

## OPTIMIZED PAPER NIR AND DIGITALIZATION TO ACHIEVE INDONESIA GOLD 2045

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### ABSTRACT

A technology-based mindset and pattern of work must be optimized to realize digitalization as a form of paperless optimization. At the current ASEAN level Indonesia is the first rank of paper exporters, ranking third in Asia after China and Japan while in the world of Indonesia is ranked sixth and aspires to be the second exporter of paper in the world. Behind it all is very important that the fact Indonesia is deforested from Kompas.com from 2010-2015 the width 684,000 he KTAR natural forest each year and the extinction of various species most in Indonesia. This study focused on paper saving, optimization of digitalization with clear roadmap, as an effort to save the environment and *go green*. The research method used is case study with qualitative research design, using interview technique, observation, and documentation. From this research, it is found that paper optimization is strongly supported by various circles, optimization of digitalization is an increasingly sprightly effort to technology literacy, becoming a developed society, and protecting the environment from the consequences caused by deforestation such as species extinction, greenhouse effect, and natural disasters. However, the paper still needs to be used and should be used more effectively without neglecting the preservation of nature to achieve Indonesia Gold 2045.

**Keywords:** paper optimized, digitization, go green, deforestation, paper nir

### INTRODUCTION

Optimization of paperlessness and digitization is very important in view of the increasingly deteriorating natural and environmental conditions, such as the extinction of various species of which most of the species reside in Indonesia. Dilansir from World Resources Institute in Indonesia there are 11% of the world's plant species, 10% of mammal species, and 16% of bird species.

As much 84% of Indonesia is the land, keep in mind that to make a ream of A4 paper requires a five-year-old tree. While in everyday life we do not escape in using paper. For example, when collecting a task, it is conceivable to make a mini paper say five sheets, then multiplied by the number of students, multiplied per course. Ineffective paper use is often done on errors due to inaccuracies thereby making waste of paper. The more paper the more trees need to be cut, not only will it cause forest destruction, the extinction of the species, but destruction of the ecosystem and lead to various natural disasters that are difficult to avoid. Like floods, due to the fewer trees, and global warming due to deforestation. Regardless, digitalization has grown to become known as the digital age. However, there are still few people and agencies that use digitalization effectively. The purpose of this research is to optimize paper paper so that people are not consumptive with paper, thus becoming an effort to maintain the forest ecosystem and minimize deforestation which has resulted in a lot of damage and loss.

Changing the work culture, communication culture until the delivery of information from the use of paper into digitalization more efficient and effective. Digital empowerment makes people more technologically literate and become habituated so that more ready to reach



Indonesia 2045 Gold so that become a nation that is advanced both in technology and science . This research can be a benchmark on paper and digitalization.

## LITERATURE REVIEW

Concerning the future of the nation, we need not be afraid to hold a straightforward and sharp exchange of thoughts. What we are betting is the future of our young generation who on average began to pessimist view the future. When pessimism turns into apathy, can we still see our future with our head held high and confident? (Amien Rais, 2008) . The statement reinforces this research, that it takes courage to optimize paperlessness and maximize digitization. Not impossible can be realized, if done steps, until the policy set by the government. Of course it should be done clearly and consistently as evidenced by the roadmap.

Reported from the media Kompas (2016) that A bad 21 is now known as the digital era marked by penetration of access to all corners and corners of the world or village. The latest data say that nearly 100 million Indonesians already have internet access.

The data explains that of the 100 million people in Indonesia who have internet access the time has increased significantly related to the functions and benefits for the community. With internet communication can be done more easily and quickly, meaning time-saving and cost-effective. So the government can save trillions of funds and be allocated to other important agendas such as equity and educational development. In addition, it can save resources such as water and maintain the forest ecosystem so as to prevent the various disasters caused.

## RESEARCH METHODS

### *Sub-section 1*

This research uses case study research method with qualitative research design. To obtain data in depth and detailed data used interview techniques, documentation, and observation.

Data collection is done from teenagers, community, teachers, lecturers, to the department. Data were collected according to teenage enthusiasm, community enthusiasm, teacher enthusiasm, lecturer enthusiasm, and paper enthusiasm and digitalization. The results data from the case study are then processed and analyzed and then described so that the results of this study can be more easily understood.

