



DIGITAL MANAGEMENT OF ARTS EDUCATION IN THE ERA OF INDEPENDENT LEARNING IN THE CHURCH MUSIC EDUCATION STUDY PROGRAM

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Abstract. This study analyzes digital transformation in arts education management during the *Merdeka Belajar* era using a qualitative approach with a case study design. The research was conducted in the Church Music Education Study Program at IAKN Kupang. Data were collected through in-depth interviews, participatory observation, and document review. The findings reveal that digital transformation planning includes needs assessment, curriculum adjustment, and teacher capacity development. The implementation of digital-based arts learning transforms teachers into facilitators, expands online collaboration, and applies electronic portfolio evaluation. An effective digital governance model is participatory, characterized by visionary leadership and a transparent evaluation system. Digital transformation aligns with the *Merdeka Belajar* policy, emphasizing flexibility, creativity, and project-based learning. Successful implementation depends on infrastructure readiness, teacher competency, and sustainable policy support. Recommendations include strengthening teachers' digital literacy and ensuring equitable access to technology by the government. This study contributes to understanding how church music education programs can adapt to digital transformation while maintaining their unique characteristics of integrating theological, liturgical, and musical values.

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INTRODUCTION

Digital transformation has become a global phenomenon that affects various sectors of life. The development of digital technology has fundamentally transformed various aspects of human life, including education systems around the world. Digital transformation affects not only teaching methods but also the management of education, which has traditionally been conducted in a conventional manner. In the context of arts education, these changes present both challenges and opportunities to create a more flexible and responsive system. Arts education programs, particularly those based on church music, are required to adapt quickly to the dynamics of the times. If not managed properly, falling behind in digital aspects can lower the quality of graduates. Therefore, digital management has become an urgent and non-negotiable necessity (Suriandjo, 2024).

In Indonesia, the *Merdeka Belajar* policy launched by the Ministry of Education encourages every educational institution to innovate independently and creatively. This policy provides academic programs with significant flexibility to design curricula that align with students' needs and the demands of the workforce. Within this framework, the digitization of management serves as a strategic tool to realize autonomous, flexible, and student-centered learning. The church music education program must be able to translate this policy into tangible managerial practices. Without digital transformation, the program will struggle to keep pace with the rapid pace of change. This forms a crucial foundation for the development of an adaptive and sustainable digital management system (Komala & Nugraha, 2022).

The Church Music Education program has unique characteristics compared to general arts programs. In addition to requiring technical mastery of music, this program must also integrate theological and liturgical values into every learning process. Effective management is necessary to align these three aspects in a systematic and measurable way. Digitizing management can help

the program coordinate practice schedules, evaluate musical works, and document liturgical activities more efficiently. Thus, the distinctiveness of this program can actually become a strength if managed with the right digital approach. This uniqueness is also the reason why studying digital management in this program is important (Nurcahyo, 2022).

The era of independent learning requires students to no longer rely entirely on instructors as their sole source of learning. Students are encouraged to actively seek out, process, and create knowledge through various digitally available resources. In the context of church music education, this means that students must be able to independently access choral materials, song arrangements, and music theory through online platforms. The role of the instructor shifts from being a content deliverer to a facilitator who guides the students' exploration process. The program's digital management must support this role shift by providing systems that facilitate access, collaboration, and assessment. Otherwise, the spirit of independent learning will remain merely a slogan without tangible implementation (Saefurrohman et al., 2021).

One of the main challenges in digitizing the management of church music education is the limited technological infrastructure on college campuses. Not all institutions offering this program have stable internet access, adequate hardware, or integrated learning platforms. In certain regions, this digital divide is still very pronounced and hinders the transformation process. As a result, management systems often still operate manually or semi-digitally, which is ineffective. These limitations affect not only the teaching and learning process but also the overall academic administration. Therefore, research on infrastructure readiness is an important part of the digitization strategy (Gettinger et al., 2012).

In addition to infrastructure, the digital competencies of faculty and educational staff are also key factors in the success of digital management transformation. Many church music education faculty members belong to a generation that is not accustomed to using digital technology in their daily lives. As a result, the implementation of digital management systems often faces resistance or is carried out merely as a formality without being fully optimized. Ongoing training and mentoring are an urgent necessity to enhance human resource capacity. Academic programs must design a systematic and measurable framework for improving digital competencies. Without the support of competent human resources, technological investments will be wasted and will not yield significant results (Rodiyah, 2025).

