

EMPOWERING INDONESIA'S DEFENSE: THE EVOLUTION OF SMART MILITARY SOCIETY IN THE TOTAL PEOPLE'S WAR SYSTEM

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Abstract

In the context of Indonesia's Total People's War, the concept of a Smart Military Society emerges as a pivotal element in modern defense practices. This study aims to explore the integration of information technology, artificial intelligence, connectivity, and collaboration within military operations to construct an efficacious Smart Military Society. The Indonesian defense sector can effectively enhance situational awareness, decision-making processes, and response capabilities to address evolving threats by harnessing the potential of ICT and smart technology. The collaboration with societal stakeholders, academia, and industries fosters innovation, adaptability, and the development of a technologically advanced defense industry. Through joint exercises and information sharing, the interoperability of defense forces improves, leading to coordinated efforts across different military components. Challenges such as cybersecurity measures must be addressed to safeguard sensitive information and critical infrastructure. The implementation of a Smart Military Society not only strengthens Indonesia's defense capabilities but also stimulates economic growth, promotes self-reliance, and enhances national security. This research contributes profound insights into the potential and challenges associated with Smart Military Society, offering valuable implications for adaptive defense strategies in the complexities of modern warfare

Keywords: *Smart Military Society, Indonesian Total People's War, Adaptive Defense Strategies*

Introduction

In the era of modernization and globalization, we face threats that are physical and greater non-physical threats, especially threats to the ideology of Pancasila which can threaten Indonesia's national integrity and resilience. For this reason, the country's defense strategy is designed with the concept of Total People's War or Total War Strategy, which involves the participation of all components of the nation based on state defense awareness derived from the history of the struggle of the Indonesian nation. The Indonesian National Army and its equipment became a major component in the country's defense. The key to our strength in facing various potential physical and non-physical threats is to strengthen the identity and identity of the nation.

National identity refers to the identity and character of the Indonesian nation, which is based on values such as Pancasila, Bhineka Tunggal Ika, and the 1945 Constitution (Marpaung, 2019), from the General Directorate of Politics and General Government of the Ministry of Home Affairs. The national identity designed by the founding fathers cannot be separated from their concerns in facing the threat of globalization that will occur in the world. Globalization can create new security threats, such as terrorism, cyber-attacks, and the spread of infectious (Tripathi, 2015). Some scholars argue that globalization has led to the emergence of a new type of national security state that is more focused on economic and non-military threats (Ripsman & Paul, 2010), (Jonathan, 2006). In the future, warfare

is expected to involve a greater focus on the mastery of modern military technology, which will require skilled human resources (Sebastian, 2015).

The concept of a smart military society revolves around leveraging technology and innovative processes to enhance military capabilities, efficiency, and effectiveness. One new characteristic mentioned is "Smart Defense," which consists of four factors: intelligence, weapon systems, decision-making, and an unspecified fourth factor (Sumari, 2013). Indonesia's Ministry of Defense has been actively involved in research and development activities related to defense technology (Ocampo, 2022). To be able to operate various types of technology that are being developed by the Indonesian government, the role of humans is very vital where adjustments must be made to support progress in terms of technology, therefore the concept of Smart military society with predetermined characteristics can improve military society in line with the smart defense which currently combines technology as a support for sophisticated tools for the Indonesian National Army.

Smart Military Society is a concept that combines intelligent information and communication technology (ICT) with modern military needs within the city area or military base. The goal is to create a smart and innovative environment for military personnel to carry out defense and security tasks more efficiently, effectively, and adaptively. In an ever-evolving digital era, the Smart Military Society provides a revolutionary approach by combining various intelligent technologies such as smart sensors, advanced data analytics, artificial intelligence (AI), the Internet of Things (IoT), and advanced network infrastructure. Modern challenges such as asymmetric threats and rapid changes in tactical and strategic situations can be better faced with this technology.

