

Building A New Smart Campus At Educational Institution X Towards Improving The Professionalism Of Cadets To Support National Defence

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Abstract:

Recent conflicts of Iran-Israel war have shown just how dependent modern nations are on high-tech warfare and cyber tactics, creating a need for a new generation of cadets which capable to master the digital battlefield. As one of the providers of national security in Indonesia, X educational institution needs to build the new way of training to equip the graduates with situational awareness and tactical readiness for facing modern military operations. Hence, this study aims to develop a New Smart Campus at Educational Institution X to enhance the professionalism of cadets in addressing national defence challenges in the era of modern warfare. In the context of global changes and technological advancements such as the Internet of Things (IoT), Artificial Intelligence (AI), and Network Centric Warfare (NCW), Educational Institution X has initiated the digitalisation of education through the Smart Campus. However, its implementation remains limited and has not been strategically integrated. Using Merilee S. Grindle's public policy implementation theory approach, this study evaluates the supporting and hindering factors in the implementation of the Smart Campus policy. This study uses a qualitative descriptive method with in-depth interviews with policy makers. The results show that the development of the Warfare Technology Smart Campus (WTSC) in the form of a 1:1 scale Command and Control Centre (Puskodal) simulator can improve cadets' situational awareness and tactical readiness in modern military operations. In conclusion, the success of Smart Campus implementation is highly dependent on the synergy between policy content, institutional context, and the participation of strategic actors in the military education system.

Keywords: Smart Campus, Educational Institution, Cadet Professionalism, Public Policy, Warfare Technology, Network Centric Warfare.

INTRODUCTION

In the face of such a global situation that has spread crisis almost all over the world, starting with economic wars that emerged with the advancement of the trade war between the United States and China ending up affecting several countries, and the first volleys of open war being fired. This has brought about enormous changes in weaponry technology that have affected the nature of warfare over time that are quite distinct from prior warfare, especially in the defence sector. For instance, the Russia-Ukraine war might be described as a “proxy war,” where major powers like Russia and the United States are not directly involved in open warfare but rather conducting their fighting through a third party, here “Ukraine” as the battlefield. This had led to what has become known as “cyber warfare”. Likewise, such phenomenon also leads to the phenomenon called “hybrid warfare”, which is defined as a strategy that integrates traditional military force with unconventional means, such as cyber attacks, misinformation campaigns, funding of non-state actors, as well as propaganda.

One of the latest manifestations of the transformation of modern warfare is the open conflict between Iran and Israel that erupted in June 2025. This war marks the escalation of long-standing geopolitical tensions into high-tech strategic military operations. Israel initiated the attack through Operation Rising Lion, supported by artificial intelligence (AI), combat drones, and advanced intelligence operations to disable Iran's nuclear facilities and defence structures. In response, Iran launched Operation True Promise III with hypersonic missiles and a large number of drones, demonstrating a significant increase in long-range strike capabilities and asymmetric warfare. Asymmetric Warfare, where the weaker party still uses conventional tactics to counter a larger military force, such as the Taliban's conflict with NATO forces in Afghanistan and the Palestinian Hamas group's war with Israel in Gaza. The use of drones and military robotics for military operations has also been implemented in current warfare (Haloho et al., 2024). The official involvement of the United States on 21 June 2025 underscores that the dynamics of modern warfare are no longer limited to conventional battles but have shifted to an era of multidimensional warfare encompassing air superiority,

cyber dominance, and the use of high-precision weapon systems. This phenomenon highlights the need for the study of the features, trends and consequences of contemporary war in the international study of defence and security.

The global situation above has caused technology to develop rapidly, currently touching on Artificial Intelligence (AI), the Internet of Things (IoT), 5G Technology, Quantum Computing, Virtual Reality (VR) and Augmented Reality (AR), and Cybersecurity Technology. Therefore, the professionalism of personnel must also keep pace with these advancements, meaning that Educational Institution X graduates must be more adaptive to technological progress, including developments in the global strategic environment.

