Multidisciplinary Output Research For Actual and International Issue (MORFAI Journal) ISSN (e): 2808-6635
Volumes 6 No. 6 (2026)

HUMAN RESOURCE DEVELOPMENT IN REGIONAL GOVERNMENT INFORMATION SYSTEM (SIPD) IMPLEMENTATION TO IMPROVE SERVICE QUALITY IN NORTH MOROWALI REGENCY

Ferdy Tengga[1]*, Syahruddin Hattab[2], Fachrul Reza[3]
[1]Master of Public Administration Program, Postgraduate School, Universitas Tadulako, Palu, Indonesia
[2,3]Master of Public Administration, Postgraduate Program, Universitas Tadulako, Palu
E-mail: fredytengga@gmail.com[1]*, syahruddinhattab@untad.ac.id[2], rezadakwah123@gmail.com[3]

Received:05/09/2026 | **Revised** : 12/09/2026 | **Accepted:** 30/09/2026 | **Published:** 12/11/2026

Abstract

This study examines human resource development (HRD) in the implementation of the Regional Government Information System (Sistem Informasi Pemerintahan Daerah, SIPD) as an effort to improve service quality at the Regional Financial and Asset Management Agency (BPKAD) of North Morowali Regency, Indonesia. Using Holton and Swanson's HRD theory, a descriptive qualitative case study was conducted. Data were collected through in-depth interviews with seven purposively selected informants, observation, and document review, and were analyzed with the interactive model of Miles, Huberman, and Saldaña across three dimensions: learning, performance, and change. Training and technical guidance improved employees' knowledge and skills, yet only 35 of 80 employees (43.75%) had updated their competencies and only nine (11.25%) had attended SIPD-specific training, so learning remained uneven. Trained staff worked faster and more accurately, but workload, system disruptions, and limited infrastructure constrained performance. Employees adapted better to digital change and showed stronger professionalism, although adaptation was gradual and some senior employees needed more time. HRD has thus contributed positively to service quality, but equitable access to training, post-training mentoring, and continuous learning remain necessary.

Keywords: Human Resource Development, Learning, Performance, Public Service Quality, SIPD

INTRODUCTION

The rapid advance of digital technology and the growing complexity of public expectations have made human resources (HR) a strategic element of bureaucratic effectiveness. Governments can no longer focus only on organizational output; they must also strengthen the quality and capacity of the civil servants who deliver public services. The World Economic Forum (2020) projected that about half of the global workforce would need reskilling by 2025 to meet new competency demands, which shows that HR development is a strategic response to a changing work environment.

In Indonesia, strengthening the civil service (aparatur sipil negara, ASN) is a core part of bureaucratic reform. Law No. 5 of 2014 on the Civil Service and Ministerial Regulation of PANRB No. 8 of 2021 on performance management place merit and performance at the center of ASN management and expect civil servants to act as agents of change and innovation rather than mere administrators. HR development should therefore be treated as a strategic process that builds comprehensive capability, not as an administrative obligation fulfilled through training certificates.

Implementation, however, remains uneven, especially in local governments. Data from the State Civil Service Agency (Badan Kepegawaian Negara [BKN], 2022) indicate that about 44% of civil servants hold positions that do not fully match their competencies or their educational and training background. Competency development is also often administrative and formal, with no systematic performance evaluation or follow-up, and training is not always based on actual competency needs.

These challenges become tangible in the implementation of SIPD, a national application that integrates regional planning, budgeting, administration, accounting, and reporting as mandated by Ministry of Home Affairs Regulation No. 70 of 2019. Because SIPD must follow regulatory change, its features, business flows, account codes, and program nomenclature are updated frequently, and local officials must continually renew both their regulatory understanding and technical skills. In addition, problems such as system errors, validation failures, and

synchronization faults can only be resolved through the central government, so slow responses can postpone financial administration services at time-critical stages such as budget preparation and financial reporting.

Technology alone, however, does not determine the success of SIPD. It depends heavily on the competence, regulatory understanding, technical ability, and readiness for change of the people who operate it. Low competence, insufficient training, resistance to change, and limited digital literacy can hinder implementation and lower service quality. This matters at the Regional Financial and Asset Management Agency (Badan Pengelolaan Keuangan dan Aset Daerah, BPKAD) of North Morowali Regency, whose services depend on data accuracy, processing speed, and system reliability.

