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"Optimizing Employee Competency Development in Government Agencies: Implementing Barbazette's TNA Model"

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ABSTRACT	INFO ARTICLE
<p>Employee competency development is a strategic priority for government agencies to ensure effective public service delivery. This study aims to analyze the implementation of training mapping in Government Agency X and formulate optimization strategies based on Barbazette's Training Needs Assessment (TNA) model. A qualitative descriptive approach was applied through case study design, using structured interviews, document analysis, and literature review with informants consisting of structural officials, HR teams, and employees. Data were validated through source triangulation and member checking. The findings reveal three main problems: (1) low employee participation in completing training mapping instruments, (2) training needs analysis that is not aligned with job descriptions, and (3) employee saturation due to repetitive and irrelevant training programs. To address these issues, this study proposes the development of a Standard Operating Procedure (SOP) for Training Needs Assessment based on TNA stages. The SOP emphasizes participatory communication strategies, position-based competency gap analysis, and alignment of training content with organizational needs. The implementation of this SOP is expected to optimize training mapping, ensuring consistency, relevance, and measurable outcomes for competency development in the public sector.</p> <p>2024 UPI Journals and Publications Office</p>	<p>Riwayat Articles <i>Submitted/Received 08 Aug 2025</i> <i>First Revised 12 Aug 2025</i> <i>Accepted 28 Aug 2025</i> <i>First Available online 28 Aug 2025</i> <i>Publication Date 28 Aug 2025</i></p> <hr/> <p>Keywords: Training Needs Assessment, training mapping, competency development, civil servants, SOP.</p>

1. INTRODUCTION

Human resources (HR) are a fundamental factor in the success of the implementation of public organizations (Rahman, Mordi & Nwagbara, 2028; Omar, 2021; Negara, 2015). In the context of government bureaucracy, employees are not just administrative instruments, but the main actors that determine the quality of public services, the effectiveness of policies, and the image of state professionalism in the eyes of the public (Noordegraaf, 2026). In line with Handoko's view (in Setyaningsih, 2021), human resource development is a continuous process that aims to improve and improve aspects of knowledge, skills, and attitudes of employees to be able to adapt to dynamic environmental changes. Therefore, employee capacity building is not just an organizational demand, but a strategic need in dealing with the complexity of public issues. The transformation of the strategic environment in the era of the Industrial Revolution 4.0 and the digital society requires government agencies to prepare their employees with more adaptive competencies (Ellitan, 2020; Ivaldi, Sacratti & Fregnan; Damayanti, 2021; Ismail & Hassan, 2019). Global competition, technological developments, changes in national policies, and increasingly critical societal demands require state civil servants (ASN) to have balanced technical, managerial, and socio-cultural competencies (Sidabutar, 2024; Kurniawan et.al, 2020; Fauzian et al., 2024). Law Number 20 of 2023 concerning ASN affirms the right of every employee to develop competencies in an ongoing manner, both through formal and non-formal training. Thus, the implementation of training and competency development is not only a form of regulatory compliance, but also a long-term investment in creating a professional, integrity, and responsive bureaucracy.

However, in practice, competency development in the public sector often faces obstacles. Several studies (Susanty, 2022; Andrianto & Supardi, 2023) shows that training programs in government agencies are still often ceremonial, repetitive, and less relevant to the actual needs of the position. Instead of departing from competency gap analysis, many training plans are based on budget availability or simply continuing the previous year's program (Galport & Azzam, 2017). This condition causes a low *transfer of learning* from the training room to the workplace, as well as the emergence of employee saturation of the program held (Grossman & Salas, 2011).

