experts, education personnel, students, and parents are consulted while developing new digital madrasa performance techniques. Table 5. SWOT Analysis Determines Alternate Strategies

	STRENGTHS S1, S2, S3, S4, S5, S6, S7,	WEAKNESS W1, W2, W3
OPPORTUNITIES	SO STRATEGY	WO STRATEGY
01, 02, 03, 04,	1) Increasing the use of the IDN	2) Utilizing the Digital
	network PorDi (Digital Portal) in the digitalization	Madrasa Innovation Award program to motivate
	performance of Islamic elementary schools	educational staff in digitizing madrasas
TREATS	STRATEGY ST	WT STRATEGY
T1, T2, T3	3) Motivating/ reaching	4) Develop the
	educational staff and parents in	professionalism of
	digitizing using PorDi (Digital	education staff with the
	Portal) IDN Network	commitment of the
		madrasas' headmasters to
		the vision of digitizing
		madrasa performance

In addition, we consider the findings of the research shown in Table 4, which shows *Madrasah Ibtidaiyah* in the fifth quadrant (Hold and Sustain) with an active strategy based on market penetration and product development. According to the findings of the research shown in Table 5, the following are some alternative methods that can be put into action: (1) expanding the usage of PortDi (Digital Portal) of the IDN Network in the digitalization performance of *Madrasah Ibtidaiyah*, (2) utilizing the Digital Madrasah Innovation Award program to motivate academic staff in digitizing madrasas, (3) motivating/ reaching out to educational staff and parents to digitize using the IDN Network's PorDi (Digital Portal), and

(4) developing the professionalism of education staff with the headmasters' commitment to digitizing madrasa performance.

# Increasing the Use of PortDi (Digital Portal) of the IDN Network in the Digitalization Performance of *Madrasah Ibtidaiyah*

As shown in Table 2, *Madrasah Ibtidaiyah's* fundamental strength in improving digital madrasas' performance is digitizing all educator data, energy data education, student data, and parent data with a weight of 0.17 rating of 4 and a score of 0.67. Digitization using PorDi (Digital Portal) IDN Network is welcomed as a digitization. Digitalization offers convenience administration and managerial finance. PorDi (Digital Portal) can help the digitalization of *Madrasah Ibtidaiyah* starting from proper data alignment with EMIS such as educator data, staff data education, participant data education, and parent/guardian. Therefore, the digitalization offers positive impacts, not monotone system, archiving system which is more effective, practical, and efficient, more excellent and easy publication to Parents/guardians, and paper saving (Sonia, 2020). Furthermore, there is a card for students to report their attendance (digital attendance register using Qr Code in the verification process to avoid fraud).

The digital attendance register is also capable of providing proof that the students and the teachers are present in learning activity (Febriyanto et al., 2019). There is also a Feature called SPP digital payment; Knowledge of Finance is a critical component in healthy finances; there is a need to increase financial knowledge so that individual can have positive attitude in managing finance (Muntahasar et al., 2021). Next, there is announcement feature. Integrated applications make it easier to conduct communication among Institution Education, parents/guardians, and students. With the support from the headmasters, digitization of madrasas can run effectively.

# Utilizing the Digital Madrasa Innovation Award Program to Motivate Education Personnel in Madrasa Digitalization.

According to the IFE analysis, as indicated in Table 2, *Madrasah Ibtidaiyah's* weaknesses in increasing performance is that education professionals and parents/guardians need to be motivated by digitalization. *Madrasah Ibtidaiyah* should use the Digital Madrasa Innovation Award to address these issues. Because of that, education staff will be motivated to improve the quality of madrasa performance to win the East Java Digital Madrasa Innovation Program. The program began with outreach through webinars, training, ongoing online and offline assistance, Digital Madrasa campaigns, surveys on madrasah digitization to map the condition of madrasa digitization, visits to madrasa, and close with the award ceremony for the East Java Digital Madrasa Innovation Award. At the peak of the Best Digital Madrasa Innovation Award in East Java, four award categories would later be used as an assessment. These categories include the best digital madrasa operators, City/District Ministry of Religion offices, and Digital Madrasa for each level (RA, MI, MTs, MA). Therefore, *Madrasah Ibtidaiyah* will be more enthusiastic about digitizing madrasah.

Several opportunities can also be taken advantage of by the high usage of the Madrasa IDN Network PorDi (Digital Portal). The opportunity to get rewards/bonuses from the IDN Network PorDi (Digital Portal), such as Student Digital Cards, Digital Attendance tools and others can also motivate all stakeholders. In addition, the opportunity for financial data to be

managed online with a student application for parents/guardians of students is helpful for online payments through Gojek, Tokopedia LinkAja, Banks, Indomart, Alfamart, etc. Furthermore, parents/guardians can get promos or tuition discounts. Therefore, in conducting tuition payment transactions, Madrasah Ibtidaiyah and parents/guardians will be more efficient than cash payments.