The concept integrates various aspects of military life, including logistics, transportation, health, and communications, using smart ICT. Centralized computing systems and connected data provide real-time access to information and accurate monitoring of situations, allowing military personnel to make informed decisions in a variety of task situations. In addition, Smart Military Society also focuses on developing military human resources through education and training supported by digital technologies such as e-learning and interactive simulations. This allows military personnel to continuously improve their skills and knowledge without leaving the military base. In the face of the complexity of today's military threats and needs, the Smart Military Society provides smart solutions to improve combat responsiveness and readiness. Utilizing intelligent technology, also can improve the level of security, efficiency, and operational capabilities of the military, putting the country's defense and security mission at a higher level.

The use of technology in the military realm since ancient times is a common thing to do even the many advanced technologies today are the fruit of the hard work of researchers to help defend the country, in the many roles of this technology we will never be able to get various technological achievements today if there is no intervention from the military community who are given the task of maintaining the defense of the country, in his writing, Sumari (2013) emphasized that smart military society is formed when the military community has utilized technology to the maximum and benefited from it in accelerating task completion.

The military is called society because according to society is People who live in a definable community and who share a culture and values, while the values of the military are to maintain state security, meanwhile the military is a group of people who unite to perform tasks by existing values and culture, even in military combat has the same goal, where the purpose and spirit are united in the doctrine made by the nation, as an

illustration in writing this article, the author will discuss how the doctrine of total war that has been applied for a long time in Indonesia is still relevant to the concept of smart military society which prioritizes the use of technology as a means to carry out its duties. Even with the existence of a smart military society as the basis for human resource development needed to maintain the sovereignty of the State of Indonesia is made efficiently, this will be in line with the Total War Doctrine which prioritizes people-centric or integrates military power with the strength of the elements of the nation consisting of many civilian entities, where the goal is not as efficient to maintain the defense of the country.

Methods

The method used in this paper is the Literature Review method, the research aims to provide a comprehensive understanding of the smart military society in the Indonesian Total War. In the initial stage, researchers will build a conceptual framework that describes the essence of the concept of a "Smart Military Society". It will involve an in-depth understanding of the integration of information technology, artificial intelligence, connectivity, and collaboration in modern military operations. Through this research method, it is hoped that this research can provide deep insight into the potential and challenges of applying smart technology and collaboration in building an effective "Smart Military Society" in Indonesia, as well as contribute to developing adaptive defense strategies in the face of complex of wars.

Results & Discussion

1. Smart Military Society (Smart Personnel (eight factors))

Smart society is related to the development of sophisticated information and communication technology to create a better and more efficient life. One important aspect of Smart Society is the full utilization of ICT to make daily activities more "smart" in various fields. Military services can also become part of a Smart Society by using ICT potential in military operations. To assess how "smart" military service is, certain characteristics and factors involving the economy, personnel, control, mobility, environment, quality of life, and smart defense can be used.

A Smart Society is a concept related to advances in information and communication technology (ICT) to create a better and more efficient life. The main goal of Smart Society is to optimize the use of technology to improve the quality of life and efficiency of daily activities. Smart Society covers various aspects of life, including economy, citizens/society, mobility, governance/management, environment, and quality of life. The use of ICT can change the way we work, learn, communicate, and interact in society. The importance of ICT in a Smart Society also applies to the military service sector. In this context, military services can also be enriched by the utilization of advanced technology to support their tasks. One of the key aspects of measuring how "smart" a military service is by identifying relevant characteristics and factors. Some of the important characteristics proposed to be indicators are smart economy, smart personnel, smart command and control, smart mobility, smart environment, smart quality of life, and smart defense.

The full use of ICTs in military tasks can increase the efficiency and effectiveness of military operations. Therefore, military services that can adopt and implement Technology optimally are considered smart military services. To assess the level of intelligence or technological readiness of military service, appropriate assessment and rating methods need

Developed. This method should include aspects such as economic efficiency, personnel capabilities, controllability, mobility, sustainable environment, quality of life, and good defense capabilities. This assessment will help to identify the extent to which a military service has been successful in implementing smart technology in its tasks. It can also help identify areas where military services need to improve to become even smarter.