The world's circumstances described earlier have driven technology at a very fast pace as it now deals with Artificial Intelligence (AI), the Internet of Things (IoT), 5G Technology, Quantum Computing, Virtual Reality (VR) and Augmented Reality (AR), Cybersecurity Technology. Accordingly, professionalism of personnel will also have to be adjusted, not least that of Educational Institution X graduates, who, in addition to being conversant with the development of technology, will also have to adapt themselves to global movements in the strategic field.

The demands of the global situation and technological advancements have impacted higher education institutions through Smart Campus education programmes. Currently, the Defense Academy is implementing an educational program that is in line with technological advances, namely the Smart Campus program, in accordance with the Defense leadership policy as outlined in the regulations regarding the Utilization of the Smart Campus System in the Implementation of the Defense Academy Cadet Education Process, including a Learning Management System and Web Conference applications. This includes the use of theories in educational materials that have been converted from manual to digital formats, including additional support in the form of electronic demonstration devices such as Virtual Reality (VR), CCTV, and a library. The characteristics of Educational Institution X cadets, who are part of Generation Z, are well-prepared to embrace more modern changes in the implementation of the teaching and learning process at Educational Institution X, as they will eventually become officers in the Indonesian Navy (David, 2011). In order to further enhance the professionalism of cadets, the current condition of the Educational Institution X as Smart Campus requires further development efforts.

According to Grindle, the success of a public policy implementation can be measured by the process of achieving the final outcomes, i.e., whether the desired objectives have been achieved. In this context, two aspects can be considered: first, the process, by questioning whether the policy implementation aligns with the design, referencing the policy actions, and second, whether the policy objectives have been achieved. By considering these two factors, the impact or effect on the public, both individually and collectively, as well as the level of change occurring among the target group recipients and the changes taking place, can be measured. In this context, the design of the Smart Campus at Educational Institution X can be implemented, its process evaluated, and its objectives in enhancing the professionalism of Educational Institution X cadets as the target public recipients assessed.

A theoretical approach in the implementation of Smart Campus at Educational Institution X can use Grindle's public policy implementation theory to optimise. The involvement of stakeholders at Educational Institution X makes the decisions (policies) that will be made by Educational Institution X leadership regarding the Smart Campus more representative and reflecting the interests and needs of various groups. It also minimizes the potential conflict and resistance to the policies enacted.

This research uses a qualitative descriptive method to obtain research results that are expected to clarify the core issues and provide the best solutions for implementation. It is important to realise national defence through the enhancement of Educational Institution X cadets' professionalism in mastering naval warfare technology through the construction of the New Smart Campus as expected.

The objective of this research is to build the New Smart Campus at Educational Institution X to enhance the professionalism of cadets in support of national defence. This is done by analysing the factors influencing the implementation of the existing Smart Campus in producing Educational Institution X cadets who are professional in the field of naval warfare. The expected outcome of the New Smart Campus, known as the 'Warfare Technology Smart Campus' (WTSC), is the construction of a Command and Control Centre (Puskodal) simulator at Educational Institution X, which includes a War Simulation Room and a Control Analysis Room. These cadets are expected to acquire the knowledge and technology necessary to achieve Network Centric Warfare (NCW) as a form of modern warfare.

The construction of this simulator is also highly beneficial given Indonesia's current economic conditions,

particularly the limited national budget for defence, which affects the operational capabilities of the Indonesian National Armed Forces. Therefore, the simulator is built on a 1:1 scale to closely replicate real-world situations and conditions, thereby enhancing the professionalism of Educational Institution X cadets. One example of a case study highlighting the necessity of the 'Warfare Technology Smart Campus' simulator at Educational Institution X is related to the Indonesian government's humanitarian mission for the Palestinian people, which involved deploying the Hospital Ship 'Dr. Rajiman Wedyodiningrat' KRI RJW-992 to deliver humanitarian aid in the form of medical supplies and equipment from Jakarta to the Gaza Strip in 2024. KRI RJW-992, as a representative of the Indonesian government and bearing the good name of the Republic of Indonesia, departed for Egypt via the Sailing Port Visit/Egypt Task Force 2024, passing through dangerous and high-risk areas.