On the other hand, students in church music programs today are generally digital natives who have grown up with technology. They expect educational management systems to be fully digital, fast, and easily accessible via mobile devices. If the program fails to meet these expectations, students will become frustrated and lose motivation to continue their studies. The gap between students' expectations and the reality of digital management services can diminish the overall quality of the learning experience. The program must recognize that digitalization is not merely a trend but a demand of this generation that must be met. Therefore, digital management must be designed with a user-centered approach one that prioritizes the students themselves.

Digital management in the church music education program encompasses various aspects, ranging from curriculum planning, resource organization, and instructional delivery to the evaluation of learning outcomes. Each of these aspects has the potential to be optimized through the integrated use of information technology. For example, curriculum planning can be conducted through a collaborative platform that brings together faculty, students, and church practitioners. Instruction can utilize a learning management system (LMS) that provides online materials, discussion forums, and assignments. Assessment can be conducted through digital portfolios that authentically document students' creative processes. With this holistic approach, digitization becomes a comprehensive system, not merely a technical add-on (Nazilah, 2024).

An effective digital management system must also be able to accommodate the specific needs of music education, which is practical and collaborative in nature. Unlike theoretical education, which can be conducted entirely online, music education requires hands-on practice, ensemble rehearsals, and intensive technical guidance. Therefore, a digital system cannot fully replace face-to-face interaction, but must serve as a complement and reinforcement. Digital



management can organize rehearsal room schedules, document rehearsal recordings, and facilitate remote collaboration among students. Thus, digitization does not eliminate the essence of arts education but rather enriches and expands its reach. This blended management approach is the most relevant model for church music programs (Ryan & Deci, 2000).

The *Merdeka Belajar* policy grants greater autonomy to academic programs in determining the direction of their curriculum development and management systems. In the context of church music programs, this autonomy can be leveraged to design digital systems tailored to local needs and the specific denominations of each church. For example, academic programs under the auspices of a specific church synod can integrate their denomination's unique hymnals and liturgical materials into a digital platform. This will make the management system more contextual and relevant for students who will eventually serve in those churches. This autonomy also allows programs to innovate without having to wait for guidance from the central office, which may be too general. In other words, *Merdeka Belajar* serves as a catalyst for the creation of independent digital management rooted in the local context (Lisnawati et al., 2023).

The implementation of autonomous digital management also carries risks if not balanced with clear quality standards. Without sound standards, each academic program may develop different digital systems, thereby complicating credit transfer and inter-institutional collaboration. Therefore, a balance between autonomy and standardization is necessary to ensure that digital management remains integrated into the national education ecosystem. Church music programs need to refer to the national qualifications framework and national higher education standards when developing their digital systems. These standards are not meant to limit creativity but to ensure that graduates possess widely recognized competencies. Thus, autonomous digital management remains within the framework of guaranteed quality (Paramita, 2020).

The success of digital transformation in academic program management depends heavily on visionary leadership that supports innovation. Program directors must be able to serve as agents of change who encourage the entire academic community to transition to digital systems. Without leadership support, digitization initiatives often stall midway due to a lack of priority and resource allocation. Good leaders will develop a realistic digitalization roadmap, involve all stakeholders, and set an example in the use of technology. In the context of church music education, leaders must also understand the unique characteristics of this field to avoid making erroneous decisions. Therefore, the development of digital leadership is an integral part of the transformation strategy.

Active student participation in the digital management process is also crucial for fostering a sense of ownership and shared responsibility. Students should not be treated as passive users of a system designed by the academic program. Instead, they need to be involved in testing, providing feedback, and even developing specific features that meet their needs. In a church music program, students can be asked to provide suggestions regarding digital recording features for choir assignments or discussion forums on liturgy. This kind of participation will result in a system that is more user-friendly and relevant to real-world needs. In other words, digital management must be developed collaboratively, not merely in a top-down, technocratic manner (Alhedaithy, 2022).