Smart Society is a concept related to the development of ICT technology to create a better and more efficient life. Military services can also become part of a Smart Society by using the full potential of ICT in their operations. A "smart" assessment of military service can be done by identifying certain relevant characteristics and factors and applying appropriate assessment methods.

Smart Personnel:

1. **Level of Qualification (Qualification Level):** Refers to the level of education and qualifications of military personnel. Personnel who have a high level of qualification will be better able to deal with complex and diverse tasks.
2. **Flexibility:** Indicates the extent to which military personnel can adapt to changing situations and task demands quickly and efficiently.
3. **Creativity:** Refers to the ability of military personnel to think creatively in the face of problems and find innovative solutions.
4. **Participation in Public Life:** Indicates the extent to which military personnel are involved and participate in public life at large outside of their military duties.
5. **Education and Training:** Refers to efforts to provide appropriate education and training to enhance the capabilities and knowledge of military personnel.
6. **E-Learning:** The use of information and communication technology to facilitate online learning and training of military personnel.
7. **Human Capital:** Refers to the human resources that exist within the military service, including the skills, knowledge, and potential possessed by military personnel.
8. **R&D&I (Research and Development and Innovation):** This is an effort to conduct research and development and innovation in various aspects related to military service, including technology, strategy, and tactics.

Smart Defense:

1. **Intelligence:** Is the ability to collect, analyze, and utilize intelligence information intelligently and effectively. Good intelligence helps in understanding the security situation and potential threats making it possible to plan appropriate strategic and tactical measures.
2. **Weapon System:** Refers to the military's ability to use and develop advanced and efficient weapon systems. The use of modern technology in weapon systems helps increase military superiority and firepower in the face of various situations and threats.
3. **Decision-Making Cycle:** Refers to the process of making effective and quick decisions in tactical and strategic situations. By making smart use of ICT, military services can respond more quickly and accurately to changing situations, thereby improving responsiveness and operational effectiveness.
4. **Interoperability:** Refers to the ability to operate in tandem with other forces or allies using different equipment and technology. Interoperability allows various military services from different countries to coordinate and collaborate in combined situations, increasing operational effectiveness and efficiency.

