



Administrative digitalization development in education and training implementation at BPSDM (human resources development agency) of North Sumatera Province

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Abstract

This study examines the post-COVID-19 development of education and training administration at the Human Resources Development Agency (BPSDM) of North Sumatera Province. The research focuses on the integration of digitalization to enhance the efficiency and effectiveness of training programs and improve work outcomes. Using a qualitative descriptive approach, respondents from diverse educational backgrounds, age groups, positions, and genders were involved. The study measures three key variables: the effectiveness and efficiency of the training program across planning, preparation, implementation, and evaluation stages; the impact of administrative digitalization on employee competencies and performance in the training program; and the enhancement of work outcomes achieved by BPSDM of North Sumatera Province. The findings reveal that administrative digitalization positively influences all measured variables, improving the training program's effectiveness and efficiency at every stage. However, obstacles such as slower adaptation and innovation among employees, particularly those nearing retirement, were identified. To address these challenges, the study recommends specialized training and guidance for employees struggling with technology adoption, policies fostering cross-generational collaboration, and effective communication strategies to raise awareness and understanding of the benefits of administrative digitalization.

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1. Introduction

Technology has emerged as the primary solution to prevent physical contact and reduce the transmission of COVID-19. However, its rapid evolution poses a threat to non-technology companies, challenging the existence of traditional bureaucratic systems and transforming them into modern systems. In the context of bureaucratic regeneration, technology offers the means to replace manual work processes, reduce costs, implement paperless operations, and save time in administrative procedures. Public Administrative Digitalization and business process automation, known as Government 4.0, present opportunities to enhance efficiency through technological advancements (McKinsey & Co).

Furthermore, in response to the demand for civil servants (ASN) to adapt quickly to the current situation, soft skills training is essential. These skills should include critical thinking, creativity, coordination, emotional intelligence, and others, with a focus on their adaptability to technology. The government aims to develop ASN competencies not only in their respective fields but also in their ability to navigate the Disruption Era through Bureaucratic Digitalization. Technology has become an integral part of government functions and development.

The Human Resources Development Agency of North Sumatera Province, responsible for developing ASN human resources in

the region, faces the crucial task of adapting and making necessary adjustments in training programs and administrative practices. This ensures effective and efficient education and training provision to government agencies within North Sumatra Province and its districts/cities. According to Law Number 5 of 2014 regarding State Civil Apparatus and Regulation of the Republic of Indonesia State Administration Agency Number 5 of 2018 concerning the Development of Competencies for Civil Servants, each civil

servant should undergo competency development for at least 20 working days per year.

However, data on managerial competency development for officials occupying positions equivalent to Echelon IV, Echelon III, and Echelon II reveal that many have not participated in leadership education and training programs, which are essential requirements for their positions. The table below describes the data obtained for government agencies in North Sumatra Province.

Table 1: Civil Servants (ASN) Holding Positions without Leadership Training Participation Data

No	ASN Holding Echelon Positions in the North Sumatra Province Government	Agencies Officials Who Have Not Participated in Leadership Training (Persons)	Total Number of ASN Holding Positions (Persons)	Percentage of Officials Not Participating in Leadership Training (3/4x100%)
1	2	3	4	5
1	Echelon II/A : 37 Persons Echelon II/B : 15 Persons	40	52	77%
2	Echelon III/A : 232 Persons Echelon III/B : 261 Persons	282	493	57,2%
3	Echelon IV/A : 908 Persons Echelon IV/B : 1 Persons	783	909	86,14%

Data from the North Sumatra Province Civil Service Agency as of July 2021

Based on the data above, it can be observed that less than 50% of the government officials in the North Sumatra Province Government Agencies have participated in Leadership Training, which is a requirement for their positions. This data provides an insight into the situation in the districts/cities throughout North Sumatra Province.

Such requirements serve as a guideline for the North Sumatra Province Human Resources Development Agency (BPSDM) to continuously innovate in order to expedite the achievement of target officials' education before assuming their positions, rather than the other way around. The scope of competency development is not limited to Managerial Competency Training related to positions or civil servant status. The North Sumatra Province Human Resources Development Agency also holds the authority for various types of competency development, including Core Technical Competency Development, General and Functional Technical Competency Development, and Managerial Competency Development.