The digital documentation of students' musical works is also an important yet often overlooked function of digital management. In fact, digital recordings and archives of every assignment, rehearsal, and performance hold immense value for the development of students' portfolios. Academic programs can manage digital repositories containing archives of student works from various cohorts to serve as learning materials and for institutional promotion. A good management system will facilitate the search, classification, and sharing of access to these archives. In the context of church music, these archives can also serve as documentation of the development of liturgical music over time. Therefore, the function of digital documentation needs serious attention in the design of management systems (Chen, 2025). Digital transformation also opens up opportunities for church music programs to engage in broader collaboration with various parties. Through digital management systems, programs can easily share materials, host joint virtual concerts, or conduct online student exchanges. Collaboration across programs, both domestically and internationally, becomes easier and more cost-effective because it is not limited



by geographical distance. In the context of church music, collaboration with seminaries, theological schools, or international church music institutions can greatly enrich students' perspectives. Effective digital management will provide features that support such collaboration, such as shared workspaces, integrated calendars, and document-sharing systems. Thus, digitization expands networks and significantly enhances the quality of the program (Yujie et al., 2025).

Another equally important challenge is the issue of data security and digital ethics in the management of digital systems. The church music program stores various types of sensitive data, such as student grades, intellectual works in the form of recordings, and the personal information of faculty and students. If the digital management system is not equipped with adequate security protocols, this data is at risk of being leaked or misused by irresponsible parties. Additionally, copyright issues regarding digital musical works must be clearly addressed to prevent future disputes. The program must establish a digital ethics policy governing the use, storage, and sharing of digital content. Without attention to these aspects, digital management could actually create new and complex problems (Nguyen, 2020).

Assessment and evaluation of learning within a digital management system also require careful design to ensure they remain authentic and fair. In music education, assessment encompasses not only final outcomes such as performances but also the practice process and students' technical development. Digital systems can help document these processes through periodic practice recordings, digital reflection journals, and online peer assessments. However, this system must be designed so as not to burden students administratively and to still provide space for qualitative assessment by expert instructors. A combination of digital assessment and direct assessment by instructors is the most ideal model. Good digital management will provide the flexibility to accommodate these various forms of assessment in an integrated manner. can improve the quality and relevance of arts education in Indonesia.

The implementation of digital management in church music programs also requires a significant financial investment. The costs of purchasing hardware, software licenses, staff training, and system maintenance often pose major obstacles, especially for programs operated by church foundations with limited funds. Therefore, careful budget planning and proper prioritization are necessary to ensure that available funds are used efficiently. Programs can consider using open-source software or subscribing to services collectively through a consortium to reduce costs. Additionally, partnerships with partner churches or donations from alumni can serve as alternative funding sources. Sustainable digital management requires creative funding models and should not rely solely on routine operational expenses.

This study addresses a critical research gap, as very few investigations specifically examine digital management in church music education programs within Indonesia's Merdeka Belajar era. Existing literature largely concentrates on general arts education in primary and secondary schools, overlooking the unique contexts, challenges, and opportunities inherent in church-based music programs. Without targeted research, digitization policies remain generic and fail to solve root problems, leaving administrators without relevant guidance. Hence, this study is highly urgent and necessary. It will comprehensively explore planning, implementation, challenges, and future development strategies to formulate an effective, efficient, and contextually appropriate digital management model. Such a model would not only serve church music programs but also offer adaptability for other arts programs with similar characteristics. Ultimately, this research aims to transform digitalization from a burdensome obligation into a strategic driver for continuous quality improvement in arts education. The findings will be presented systematically and in-depth in the final report.

RESEARCH METHODS

A qualitative approach was selected for this study to gain an in-depth understanding of digital transformation in educational management, rather than to measure statistical relationships. This phenomenon involves the perceptions, experiences, and strategies of stakeholders—program chairs, faculty, and students—which are inherently subjective and contextual. The qualitative approach



enables researchers to explore the meanings behind managerial actions and decisions in church music programs, while also capturing changes in organizational culture and leadership patterns that cannot be quantified numerically. It allows for the observation of natural field dynamics without manipulating variables.

A case study design was employed because the research focuses on a specific unit of analysis: the Church Music Education Program that has implemented digital management. This design facilitates a holistic and in-depth investigation into planning, organizing, implementing, and evaluating processes within real-world contexts. Case studies are particularly effective for addressing "how" and "why" questions, such as how programs manage digital transformation and why particular strategies succeed or fail. This approach also allows researchers to understand specific contextual factors, including campus policies, organizational culture, and the characteristics of partner churches. Although case study findings are rich and detailed, they are not statistically generalizable.

The research sites include church music education programs that have operated digital management systems for at least one semester, ensuring empirical evidence of actual transformation practices rather than mere planning. Such programs are exemplified by the State Christian Institute (IAKN) in Kupang. Participants were selected through purposive sampling based on criteria of direct involvement in digital management and a minimum of one year of experience. Key informants include: (1) the Program Chair as strategic decision-maker, (2) instructors as learning implementers, (3) IT staff as system administrators, and (4) students as service users. This diverse selection ensures comprehensive data from multiple perspectives.

