

Digital Transformation in Civil Servant Competency Development at BPSDMD Banten Province

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Abstract

Digital transformation within the bureaucracy has become an urgent necessity for achieving excellent Electronic-Based Government Systems (SPBE). This study aims to analyze the implementation, obstacles, and impact of digital transformation on the competency development of State Civil Apparatus (ASN) at the Regional Human Resources Development Agency (BPSDMD) of Banten Province. A descriptive qualitative method was employed, utilizing data collection techniques such as in-depth interviews, observation of e-learning platforms, and document analysis. The results indicate that the digitalization of training systems—specifically through the "Banten Ceria" and "SIM Ceria" Learning Management System (LMS) platforms—has significantly improved equitable access, budget efficiency, and flexibility regarding employees' learning schedules. However, the program's acceleration remains hindered by the digital literacy gap across ASN generations (the digital divide) and limited information technology infrastructure in certain remote work units. The study concludes that digital transformation at BPSDMD Banten Province has successfully fostered a more adaptive work culture, although it requires strengthened local regulations and continuous enhancement of digital literacy capacity across all levels of the civil service.

Keywords: *Digital Transformation; Competency Development; State Civil Apparatus; BPSDMD Banten.*

Introduction

The era of technological disruption and global demands requires public bureaucracies to operate with greater agility through the implementation of Electronic-Based Government Systems (SPBE) (Arief & Abbas, 2021). Digital transformation is no longer merely a matter of adopting information technology; it entails a comprehensive restructuring of work patterns, governance, and public service interactions. Modern governments are compelled to shift from manual service paradigms—often characterized by slowness and excessive bureaucracy—toward digital governance models that are responsive, transparent, and accountable (Awaludin, 2019). The success of this transition serves as a key benchmark for evaluating the efficiency of contemporary government administration (Rusdy & Flambonita, 2023).

However, the primary driver of success for this digital bureaucratic reform lies not in the complexity of the procured information technology infrastructure, but in the

readiness of the human resources operating within it (Prawira et al., 2023). State Civil Apparatus (ASN) personnel act as the primary driving force and the agents responsible for executing every digital-based policy (Wulandari et al., 2021). Without upgrading competencies to keep pace with technological advancements, massive investments in government software applications and hardware risk becoming nothing more than non-functional bureaucratic ornaments. Consequently, strengthening the digital competencies of employees is an urgent priority (Hidayah & Almadani, 2022).

At the macro level, national regulations—specifically the State Civil Apparatus Law—explicitly mandate that every employee has the right and obligation to undergo continuous competency development (Khatab, 2019). This policy requires government training institutions to reformulate their learning approaches so that they can reach employees at all levels, unconstrained by the limitations of time and space. Conventional, face-to-face classroom-based learning models are increasingly seen as losing their relevance in addressing the rapidly shifting competency requirements of the digital era (Sedarmayanti, 2012).

A "competency gap" has emerged as a common challenge, driven by the intergenerational digital literacy divide within the bureaucracy. Senior officials accustomed to paper-based workflows often exhibit resistance and anxiety regarding technology when confronted with new digital management systems (Samsara, 2023). Conversely, younger employees demand a fast-paced, online-oriented work ecosystem. This capacity disparity necessitates tactical interventions through integrated and adaptive civil servant training systems capable of meeting the needs of all groups (Ngindana & Hermawan, 2019).

In response to these challenges, regional human resource development institutions have begun incorporating digital transformation concepts into their training programs. The digitalization of training is being realized through the development of e-learning platforms, Massive Open Online Courses (MOOCs) (Setiadiputra, 2017), and integrated, app-based learning management systems. These strategic measures are expected to significantly improve regional budget efficiency while expanding the reach of the mandatory annual training hours required for every state official (Sumanti, 2018).

Despite offering high efficiency, the reality on the ground reveals that the transition from traditional classroom training to a digital learning ecosystem often encounters complex barriers. These obstacles stem not only from limited internet connectivity and software maintenance issues but also from organizational culture readiness. A failure to internalize the values of independent digital learning often results in online training participation becoming a mere formality—undertaken solely to satisfy administrative requirements. Given the urgency of this phenomenon, this study focuses specifically on the Regional Human Resources Development Agency (BPSDMD) of Banten Province. This location was selected due to the agency's strategic position as the epicenter for capacity building for all civil servants across the province—an entity currently making aggressive strides toward the digitalization of training amidst the geographical and infrastructural disparities existing between Banten's various regencies and cities. The study conducts an in-depth analysis of how the institution orchestrates the technological transformation of training, identifies internal and external obstacles,

and measures the significance of the impact on enhancing the competency standards of civil servants within the Banten Provincial Government.

