

# Building the Kapability of the Main Components of Defense in The Face of the Era of Society 5.0

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**Abstract:** This study aims to analyze the strategy of developing the capabilities of the main components of national defense. This study uses a qualitative approach, with a literature study method. The data sources come from articles published in 2020 to 2022. The analytical techniques used are content analysis, data processing and analysis using the Nvivo 12 Plus software. The results of the study found that the strategy for developing the main components of defense in the era of society 5.0 was carried out through education by paying attention to four main components, namely educational facilities, educational curriculum, educators and students.

**Keywords:** capability, defense, society 5.0

## I. INTRODUCTION

Human civilization is developing very rapidly, as well as the development and advancement of science and technology (SCIENCE AND TECHNOLOGY). The development of information and communication technology has triggered a digital transformation that is changing the fabric of the industry. One form of digital transformation is the creation of a new framework of mind and policy in the world of technology, namely Society 5.0. Society 5.0 is an era in which people can solve various social challenges and problems by utilizing various innovations born from the industrial revolution 4.0 era and oriented towards the use of technology. Society 5.0 itself was first introduced by the Japanese government in 2019, Society 5.0 is a development of the industrial revolution 4.0. Industrial revolution 4.0 based on the sophistication of the Internet of Things (IoT), Artificial Intelligence (AI) and robotics technology in the industrial sector, this concept was later developed again by Japan who designed the core concept of the 5th Basic Plan of Science and Technology called Society 5.0. The main goal of designing the concept of Society 5.0 is to build a human-centered society when economic development and solutions to problems can be achieved, and everyone can enjoy a quality life (Fukuyama 2018). The key to realizing this goal is through combining cyber space with the real world to create quality data and provide new value and solutions to solve every problem. Society 5.0 is a concept that implements technology in the Industrial Revolution 4.0 by considering aspects of the humanities so that it can solve various social problems and create sustainability (Faruqi 2019).

If Industry 4.0 places technology simply as a machine or a tool for accessing information, then Society 5.0

emphasizes that technology and its functions are already part of human life (Ellitan 2020).

The rapid development of science and technology requires us to be ready to face increasingly complex threat changes according to the patterns, nature and forms of new threats that are increasingly difficult to predict, dynamic, and full of uncertainty along with the increasingly sophisticated development of science and technology. The development of science and technology also creates network-based warfare that relies on information excellence, while being able to conduct digital warfare or cyber warfare. The impact can make the security situation unstable because the cyber world knows no boundaries, difficult to detect and predict.

In terms of defense, cyber space has become the fifth domain that can be used as a battlefield, in addition to land, sea, air, and space battlefields. The use of internet-based systems, equipment, and platforms is likely to become more widespread and potentially a vulnerability (Hanneg White Paper 2015).

Therefore, the capabilities of the main components of defense should be ideal in order to be able to handle all forms of new threats in an organized, structured, planned manner, with vigilance and military use and deployment. In building the capabilities of the main components of defense as stated in the Law of the Republic of Indonesia Number 3 of 2002, in Chapters I articles 4 and 5 on the defense of the country states that the management of state defense is all activities at the strategic and policy level that include planning, implementing, supervising, and controlling the country's defense. While the main component is the Indonesian National Army which is ready to be used to carry out defense tasks.

Recently there have been issues related to the war between the two countries, Ukraine and Russia. To maintain the defense system contained in both countries will certainly use well-tested tools such as fighter aircraft and so on. There are various combat equipment that has been prepared by the state to deal with the era of society 5.0, for example amphibious landings, electronic warfare, missile-based attacks, and the presence of airmen from various tantara in the first firing. From these events, it is very important to make defense policies to deal with the era of society 5.0.

Based on research conducted by Rezky, et al. (2019) explained the results that in the face of the era of society 5.0 defense efforts are one of the things that need to be studied in

depth. Defense systems can be started from the development of HUMAN RESOURCES (HR). Then good human resources can be formed from a good education system, which will be given to generations in a country. So in the study it can be concluded that Education is the most basic thing to face and form a defense system in society 5.0.