However, the competency development efforts at the North Sumatra Province Human Resources Development Agency face challenges in terms of reaching the demands of districts/cities throughout North Sumatra Province due to manual implementation. From 2014 to 2018, when training was conducted manually, the North Sumatra Province Human Resources Development Agency graduated less than 5,000 participants annually (data from the alumni of the Certification Field of the BPSDM Provsu).

Literature

The manual implementation of competency development training encounters several obstacles, such as limited financing, facilities, and infrastructure for accommodating training participants, limited human resources, and a shortage of trainers. Therefore, administrative and training competency development digitalization is considered the most ideal method for maximizing the quantity and quality of training outcomes. The North Sumatra Province Human Resources Development Agency has started implementing these developments. In the post-COVID-19 pandemic

disruption era, the agency has begun adapting to digital-based training concepts and digital-based administrative services, encompassing planning, preparation, implementation, and evaluation stages. These initiatives leverage digital platforms to streamline and maximize the capacity of training outcomes with limited human resources. However, achieving these goals would not be possible if the North Sumatra Province Human Resources Development Agency has not adapted and continues to employ manual methods for competency development training.

The objective of this study is to describe the development of administrative digitalization in the implementation of education and training at the Human Resources Development Agency (BPSDM) of North Sumatra Province. The development is linked to the variables of training effectiveness and efficiency, employee competency and performance improvement, as well as the enhancement of the quality and quantity of training alumni.

Another study conducted by Nanda Pratama in 2020 titled "Performance of Civil Servants in the Digitalization of Administrative Services in the Era of the COVID-19 Pandemic at the Regional Civil Service Agency and Human Resources Development Agency (BKPSDMD) in Bangka Regency, Bangka Belitung Province" explored the performance of civil servants in the digitalization of administrative services during the COVID-19 pandemic. The focus of the research was on the performance indicators of job quality, timeliness, initiative, ability, and communication. A qualitative research approach with descriptive and inductive methods, along with interview, observation, and documentation techniques, was employed for data collection. Data reduction, data presentation, and data verification were utilized for data analysis based on performance assessment criteria. The study found that the performance of civil servants in providing services was generally good, albeit slightly affected by the COVID-19 pandemic.

Research Method

The research methodology employed in this study is qualitative research. All data were obtained through analysis

of various relevant literature. The objective of qualitative research methodology is to analyze and describe phenomena or research objects through the social activities, attitudes, and perceptions of individuals or groups.

This research obtained information regarding the development of administrative digitalization in the implementation of education and training using digital platforms. This enables more effective training programs in terms of human resources by facilitating data recapitulation and budget efficiency, eliminating the need for physical contact, and allowing for remote participation using internet connectivity. It enables a greater quantity of participants and improved learning quality through digital innovation. Therefore, the technique used in this research is observation. This technique can also be used to assess the effectiveness of participants in meeting digital learning criteria, eliminating the need for physical documentation and relying on digital copies through websites with automatic data capture. Interviews with alumni who have completed the digital learning program can also be conducted using this technique. The technique used in this research involves conducting interviews with both civil servant (ASN) and non-ASN employees from various educational backgrounds, genders,

educational levels, and positions. Additionally, the analysis is based on the author's own observations as an employee with approximately ten years of experience, having been assigned to various departments, which allows for providing explanations based on personal observations and interactions with fellow employees. Documentation produced during the research process, as well as documentation of various administrative digitalization systems implemented at the BPSDM (Human Resources Development Agency) of North Sumatra Province, are also utilized.

1. Respondent Category

The respondents in this study are employees, both civil servants (ASN) and non-ASN, who are directly involved in the implementation of education and training for competency development at the Human Resources Development Agency (BPSDM) of North Sumatra Province. The adaptation to administrative digitalization in the provision of education and training is closely related to the competencies of human resources and their ability to adapt to digital-based administrative systems. These categories include age, position, gender, and educational level.