In practical implementation, these challenges are reflected in several recurring issues faced by government agencies. First, employee participation in training needs mapping tends to be low, as many civil servants consider the process a formality that does not directly affect their career progression. Second, training proposals submitted by employees often deviate from the actual competency standards required for their positions, resulting in a mismatch between organizational needs and training interests. Third, employees frequently experience fatigue due to training programs that are repetitive, generic, and lack relevance to their daily work. These issues indicate that the training process has not yet functioned as a strategic instrument for bridging competency gaps, but remains limited to administrative compliance. This phenomenon is also seen in Government Agency X, where training mapping has been carried out periodically but is still administrative. The instrument used is in the form of an online questionnaire, which is basically able to collect data quickly, but has not been further processed into an adequate competency gap analysis. Many employees fill out instruments simply as a formal obligation, without understanding the direct benefits for their career development. As a result, the data collected is less valid as the basis for training planning.

In fact, the *theory of Training Needs Assessment* (TNA) put forward by Barbazette (2006) emphasizes that the training mapping process must go through three main stages, namely: (1) collecting information, (2) analyzing information, and (3) preparing a training plan. These three stages require active employee involvement, the use of appropriate assessment methods, and evaluation of the gap between actual competencies and standard job competencies. Without these stages, the training conducted risks being irrelevant, wasteful of resources, and failing to improve organizational performance. Furthermore, within the framework of *good governance*, systematic and standardized training mapping is an important part of public accountability. Government

agencies are not only required to carry out administrative functions, but also ensure that every training expenditure produces *value for money* in the form of real competency improvements in employees. In other words, training must be able to answer fundamental questions: what competencies are lacking, who needs them, and how training interventions can close those gaps. In addition, other challenges arise related to low employee awareness of the importance of self-development. Many civil servants still consider training only as an organizational obligation or an opportunity to obtain a certificate, not as a means of improving performance (Amin, 2023). This requires a more effective communication strategy so that employees feel they have a sense of *ownership* over the training mapping process. Without the active participation of employees, TNA will lose its validity.

Based on this background, this study focuses on optimizing TNA-based training mapping in Government Agency X. The purpose of the research is to analyze the implementation of existing training mapping and formulate alternative solutions in the form of Standard Operating Procedures (SOP) for Training Needs Assessment. With this SOP, it is hoped that the training mapping process in government agencies can be carried out more consistently, measurably, and relevant to organizational needs, so as to directly contribute to improving employee competence and the effectiveness of public services.

2. METHOD

This study uses a qualitative approach with a descriptive method. A qualitative descriptive approach is particularly suitable for studies that seek to capture subjective meanings, contextual dynamics, and organizational practices, rather than testing causal relationships. This makes it possible to generate findings that are not only descriptive but also reflective of the lived experiences of employees. Qualitative approaches in the social sciences are known to have a relatively narrow but in-depth scope of research (Mohajan, 2028). According to Moleong (2014), qualitative research aims to understand social phenomena in their natural context by emphasizing the meaning, understanding, and interpretation provided by the research subject. This approach allows researchers to explore in more detail the experiences, perceptions, and obstacles faced by employees and managers in the training mapping process (Bäckström & Bengtsson, 2019; Takey & de Carvalho, 2015). In other words, researchers become key instruments in research, whose sensitivity determines the quality of data and analysis results. The qualitative approach was also considered relevant because training mapping involves perceptions, attitudes, and organizational practices that cannot be adequately represented through numerical data, but require exploration of meanings within their natural setting.

The research method used is a case study. (Yin, 2011) explained that case studies are research strategies used to understand contemporary phenomena in real-life contexts, especially when the boundaries between phenomena and contexts are unclear. In this case, the case study is focused on the practice of mapping training carried out by Government Agency X in the context of employee competency development. The selection of case study methods is intended for researchers to obtain a comprehensive and in-depth picture of the process that occurs, including dynamics, problems, and optimization opportunities that can be developed. The case study design is considered the most appropriate because it enables the researcher to integrate multiple data sources—interviews, documents, and literature—into a holistic analysis, thereby producing a nuanced understanding of both organizational practices and individual experiences. This design also provides space to integrate multiple data sources, thereby strengthening the validity of the analysis.

The location of the research was determined in Government Agency X. The determination of this location was based on the consideration that the agency had carried out training mapping on a regular basis, but still faced obstacles of low employee participation, analysis of needs that were not position-based, and the saturation of training materials. This condition makes

Government Agency X a relevant locus to study the optimization of training mapping based on the Barbazette *Training Needs Assessment* (TNA) model.