Responding to this, of course, in formulating and preparing a policy to realize a strong, strong and resilient defense of the country, a strategy is needed that can be used to achieve goals and interests. Based on the above problems, the purpose of this study is to provide a literature review of the strategy for developing the capabilities of the main components of the country's defense.

### II. RESEARCH METHODS

The research method used in this research is the study of literature.

In this literature review, the data source comes from articles published from 2020 to 2022. The data search in this study used only one database, namely Google Scholar. The search keyword used is "military era society 5.0" to obtain relevant articles. After filtering the article obtained two relevant articles for further analysis. The data analysis technique used in this study is the content of the analysis. Content analysis is used to identify what content is related to the research theme. Data processing and analysis using the help of Nvivo 12 Plus software.

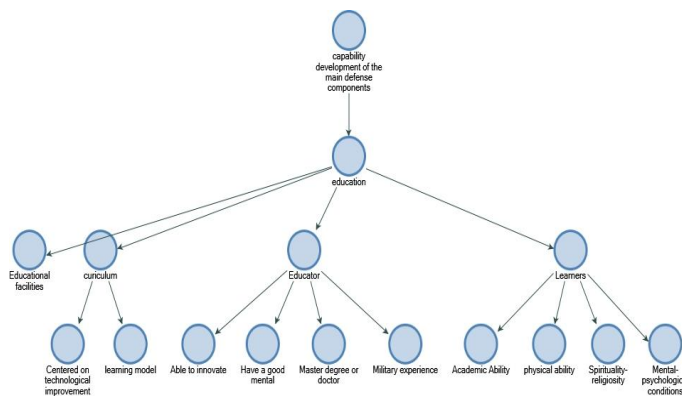
### III. RESEARCH AND DISCUSSION RESULTS

Based on the results of the article filtering found 2 articles related to the development of the capabilities of the main components of defense. Below is a summary table of 2 related articles.

Table 1. Summarize Research Studies

Defense Key Component Capability Development				
No	Study	Research Title	Method	Result
1	Sahupala, Tokio, Sartika & Pujianto (2021)	Peran Lembaga Pendidikan Sekkau Dalam Menyiapkan Peserta Didik Profesional Di Era Society 5.0.	Qualitative	The role of Sekkau Educational Institutions in developing the capabilities of students in the community era at Sekkau institutions pays attention to the four main components of Education, namely Education facilities, Educational Curriculum, Educators and learners. In the facility component, Education at Sekkau Institution is supported by classroom facilities, Educational media tools, tables, chairs and so on, as well as the facilities of the latest digital technology devices. The curriculum component of education is prepared and developed with a teaching model that pivots on improving technology. In the educator component, the expected educator criteria are educators who have a good mentality, at least S2-level education, have experience in military command, and have innovation skills with good teaching tactics and techniques. In terms of learners, the criteria of learners consist of having good academic-cognitive ability, physical condition and good health as seen from the results of health tests, good psychological mental state as seen from the results of psychological tests, and having a good spiritual-religious attitude..
2	Irfan, Dwi MP, Armyanto, Rifqi, Azka & Ghofur (2021)	Pengaruh Disruptive Innovation Terhadap Pendidikan Di Akademi Militer Pada Era Society 5.0	Qualitative	To deal with the era of society 5.0, then education in military schools need to adapt to it. Therefore, the learning model applied includes open discussion, case study and project design. This is facilitated by the use of the latest technology to optimize the learning outcomes of cadets.

Based on these findings, it can be said that the development of the capability of the main component of defense in this case the army or cadets lies in the quality of education at the level of military education. Cadet education needs to pay attention to four main components, namely educational facilities, educational curriculum, educators and students themselves. In more detail, it can be seen in the concept of nvivo software processed folders as below:



Picture 1. Concept Map

In the component of educational facilities, there needs to be facilities that are able to support students (cadets) to absorb knowledge. Forms of educational facilities include educational buildings, classrooms, tools such as technology-based educational media, tables, chairs and so on (Sahupala, Tokio, Sartika & Pudjianto, 2021). Irfan, et al (2021) emphasize on actual learning media facilities involving the operation of the latest technology to optimize learning and training outcomes from cadets. Technology is a mandatory facility in education in the era of society 5.0. This is in line with the research conclusion of Nastiti & Abdu (2020) that in the era of society 5.0, the world of education needs and should use technology as a tool for teaching and learning activities.