This situation may give rise to anomalies and dynamics during the voyage. Therefore, how do Educational Institution X cadets conceptualise the development of 'Situation Awareness Warfare' to address such conditions, armed with knowledge of Network Centric Warfare-based warfare? The hope is that this New Smart Campus will shape the mindset of Educational Institution X cadets in assessing their own strengths, the strengths of allies and adversaries, the operational environment conditions, and making the right command decisions. This will make them aware that their future operational environments will be highly complex and carry significant risks, thereby requiring even greater professionalism.

Previous studies have explored the development of Smart Campuses from a technological and information systems perspective, such as the integration of the Internet of Things (IoT), 5G networks, big data, and monitoring systems (Cárdenas-Quiroga, 2021; Xu et al., 2018). However, these studies have not examined in depth the implementation of the Smart Campus policy in a military education environment, especially at the Indonesian Educational Institution X has unique characteristics in terms of organisational structure, disciplinary culture, and the goal of establishing maritime professionalism. A study by Ahmed et al. (2020) and Cordiaz (2017) focusing on civilian campuses and not yet addressing the strategic dimensions required to develop cadets' combat competencies, such as defence technology readiness and operational terrain mastery. Additionally, no research has specifically developed the concept of Warfare Technology Smart Campus (WTSC), which integrates digital learning systems with command and control centre simulators (Puskodal) to simulate modern warfare conditions based on Network Centric Warfare (NCW). Another gap is the absence of an evaluative approach based on public policy implementation theory, as formulated by Merilee S. Grindle, to measure the extent to which the Smart Campus policy is effective in promoting cadet professionalism. On the other hand, most previous studies only assess the success of the Smart Campus based on service efficiency and user satisfaction (Sari et al., 2017; Villegas-Ch et al., 2019).

In essence, this writing has not been studied previously, at least not as a matter of topic and method. The subject matter of this paper is aimed at the development of a Smart Campus at Educational Institution X into a New Smart Campus, in order to further professionalize the discipline of the Cadets and using Merilee S. Grindle's theory of Public Policy in deducing the factors in relation of consequences on the implementation of a Smart Campus.

This research introduces innovation through the development of a New Smart Campus at Educational Institution X by constructing a Command and Control Centre (Puskodal) simulator based on Network Centric Warfare (NCW) that resembles real-world conditions (scale 1:1), to enhance the professionalism of Educational Institution X cadets. Using Merilee S. Grindle's policy implementation theory, this paper provides strategic moves to improve education system, teacher, and infrastructure. The outcome achieved is an increase in cadets' situational awareness in the operational field, enabling them to identify conditions and make appropriate command decisions in facing threats in a modern warfare environment. This innovation demonstrates that cadets have become more professional and world-class, particularly in assessing and understanding various threats from foreign countries that could disrupt the defence of the Republic of Indonesia.

METHOD

This study uses a qualitative descriptive approach with a phenomenological method to describe in depth the phenomena occurring in the field, particularly related to the implementation of Smart Campus at Educational Institution X. This approach was chosen because it emphasises understanding the meaning of observed events and seeks to reveal hidden values in social and institutional contexts. The primary focus of the research is to evaluate the current state of the Smart Campus and its role in enhancing the professionalism

of cadets. The development of the Smart Campus is guided by a strategy for building a New Smart Campus based on Warfare Technology Smart Campus (WTSC), which was developed in accordance with Merilee S. Grindle's theory of public policy implementation. An evaluation of supporting and hindering factors serves as the basis for designing more effective and adaptive policies, ensuring that planning, innovation, and change management processes can operate optimally and sustainably.

The data sources in this study consist of primary and secondary data. Primary data was obtained through in-depth interviews with key informants who have authority and direct involvement in policy-making and the implementation of the Smart Campus. The selection of informants was conducted in stages until information saturation was reached. The data collected includes the implementation status of the Smart Campus, the use of technology and the internet, server data systems, human resource education and training, and supporting regulations. Meanwhile, secondary data was obtained from documented literature such as scientific journals, articles, websites, photos, and relevant statistical data. All of this data was analysed inductively to build a comprehensive understanding of the future development strategy of the Smart Campus at Educational Institution X.