Table 2: Natural Resources Data of BPSDM PROVSU by Age

No	Employee Age Category	AGE (years)	ASN (People)	Non-ASN (People)	Total (People)	Additional Information
1	Birth Year 1961-1970	53-62	20	-	20	Employees approaching retirement age and Main WI with a Retirement Age of 65 Years
2	Birth Year 1971-1980	43-52	23	3	26	
3	Birth Year 1981-1990	33-42	8	12	20	
4	Birth Year 1991-2000	23-32	1	12	13	
	TOTAL		52	27		

Table 3: Gender Distribution in SDA BPSDM PROVSU

No	Unit	ASN (People)		TPP (People)		Total (People)
		Male	Female	Male	Female	
1	Secretariat	12	7	13	5	37
2	PKTUF field	2	6		2	10
3	ICP field	2	3		2	7
4	SKPK field	3	3	1	1	8
5	PKM field	8	3	1	2	14
6	JF Widyaiswara	20	5			25
	TOTAL	47	27	15	12	101

Table 4: Education Level in BPSDM PROVSU Natural Resources Data

No	Unit	ASN					TPP				Total
		Senior High School	D3	S1	S2	S3	Senior High School	D3	S1	S2	
1	Secretariat	4	2	6	7		4	2	10	2	37
2	PKTUF field	1		5	2				2		10
3	ICP field	2		3					2		7
4	SKPK field		1	3	2				2		8
5	PKM field	3	1	6	1				2	1	14
6	JF Widyaiswara				18	7					25
	TOTAL	10	4	23	30	7	4	2	18	3	101

Table 5: List of Respondents in the Research and Categories

No	Field	Respondent Name	SDA	Age (years)	Education	Position
1	Secretariat	1. Mohd. Ghufrin, S.Sos, M.AP	ASN	43	S2 (Master)	Young Expert Planner
		2. Edek Irawan, SH	ASN	48	S1 (BSC)	Treasurer
		3. All Imran Dalimunthe	ASN	53	SENIOR HIGH SCHOOL	Planning and Program Administration
		4. Dewi Trisnawati, S. Kom	ASN	37	S1 (BSC)	Apparatus HR Analyst
		5. Rahmadani, SE	Non-ASN	39	S1 (BSC)	TPP Program
		6. Widya Safitri Sihaloho, A.Md.Kom	Non-ASN	23	D3 (Diploma)	TPP Finance
		7. Ismail Amnur, S.Pdi	Non-ASN	35	S1 (BSC)	TPP General Section
		8. M. Wirawan Saputra, MH	Non-ASN	32	S2 (Master)	TPP Program
	PKTUF field	1. Anovia Syahfitri Harahap, SE, MM	ASN	43	S2 (Master)	Young Expert Policy Analyst
		2. Isnainy Waty, S. Sos	ASN	56	S1 (BSC)	Compiler of the Training Implementation Program
		3. Juliamine Sihombing	ASN	46	SENIOR HIGH SCHOOL	Training Administration
		4. Naptalina Simanungkalit, S.Pd	Non-ASN	32	S1 (BSC)	TPP Field
		5. Widi Pratiwi Hasibuan, SIKom	Non-ASN	26	S1 (BSC)	TPP Field
	ICP field	1. Melani Rusli, SH	ASN	56	S1 (BSC)	Kabid
		2. Yurlinda, S.Sos	ASN	49	S1 (BSC)	Young Expert Policy Analyst
		3. Md. Fandi Abdillah	ASN	39	SENIOR HIGH SCHOOL	General Administration
		4. Astri Dufani Lubis, SHI	Non-ASN	35	S1 (BSC)	TPP Field
		5. Sri Mutharidah, S.Ak	Non-ASN	26	S1 (BSC)	TPP Field
	SKPK field	1. Hj. Emilia, S.Sos, M.AP	ASN	51	S2 (Master)	Young Expert Policy Analyst
		2. Juliaman Sihombing, S. Sos	ASN	46	S1 (BSC)	Training Analyst
		3. Siti Aisyah, A.Md	ASN	55	D3 (Diploma)	Competency Test Place Administration Manager
		4. Indah Permata Marpaung, S. Kom	Non-ASN	29	S1 (BSC)	TPP Field
		5. M. Fazrur Rahman, S.Pi	Non-ASN	35	S1 (BSC)	TPP Field
	PKM field	1. M. Fauzi Siregar, S.IP, M.Si	ASN	36	S2 (Master)	Kabid
		2. Masdalifah, SE	ASN	57	S1 (BSC)	Compiler of the Training Implementation Program
		3. Ilham Fadhly Harahap, AMK	ASN	46	D3 (Diploma)	Management of Training Implementation
		4. Eddie Sudarja	ASN	46	SENIOR HIGH SCHOOL	Training Administration
		5. Irma Syafitri Nst, SE, M.Sc	Non-ASN	37	S2 (Master)	TPP Field

2. Interviews

There are two types of interviews: 1. in-depth interviews, where the researcher explores information in depth by directly engaging with the interviewee and having free-flowing discussions without predefined questions, creating a lively atmosphere. These interviews are conducted multiple

times. 2. guided interviews, where the researcher asks prepared questions to the interviewee. Unlike in-depth interviews, guided interviews have the drawback of a less dynamic atmosphere since the researcher is bound by predetermined questions.