Three data collection techniques were used simultaneously. First, semi-structured in-depth interviews allowed flexibility to explore emerging information, conducted in person or via video call, recorded, and transcribed. Second, participatory observation involved direct monitoring of digital processes such as online coordination meetings, LMS usage, and digital music practice, documenting activities and technical challenges. Third, document reviews examined curricula, digital schedules, student e-portfolios, and digitization policies. These complementary techniques enriched the data obtained from various angles.

RESULTS AND DISCUSSION

A. Planning Digital Transformation in Arts Education

Planning for digital transformation in arts education is a strategic stage that determines the direction of change in learning governance and arts programme management in schools. Digital transformation does not only mean the use of technological devices, but also systemic changes that encompass vision, policy and organisational culture. Therefore, planning must be comprehensive and participatory. From an educational management perspective, planning is an initial function that determines the success of programme implementation (Cahyaningrum & Wijaya, 2024). Without careful planning, digitisation risks becoming a purely technical activity without any substantive impact. Thus, arts education requires a structured and sustainable planning framework.

In the context of national policy, the direction of digital transformation planning needs to be aligned with the principles of *Merdeka Belajar* (Independent Learning), which emphasises flexibility, creativity and school autonomy. This policy provides space for educational units to design learning innovations based on the needs of students. Arts education has a creative character that is highly compatible with this approach. Therefore, digital planning must be able to integrate the principle of freedom of expression with the use of technology (Irimiás et al., 2022). This integration is the main foundation for the development of a digital-based arts curriculum. With planning that is in line with policy, the transformation has strong normative legitimacy.

Digital transformation planning begins with a needs assessment. Schools need to identify the readiness of infrastructure, teacher competencies, and students' access to technological devices. This analysis is important so that the programmes designed are realistic and contextual. Tian (2025) emphasise that understanding the context is the first step in designing effective change. In arts education, the context includes the types of arts taught, student characteristics, and



local potential that can be developed through digital media. Thus, planning is not generic, but based on real needs.

Furthermore, planning must include the formulation of a digital vision for the school. This vision serves as a strategic direction that guides all stakeholders. A digital vision in arts education can take the form of developing a technology-based creative ecosystem (Demartini et al., 2020). This vision is then translated into measurable operational objectives. Without a clear vision, digital transformation tends to proceed without direction. Therefore, the school principal's leadership plays an important role in formulating an inspiring and implementable vision.

Curriculum planning is a crucial aspect of the digital transformation of arts education. The curriculum needs to be adjusted to accommodate the integration of technology in the creative process. The development of digital project-based modules is one relevant strategy. The principle of participatory learning as stated emphasises the importance of active student involvement in art practice. Digital technology expands this space for participation through interactive media. Therefore, curriculum planning must ensure a balance between aesthetic values and digital competence. In addition to the curriculum, planning also includes human resource capacity building. Art teachers need to be equipped with digital literacy training so that they are able to manage technology-based learning. Digital transformation will not be effective without the readiness of teachers as key actors. Bannikova et al. (2023) emphasises the importance of a deep understanding of meaning and context in art practice. In the digital age, this understanding needs to be combined with technical skills in the use of new media. Thus, training planning becomes an integral part of the transformation strategy.

Infrastructure is also an important aspect of planning. Schools need to ensure the availability of adequate hardware and software. Stable internet access is a key prerequisite for digital learning. Budget planning must consider long-term investment in technology development. Without infrastructure support, digital programmes risk being halted midway. Therefore, transparent and sustainable financial planning is a must. Digital transformation planning also includes the development of internal school policies. These policies regulate the use of devices, digital ethics, and the protection of students' copyrights. In arts education, intellectual property rights issues are particularly relevant. Careful planning ensures that students' digital work is protected legally and ethically. In addition, internal regulations help create a safe and productive digital environment. Thus, governance becomes more structured and accountable (Kuzu, 2020).

Collaboration is an important element in digital transformation planning. Schools can establish partnerships with the arts community, universities, or the creative industry. This collaboration enriches learning resources and expands the network for publishing student work. Collaborative planning also increases the sustainability of digital programmes. Planning evaluation also needs to be designed from the outset. Indicators of digital transformation success must be clearly and measurably formulated. Evaluation should not only assess the end result, but also the implementation process. In arts education, evaluation can be carried out through digital portfolios and documentation of the creative process. Evaluation planning ensures that the programme runs according to its objectives.