## Motivating/Reaching out to Education Personnel and Parents/Guardians to Digitalize by Using the IDN Network Portal

According to the findings of the IFE analysis, which are presented in table 2, the strength of *madrasah ibtidaiyah* is the high commitment of the headmasters to improve the quality of madrasa performance by utilizing the PortDi (Digital Portal) IDN Network. This factor carries a weight of 0.14, has a rating of 3, and has a score of 0.46. The leaders provide directions for the employee about how to do their job adequately to achieve the purpose of institutions (Ramdhi et al., 2021). Therefore, headmasters need to motivate parents/guardians by promoting digitalization using the IDN Network's PortDi (Digital Portal). Digitalization is indeed considered burdensome by some education staff who become digitalization delegators because they do not yet realize the importance of digitalization at this time, because without digitalization of education such as innovative administration, slowly but surely madrasas will be left behind (Supendi & Mulyadi, 2017).

Delegators object to the digitization task given to them because it only adds new assignments or workload to educators and education staff (Wibowo, 2018); then, in this aspect, madrasas transform their vision by providing explanations and opening up discussion space to make all delegates aware carrying out digitization tasks without negative thoughts as early as implementing digital attendance with the innovation of using digital student cards which were considered too strict. However, over time they realized that digitizing attendance would place more emphasis on fairness and discipline. This Digital Student Card is integral to the IDN Network PorDi (Digital Portal). This student card makes it easy to check student attendance, teachers, and education staff in real-time. In addition, the card can inform parents/guardians directly if a student is not present, provided that the student has downloaded the application. By using student cards at *Madrasah Ibtidaiyah* to record or monitor student attendance, administrative activities become more effective and efficient. Furthermore, this student application is a media for two-way communication between the Madrasah and the parents/guardians of students in terms of digitizing data, information about madrasah, regulations and assignments.

# Developing the Professionalism of Education Personnel with the Commitment of Madrasas' Headmasters to the Vision of Digitalizing Madrasa Performance

According to the IFE analysis, as shown in Table 2, *Madrasah Ibtidaiyah's* weaknesses in increasing performance is that parents' motivation to make non-cash payments is still low, with a weight of 0.06, a rating of 1, and a score of 0.07. Education staff's motivation to digitize input data remains low, with a weight of 0.10, a rating of 2, and a score of 0.23. To address these issues, *Madrasah Ibtidaiyah* must improve education personnel professionalism.

Handayani & Rasyid (2015) said that with models and style leadership, particularly a leader capable of building commitment of the people, leads to produce optimal performance.

The vision of digitizing *madrasah Ibtidaiyah* was created from the creativity of the leaders' minds, which became a reflection of their professionalism and experience as well as the elaboration of thoughts with other educational staff in the form of digitization ideas to realize together even though the madrasas were located in border areas (Syahrani, 2022). Digital madrasas' principal benchmarks are implemented quickly, cross-hierarchically, cooperatively, and innovatively (Lubis & Rifma, 2022). Headmasters must understand what the objectives of the Madrasas are and a clear picture of the realization of the objectives of the Madrasas realized within the specified timeframe. Thus, there is a vision of digitizing administration and finance and even the desire to develop a model for digitizing the publication of madrasa activities with digital announcement features through the student application.

The attitude of futuristic thinking played by the visionary headmasters is, of course, not only thinking about the current position of the Madrasas but the school's position in the future (Athiyah, 2019). The academic staff design a development model for digitizing all activities in madrasas which are believed to raise and make madrasas proud via the internet as a new medium with high interactivity connectivity that is different from conventional patterns (Rubawati, 2018). Because unintentionally, this has become a vehicle for promoting madrasas' programs and duplicating steps for school administrations so that they are widely accessible as a form of their responsibility in realizing organizational goals. Therefore, the visions, which was initially the concept of the headmasters, was conveyed to educational staff (operators) and treasurers. In this context, the headmaster directs and divides the digitization tasks according to competence. The madrasa's operator digitizes all teaching and academic staff data, and student and parent/guardian data according to EMIS data. The treasurer digitizes madrasah finance (Prabowo, 2012).

A visionary headmaster is required to determine the direction of his vision with organizational goals, being able to mix the tasks and work of each section of the organization (Mukti, 2018). Therefore, in the attitude of process alignment, the headmasters try to ensure that digitizing school programs does not hinder madrasas' academic and non-academic achievements and that digitizing the program does not impede the smooth flow of data requests from the Education Office. Digitalization does not hinder but instead integrates the digitalization of the performance of all academic staff at *Madrasah Ibtidaiyah* because the world now needs fast and actual service.

#### CONCLUSION

The results of the evaluation analysis of internal and external factors show that the internal factor capabilities of three madrasas are robust and can overcome their weaknesses in improving the quality of digital-based madrasa's performance. In addition, the *Madrasah Ibtidaiyah* have very high opportunities to overcome problems and they are also highly responsive in enhancing digital-based madrasas' performance. Both of these characteristics are very impressive. Implementing intense methods, such as market penetration and product development, was one of the alternative strategies formulated through a SWOT analysis to improve the performance quality of digital-based madrasas. *Madrasah Ibtidaiyah* can penetrate the market more proactively using the IDN Network PortDi (Digital Portal) in carrying out digital-based madrasas' performance. Product development (madrasa administration and madrasa finance) can increase the professionalism of education staff in digital-based madrasas' performance.

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