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Development of Ecotourism-Based Strategy: A Case Study of Tinjomoyo Tourism Forest

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Abstract

Tinjomoyo Tourism Forest Area is an object or tourist destination with the concept of ecotourism-based nature conservation in the city of Semarang, Central Java Province. The number of visitors, based on the tourist destination in the last three years (2015-2017) shows that the number of tourists visiting the Tinjomoyo Tourism Forest Area are 5,949 tourists in 2015, to 13,755 tourists in 2017. The area is inversely proportional to tourism in Semarang, including the park, Wildlife, Lele Park and Kreo Goa. To improve the visitor attention, it needs a development of potential strategy Ecotourism-based tourism objects using strengths, weaknesses, opportunities, threats (SWOT) analysis and Quantitative Strategic

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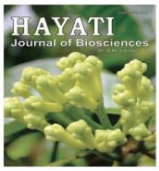

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Development of Ecotourism-Based Strategy: A Case Study of Tinjomoyo Tourism Forest

Novie Susanto*, *Denny* Nurkertamanda, *Heru* Prastawa, and *Aditya* R Nugraha

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Abstract. Tinjomoyo Tourism Forest Area is an object or tourist destination with the concept of ecotourism-based nature conservation in the city of Semarang, Central Java Province. The number of visitors, based on the tourist destination in the last three years (2015-2017) shows that the number of tourists visiting the Tinjomoyo Tourism Forest Area are 5,949 tourists in 2015, to 13,755 tourists in 2017. The area is inversely proportional to tourism in Semarang, including the park, Wildlife, Lele Park and Kreo Goa. To improve the visitor attention, it needs a development of potential strategy Ecotourism-based tourism objects using strengths, weaknesses, opportunities, threats (SWOT) analysis and Quantitative Strategic Planning Matrix (QSPM) analysis. This study recommends development strategies that are analysed through data processing from internal and external factors and alternative strategies that become priority strategies that can be implemented. The results of the study found 23 indicators of strength indicators and 12 weakness indicators. While for external factors there are 12 indicators that appear with details of 6 opportunity indicators and 6 threat indicators. From the indicators found, a data processing is performed using the QSPM method that produces priority strategies.

1 Introduction

The development of potential in the tourism industry is currently being carried out by the city/regency governments in Indonesia. The city of Semarang with its Tinjomoyo Tourism Forest (TTF) Area is currently carrying out an ecotourism-based development program, TTF Area is a natural tourist destination which is currently being carried out in more depth development efforts by the Semarang City Government and Semarang City Culture and Tourism Office. The development of tourist destinations in the tourism area of Tinjomoyo Forest included in the development of ecotourism as well as a means of bringing together conservation and community activists travel. Ecotourism is a form of a real tourism strategy to protect the environment and create income for local communities or managers based on principles that are always considered in its sustainability. Development with the ecotourism concept is carried out because in the main elements of the development concept also includes the concept of green tourism and sustainable tourism. The concept of green tourism is a concept of tourism development that applies to any activity or facility that operates in an

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Sustainable development goals as a tool for strategic planning in communities: a bibliometric analysis of research

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Abstract. Nowadays, the balanced development of any territorial unit should be based on the concept of sustainable development. As a result of its significant expansion, the goals of sustainable development began to be used at the level of strategic and operational documents, which in the context of decentralization is reflected at the level of individual territorial communities. This article is devoted to bibliometric analysis of the scientific papers from the Web of Science and Scopus, which deals with the topic of sustainable development in local communities as elements of strategic planning. To do this, we used the VOS viewer, Scopus, and Web of Science tools, which made it possible to identify major trends (for example, dynamics by year, country, authors, subject area, etc.) and clusters that visually present the obtained information. The following key parameters were also selected for the analysis: published for 1987-2019 years; the language of the paper – English; papers which contain keywords – sustainable development, local communities, and strategic planning. The results indicate a growing role of the chosen topic, which prevails in environmental and social sciences. The bibliometric analysis revealed 8 clusters (Scopus database) and 11 clusters (Vos database) with the central term "sustainable development". The term "local communities" is also one of the key ones in the analyzed research, which is confirmed by the number and strength of links. The analyzed trends show that sustainable development is increasingly considered at the local level of territorial communities in the context of their planning and development.