Digital transformation planning must consider sustainability. Digital programmes should not be temporary or follow short-lived trends. Long-term strategies need to be developed so that transformation becomes part of the school culture. Sustainability includes equipment maintenance, system updates, and teacher competency improvement. Without a sustainable strategy, digital innovation will lose its impact. Therefore, planning must be visionary and progressive. The cultural dimension of the organisation also needs to be considered in planning. Digital transformation requires changes in work patterns and mindsets. Teachers and students need to build a technology-based collaborative culture. Alacovska et al. (2020) reminds us that artistic practice is always linked to social meaning and community values. Therefore, the integration of technology must maintain humanistic values in arts education. Planning that is sensitive to the culture of the organisation will facilitate the adaptation process.

Student participation is also part of inclusive planning. Students need to be involved in formulating ideas and developing digital arts programmes. This approach is in line with the



Merdeka Belajar (Independent Learning) principle, which gives students autonomy. Active student involvement increases their sense of ownership of the programme. In addition, participation encourages creative innovation that is relevant to the needs of the digital generation. Thus, planning becomes a dialogical process.

Planning for digital transformation in arts education also needs to consider the dimensions of ethics and data security. The use of digital platforms must comply with the principles of personal data protection. Schools need to provide digital literacy education to students. Awareness of digital ethics prevents the misuse of technology. With careful planning, risks can be systematically minimised. This strengthens responsible governance.

Overall, planning for digital transformation in arts education is a multidimensional process involving policy, curriculum, human resources, infrastructure, and organisational culture. Technology integration must be strategically designed to support broader educational goals (González-Zamar & Abad-Segura, 2021). In line with the *Merdeka Belajar* policy, schools have the opportunity to develop contextual and creative innovations. Careful planning will ensure that the transformation is effective and sustainable. Thus, arts education can develop as a creative space that is adaptive to the digital era.

B. Implementation of Digital-Based Art Education

The implementation of digital-based arts education is the practical stage of digital transformation planning in schools. This stage focuses on how technology is integrated into the arts teaching and learning process. Digitalisation not only serves as a tool, but also as a creative medium that expands students' space for expression. In the context of arts education, technology enables more varied exploration of form, sound, movement and visuals (Black & Browning, 2011). Therefore, the implementation of digital-based learning requires adaptive pedagogical strategies. This integration must remain oriented towards the achievement of students' aesthetic and creative competencies.

Within the framework of the *Merdeka Belajar* (Independent Learning) policy, digital-based arts education is in line with the principles of flexibility and independence in learning. Teachers are given the space to design contextual and innovative project-based learning. Students can explore digital media according to their interests and talents. This model reinforces the student-centred learning approach in arts education. Thus, learning is no longer one-way, but collaborative and participatory (Li, 2020). The implementation of technology becomes a means of empowering students' creativity.

Digital-based arts education can be implemented through synchronous or asynchronous models. The synchronous model allows for direct interaction through video conferencing or virtual classrooms (Batty, 2021). Meanwhile, the asynchronous model provides flexibility in terms of time through online modules and recorded materials. The combination of these two models expands student access and participation. Arts teachers can demonstrate techniques through digital video tutorials. This supports the diversity of learning styles among students.

In practice, various creative applications are used as learning media. In music, digital composition software allows students to create arrangements independently. In visual arts, graphic design applications support digital-based visual exploration. Meanwhile, in performing arts, video and multimedia technology enriches the documentation of works. Marcum (2014) emphasises that artistic practice is a participatory activity that builds social identity. Digital media expands this participation to a wider virtual space.

The implementation of digital-based art learning also changes the role of teachers. Teachers are no longer merely conveyors of material, but facilitators and curators of learning. Teachers guide students in the process of creative exploration and reflection. A reflective approach is an important part of the digital arts learning process.

The aspect of collaboration has become increasingly strong in digital-based learning. Students can work together on art projects through online platforms (Byrnes, 2022). Cross-class and even cross-school collaboration has become easier. Social media and video sharing platforms have become spaces for appreciating students' work. These interactions broaden the aesthetic insights and experiences of students. Thus, the implementation of arts education has become more



open and inclusive.

Evaluation in digital-based art learning is carried out through electronic portfolios. Every process and result of students' work can be documented systematically. Assessment does not only focus on the final product, but also on the creative process that is recorded. This approach is in line with the principles of authentic assessment in education. Teachers can provide online and continuous feedback. Digital documentation also facilitates monitoring of student progress.