Method

This study employs a descriptive qualitative approach to explore the phenomenon of digital transformation within the agency in depth. Primary data were collected through observations of online learning platforms and in-depth interviews with key informants selected via purposive sampling—comprising management, trainers, and civil servant (ASN) training participants (Sugiyono, 2017). Meanwhile, secondary data were obtained through a documentary review of regulations, training curricula, and annual evaluation reports. The validity and credibility of the collected data were ensured through source and method triangulation techniques.

The data analysis process was conducted interactively and continuously across three main stages: data condensation, data display, and conclusion drawing and verification. In the initial stage, raw data from interview transcripts and documents were sorted and focused on aspects regarding the processes, obstacles, and impacts of digitalization. Subsequently, the data were presented in a systematic, descriptive narrative to facilitate understanding. The final stage involved drawing theoretical and practical conclusions, which were cross-verified against empirical evidence to produce an objective analysis of civil servant competency development.

Results and Discussion

Implementation and Impact of Digital Learning Innovation

The digital transformation of State Civil Apparatus (ASN) competency development at the Regional Human Resources Development Agency (BPSDMD) of Banten Province represents a fundamental restructuring of the regional training ecosystem. This tactical move is no longer viewed merely as a supporting alternative but as a primary instrument shifting conventional training methods toward a more adaptive system. The sociological and legal foundations of this change are deeply rooted in global demands for agile governance. Through a digital approach, training institutions are required to facilitate employee capacity-building needs—on a massive scale and with speed and measurability—without compromising the quality of the instructional content.

From a regulatory standpoint, the acceleration of this transformation has been massively driven by the enactment of Law Number 20 of 2023 concerning the State Civil Apparatus. This latest regulation introduces a new paradigm by shifting the status of competency development from a normative employee right to an absolute obligation (experiential learning). The implications of this rule compel every regional government agency to reformulate learning strategies capable of equitably reaching all levels of the workforce. BPSDMD Banten Province has responded to this mandate by implementing large-scale instructional digitalization to facilitate the annual training hour requirements for tens of thousands of ASN personnel at both provincial and regency/city levels.

As a concrete operational step, BPSDMD Banten Province has integrated information technology through the launch of an integrated digital ecosystem: the "Banten Ceria" (Smart and Innovative Banten) Learning Management System (LMS)

platform. Based on Moodle open-source software, this platform is specifically designed to serve as a hub for independent online learning for employees. With its modular system architecture, the LMS is capable of hosting large-scale interactive learning materials, ranging from video tutorials and digital modules to asynchronous discussion forums. The launch of this platform marks a new milestone in the modernization of the civil servant training system in Banten Province.

In addition to providing a learning medium via the "Banten Ceria" LMS, the institution has complemented it by developing an integrated training administration system known as "SIM Ceria." This application serves as the backbone of training management, automating the entire training cycle from start to finish. Administrative processes that previously consumed significant time—such as participant registration, document screening, class scheduling, and the issuance of barcode-enabled digital certificates—can now be completed automatically through the system. The integration of SIM Ceria and the Banten Ceria LMS fosters a training management framework characterized by transparency, streamlined bureaucracy, and minimal operational data errors.

The implementation of this digital ecosystem directly overcomes the limitations of traditional classroom-based methods, which tend to be rigid and costly. Prior to digitalization, conducting in-person training relied heavily on the availability of physical classrooms and dormitory facilities, as well as the schedules of both instructors and participants. Such physical constraints resulted in long waiting lists, leaving many civil servants without training opportunities for years. With the introduction of e-learning, constraints regarding space and time have been completely eliminated, enabling all employees to engage in self-directed learning alongside their regular work duties.

Field observations indicate that the curriculum presented on this digital platform encompasses a vast and comprehensive range of competencies. Training materials are systematically categorized into technical competencies aligned with specific job functions, managerial competencies for leadership, and socio-cultural competencies that foster national unity. The instructional materials were developed in accordance with Civil Servant (ASN) competency standards, ensuring that self-directed learning remains aligned with organizational needs. This flexibility in selecting materials fosters a voluntary interest in learning among civil servants.