This research uses a qualitative descriptive approach based on Merilee S. Grindle's theory of public policy implementation. The data collection process began with observations to identify critical issues in the development of the Smart Campus at Educational Institution X, followed by in-depth interviews with stakeholders to confirm the initial findings. Data was collected through structured interviews with competent sources, accompanied by documentation and transcription to maintain data integrity. Analysis was conducted by identifying internal and external factors influencing the success of policy implementation, such as political support, resources, and institutional capacity. The research procedures included literature studies, field observations, primary and secondary data collection, and thematic coding. The main objective of this research was to formulate and develop a new defence technology-based Smart Campus strategy, namely Warfare Technology Smart Campus (WTSC), to enhance the professionalism of Educational Institution X cadets in strengthening national defence.

RESULT AND DISCUSSIONS

Current Status of the Smart Campus at Educational Institution X in Enhancing Cadet Professionalism

Smart Campus at Educational Institution X has been implemented through leadership policies outlined in educational implementation regulations, which includes the use of a Learning Management System (LMS), web conferencing applications, and supporting devices such as Virtual Reality (VR), CCTV, and a digital library. This innovation is designed to replace manual learning methods with digital ones, making it more suitable for the adaptive nature of Generation Z towards technology. Educational Institution X has prepared a learning environment that supports the concept of digitalisation in order to develop cadets who are professional, technologically responsive, and ready to face modern technology-based warfare such as Network Centric Warfare (NCW).

However, although the initial implementation of Smart Campus has been carried out, its development is still partial and requires further integration in terms of warfare simulation systems, control centres, and global situation awareness. Therefore, this study proposes an advanced model in the form of a New Smart Campus or Warfare Technology Smart Campus (WTSC), an integrated system equipped with a Command and Control Centre (Puskodal) simulator to develop cadets' professional readiness in the context of global threats, such as hybrid warfare, cyber warfare, and the use of AI and drones.

In a study by Cahyaningrum & Rukmi (2014), through a systems thinking-SWOT analysis approach, it is clear that the success of the transition to a Smart Campus is greatly influenced by the readiness of technological infrastructure, change management, and the active involvement of all stakeholders, including educators, management, and end users. They show that many institutions in developing countries fail to optimally implement Smart Campus due to a weak understanding of policy complexities and limitations in supporting infrastructure.

Polin et al. (2023) developing a conceptual framework based on the four main domains of Smart Campus, namely people, economy, environment, and governance. They emphasised that the success of Smart Campus is not only achieved by incorporating technological elements such as the Internet of Things (IoT) or cloud computing, but must be accompanied by comprehensive institutional transformation, the development of big data architecture, and strategic alignment between the campus vision and operational policies. They also underscore the importance of creating an innovation ecosystem that enables cross-functional interaction

between technology, users, and policies, an approach that is highly relevant given the structural complexity of Educational Institution X as a military higher education institution.

In the context of Institution X, the current situation shows that some basic elements of a Smart Campus, such as a Learning Management System (LMS), digital libraries, and VR-based learning media, have begun to be adopted. However, as indicated in the dissertation analysis results, the success of a comprehensive Smart Campus implementation still depends on system integration, human resource training, and a comprehensive evaluation of its impact on shaping cadet professionalism. Therefore, the idea of a 'New Smart Campus' or Warfare Technology Smart Campus (WTSC) proposed by the researcher is a strategic solution that not only strengthens the digital infrastructure elements but also combines network-centric warfare knowledge and situational awareness in the cadet education process.

Referring to Merilee S. Grindle's public policy implementation theory model, the success of the Smart Campus transformation at Educational Institution X is highly determined by the aspects of policy content and implementation context, meaning that, in addition to a strong policy design, there must also be alignment between implementing actors, resources, political support, and organisational social conditions that support the change itself. Therefore, the future success of the Smart Campus at Educational Institution X requires an inclusive, integrative, and sustainable strategic design, as also emphasised by the international academic literature referenced in this dissertation.