However, the implementation of digital-based art learning faces various challenges. The technology access gap remains an obstacle in some areas. Not all students have adequate devices or internet networks. Teachers also face challenges in mastering new technologies. Therefore, institutional support is an important factor in the success of implementation. Without such support, digital learning is difficult to optimise.

Strengthening digital literacy is an integral part of learning. Students need to understand the ethics of digital media use and copyright. [Xiao et al. \(2025\)](#) emphasises that art is always linked to social values and meanings. In the digital context, these values must be upheld through responsible practices. Teachers need to educate students about data security and the ethics of publishing work. In this way, digital art education remains grounded in humanistic values.

The implementation of digital-based art learning also encourages innovation in teaching methods. Teachers can utilise gamification to increase student motivation. Virtual reality and augmented reality technologies are beginning to be used in the exploration of visual arts. These innovations create an immersive and engaging learning experience. This transformation shows that technology is not a threat, but an opportunity ([Sarpani et al., 2022](#)). Art learning has become more dynamic and interactive.

In the context of school management, the implementation of digital learning requires good coordination. The head teacher needs to ensure the availability of facilities and technical support. The school IT team plays a role in maintaining the smooth running of the online learning system. This coordination reflects collaborative educational governance. Digital implementation cannot be done individually. Therefore, synergy between school elements is the key to success.

The implementation of digital-based arts learning also opens up opportunities for the integration of local arts in a modern format. Traditional works can be recorded and published through digital platforms. This expands the scope of cultural preservation. [Wulansari et al. \(2026\)](#) states that art plays a role in shaping collective identity. Digitalisation allows this identity to be preserved and introduced to a global audience. Thus, digital arts learning has a strong cultural dimension.

Reflection is an important part of digital-based arts education. Students are encouraged to evaluate their creative process through digital journals or online discussions. Teachers provide constructive feedback for the development of future works. This reflective process strengthens students' aesthetic and critical awareness. Emphasise the importance of interpreting experiences in learning. Through reflection, arts education becomes more meaningful.

The success of digital-based art learning depends heavily on the readiness of the school ecosystem. Infrastructure, teacher competence, and policy support must work in harmony. The *Merdeka Belajar* (Independent Learning) policy provides space for schools to develop creative learning models. Effective implementation will improve the quality of art learning. In addition, digital learning expands opportunities for students to participate in global creative spaces.

The implementation of digital-based arts education is a transformational process that integrates technology with aesthetic and cultural values. This process involves changes in pedagogy, the role of teachers, interaction patterns, and evaluation systems. Theoretical references from [Shi \(2025\)](#), reinforce the understanding that art is a dynamic social practice. Digitalisation is not merely a technical innovation, but a paradigm shift in learning. With focused and reflective implementation, digital-based arts education can enhance creativity, participation, and the quality of learning in a sustainable manner.

C. Digital Governance Model Analysis

The analysis of digital governance models in arts education aims to understand how school management systems adapt to technological transformation. Digital governance is not only about



the use of software or online platforms, but also encompasses changes in organisational structure, communication patterns, and decision-making mechanisms (Sun et al., 2024). In the context of arts education, digital governance models influence the planning, implementation, and evaluation of creative programmes. Therefore, analysis is needed to assess the effectiveness and sustainability of the models implemented. This approach helps identify best practices and implementation challenges. With comprehensive analysis, schools can develop more adaptive and responsive systems.

Digital governance models can generally be categorised as centralised or participatory. Centralised models place decision-making in the hands of school leaders with strong administrative control. Meanwhile, the participatory model involves teachers, staff, and even students in the planning and evaluation process of digitisation. In arts education, the participatory approach is more relevant due to the collaborative and expressive nature of art. Therefore, a participatory digital governance model tends to be more effective in the context of arts education.

Analysis of digital governance models also needs to consider alignment with national policies such as *Merdeka Belajar* (Independent Learning) (Gomes, 2022). This policy gives schools greater autonomy to develop learning innovations. Flexible governance models enable schools to respond creatively to local needs. The integration of technology in arts education management must support the principles of independence and innovation. Therefore, the analysis needs to look at the extent to which these policies are implemented in practice. The alignment between policy and implementation is an indicator of the effectiveness of the governance model.