The research subjects were selected purposively, namely the parties who were considered to know the training mapping process best. The main informants consist of:

1. Structural officials who have authority in human resource management;
2. HR management team who is directly responsible for the implementation of training mapping;
3. Employees from various work units who are respondents in filling out the mapping instruments;

The data collection techniques used are:

1. Structured interviews were conducted with structural officials, HR managers, and employees to find out their experiences, obstacles, and perceptions of the training mapping process. The structured format.
2. Documentation studies that include training mapping instruments (e.g. *Google Forms*), recapitulation of filling results, annual training plan documents, and policies related to competency development. These documents served as secondary data to cross-validate the interview findings.
3. Literature study that refers to previous theories and research regarding training needs assessment, ASN competency development, and the implementation of Training Needs Assessment, in order to provide a broader analytical perspective.

Data analysis was carried out using the interactive analysis model of (Miles and Huberman, 1992) which includes:

1. Data reduction, namely the selection process, concentration, simplification, and organization of raw data into meaningful information;
2. Data presentation, which is compiling data in the form of narratives, tables, or charts to facilitate the extraction of meaning;
3. Drawing conclusions and verification, which is formulating research findings based on patterns, relationships, and meanings that emerge from the data.

The data analysis process is carried out simultaneously from before entering the field (through initial studies and literature studies), during the data collection process (through reflection and field recording), to after all data is collected (through the preparation of final interpretation). This cyclical process ensures that the findings are grounded in evidence and continuously refined as data collection progresses.

To maintain the validity of the data, this study uses four validation techniques, namely:

1. Extension of participation, by spending enough time at the research site so that the data obtained is more accurate;
2. Triangulation of sources, which is comparing interview data with the results of documentation and literature;
3. Sufficiency of references, namely strengthening data with the support of relevant theories and previous research results;
4. *Member check*, which is confirming the results of provisional findings to the informant so that the researcher's interpretation is in accordance with the reality of the field.

By using a qualitative approach, case study methods, and comprehensive validation techniques, this study is expected to be able to provide a complete picture of the condition of training mapping in Government Agency X and offer an optimization model in the form of the preparation of Training Needs Analysis SOPs based on Barbazette's Training Needs Assessment. The qualitative descriptive design also ensures that the proposed SOP is not only theoretically grounded but also contextually adapted to the practical realities faced by government institutions.

3. RESULTS AND DISCUSSION

3.1. Result

The study found that training mapping in Government Agency X was still administrative and had not functioned as a comprehensive tool for competency needs analysis. Several key problems were identified: (1) low employee participation in completing mapping instruments; (2) training needs analysis that was not aligned with position competencies due to reliance on self-assessment without validation from supervisors; and (3) employee saturation caused by repetitive and irrelevant training programs. These conditions indicate that the data collected could not be fully utilized as a basis for designing effective competency development programs. These conditions indicate that the data collected could not be fully utilized as a basis for designing effective competency development programs. According to Barbazette (2006), a proper Training Needs Assessment must not stop at administrative data collection but should emphasize competency gap identification to ensure training relevance.

Employee Participation in Instrument Filling

The level of employee participation in filling out Google Forms is relatively low. Although the instruments have been disseminated through internal communication groups and formally encouraged, there are still many employees who do not fill in or fill in in a less serious way. Some employees only write short training without explanation, and some even choose not to participate at all. This gives the impression that filling out forms is seen as more of an administrative formality than an important means of developing competence. Interviews with the management emphasized that low participation is closely related to employee busyness and heavy daily workload. Employees in technical units tend to prioritize operational tasks so that filling in mapping instruments is not considered urgent. On the other hand, the lack of socialization about the benefits of training mapping makes employees not see the urgency of this activity. From the employee's own perspective, the mapping form is often considered an annual routine that has no real impact on their chances of taking part in training. This condition is consistent with (Grossman & Salas, 2011), who highlight that trainee motivation and perceived utility strongly influence participation in training-related activities.