Against this background, this study examines how HR development supports SIPD implementation and service quality at BPKAD North Morowali Regency. Specifically, it (1) describes the condition of human resources in SIPD implementation and (2) analyzes service quality delivered through SIPD use, using the learning, performance, and change dimensions of Holton and Swanson's (2011) HRD theory. The findings are expected to inform local-government strategies for developing civil servants who are responsive to digitalization.

LITERATURE REVIEW

Human Resource Development

Human resource development is a set of planned activities that give individuals opportunities to learn and to build capacity within the organization (Werner & DeSimone, 2012). In the public sector it covers training, career development, and organizational learning so that civil servants can serve professionally and adapt to policy and technological change. Holton and Swanson (2011) frame HRD around three interrelated dimensions: learning, performance, and change. Learning develops knowledge, skills, and attitudes; performance concerns applying that learning to improve effectiveness, productivity, and contribution to organizational goals; and change refers to the behavioral and organizational transformation that follows. In this view HRD is judged by its contribution to organizational effectiveness, not by the number of training events. From a human capital perspective, training is also an investment that raises individual and, ultimately, organizational productivity (Becker, 1993), and digital learning and knowledge sharing offer flexible ways to build and spread competence (Noe, 2020).

Transfer of Training and Organizational Support

Whether training results appear on the job is the central question of the transfer-of-training literature. Transfer is shaped by training design, trainee characteristics, and the work environment (Baldwin & Ford, 1988; Yamnill & McLean, 2001). Meta-analyses show that design quality, opportunities to practice, supervisor support, and the chance to apply new skills influence transfer (Arthur et al., 2003; Blume et al., 2010), and that perceived organizational support conditions the link between training and performance (Chiaburu & Tekleab, 2005). More recent evidence shows that social support and knowledge sharing amplify training benefits, whereas formal training without follow-up such as coaching or refreshers limits long-term impact (Mehner et al., 2024). Social learning theory explains why mentoring and peer learning matter, because people learn by observing others and are guided by self-efficacy (Bandura, 1977), while experiential learning stresses cycles of experience and reflection (Kolb, 1984).

Service Quality and SIPD

Service quality is judged from the recipient's perspective and is commonly described through five dimensions: reliability, responsiveness, assurance, empathy, and tangibles (Parasuraman et al., 1988). In a financial management agency these dimensions translate into accurate, timely, and responsive administration, which depends on how well officials can operate information systems. SIPD links regional planning, budgeting, administration, accounting, and reporting in one platform (Ministry of Home Affairs Regulation No. 70 of 2019), so officials' ability to use it directly shapes the speed and accuracy of services.

Previous Studies and Research Gap

Earlier Indonesian studies link HR development to government performance and public services. Efendi (2015) found that competency-based HR development in the Bandar Lampung city government was not yet optimal because of a weak learning culture, training poorly matched to job needs, and a non-integrated development system. Wahyuli (2019) reported that capacity building at the Palembang civil service agency was fairly good but constrained by transparency and collective commitment, with supportive leadership proving decisive. Maulidyah et al. (2019) found that employees of a Malang sub-district office were largely professional, supported by training, but struggled

OPEN ACCESS

with information technology and document management. Martins and Sudarmo (2023) showed that the Dili municipal government used training and study permits to develop HR, yet faced limited technology use and a shortage of technically competent staff.

These studies focus on capacity building or HR strategy in general administrative settings, and they identify weak technology competence as a recurring barrier. The studies reviewed here, however, do not examine HR development tied to a specific, nationally mandated information system such as SIPD, nor do they apply the learning–performance–change framework of Holton and Swanson (2011) in a regional financial and asset management agency. The present study addresses this gap by analyzing how HR development contributes to service quality in the context of SIPD implementation.

METHOD

This study used a descriptive qualitative approach with a case study design. A qualitative approach suits the aim of understanding a social phenomenon from participants' perspectives, including their experiences and meanings (Creswell & Poth, 2018), while a case study allows in-depth, contextual examination when a phenomenon cannot be separated from its setting (Yin, 2018). The case was HR development in SIPD implementation at BPKAD of North Morowali Regency, chosen because the agency holds a strategic role in regional financial and asset management that demands competent and adaptable officials.

Informants were selected purposively according to their involvement in planning, implementing, and experiencing HR development and in using SIPD. Seven informants took part: the Head of the Agency, the Expenditure Treasurer, and five staff members and system operators (Table 1).