The successful implementation of this digitalization is also evidenced by the Banten Province Human Resources Development Agency's (BPSDMD) involvement in various national-scale pilot programs. A key strategic achievement for the agency was the successful piloting of the "Integrity-Driven Civil Servant E-Learning" program. Through this initiative, the core Civil Servant values known as "BerAKHLAK" and an anti-corruption culture were disseminated widely via digital channels. The successful execution of this national program not only enhanced the agency's reputation in the eyes of the National Institute of Public Administration (LAN) but also earned the Banten Provincial Government a national award for its commitment to transparent training governance.

From a regional financial management perspective, the positive impact of this digital transformation is clearly evident in budget utilization efficiency. Distance learning

and blended learning models have proven capable of significantly reducing operational training costs. Regional budget expenditures—previously consumed by catering, accommodation, physical module reproduction, and travel allowances for participants—can now be reallocated. This budgetary efficiency creates greater fiscal space for the region to invest in IT infrastructure and the development of higher-quality training content.

Another significant impact of this digital innovation is a massive increase in the total annual training hours (JP) achieved by employees. Based on annual evaluation documents, the percentage of civil servants meeting minimum competency development requirements has surged dramatically since the online platform was launched. This is attributed to the micro-learning approach—whereby material is broken down into short, 5-to-10-minute videos—making it much easier for employees to learn amidst the demands of public service duties. This rise in the competency fulfillment index has automatically boosted Banten Province's Civil Servant Professionalism Index (IP-ASN) score at the national level.

Furthermore, the use of this technology has shifted the civil servants' learning habits toward a more positive and autonomous approach. The traditional mindset—characterized by employees passively waiting for superiors to assign training—is gradually changing. The inclusion of a personal dashboard within the "LMS Ceria" account encourages civil servants to consciously track their own learning progress and actively select digital classes relevant to their career development. This behavioral shift serves as a vital cultural asset for establishing a "learning organization" within the government bureaucracy.

At a broader organizational level, the integration of this training technology system contributes directly to raising the Electronic-Based Government System (SPBE) Index score for Banten Province. BPSDMD Banten's success in digitizing its human resource management sector serves as tangible proof that the civil service's readiness to adopt technology is on the right track. As civil servants become accustomed to using digital platforms for internal needs, their ability to adapt to various external public service applications intended for the public will also improve significantly.

The implementation of the "Banten Ceria" and "SIM Ceria" platforms by BPSDMD Banten Province has demonstrated that information technology can serve as a key enabler for enhancing bureaucratic capacity. This innovation successfully addresses challenges related to geographical constraints and limited regional budgets by providing inclusive, flexible, and high-quality learning access. The long-term impact of this successful transformation extends beyond mere administrative excellence for the training agency; it ultimately fosters a new generation of leaders and civil servants who are digitally competent, responsive, and capable of delivering excellent public services to the people of Banten.

Structural Challenges and Digital Culture Adaptation Strategies

Although the "Banten Ceria" and "SIM Ceria" platforms have operated with systemic stability, field data analysis confirms that the digital transformation process at BPSDMD Banten Province has not been without obstacles. The challenges that have

emerged are multidimensional, broadly categorized into two main dimensions: technical-structural barriers and cultural-behavioral barriers. These obstacles serve as a test for the institution, revealing the extent to which the adopted digitalization policies possess the flexibility and resilience to withstand the complex realities of regional bureaucratic dynamics.

Regarding the structural dimension, the most dominant fundamental constraint in the field is the uneven stability of internet network infrastructure and the inconsistent availability of supporting technological devices across the agency's operational areas. As a province characterized by a geographical imbalance—featuring an urban north and a predominantly rural south—connectivity disparities present a tangible challenge. Civil servants stationed in remote or outlying areas within regencies and cities often encounter technical difficulties when attempting to access high-quality, interactive video-based training materials or when required to complete real-time competency assessments via the Learning Management System (LMS).

These structural obstacles are compounded by limited budget allocations for operational technology maintenance and local-level cybersecurity measures. A massive digital learning system accessed simultaneously by tens of thousands of users demands substantial server capacity and rigorous data protection to mitigate risks such as cyberattacks or system crashes. A shortage of in-house IT specialists at the Banten Provincial Human Resources Development Agency (BPSDMD)—specifically those skilled in network architecture and database security—can hinder the resolution of technical issues in the field, potentially diminishing the user experience during the learning process.