This condition causes the data collected to not fully reflect the actual needs. In fact, the active participation of employees is very important so that the mapping process can produce a valid portrait of the competency gap. This low level of involvement is a fundamental obstacle in building a sustainable competency development system.

Quality of Mapping Data

Figure 4.2 Employee Identity Fill in Google Form

Source: Processed Researcher, 2025

The quality of the data collected also shows limitations. Figure 4.2 shows an example of employee identity in Google Form, which is still dominated by personal aspects such as name, NIP, last education, and work unit. Although the data is important for administration, the instrument is not designed to delve further into the technical, managerial, or socio-cultural skills required for the position. In line with Barbazette’s (2006) framework, the lack of competency-focused data means that the first stage of information gathering in TNA has not been properly implemented, thereby weakening the subsequent analysis process.

Figure 4.3 Competency Development Data of Government Agencies X

NO	SATKER	NAMA LENGKAP	JK	STATUS	PANGKAT	GOL	NIP/NRP	ST KEPEG	JABATAN	TMT JABATAN	JENIS JABATAN	DIKLAT YANG TELAH DIKUTI	TAHUN	DIKLAT YANG DIMINATI	KET
1														DIKLAT TEKNIK DIKLAT PENUNJANG SOSIAL JABATAN DPE	
2														DIKLAT TEKNIK DIKLAT PENUNJANG SOSIAL JABATAN DPE	
3												DE A 2023	2023	DIKLAT TEKNIK DIKLAT PENUNJANG SOSIAL JABATAN DPE	
4														DIKLAT TEKNIK DIKLAT PENUNJANG SOSIAL JABATAN DPE	

Source: Processed Researcher, 2025

In addition, Figure 4.3 shows the results of the mapping recapitulation compiled in the form of a spreadsheet. The data produced is only in the form of a list of training that has been attended and training that employees are interested in. There is no column that connects the training with the competencies of the position or performance indicators that are to be improved. Thus, mapping data is not capable of being used to identify competency gaps, which should be at the heart of the training needs analysis. This is in line with Competency-Based Human Resource Management (CBHRM), which emphasizes that training programs must be directly linked to position-based competency standards rather than merely recording administrative information (Sanghi, 2016).

Incompatibility with Position Competencies

Further analysis also shows that there is a discrepancy between the training chosen by the employee and the competencies that should be developed according to the demands of their position. Some employees tend to propose general training that is more of a personal interest, while their positions actually demand more specific technical skills. This condition indicates that the mapping process has not been fully geared towards identifying competency

gaps relevant to day-to-day work. This is in line with the results of the interview, where an informant from the planning team revealed that there is no mechanism to verify the suitability of the training proposal with the competency standards of the position. The mapping process is still entirely *self-assessment-based*, without any clarification or validation from direct superiors. As a result, the data collected reflects more individual preferences than organizational needs. This situation risks making the mapping results less able to be used as a strong basis for developing targeted training priorities.

In addition to these inconsistencies, this study also found a number of main obstacles that hinder the optimization of training mapping. Based on the results of the research, there are a number of dominant obstacles in the implementation of training mapping in Government Agency X. These obstacles not only arise from the technical aspect of the instrument, but also from the aspect of participation and follow-up.

First, the employee participation rate is still low. Some informants admitted that many employees have not filled out the instruments seriously, and some have not filled them at all. This makes the data obtained incomplete and cannot be fully used as a basis for further analysis. Second, the instruments used are still administrative. Based on the observation of documents and informant explanations, the contents of the form ask more about identity, educational history, and work experience, but have not explored the need for training directly related to the competence of the position. Third, employee answers tend to be homogeneous. Informants from the management team mentioned that often employees write the same type of training in one unit, so the data collected is less varied and does not reflect the specific needs of the individual. Fourth, there is no mechanism for validating the mapping results. The informant from the planning department said that the employee training proposal had not been verified by the direct supervisor, so the results that came in were more in the form of personal preferences. Fifth, there has been no strategic follow-up to the mapping results. The data that has been collected is only recapped as an archive, without any in-depth analysis process or cross-unit discussion forum to formulate a training program.