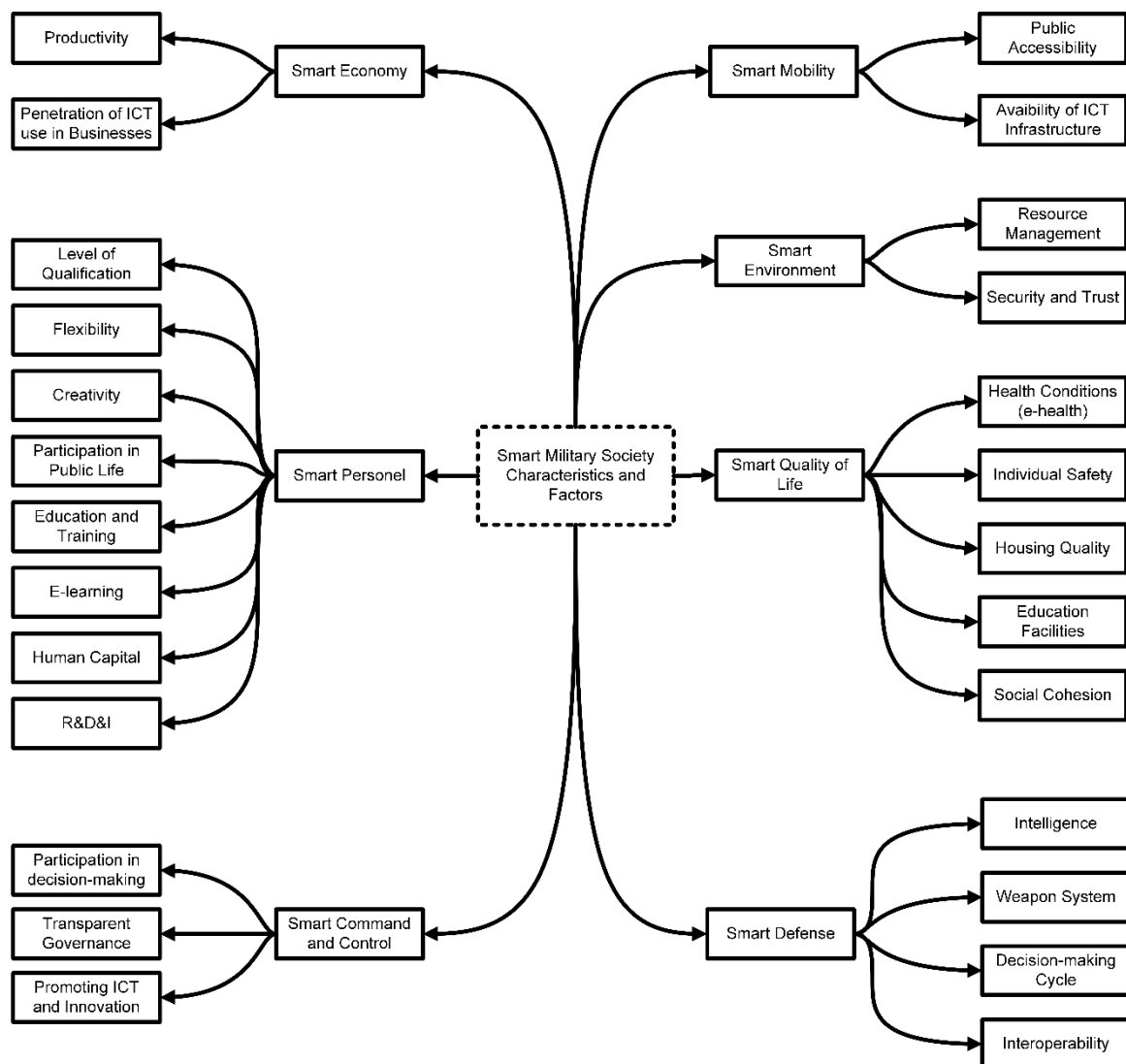


Figure 1. Smart Military Society Framework

Source: Processed by researchers from Smart Military Society: Defining the Characteristics to Score the "Smart" of the Military Services (Sumari, 2013),

Smart Military in Indonesia's Total People's War System

An in-depth analysis of Indonesia's national context indicates that the concept of a "Smart Military Society" has the potential to change the landscape of national defense strategies. By utilizing advanced technology, military operations can become more efficient, responsive, and adaptive to evolving threats. Smart Military refers to the integration of advanced technologies such as artificial intelligence, autonomous systems, and sensor-fuzed munitions into military operations (Omotoyinbo, 2022). The use of these technologies can help address moral challenges in modern warfare, protect innocent civilians, and simplify the tasks performed by soldiers in uncontested environments.

Some countries can adapt military forces based on their to develop technology, Israel's technological capabilities with its capabilities using sustainable technology can develop Dual-use start-ups where technological strength is implemented in the use of convergence, lasers, AI, Cyber and air defense (Frantzman, 2023). In terms of human

resource strength, Israel has Unit 8200, or the largest unit within the IDF's Israel Defense Forces, comprising several thousand soldiers. It is the central collection unit of the Intelligence Corps and is sometimes referred to as the Israeli SIGINT National Unit (ISNU). The unit provides over half of the overall intelligence information for the Israeli Intelligence Community. It is known for its highly skilled personnel who are trained in advanced technology and innovation.

The Lowy Institute Asia Power Index ranks countries based on their military capability, including conventional military strength. The 2023 ranking lists the United States, China, Russia, India, South Korea, Japan, Australia, North Korea, Singapore, and Pakistan as the top ten countries with the highest military capability. According to the Lowy Institute Asia Power Index 2023 edition, Indonesia's Military Capability occupies the 13th position or middle power in the world, this advantage is possessed in terms of resilience and diplomatic influence while the least is military capability, from several indicators the calculation of weapons and platforms is the smallest, the shortcomings faced are the technology used as a tool to conduct battle, Where the strength of the country can be increased by the renewal of technology and the power of its weaponry. Meanwhile, the Smart military society sees that weapon systems are an important part of the formation of a smart military society.