Table 1. Research informants

No.	Position / work unit	Role in the study
1	Head of BPKAD	Policy direction, HR development strategy, and training budget
2	Expenditure Treasurer	Administration and accountability of regional spending using SIPD
3	Financial Analyst, Accounting and Reporting Division	SIPD user in accounting and financial reporting
4	Junior Expert Planner, Accounting Division	SIPD user in planning and financial statements
5	Staff, Asset Division	Regional asset recording (SIMDA BMD and SIPD)
6	Computer Systems Analyst	System operator and handler of technical problems
7	Technical Policy Reviewer	Technical implementation and review staff

Primary data came from in-depth, semi-structured interviews conducted between 21 August and 3 September 2026, using open-ended guides on training planning, constraints, and the contribution of training to performance (Patton, 2015). Observation of work processes and document review supplemented the interviews. Secondary data included Ministry of Home Affairs Regulations No. 70 of 2019 and No. 77 of 2020, personnel and training records (attendance lists, assignment letters, and evaluation results), and internal policy documents.

Data were analyzed with the interactive model of Miles et al. (2014): data condensation (selecting, focusing, abstracting, and simplifying), data display in narrative and tables, and conclusion drawing and verification. Credibility was supported by triangulating sources (informants in different roles) and techniques (interviews, observation, and documents). The analysis followed three dimensions from Holton and Swanson (2011), as shown in Image 1: learning (planned activities that improve knowledge, skills, and attitudes, such as technical training, technical guidance, coaching, and mentoring); performance (observable results of applying learning, such as effectiveness, productivity, and target achievement); and change (transformation in work behavior, technological adaptation, and professionalism).

OPEN ACCESS

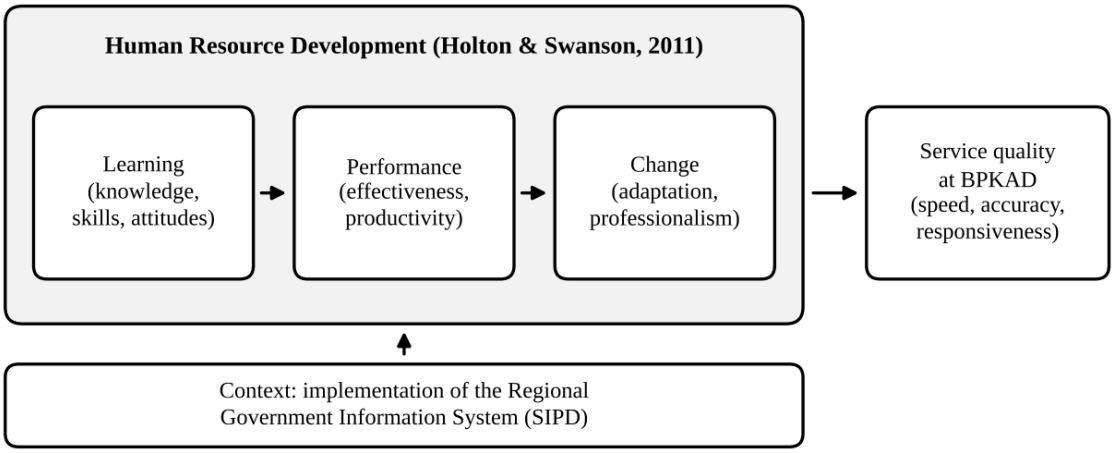


Image 1: Analytical framework of the study

RESULTS AND DISCUSSION

The results are presented around the agency's HR profile and the three HRD dimensions, and each dimension is discussed against the relevant literature. Interview excerpts were translated from Indonesian and are attributed by position.

Human Resource Profile and the Competency Gap

BPKAD of North Morowali Regency had 80 employees as of early August 2026. Most held a bachelor's degree (64 people, 80%), followed by senior high school (12, 15%), diploma III (3, 3.75%), and a master's degree (1, 1.25%). By status, 36 employees (45%) were Group III civil servants, 36 (45%) were government employees with work agreements (PPPK), five (6.25%) were Group IV, and three (3.75%) were Group II. Women made up 58.75% of staff (47 people). Formally, the agency therefore has a relatively strong educational base.

Competency development, however, is limited (Table 2). Only 35 employees (43.75%) had undertaken competency development, 45 (56.25%) had not renewed theirs, and only nine (11.25%) had attended training or technical guidance specifically on SIPD.