### *Sub-section 2*

In this study using reliable and reliable sources. Among them are Kompas media, World Resources Institute, Journals, government official website, books and websites used for deepening of data and references.

## FINDINGS AND DISCUSSION

As for formulation of the problem in this research ad publi enthusiasm k ne how to optimize non paper and digitizing an attempt to achieve Gold Indonesia 2045? The data collection a ndusiasme p ubli k made into some elements consisting of teenagers, communities, teachers, lecturers and the department. The data were collected in accordance with pre-determined research methods, including interviews and observations to adolescents, communities, teachers, lecturers and offices on paper optimization and digitalization optimization.

The data obtained indicate that most agree to save paper usage, because to obtain a lot of paper that is sacrificed, starting from the barren and more depleted forest while the increasing need for paper continues to increase causing the loss of Indonesia's forests. Not only that, due to the production of paper that many trees are also needed with good quality so that threaten the continuity of various species both plant species, mammals, and birds. Neither are the ecosystems damaged and continue to deteriorate. This reality needs strict action for the

sustainability of the environment, ecosystem and life especially in Indonesia. World Wild Life (WWF) Fund in its annual report, estimates that Kalimantan's forests are believed to shrink by 75 percent by 2020 if deforestation rates are not stopped. If conscious of forests in Sumatra and Kalimantan contribute to Global deforestation.

Paper saving and utilization of digitalization is not just a solution, optimization of digitalization makes people increasingly literate rapid technological developments that are not left behind in science and technology and paper saving as needed is an effort to save the environment, ecosystems and various species in Indonesia.

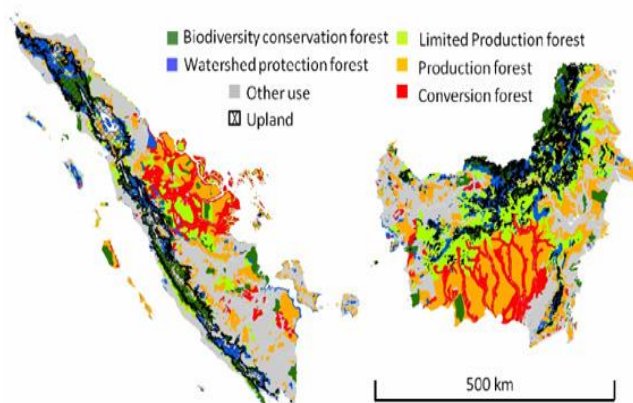


Figure 1. Forest condition in Indonesia Sumatra island and Borneo island ( *source WRI* )

The picture is a deforestation representation in Indonesia. As a result of paper use according to Ministry of Forestry statistics, the rate of deforestation in Indonesia continues to accelerate 1.2 million hectares annually. According to Forest Watch Indonesia (in Simanjutak, 2015) the rate of deforestation due to land clearing from year to year in Indonesia is among the highest in the world. Paper industry and consumptive paper use result in the loss of millions of hectares of forest in Indonesia each year, not to mention producing 1 ton of paper producing approximately 72,200 liters of liquid waste and 1 ton of solid waste, while to produce 1 kg of paper requires 324 liters of water. Here is a table rank globally average per year lost.

Table 1. Global ranking table ( *WRI source* )

Rank	Country	Average Annual Tree Cover Loss (thousands of hectares)
1	Russia	4,319
2	Canada	2,450
3	Brazil	2,157
4	US	1,736
5	Indonesia	1,605
6	Congo	608
7	China	523
8	Malaysia	465
9	Argentina	439
10	Paraguay	421

## CONCLUSION

Based on the research that has been done on paper optimization and maximization of digitalization , it can be concluded that paper optimization and maximizing the digitization of the result of teenagers' enthusiasm are more amenable to digitalization so that it can suppress

the rate of deforestation and as an effort to save the earth, while the enthusiasm of society, teachers, lecturers and the average service agrees to maximize the digitalization of both communications to information delivery, but still needs to use paper such as important documents and archives. Thus, the need for paper is still needed but its use can still be reduced by optimizing paperless and maximizing digitization, this research needs to be followed up with policy decisions. Some institutions in Indonesia have started to optimize paper nir which results in many responses by netizens. That way, it can minimize deforestation rates and save the environment, species, and forest ecosystems even with savings in paper use can save the budget to trillions of dollars and funds can be allocated for the benefit of others.

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