Overall, these obstacles show that the mapping of training in Government Agency X is still not optimal. The data obtained has not been able to be used as a basis for the preparation of a targeted competency development program, so the main goal of Training Needs Assessment (TNA), which is to identify employee competency gaps, has not been fully achieved. In line with (Barbazette, 2006), skipping the analysis and planning stages after data collection risks reducing the relevance and impact of training programs, thereby turning training into a routine activity with little contribution to organizational performance.

3.2. Discussion

The results of the study show that the implementation of training mapping in Government Agency X has not been running optimally and still faces a number of fundamental obstacles. This condition is interesting to be analyzed further using the Training Needs Assessment (TNA) framework proposed by Barbazette, which consists of three main stages, namely: (1) collecting information, (2) analyzing information, and (3) developing a training plan.

Stage One: Gathering Information

In the early stages, organizations should identify needs through various data sources, such as performance documents, observations, and interviews with employees and superiors. However, the results of this study show that the information collection process at Agency X is mostly carried out through the Google Form instrument which focuses on identity data and

educational history. The information collected is still administrative and lacks a real competency gap.

In addition, the level of employee participation in filling instruments is relatively low. Some employees admitted that they only filled out formally, while others did not fill out at all. This indicates that the information collection stage has not actively involved employees and has not been able to build awareness about the importance of training mapping.

Second Stage: Analyzing Information

The next stage in TNA is to analyze the data that has been collected to find competency gaps. In practice, Government Agency X has not implemented this stage adequately. The data collected is only recapd without in-depth analysis, so it is not able to show whether the training that employees are interested in is relevant to the demands of their position.

The results of the study also found that there was a tendency for homogeneous answers and personal preferences. This indicates that the mapping is still limited to self-assessment without validation. In fact, according to Barbazette, the analysis of training needs should involve comparing the required competency standards with the actual conditions of employees. Without this kind of analysis, organizations will struggle to prioritize truly strategic training.

Similar findings were also highlighted by (Nadiarani Anindita & Moh. Taufiq Hidayat, 2023) in their study of training needs analysis in BKD Jombang. Their research revealed that the process of training needs analysis in the agency was still administrative in nature and did not apply a formal TNA approach. As a result, many training programs were not aligned with actual employee needs. This mirrors the situation in Government Agency X, where training mapping focuses more on administrative recaps rather than systematic gap analysis. Such similarities reinforce that weaknesses in the implementation of TNA are not only technical issues in one agency but reflect a broader pattern within public institutions. This condition can also be analyzed through the Transfer of Training Theory (Grossman & Salas, 2011). This theory emphasizes that the success of training is not only determined by the content of the program but also by three critical aspects: trainee characteristics, training design, and the work environment. In the case of Government Agency X, the low participation rate and the perception of training mapping as a mere administrative task indicate that employees' motivation as trainees is weak. Moreover, the design of training programs, which tends to be repetitive and irrelevant, reduces their ability to create new learning experiences. Finally, the organizational environment does not provide sufficient reinforcement, since there is no validation or follow-up process that links training to employee performance. These three factors combined explain why even when training is conducted, it fails to generate meaningful transfer of knowledge and skills to the workplace. In other words, without proper alignment with Transfer of Training principles, training programs are likely to become routine activities with minimal impact on competency development.

The findings can also be interpreted from the perspective of Competency-Based Human Resource Management (CBHRM). CBHRM posits that every HR practice—recruitment, training, performance appraisal, and career development—should be based on clearly defined competency standards that reflect the organization's strategic needs. Training programs, therefore, must aim to close the gap between actual employee competencies and the required standards of their positions. However, the mapping process in Government Agency X relies heavily on self-assessment and employee preferences, without validation from supervisors or reference to organizational competency frameworks. This causes training proposals to be more reflective of personal interests than institutional needs. The absence of CBHRM principles in the training mapping process leads to a mismatch between training

activities and organizational goals, thereby weakening the strategic function of competency development. By embedding CBHRM into the mapping process, organizations would be able to design training that is not only responsive to employee aspirations but also aligned with the competencies required for effective public service delivery.