Table 2. Competency development and SIPD training of BPKAD employees

Indicator	Number of employees	Percentage (%)
Completed competency development	35	43.75
Without updated competency development	45	56.25
Attended SIPD-specific training or technical guidance	9	11.25
Total employees	80	100

Source: BPKAD Personnel Secretariat, North Morowali Regency (2026)

This gap matters because SIPD skills are not acquired through daily experience alone. When only nine employees have SIPD-specific training, knowledge is likely to be concentrated in a few people, creating dependence on them. Trained staff then carry extra workload as informal helpdesks, while others need more time and risk errors that require rework, which can delay financial administration services because a delay at one stage propagates to the next. SIPD competence has therefore become a job requirement rather than an optional skill, which makes the three HRD dimensions below directly relevant.

Learning: Training Is Beneficial but Access Is Uneven

Training and technical guidance were widely seen as useful. The Expenditure Treasurer, who had attended technical guidance on SIPD implementation, said:

> "I have attended technical guidance and training on SIPD implementation. [They] helped me understand system changes and financial management procedures and improved my skills. The knowledge also helps me work faster and more accurately, so financial services at BPKAD can be better." (Expenditure Treasurer, 26 August 2026)

A financial analyst in the accounting division reported the same pattern: the training deepened his understanding of regional financial management through SIPD, and he could apply it daily to finish tasks faster and more accurately. The Head of the Agency, however, pointed to constraints and to an informal response:

> "Budget limitations are currently an obstacle to technical guidance or training, but we regard HR development as very important, especially for SIPD. Employees who have attended training are expected to pass on what they learned to others, so learning does not depend only on formal training but also on discussion, coordination, mentoring, and sharing experience." (Head of the Agency, 21 August 2026)

Learning also arises from work problems. A staff member of the asset division explained that asset management still relies on the SIMDA BMD application because it is not yet fully integrated with SIPD, so some data must be moved or adjusted manually, which takes longer and requires extra care. A computer systems analyst described technical disruptions that push him to learn independently, discuss with fellow operators, and attend technical guidance so that he can help users quickly.

These accounts show that learning at BPKAD takes formal forms (training, technical guidance) and informal forms (knowledge sharing, peer discussion, self-study), and that the Head's emphasis on cascading knowledge is a pragmatic response to budget limits. They also show evidence of transfer: trained employees apply SIPD skills directly to speed up work, consistent with the HRD emphasis on relevant and applicable learning (Holton & Swanson, 2011). Yet the benefits are unevenly distributed. Limited budgets restrict the duration and reach of training, and transfer research suggests that results depend on opportunities to practice, supervisor support, and reinforcement such as refresher training (Baldwin & Ford, 1988; Blume et al., 2010; Mehner et al., 2024). From a human capital view (Becker, 1993), unequal access creates competency gaps that translate into differences in individual performance. Knowledge sharing therefore complements, but cannot replace, systematic training, coaching, and post-training evaluation. The dual-application burden in the asset division adds that learning needs differ by unit, so training should be tailored to tasks.

Performance: Faster Work, Constrained by Workload and System Problems

Staff who received technical training worked better, particularly in data input and processing. The Head of the Agency observed:

> "Employees who have received technical training show better ability to complete their work, especially in input and processing of budget planning data. However, this improvement is not visible across all employees because some have not had the opportunity to attend training. A heavy workload also affects target achievement, so improving performance requires adding human resources that match organizational needs." (Head of the Agency, 21 August 2026)

The Expenditure Treasurer confirmed both the gain and its limits:

> "After the technical guidance on SIPD-based accounting and financial accountability reporting, I can prepare the regional government financial accountability report faster. But sometimes I cannot work at my best because the application often has problems or the network is slow. So even though my ability has improved, technical obstacles also affect performance." (Expenditure Treasurer, 26 August 2026)

A financial analyst added that training helped staff understand regulations and data-input procedures from budgeting to reporting, making coordination between divisions more directed and recording more accurate, although reaching a favorable audit opinion on the financial statements also depends on overall HR conditions.

Performance gains are therefore real but conditional. Consistent with the HRD view that performance is the observable outcome of learning (Holton & Swanson, 2011), trained employees finish tasks faster and with fewer errors. The literature indicates that training improves performance but depends on the work environment (Arthur et al., 2003; Cheng & Ho, 2001) and on perceived organizational support (Chiaburu & Tekleab, 2005). The findings reflect this: workload, staff shortages, application errors, and slow networks limit what competent employees can deliver. Improving performance at BPKAD thus requires an integrated approach that combines needs-based training with fairer workload distribution, adequate staffing, and reliable infrastructure.