From an educational management perspective, digital governance includes the functions of planning, organising, implementing, and supervising. The analysis is conducted by assessing how each of these functions is integrated with technology (Hu, 2025). Digital transformation changes the way schools communicate internally and externally. Therefore, governance models must be able to accommodate these changes systematically. This analysis helps to see the consistency between policy, practice, and results.

Leadership is a central element in the digital governance model. The headteacher acts as an agent of change who determines the direction of transformation. Transformative leadership encourages technology-based innovation and collaboration. Analysis of the governance model needs to examine the leadership style applied. Is leadership instructive or collaborative? The answer to this question determines the effectiveness of digitalisation implementation in arts education.

In addition to leadership, organisational structure also influences digital governance. The formation of a special digital transformation team is an indicator of institutional readiness. This team usually consists of art teachers, IT staff, and school management representatives. Collaboration between work units accelerates the process of technological adaptation. Organisational structure analysis helps identify patterns of coordination and task distribution. With a clear structure, the implementation of digital programmes becomes more focused.

The dimension of internal communication is an important aspect in the analysis of digital governance models. Technology enables faster and more efficient communication through online platforms. However, the effectiveness of communication depends on an open organisational culture. Therefore, digital communication in arts education must maintain humanistic values. Communication analysis helps to understand the dynamics of interaction within organisations.

The aspects of transparency and accountability are also the focus of digital governance analysis. Digital systems enable real-time documentation of activities and reports. This transparency strengthens stakeholder trust (Hu, 2025). In arts education, documentation of works and activities is part of programme accountability. Analysis needs to look at the extent to which digital systems support good governance principles. With strong transparency, management becomes more professional. Evaluation and monitoring are integral parts of the digital governance model. Data-based evaluation systems enable more objective decision-making. Model analysis needs to look at the evaluation mechanisms that are implemented. Is evaluation carried out regularly and participatively? With systematic evaluation, the governance model can be continuously refined.



Analysis of the digital governance model also includes the dimension of organisational culture. Digital transformation requires changes in mindset and work habits. Teachers and students need to adapt to technology as part of their daily activities. A culture of innovation is an indicator of successful transformation. Without a supportive culture, digital systems become merely an administrative formality.

External collaboration also influences the digital governance model (Xanthopoulou et al., 2023). Schools can collaborate with art communities, universities, or the creative industry. This collaboration expands resources and professional networks. states that art develops through broad social interaction. In the digital context, external collaboration becomes easier to carry out. Analysis of the governance model needs to look at the school's openness to partnerships. The dimension of digital ethics is also a concern in governance analysis. The use of technology must be accompanied by clear regulations regarding copyright and data security. Arts education produces works that have high intellectual value. Therefore, the protection of students' digital works is the responsibility of the institution. Analysis of the governance model needs to ensure that there are adequate ethical policies. With clear regulations, governance becomes more accountable.

The sustainability of digital programmes is an important indicator in governance model analysis. Effective programmes must have long-term planning. Investment in training and infrastructure is part of the sustainability strategy (Wei et al., 2026). Without sustainable planning, digital transformation will stall at an early stage. The analysis needs to assess the institution's commitment to sustainable development. This determines the resilience of digital innovation. From a theoretical perspective, digital governance model analysis can use a case study approach to understand the specific context of schools. This approach is relevant for examining changes in arts education governance. Qualitative data provides a comprehensive picture of actual practices in the field. Context-based analysis helps generate applicable recommendations.

The analysis of digital governance models in arts education covers the dimensions of leadership, organisational structure, communication, evaluation, culture, ethics, and sustainability. Technology integration must support aesthetic values and broader educational goals. In line with the *Merdeka Belajar* (Independent Learning) policy, schools have the opportunity to develop innovative and participatory governance models. Theoretical references from Engvall & Flak (2022), With in-depth analysis, digital governance models can be developed effectively and sustainably in arts education.

D. Relevance to the Independent Learning Policy

The relevance of digital transformation in arts education to the *Merdeka Belajar* policy lies in their shared vision of encouraging innovation and independent learning. This policy is designed to give educational institutions greater autonomy in managing learning. Digital transformation is one of the strategic instruments for realising this flexibility. In the context of arts education, technology opens up broader space for creative exploration. Therefore, digital integration is strongly aligned with the spirit of this policy (Lau, 2015). This relevance is evident in the paradigm shift from teacher-centred to student-centred learning.