Evaluation of Supporting and Inhibiting Factors in the Implementation of the Smart Campus Policy at Educational Institution X Based on Grindle's Theory

The implementation of the Smart Campus policy at Educational Institution X is a strategic effort to respond to the challenges of globalisation and advances in information and communication technology, particularly in the context of modern military education. This policy aims to enhance the professionalism of cadets through the use of digital-based learning systems, including Learning Management Systems (LMS), web conferencing, and technologies such as Virtual Reality (VR), digital libraries, and CCTV-based surveillance systems. To evaluate the success of this policy implementation, Merilee S. Grindle's theoretical approach is used as the basis for analysis. Grindle (1980) states that the success of public policy implementation is influenced by two main variables, namely the content of the policy and the context of implementation, which integrally shape the outcomes of public policy.

From a policy content perspective, the Smart Campus of Educational Institution X is designed with a strong normative framework as regulated in the educational implementation regulations, which establishes the transformation of the learning system into a digital platform. The design of this policy reflects an adaptive response to changes in the higher education landscape and the demands of the Industrial Revolution 4.0 and Warfare 5.0. In addition, this policy also has a long-term orientation in supporting the formation of Indonesian Navy officers who not only have conventional military competencies but also master strategic technologies such as Network Centric Warfare (NCW), which is a modern warfare concept based on real-time information integration and situational awareness.

In terms of content, the Smart Campus policy of Educational Institution X has been designed with strong substance and is aligned with the strategic vision of national defence as stated in Indonesian Law No. 3 of 2025 on the Indonesian Army, which emphasises the importance of developing modern and professional defence capabilities (Articles 3 and 7). The Smart Campus supports this mandate through the development of superior defence human resources based on technology.

Meanwhile, in terms of implementation context, there are several significant supporting factors. First, strong support from the leadership of Institution X, which has an institutional commitment to the digitalisation of educational processes, as reflected in investments in supporting infrastructure such as LMS, VR, and other technological devices. Second, the demographic characteristics of cadets, most of whom belong to Generation Z, generally have a high ability to adapt to digital technology. Third, there is alignment between the Smart Campus policy and the strategic needs of national defence, which requires the development of superior, innovative, and responsive defence human resources capable of addressing multidimensional threats.

However, the evaluation also identified several hindering factors that require attention. First, in terms of system integration, the implementation of Smart Campus at Educational Institution X is still sectoral and partial. The academic information system (SIKAD), CBT, and Smart Class are not yet as a main unit system which can support the best performance of the management and academic supervision function. Second, there is a disparity in digital literacy capacity among lecturers and educational staff, which has an impact on inequality in the adoption of digital learning technology. Third, in terms of resources, there are budget

constraints in the development of the Warfare Technology Smart Campus (WTSC) simulator, which is a strategic instrument for command and control training. Fourth, the hierarchical and top-down nature of military organisational culture limits the participation of middle and lower-level stakeholders in the planning and decision-making processes.

Historically, military culture has placed a high value on tradition, stability, and hierarchy, which often results in resistance to the adoption of new technologies or innovative work methods. Hill (2015) states that conservative values in military organisations tend to maintain the status quo, which ultimately hinders the digital transformation necessary for successful information system integration. A clear example of this can be seen in the history of the British Army, which was reluctant to adopt tank technology in the early 20th century due to its preference for old doctrines, thereby delaying its military readiness to face modern battlefields (Hegarty, 2023).

The highly hierarchical military organisational structure also hinders cross-unit collaboration and open sharing of ideas, two things that are crucial in developing and managing integrated information systems. (Cosgrove, 2023) highlights that the top-down nature of military decision-making limits initiative from lower levels, so that the process of adopting technological systems is often sectoral and uncoordinated. In addition, as stated by (Syahtria, 2022), procurement policies in the military favour an approach of acquiring individual systems rather than integrated systems, which results in a lack of interoperability between units and weak overall systemic efficiency.