Change: Digital Adaptation and Professionalism

The change dimension shows gradual adaptation. The Head of the Agency noted:

> "There is a change, especially in employees' ability to operate digital systems. After training, staff adapt faster to new applications and depend less on technical direction. Work patterns are also more orderly

OPEN ACCESS

because procedures are understood. But change is gradual because each employee learns at a different speed." (Head of the Agency, 21 August 2026)

A computer systems analyst described the same shift at the individual level:

"Since attending training I adapt faster when the system is updated. Before, new features were often confusing; now it is easier to adjust. Work is faster and neater because I understand the flow." (Computer Systems Analyst, 3 September 2026)

Adaptation, however, is uneven. A financial analyst said that only some employees can already operate SIPD while many operators still need guidance, and the technical policy reviewer noted that adaptation has gone fairly well but that regular system updates demand continuous competency improvement. The Expenditure Treasurer recalled that early implementation was difficult and required assistance.

These accounts indicate that training improved not only technical mastery but also confidence, orderliness, and professionalism in serving other agencies, in line with the idea that individual behavioral change accumulates into organizational change (Holton & Swanson, 2011). Still, differences in learning speed and digital literacy show that change is not evenly spread. Research on reactions to organizational change suggests that slower adaptation by some employees is common and depends on how change is managed (Oreg et al., 2011), so one-off training is insufficient; continuous reinforcement, mentoring, and follow-up training are needed as SIPD keeps changing.

Synthesis and Implications for Service Quality

Table 3 summarizes the findings across the three dimensions.

Table 3. Summary of HRD findings at BPKAD North Morowali Regency

Dimension	Main findings	Constraints	Implications
Learning	Training and technical guidance improve knowledge and skills; knowledge sharing and self-study supplement formal learning	Only 11.25% trained in SIPD; budget limits; dual applications (SIMDA BMD and SIPD)	Expand and equalize access; tailor training to unit tasks
Performance	Faster and more accurate work among trained staff; better coordination between divisions	Heavy workload, staff shortage, system errors, slow network	Balance workload; strengthen infrastructure; reinforce transfer
Change	Faster adaptation to system updates; greater confidence, orderliness, and professionalism	Different learning speeds; frequent SIPD updates	Continuous mentoring, refresher training, change management

Taken together, the dimensions form a chain: learning builds SIPD competence, competence improves the speed and accuracy of work, and sustained application changes work behavior. At BPKAD this chain works for trained employees but is weakened by uneven access to training, organizational constraints, and system instability. Because service quality in a financial agency rests on accurate, timely, and responsive processing (Parasuraman et al., 1988), the benefits of HRD for service quality will remain partial until these gaps are closed. Five actions follow: (1) regular, role-specific SIPD training whenever features or regulations change; (2) competency mapping to equalize access; (3) internal mentoring and knowledge sharing; (4) prompt socialization of system and regulatory changes accompanied by technical guidance; and (5) regular evaluation of training in terms of skills, accuracy, speed, error rates, and service to other agencies.

CONCLUSION

HR development at BPKAD of North Morowali Regency has been carried out reasonably well, although it is not yet optimal. In the learning dimension, training and technical guidance improved employees' knowledge and skills in using SIPD, but effectiveness is uneven because of limited training budgets, unequal access, and differing adaptability: only 43.75% of employees had updated their competencies and 11.25% had attended SIPD-specific training. In the performance dimension, HR development improved the effectiveness and speed of service and the achievement of targets, but a gap remains between competencies gained and their application, shaped by workload, staffing, and system disruption. In the change dimension, employees adapt better to technology and show stronger professionalism, although change is gradual, some senior employees need longer to adjust, and continuous reinforcement is not yet in place. Overall, HRD has contributed positively to employee performance and service quality.

OPEN ACCESS

BPKAD should therefore equalize access to SIPD training, strengthen post-training mentoring and knowledge sharing, evaluate training outcomes regularly, and manage change continuously. The study is limited to a single agency and seven informants, so its findings cannot be generalized. Future research could compare several regional agencies or combine qualitative evidence with measures of service quality from service users' perspectives.