Several studies provide definitions for forming a super-smart society, Sá et al., (2021) state that a super-smart society offers technological development to solve social challenges and build a sustainable society. According to Potočkan et al. (2020), the super smart society vision includes incorporating advanced technologies such as artificial intelligence (AI), big data, blockchain, Internet of things, robots, and virtual reality in all industries and social activities to achieve economic development and solve social problems to accomplish the United Nations' Sustainable Development Goals (SDG's). On the one hand, according to Nair et al (2021), a super smart society is a concept whereby nations start to visualize AI and robots taking over human jobs to improve the quality of life of stakeholders (Aldabbas et al., 2020).

A smart military society is a framework that envisions the seamless integration of military forces, government institutions, academia, industries, and the general public in a collaborative effort to achieve national defense objectives. It recognizes that modern warfare is not limited to the battlefield alone but extends to various domains, including cyberspace, information, and technology. By leveraging the collective intelligence and capabilities of all stakeholders, a smart military society seeks to enhance the overall defense readiness of a nation.

Indonesia's total war strategy is a comprehensive doctrine that goes beyond traditional military operations. It encompasses all elements of national power, including political, economic, social, and cultural aspects (Rusyadi et al., 2022). The strategy recognizes that a nation's defense is not solely the responsibility of the military but requires the active participation of all citizens. By mobilizing the entire society, Indonesia aims to create a robust defense system capable of countering any threat effectively.

The integration of a smart military society in the Indonesian total war strategy offers several advantages. Firstly, it enhances situational awareness by leveraging advanced technologies such as surveillance systems, drones, and artificial intelligence. These tools provide real-time information, enabling more effective decision-making and response to potential threats. Additionally, the integration of societal stakeholders allows for a broader range of expertise, fostering innovation and adaptability in defense strategies.

Furthermore, a smart military society promotes the development of a technologically advanced defense industry. By collaborating with academia and industries, the military can access cutting-edge research, development, and manufacturing capabilities (Research and Market, 2021). This cooperation not only strengthens Indonesia's defense capabilities but also stimulates economic growth and technological advancement. The implementation of a smart military society within the Indonesian total war strategy has yielded significant results. One notable outcome is the improved interoperability of various defense forces and agencies (U.S. Bureau of Political-Military Affairs, 2021). Through joint exercises, training programs, and information sharing, different components of the military, including the army, navy, and air force, can coordinate their efforts more effectively. Moreover, the integration of technologies and the involvement of academia and industries have resulted in the development of indigenous defense systems (Guild, 2023). This self-reliance reduces dependency on foreign suppliers, enhances national security, and boosts the economy by promoting local industries.

challenges

While the concept of a smart military society holds great potential, several challenges must be addressed for its successful implementation. One major hurdle is the need for comprehensive cybersecurity measures to safeguard sensitive information and critical infrastructure. As the reliance on technology increases, the risk of cyber threats also escalates. Therefore, robust cybersecurity protocols and continuous monitoring are essential to prevent potential breaches and attacks. Furthermore, the integration of various stakeholders in the defense sector requires effective coordination and communication mechanisms. Clear guidelines, protocols, and platforms for information sharing and collaboration must be established to ensure seamless integration and maximize the potential of a smart military society.

Conclusion

The use of advanced technology is crucial in enriching military services and improving operational tasks, demonstrating the importance of the concept of a smart military society in modern warfare. This technology helps in various aspects, from communication, logistics, to combat strategy. The Smart Military Society serves as a model for using technology effectively to facilitate the duties and responsibilities of the Indonesian National Army (TNI) in maintaining national security. With the integration of technology, the TNI can conduct operations more efficiently and responsively to emerging threats.

The concept of Smart Military Society plays a vital role in Indonesia's Total People's War Strategy by integrating advanced technology, strengthening national identity, and ensuring the readiness of the armed forces to deal with various threats effectively. This strategy not only increases military capabilities, but also ensures that all components of the nation participate in efforts to defend state sovereignty.

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