3. Observation

Bungin (2007: 115-117) suggests several forms of observation, including: (1) participant observation, (2) unstructured observation, and (3) group observation.

4. Documents

In addition to interviews and observations, information can also be obtained through facts stored in the form of letters, diaries, photo archives, meeting minutes, souvenirs, activity journals, and so on.

Result and Discussion

The implementation of Administrative Digitalization has had an impact on the effectiveness and efficiency of Education and Training programs. The following research variables can serve as a guide for the writer to determine target points in line with the benefits and objectives of this study, particularly in investigating the role of Administrative Digitalization in conducting training programs in various fields at BPSDM North Sumatra Province. The variables are as follows:

a. Effectiveness and Efficiency in Training Program Planning

1. Publication of Training Calendar through the official website and social media of BPSDM North Sumatra Province provides ease for training participants and districts/cities to know about the optimal implementation of training programs at the beginning of the fiscal year.
2. Online registration is available on the official website and social media of BPSDM North Sumatra Province, facilitating the fulfillment of training participant quotas prior to the actual training program.

b. Effectiveness and Efficiency in Training Preparation

1. Online Registration Link for Training Programs using Google Form.
2. Preparation of Training Emails and integration of required administrative documents stored in Google Drive.
3. Creation of WhatsApp Groups for participants to maximize communication, information sharing, and collaboration among organizers, resource persons, and training participants.

c. Effectiveness and Efficiency in Training Implementation

1. Online Attendance using Google Form, with participants attaching their self-portraits using the Timestamp Camera app, which displays the timestamp and GPS coordinates of the participant's location. Attendance through the Learning Management System for distance learning participants. This helps ensure data accuracy and layered supervision related to training participant discipline.
2. Creation of Pre-Test and Post-Test Links using Google Form, enabling paperless efficiency with immediate data compilation and conversion for inclusion in certificates indicating qualification levels of Excellent, Good, Fair, and Poor.
3. Printing of certificates using the Mailing method in Microsoft Word, correlating registration data and participant scores.

d. Effectiveness and Efficiency in Training Evaluation

1. Online Evaluation of Instructors/Widyaiswara using Google Form. This maximizes efficiency and facilitates the organizers in obtaining a summary of assessments, as well as feedback and suggestions from training participants. It is also effective in internalizing evaluation results in the form of charts for easy reporting to superiors as periodic evaluation materials to enhance the quality of instructors and the incorporation of up-to-date issues in learning modules. The evaluation covers ten criteria, including subject matter mastery, presentation structure and delivery, punctuality and attendance, use of teaching methods and media, attitude and behavior, neatness of attire, response to participant questions, language usage, motivation provided to participants, and collaboration among instructors in the team. Participants are also given the opportunity to provide feedback and suggestions at the end of the evaluation form. The assessment is scored on a scale of 60-100, indicating Excellent, Good, Fair, and Poor ratings.
2. Organizer Evaluation The evaluation of training program organizers is a mandatory instrument to ensure that the implementation of the training program follows applicable rules and established standard operating procedures. This evaluation includes assessing the provision of complete information to participants, evaluating training facilities and infrastructure, and assessing the service provided by staff.

e. Development of Training Program Digitalization and Program Activity Socialization in BPSDM North Sumatra Province

1. Implementation of PKN II: Conducted through Blended Learning, which combines Distance Learning and Classroom methods. It is the first training program equivalent to PKN II since 2008, organized by the Training Agency.
2. Multimedia Studio Acquisition: A facility for socialization, publication, website management, and social media management in BPSDM North Sumatra Province.
3. Establishment of the Sibermartabat Learning Management System (LMS): The Sibermartabat LMS serves as an online learning platform for Blended Learning participants. It includes features such as scheduling, modules, assignment submission, task collection, grading, and discussion forums for instructors and training participants.
4. Implementation of Bimtek E-Learning Sibermartabat: Bimtek E-Learning Sibermartabat is an online learning model conducted through the Virtual Zoom Meeting feature using the distance learning method. It has been implemented as an innovative learning approach in BPSDM North Sumatra Province.
5. Socialization Activities: In addition to training programs and bimtek, BPSDM North Sumatra Province is also authorized to conduct socialization activities related to the latest regulations issued by the central government and local governments concerning the development of technical competencies, functional positions, and other relevant areas.
6. Conducting FGDs for Training Needs Analysis: To enhance collaboration, BPSDM North Sumatra Province