REFERENCES

Arthur, W., Bennett, W., Edens, P. S., & Bell, S. T. (2003). Effectiveness of training in organizations: A meta-analysis of design and evaluation features. Journal of Applied Psychology, 88(2), 234–245. https://doi.org/10.1037/0021-9010.88.2.234

Badan Kepegawaian Negara. (2022). Laporan statistik ASN 2022. https://www.bkn.go.id

Baldwin, T. T., & Ford, J. K. (1988). Transfer of training: A review and directions for future research. Personnel Psychology, 41(1), 63–105. https://doi.org/10.1111/j.1744-6570.1988.tb00632.x

Bandura, A. (1977). Social learning theory. Prentice Hall.

Becker, G. S. (1993). Human capital: A theoretical and empirical analysis, with special reference to education (3rd ed.). University of Chicago Press.

Blume, B. D., Ford, J. K., Baldwin, T. T., & Huang, J. L. (2010). Transfer of training: A meta-analytic review. Journal of Management, 36(4), 1065–1105. https://doi.org/10.1177/0149206309352880

Cheng, E. W. L., & Ho, D. C. K. (2001). A review of transfer of training studies in the past decade. Personnel Review, 30(1), 102–118. https://doi.org/10.1108/00483480110380163

Chiaburu, D. S., & Tekleab, A. G. (2005). Individual and contextual influences on multiple dimensions of training effectiveness. Journal of European Industrial Training, 29(8), 604–626. https://doi.org/10.1108/03090590510627085

Creswell, J. W., & Poth, C. N. (2018). Qualitative inquiry and research design: Choosing among five approaches (4th ed.). SAGE Publications.

Efendi, N. (2015). Pengembangan sumber daya manusia berbasis kompetensi di Kantor Pemerintah Kota Bandar Lampung.

Holton III, E. F., & Swanson, R. A. (2011). Foundations of human resource development. ReadHowYouWant.com.

Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development. Prentice Hall.

Kementerian PANRB. (2021). Peraturan Menteri PANRB Nomor 8 Tahun 2021 tentang Sistem Manajemen Kinerja Pegawai Negeri Sipil. https://peraturan.bpk.go.id/Home/Details/168722/permen-pan-rb-no-8-tahun-2021

Martins, P. N., & Sudarmo. (2023). Strategi pengembangan SDM untuk meningkatkan kualitas pelayanan publik di Kota Dili.

Maulidyah, Y. F., Muchsin, S., & Abidin, A. Z. (2019). Pengembangan kapasitas sumber daya manusia dalam meningkatkan kualitas pelayanan publik (Studi pada Kantor Kelurahan Pandanwangi, Kecamatan Blimbing, Kota Malang).

Mehner, L., Rothenbusch, S., & Kauffeld, S. (2024). How to maximize the impact of workplace training: A mixed-method analysis of social support, training transfer and knowledge sharing. European Journal of Work and Organizational Psychology. https://doi.org/10.1080/1359432X.2024.2319082

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). Qualitative data analysis: A methods sourcebook (3rd ed.). SAGE Publications.

Noe, R. A. (2020). Employee training and development (8th ed.). McGraw-Hill Education.

Oreg, S., Vakola, M., & Armenakis, A. (2011). Change recipients' reactions to organizational change: A 60-year review of quantitative studies. Journal of Applied Behavioral Science, 47(4), 461–524. https://doi.org/10.1177/0021886310396550

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. Journal of Retailing, 64(1), 12–40.

Patton, M. Q. (2015). Qualitative research & evaluation methods (4th ed.). SAGE Publications.

Peraturan Menteri Dalam Negeri Republik Indonesia Nomor 70 Tahun 2019 tentang Sistem Informasi Pemerintahan Daerah.

Peraturan Menteri Dalam Negeri Republik Indonesia Nomor 77 Tahun 2020 tentang Pedoman Teknis Pengelolaan Keuangan Daerah.

Undang-Undang Republik Indonesia Nomor 5 Tahun 2014 tentang Aparatur Sipil Negara.

Wahyuli, Y. H. (2019). Pengembangan kapasitas pegawai untuk mewujudkan good governance pada BKPSDM Kota Palembang.

OPEN ACCESS

Werner, J. M., & DeSimone, R. L. (2012). Human resource development (6th ed.). South-Western Cengage Learning.

World Economic Forum. (2020). The future of jobs report 2020. World Economic Forum.

Yamnill, S., & McLean, G. N. (2001). Theories supporting transfer of training. Human Resource Development Quarterly, 12(2), 195–208.

Yin, R. K. (2018). Case study research and applications: Design and methods (6th ed.). SAGE Publications.

OPEN ACCESS