The need for cultural change is becoming increasingly urgent in this context. (Kasim et al., 2022) emphasising the importance of transforming the culture of military organisations to open up space for the adoption of information technology through increased digital literacy and the promotion of interdisciplinary collaboration, especially among military leaders and policymakers.

This Smart Campus policy is also in line with the central leadership regulations regarding the Principles of Education, which mandates the need for innovative learning methods to develop Indonesian Navy officers who are professional, ethical, and adaptive to changes in the strategic environment. Furthermore, the Chief of Naval Staff Decision Number Kep/1709/VII/2004 concerning General Guidelines for the Development of Cadets at Educational Institution X also emphasises the importance of developing academic and information technology skills to support the professionalism of young officers.

The analysis shows that although the design of the Smart Campus policy at Educational Institution X is substantially strong, its implementation is still in a transitional phase. The evaluation shows that the policy outcomes, namely the formation of professional and technology-responsive cadets, have not been fully optimised due to limitations in human resources, technology, and a managerial system that has not been holistically integrated. Therefore, the development of a New Smart Campus that integrates Warfare Technology Smart Campus (WTSC), including Network Centric Warfare (NCW)-based Command and Control Centre simulations, is an important strategy in addressing these challenges.

Based on Grindle's framework, the policy design has met substantive standards, but the implementation process still faces challenges in terms of human resources, organisational structure, and technological dynamics. This has resulted in the policy outcomes not being fully optimised, namely the creation of comprehensive and sustainable professionalism among cadets at Educational Institution X. Therefore, institutional capacity-building strategies, information system integration, digital literacy training for all academic staff, and cultural reforms toward collaborative and adaptive learning are required.

Taking into account Grindle's evaluative approach, it can be concluded that the success of the Smart Campus policy at Educational Institution X is not only determined by the strength of the policy content, but is also greatly influenced by the institution's ability to manage the complexity of its implementation in a systemic and inclusive manner. In this context, the development of the New Smart Campus through the integration of the Command and Control Centre (Puskodal) simulator, which approximates real warfare scenarios based on NCW, is a key instrument in producing cadets who are professional, technologically responsive, and globally competitive.

The Development of a New Smart Campus at Educational Institution X to Enhance Cadet Professionalism Based on Grindle's Theory of Public Policy Implementation

The development of the New Smart Campus at Educational Institution X is a strategic step aimed at enhancing the professionalism of cadets as prospective Indonesian Navy officers who are not only physically and mentally tough, but also adaptive to developments in modern military technology. To ensure that this policy can be implemented effectively and produce substantive impacts on the quality of defence human

resources, Merilee S. Grindle's public policy implementation theory approach is highly relevant. Grindle emphasises that the success of policy implementation is largely determined by two main components: the content of the policy and the context of implementation, which synergistically influence the outcomes and impacts of the implemented policy (Grindle, 1980).

From the content of policy perspective, the development of a Smart Campus must consider: (1) the various interests involved, including internal stakeholders X, which can influence the direction and sustainability of implementation; (2) the types of benefits to be achieved, such as improved learning effectiveness, administrative efficiency, and operational readiness of cadets through technology integration; (3) the degree of change, i.e., the extent of transformation from conventional educational methods to a digital-based system and war simulation; (4) the location of decision-making, which in a military context is hierarchical and centralised, making cross-unit coordination crucial; (5) the competence of programme implementers, including lecturers, cadet trainers, IT technicians, and campus management personnel who must understand digital content and the nature of military education; and (6) the availability of resources, including technology (networks, servers, LMS, simulators), human resources, and defence budgets that support the implementation of this policy.

Meanwhile, from the context of implementation, the success of this policy is influenced by: (1) the strength, interests, and strategies of implementing actors, such as support from X leadership, higher command, and technology providers, which must align with the strategic vision of Smart Campus development; (2) institutional characteristics, which in this case is a military environment with a culture of discipline, loyalty, and high compliance, but also has the potential to be resistant to digital change if not managed adaptively; and (3) the level of compliance and response of the implementers, namely the extent to which managers and end users, lecturers, cadets, and staff can accept, understand, and run the new system with commitment and responsibility.