Third Stage: Developing a Training Plan

The final stage of TNA is to develop a training plan based on the results of the analysis. This plan includes determining priorities, target participants, and budget allocation. However, in Government Agency X, this study found that the mapping results have never been followed up into a structured training plan. The data is only used as an archive without a cross-unit discussion forum to formulate a competency development program.

The absence of this strategic follow-up has serious implications for the organization. Employees did not see a direct relationship between filling out the mapping instrument and their opportunities to develop competencies. This has the potential to reduce employee motivation in filling out future mappings, thus creating a recurring circle of weaknesses.

Implications for Competency Development

If it is associated with human resource management regulations, especially the principles of employee competency development, the results of this study show that there is a gap between ideal policies and practices in the field. The regulation emphasizes that every public organization is obliged to conduct an analysis of training needs as the basis for the preparation of competency development programs. However, the findings in Government Agency X show that mapping has not been fully used as a strategic tool, but only to fulfill administrative obligations.

According to Barbazette, the analysis of training needs cannot be started by simply asking what training employees want. This method tends to produce preference data, not actual competency gap data. Mapping that relies solely on the desires of high-risk individuals results in training programs that are less relevant to the demands of the job and organizational goals.

Thus, it can be concluded that the implementation of TNA in Government Agency X is still limited to the initial stage of data collection, while the next two stages, namely information analysis and the preparation of training plans, have not been optimal. This causes training mapping to fail to answer its main objective, which is to identify competency gaps and provide a solid foundation for human resource development in organizations.

Based on the description above, it can be emphasized that the implementation of training mapping in Government Agency X still faces significant limitations. The mapping process has not been able to function as a comprehensive training needs analysis instrument, but is only limited to collecting administrative data. Low employee participation, homogeneity of responses, and the absence of a validation and strategic follow-up mechanism further weaken the mapping function in supporting competency development. When compared to Barbazette's *Training Needs Assessment* (TNA) framework, the practice that takes place in the field only includes the initial stage of data collection, while the analysis and formulation stages of training plans have not been optimally implemented. As a result, training mapping has not been able to fully answer the main goal of TNA, which is to identify the competency gap between the actual condition of employees and the competency standards set by the organization.

Thus, more systematic improvement steps are needed so that training mapping in Government Agency X can really become a strategic foundation in planning for employee competency development in the future.

4. CONCLUSION

This study concludes that training mapping at Government Agency X has not yet functioned as an effective Training Needs Assessment (TNA). The process remains largely administrative, with low employee participation, reliance on self-assessment without supervisor validation, and a lack of strategic follow-up. As a result, the mapping data is unable to accurately identify competency gaps, which undermines its role as the foundation for competency development.

To address these challenges, several strategic steps need to be taken. First, organizations should strengthen communication and socialization to increase employee participation by highlighting the direct benefits of competency-based training for career development. Second, validation mechanisms must be introduced, whereby training proposals from employees are reviewed by direct supervisors to ensure alignment with positional competencies. Third, the mapping instrument should be redesigned to move beyond administrative data and capture technical, managerial, and socio-cultural competencies relevant to each role. Fourth, cross-unit discussion forums need to be established to analyze mapping results collectively, ensuring that training priorities reflect both individual and organizational needs.

From a policy perspective, government agencies should institutionalize TNA through internal regulations that mandate systematic training needs identification as part of annual HR planning. The adoption of a standardized SOP for Training Needs Analysis, based on Barbazette's framework, is highly recommended to ensure consistency, validity, and accountability. Furthermore, integrating TNA results into broader HR policies such as performance management and talent development will strengthen the linkage between training programs and organizational performance.

In summary, training mapping must evolve from a procedural requirement into a strategic instrument for human resource development. By implementing these steps and institutionalizing supportive policies, government agencies can ensure that training programs are more relevant, efficient, and impactful in addressing competency gaps and supporting organizational goals.

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