Meanwhile, from a cultural-behavioral perspective, the primary challenge during this digital transition stems from the intergenerational digital literacy gap, commonly known as the "digital divide." The Banten Provincial Government's bureaucratic structure currently retains a significant proportion of senior employees in strategic positions. Employees in this age group are generally accustomed to traditional paper-based workflows and conventional face-to-face training methods; consequently, they often exhibit psychological resistance and "technostress" when required to shift to a digital ecosystem.

This cultural resistance directly impacts the quality of employee participation in e-learning initiatives. In-depth interviews and observations indicate that some civil servants still view online learning activities within the LMS merely as administrative formalities—undertaken solely to satisfy personnel record requirements or to fulfill annual obligations. The phenomenon of "mindless clicking"—or delegating the completion of digital training modules to younger staff simply to obtain a digital certificate—remains commonplace. This indicates that the true essence of personal capacity building via digital platforms has not yet fully permeated the work culture mindset of some employees.

On the other hand, the younger cohort of civil servants (Millennials and Generation Z)—who naturally possess higher digital literacy—presents unique challenges for training institutions. While highly adept at navigating advanced Learning Management System (LMS) features, these younger employees are prone to losing focus

due to digital distractions during self-paced online learning. Furthermore, their digital literacy potential is often underutilized regarding the organization's core substantive tasks; instead, it is frequently limited to basic communication or personal social media activities that contribute little to institutional performance.

To address these complex structural and cultural obstacles, the BPSDMD of Banten Province has taken proactive measures by formulating a series of sustainable, tactical intervention strategies. The institution has gradually upgraded its infrastructure through a cross-sector collaboration with the Banten Province Communication, Informatics, Statistics, and Encryption Agency (Diskominfo). This partnership has materialized through initiatives to optimize network bandwidth at strategic locations and the establishment of "digital learning corners" within government offices, thereby supporting employees who face equipment-related issues at home or in their respective work units.

To overcome psychological resistance and bridge the intergenerational gap in technological proficiency, the BPSDMD of Banten Province has launched a large-scale, culturally focused educational initiative known as the "ASN Digital Literacy Training." Moving away from rigid technical administrative material, this program is specifically designed to instill in senior employees a fundamental understanding of technology's utility, digital ethics, and information security. The instructional approach is persuasive and practical, aiming to build "digital confidence" among staff and gradually alleviate fears regarding changes to work systems.

Additionally, the institution has introduced innovative programs—specifically targeting younger civil servants—such as Digital Creativity Training and Innovation Development Training. Through this program, the adaptive energy of younger employees is channeled into productive endeavors—such as creating public educational content, optimizing the agency's digital media usage, and designing user-friendly public service applications. By combining the technological aptitude of younger staff with the professional experience of senior personnel, BPSDMD Banten Province aims to foster an inclusive and harmonious peer-to-peer learning ecosystem within the bureaucracy.

Overall, these improvement efforts demonstrate BPSDMD Banten Province's recognition that successful digital transformation is not measured merely by the sophistication of applications, but by organizational readiness—specifically, a digital culture. By combining the development of inclusive physical infrastructure with a consistent strengthening of digital literacy, the institution has successfully turned obstacles into opportunities to accelerate regional innovation. This ongoing process of cultural adaptation lays a solid foundation for a government bureaucracy in Banten Province that is not only technologically resilient but also embodies a modern public service mindset rooted in integrity.

Conclusion

The digital transformation of civil servant (ASN) competency development at BPSDMD Banten Province—facilitated by the *Banten Ceria* LMS and *SIM Ceria* platforms—has successfully revolutionized the conventional training ecosystem. It has created a system that is more flexible, transparent, and cost-effective, while massively boosting employees' training hours to realize modern digital governance. Although the

program's acceleration faces structural hurdles—such as network infrastructure disparities in rural areas—and cultural challenges—such as the intergenerational digital literacy gap—the agency's tactical interventions have proven effective. By strengthening cross-sectoral infrastructure and conducting inclusive digital literacy training, the agency has successfully fostered an adaptive organizational culture. This successful transition has not only measurably enhanced the professionalism of local government personnel but has also contributed directly to improving the Electronic-Based Government System (SPBE) index, ultimately leading to better public service quality across the Banten Provincial Government.

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