Grindle's model also measures implementation success on two primary dimensions; process and outcomes. From the "process" perspective, it is assessed whether the implementation of the Smart Campus does fit the initial policy design in terms of stages and in terms of standards of implementation. At the same time, according to the "outcomes" of this policy, it is seen whether the policy has an impact on improving the professionalism of cadets, both individually and as a group, through indicators such as tactical decision-making abilities, situational awareness, technological skills, and readiness for modern military operations.

However, the success of policy implementation is not only determined by good policy design but also by the context of implementation. In this case, there are several important variables that must be considered to ensure the optimal development of the New Smart Campus. First, in terms of institutional capacity, Educational Institution X needs to ensure the readiness of digital technology infrastructure, including data networks, cloud-based architecture, and software and hardware to support VR (Virtual Reality), AR (Augmented Reality), and AI (Artificial Intelligence). Second, in terms of human resources, lecturers, instructors, and mentors must be given intensive training in military digital technology and modern teaching methodologies. Third, political and internal bureaucratic support from the Indonesian Navy, particularly from the Navy Headquarters, is crucial in terms of budgeting, regulation, and policy command so that the implementation of the New Smart Campus is not hampered by bureaucratic resistance or structural fragmentation.

The implementation of public policy is always influenced by socio-political dynamics and the power of implementing actors. Educational Institution X needs to create a sense of ownership among all internal stakeholders so that they are not only implementers but also agents of change in the campus digital transformation process. The use of a participatory policy implementation approach, as suggested by Grindle, allows the policy formulation and evaluation process to be more adaptive and responsive to on-the-ground realities. Additionally, policy evaluation must be conducted periodically to measure whether the development of the WTSC simulator has made a tangible contribution to enhancing the professional capabilities of cadets, both in cognitive, psychomotor, and affective aspects.

Grindle's theoretical framework also requires an evaluation of the impact and sustainability of policies. In this context, the outcomes of the New Smart Campus implementation can be observed in cadets' ability to conduct tactical analysis, make data-driven decisions with precision, and understand global and regional dynamics that may influence national maritime stability. An example is the ability to simulate a humanitarian mission scenario using the hospital ship KRI RJW-992 to Gaza, which involves potential threats, geopolitical anomalies, and the necessity to act quickly with proper command procedures. The cadets' success in

simulating this mission can serve as a key indicator of professionalism based on Network Centric Warfare and Situational Awareness.

Therefore, Merilee S. Grindle's idea about policy implementation is a comprehensive framework to analyze and construct Quote the New Smart Campus of Educational Institution X in which it is not only adequate to be implemented technically, but should also be addressed from the political side of the policy, as well as the aspect of the actors participating in it, the readiness of the resources, and its sustainability. The New Smart Campus is not only a technology project, but also an institutional cultural transformation that will determine the readiness of Educational Institution X in producing future officers who are professional, adaptive, and excel in facing global challenges. If executed with the right policy implementation approach, the New Smart Campus will become the first digital-based military education centre of excellence in Indonesia that is capable of contributing significantly to the country's defence system.

CONSLUSION

Based on the research results, it can be concluded that the implementation of Smart Campus at Educational Institution X has shown initial progress through the digitisation of learning, but has not yet been fully optimised in shaping the professionalism of cadets due to obstacles in system integration, human resource capacity, and limitations in strategic infrastructure. Therefore, the development of Smart Campus become the New Smart Campus integrated with the Warfare Technology Smart Campus (WTSC) is a strategic solution by adding a Command and Control Center simulator based on Network Centric Warfare (NCW), which aims to produce cadets with high situational awareness, mastery of modern warfare technology, and tactical decision-making skills as well as the ability to carry out diplomacy with the addition of diplomatic knowledge. This study also suggested a broader scale of institutional reform through digital literacy training for lecturers and mentors, better integration of information system, and strengthened political and budgetary support from Navy Headquarters as the main recommendation. Practically, the research serves to support the improved operational readiness of cadets to prepare for future multidimensional threats, and theoretically, it provides another layer of new information relevant to the development of adaptive, sustainable digital-based military education policy models.

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