1 Introduction

In modern realities the basic ideas of the concept of "sustainable development" are becoming an integral part of most government programs and strategies, which is reflected in all areas of the national economy. Traditionally, they take into account and keep a balance of the economic, environmental, and social components of the country's development through the achievement of the UN-proposed goals and indicators.

At the same time, there is a dynamic in the world, according to which most countries are moving to a model of decentralized management, which makes it possible to make more

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Using FHE in a binary ring Encryption and Decryption with BLE Nano kit microcontroller

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Abstract. An integrated circuit (IC) that can be programmed to perform a series of functions to control a range of electronic devices is a microcontroller. What makes the microcontroller special is that it is programmable. In this article, we're going to try to rely on the mbed platform, the most common open source microcontroller development platform; we use completely homomorphic encryption in a binary number ring to ensure the data protection feature. Let us compare the time it takes to perform encryption and decryption on a Visual Studio C ++ and a Bluetooth Low Energy (BLE) Nano kit microcontroller. Experimental results show that the device can complete a fully homomorphic encryption in a binary number ring in 64.2 microseconds, which is reasonable in a real application scenario and illustrates the feasibility of implementing a more complex cryptographic system using a microcontroller.

1. Introduction

Microcontroller can be easily adopted in various applications with a variety of peripherals due to its merits of small size, simple architecture. One kind of microcontroller with an open source platform is the BLE Nano Kit [1-2]. The smallest BLE production board on the market is the BLE Nano.

In short, due to its low cost, cross-OS scalability, open source and easy use features, BLE Nano Kit has a wide developing future [3-4]. As a consequence, on this framework, different multifunctional applications can be created. The aim of a scientific article is to perform on the microcontroller of the BLE Nano Kit on a Windows block cipher and modern cryptographic algorithms on the mbed platform and Visual Studio C++, such as completely homomorphic encryption in a binary number ring. The execution time of various algorithms in the microcontroller and the personal computer is then compared.

As follows, the rest of the paper is organized. In Section 2, we summarize the key features and applicability of a binary number ring for both block cipher and completely homomorphic encryption. We present the running time of various algorithms in our microcontroller and PC (personal computer) and problems in Section 3, as well as address the adoption of the strategy. Finally, we are reporting the final findings of the paper in Section 4.

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Denial of Service (DoS) attack identification and analyse using sniffing technique in the network environment

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Abstract. Network-based intruders such as (DoS) attacks have become one of the most significant internet interruptions. Some operations that rely on the internet, such as banking transactions, education, trade marketing, and social networking, have become the primary targets. The attacker is trying to surround and making it difficult for the system to defend. The research's objective is to recognize the characteristics and level of DoS attacks. In understanding the behavior of intruders against a target web server, Wireshark was used in all traffic networks—capturing the traffic in a networked environment. In this research, the user identifies the attack levels (TCP SYN, UDP, and HTTP protocol), ranging from low (Q1), medium (Q2), and high (Q4) attacks. The approach is to simulate the TCP, HTTP, and UDP flood attacks and analyze the attacks' effects on the network environment. In this work, normal scenarios and pattern attacks were compared. In this case, the intruder floods unwanted packets to the victim with a massive number of request packets; the SYN from the corresponding SYN-ACK replies are not achieved. This paper will identify the DoS attacks level and analyze the behavior of traffics.

Keywords. DoS attacks level Identification and traffic analysis criteria of traffic.

1. INTRODUCTION

In modern technology, most of the users, depending on the internet to access their information resources instantly, the network performs a significant function for the users [1, 2]. Nowadays, network- based attacks have become more adverse and continue to increase in number day by day [3-5]. The necessitate of the internet is significantly crucial if the users wish to obtain information resources or to communicate among themselves. In this case, the internet network allows its customers to use distributed resources on the internet for computations. However, the implementation of security becomes a big challenge in the development of a network environment [6-8]. The various techniques must be immediately

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