- conducts Focus Group Discussions (FGDs) for analyzing training needs.
7. Conducting FGDs for the Development of Provincial Competence Forums: BPSDM North Sumatra Province organizes FGDs for the Provincial Competence Forums in collaboration with relevant regional agencies.
 8. Publication and Social Media: BPSDM North Sumatra Province utilizes various platforms for publication and social media activities to disseminate information and engage with stakeholders.
 9. Establishment of the North Sumatra Provincial LSPPDN: The North Sumatra Provincial Training and Education Center (LSPPDN) is formed to provide professional training and education for civil servants in the province.
 10. Implementation of the Digital Leadership Academy: The Digital Leadership Academy is an initiative aimed at developing digital leadership competencies among leaders and managers.
 11. Implementation of Training Accreditation: BPSDM North Sumatra Province conducts accreditation for training programs to ensure quality and compliance with established standards.
 12. Bimtek for Members of Regional Legislative Councils (DPRD) and Provincial OPDs: BPSDM North Sumatra Province conducts specialized training programs (Bimtek) for members of regional legislative councils and provincial government agencies.

Conclusion and Recommendation

Based on the research findings, it can be concluded that the digitalization of administration at the BPSDM of North Sumatra Province has brought about significant improvements in the effectiveness and efficiency of training programs, employee performance competencies, and the quality and quantity of its alumni. By implementing digital systems, the BPSDM has enhanced the organization and execution of training programs, resulting in more streamlined processes and improved outcomes.

Furthermore, the digitalization efforts have positively impacted the competencies of employees, enabling them to acquire and apply knowledge more effectively. The use of digital platforms for registration, communication, and collaboration has facilitated a smoother flow of information and enhanced engagement among participants, trainers, and organizers.

Moreover, the digitalization of administration has contributed to the development of high-quality alumni. With digital systems in place, the BPSDM can closely monitor the career progression and achievements of its alumni, fostering stronger connections and support networks. This enables the BPSDM to assess the impact of their training programs and make necessary improvements based on the feedback and success stories of their alumni.

In conclusion, the digitalization of administration at the BPSDM of North Sumatra Province has brought about significant positive changes. It has improved the effectiveness and efficiency of training programs, enhanced employee performance competencies, and contributed to the production of high-quality and successful alumni. These advancements highlight the importance of leveraging information technology and digital systems in optimizing the functions of BPSDM and advancing human resource development in the province.

Based on these findings, it is recommended that the BPSDM of North Sumatra Province continues to invest in digitalization efforts and explore further opportunities to enhance their training programs and administrative processes. This can involve ongoing training and capacity building for staff members, continuous improvement of digital platforms, and regular evaluations to identify areas for enhancement. Collaboration with relevant stakeholders, such as government agencies and industry partners, can also help in leveraging technological advancements and staying up to date with emerging trends in the field of training and education. By prioritizing digitalization and embracing technological advancements, the BPSDM can further enhance its role as a leading institution for human resource development in the province.

References

1. Bungin M Burhan. *Qualitative Research: Communication, Economics, Public Policy, and Other Social Sciences*. Jakarta: Kencana Prenada Media Group, 2007.
2. Creswell John W, Vicki L Plano Clark. *Designing and Conducting Mixed Methods Research*. Thousand Oaks: SAGE Publications, 2007.
3. Pratama, Nanda. *Performance of Civil Servants in the Digitalization of Personnel Administration Services during the Covid-19 Pandemic at the Regional Personnel and Human Resources Development Agency (BKPSDMD) in Bangka Regency, Bangka Belitung Province, 2020*.
4. LMS Sibermartabat BPSDM Provsu Website. Retrieved from <https://sibermartabat.asnunggul.lan.go.id/>
5. SIBANGKOM Alumni Big Data Website. Retrieved from <http://sibangkom-bpsdm.sumutprov.go.id/>
7. BKN Website. Retrieved from <https://www.bkn.go.id/wp-content/uploads/2022/02/STATISTIK-PNS-Desember-2021.pdf>