Curriculum is the next component that needs to be considered in the framework of the development of the main components of the country's defense. The curriculum on the education of military cadets should also be centered on improving technology. Learning in the era of society 5.0 requires activeness from students (cadets) in order to have a variety of skills, knowledge and abilities in the field of technology, knowledge of media and information processing, and innovating skills and life and career skills (Sahupala, Tokio, Sartika & Pudjianto, 2021). This is in line with the results of Marisa's research (2021) which revealed that the curriculum in the era of society 5.0 needs to combine the development of technological progress with community problems. Technology in the era of society 5.0 can be a solution to people's problems.

One part of the curriculum is the learning model. Irfan, et al (2021) revealed that the learning model in military academies that are in accordance with the era of society 5.0 is open discussion, case study and project design. This is in line with research conducted by Sumarno (2019) explaining that learning models that emphasize knowledge transfer are no longer able to achieve changes in the era of society 5.0. The model of constructive paradigma learning and experimentation is the right choice in the face of the era of society 5.0. Learning models such as inquiry training, inquiry jurisprudence, group investigation, and project based learning deserve to be put forward.

Educators in the era of society 5.0, especially educators in military education have at least these four things, namely: able to innovate, have a good mentality, at least education is S2, and have military experience as a commander (Sahupala, Tokio, Sartika, Pudjianto, (2021). Gunawan, et al (2020) revealed that there are four competencies that an educator needs to have, namely pedagogical competence, personality competence, social competence, and professional competence. The ability to innovate as well as educational strata is part of the competence of pedagogik in educators. A good mentality is a characteristic of people having good personality competencies. While experience in the military field shows the sophistication or professional competence of educators.

Sahupala, Tokio, Sartika, Pudjianto (2021) explained that students or cadets in military education need to have these four abilities, namely: academy ability, good physical ability or condition, good psychological mental state and good spirituals. Academic ability is evidenced by the graduation of the academy test as a condition of education in the military academy. Physical ability or condition is evidenced by the passing of physical tests which are indeed mandatory tests in military education. Psychological tests are also commonly done to determine the graduation of a cadet or learner in military education. And no less important thing is spirituality or spirituality. Therefore, the spiritual and spiritual aspects of this spiritual and spiritual development is also carried out in military education.

Society 5.0 emphasizes humans as its main element, with technology acting as a perfecting of human convenience in everyday life. Society 5.0 is an information society built on society 4.0 that aims to prosperity centered on humans (Irfan, et al, 2021). Therefore, humans as the main element in society 5.0 need to have skills that can support his ability to live in society 5.0. Hidayat & Selvia (2022) revealed that the skills that need to be possessed by the generation of society 5.0 era are *complex problem solving, critical thinking, creativity, people management, coordinating with others, emotional intelligence, judgment and decision making, and service orientation*. Based on research from the World Economic Forum (WEF) 2020 there are 10 main capabilities that are most needed to face the era of society 5.0, namely being able to solve complex problems, think critically, creatively, the ability to manage humans, Can coordinate with other people, emotional intelligence, ability to judge and make decisions, oriented to prioritize stewardship, negotiation ability, and cognitive flexibility.

#### IV. CONCLUSION

The strategy of developing the capability of the main components of state defense in the era of society 5.0 in this case cadets is carried out through education. The four components of education that need to be considered in cadet education are educational facilities, curriculum, educators and learners. Technology is a must-have facility in the era of society 5.0. Attention to technology as a medium of learning is a concern for military education. The curriculum also emphasizes the importance of using and improving technological capabilities. In the educator component, the ability that educators need to have in military education is to be able to innovate, have a good mentality, a minimum of master's education and experience leading the command. While students need to have good academic ability, healthy and excellent physical condition, good mental condition, and good spirituality.

#### *Suggestion*

Through this paper, the author wants to convey a message to readers to carefully study the capabilities of the main components of defense in the face of the era of society

5.0 and is advised to complete this journal more deeply. Then it is recommended to the next researcher to conduct research through direct field studies, because the journals written by these researchers, are limited to literature studies using descriptive analysis. With the data in the field, then this journal will go to perfection.

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