Merdeka Belajar emphasises the importance of project-based learning as a means of strengthening competencies. Arts education is inherently practice-based and focused on creating works of art. Digitalisation enriches project-based learning models through the use of creative applications and collaborative platforms. Thus, digital transformation strengthens the implementation of project-based learning in the arts. Christanti & Sukoco (2022) states that art develops through active participation and direct experience. Digital media expands this participation to a broader and more inclusive virtual space.

The *Merdeka Belajar* policy also emphasises differentiated learning according to students' needs and interests. Digital transformation enables teachers to provide a variety of flexible learning resources. Students can access art materials through video tutorials, interactive modules, and online platforms. This supports an adaptive and personalised learning approach. Creswell & Poth (Suriandjo, 2024) emphasise the importance of understanding the context and individual experiences in the learning process. Digitalisation helps accommodate this diversity of



experiences more effectively. In addition, *Merdeka Belajar* encourages the strengthening of Pancasila student profiles that are creative and critical thinkers. Digital-based arts education contributes to the development of students' creativity and reflective thinking skills (Hockings et al., 2018). The use of technology in the creative process requires students to solve problems innovatively. Digital transformation also trains media literacy and ethical responsibility. Thus, the implementation of digital arts learning is in line with the goal of character building. This relevance strengthens the position of arts education in national policy.

This policy also gives schools greater autonomy in managing their curricula. Digital transformation enables schools to develop arts curricula based on local needs. The integration of technology can be tailored to the cultural potential of the region. Broad (2006) asserts that art serves as an expression of social and cultural identity. With digitalisation, local artworks can be published globally. This shows that the *Merdeka Belajar* policy supports cultural preservation through technological innovation. Another relevant aspect is assessment or learning evaluation. *Merdeka Belajar* encourages authentic assessment that is process and competency oriented. In digital arts education, evaluation can be carried out through electronic portfolios. Documentation of the creative process is an important part of assessment. Emphasise the importance of reflection in understanding the learning process. With a digital system, reflection can be documented systematically and transparently. Digital transformation also supports cross-institutional collaboration as recommended in the *Merdeka Belajar* policy. Schools can collaborate with the arts community and creative industries through online platforms. This collaboration enriches students' learning experiences. Hetland & Winner (2004) emphasized that educational practices cannot be separated from social values and community relations. Digitalization expands this network of relationships. In this way, art learning becomes more contextual and relevant.

Merdeka Belajar also encourages increasing teacher competency as learning facilitators. Digital transformation requires art teachers to increase technological literacy and digital pedagogy. Training and professional development are part of policy implementation. Teachers who are competent in technology are able to design innovative learning. This shows that digital transformation plays a role in supporting teacher professionalism. This relevance shows the close relationship between policy and practice (Hetland & Winner, 2004). The *Merdeka Belajar* policy emphasizes the importance of freedom of thought and expression. Digital-based arts education provides a wider space for expression for students. Social media platforms and video channels have become a means of publishing works. Digital media expands the social impact of students' work. Thus, freedom of expression can be realized through digital transformation. In the context of organizational culture, *Merdeka Belajar* encourages the creation of an innovative learning environment.

Digital transformation is changing communication and collaboration patterns in schools. An adaptive organizational culture is a prerequisite for successful policy implementation. Cropley (2019) emphasize the importance of contextual understanding in the organizational change process. Schools need to build a reflective culture and be open to innovation. With a supportive culture, policies can be implemented effectively. Digital transformation in arts education has strong relevance to the *Merdeka Belajar* policy. Alignment is seen in the aspects of flexibility, project-based learning, differentiation, authentic assessment, and character strengthening. Digital transformation is a strategic instrument for realizing an innovative and humanistic educational vision (Hetland et al., 2013). With proper implementation, this policy can strengthen the quality and relevance of arts education in the digital era.

CONCLUSIONS AND SUGGESTIONS

Digital transformation in arts education governance has strong relevance to the *Merdeka Belajar* policy because both emphasize flexibility, creativity, independent learning, as well as strengthening the character of students through project-based learning and authentic assessments. Digitalization not only supports innovation in the arts learning process, but also strengthens school management through a system that is more transparent, collaborative and adaptive to technological developments. However, successful implementation is highly dependent on



infrastructure readiness, teacher competency, school leadership, and sustainable policy support. Therefore, schools need to design an integrated digital transformation strategy, teachers must increase digital pedagogy capacity, and the government needs to ensure equitable access to technology so that this transformation truly has an impact on improving the quality and relevance of arts education in the Independent Learning era.

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