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5th International Conference on Energy, Environmental and Information System, ICENIS 2020; Semarang; Indonesia; 12 August 2020 through 13 August 2020; Code 164805

Design and Implementation of FS-I Method to Improve Effectiveness of Product Advertising using Social Media, Based on Quality Function Deployment and Fuzzy Servqual (Conference Paper) (Open Access)

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Abstract

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The development of advertising, many companies use social media as an alternative online advertising. It is more interactive to promote their product. The purpose of study is to determine the comparison of strategies to improve the quality of advertising services on several social media. The results of the validity and reliability test showed that the items of questions for the questionnaire were all valid and reliable. The method used in this study is fuzzy servqual and quality function deployment. The fuzzy logic integration aims to calculate the total weight, average, and gap values of the subjectivity of the results of the servqual method. The proposed improvement in this research is based on data processing using the quality function deployment method. The main target of the proposed improvement by making the most popular company advertisements, providing up-to-date information, lots of promotions, the most interesting features, and many customer interests. © The Authors, published by EDP Sciences, 2020.

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Advertising Effectiveness Quality function deployment Social media

Indexed keywords

Engineering controlled terms:

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12-13th August 2020

Preface

The 5th International Conference on Energy, Environment, Epidemiology and Information System 2020 (5th ICENIS 2020) has been organized by the School of Postgraduate Studies, Universitas Diponegoro, Indonesia with the support by World Class University (WCU) Program. The conference was held on August 12th-13th 2020 in Semarang, Indonesia by using Online Conference System. The aim of the conference was to distribute research outcomes on multidisciplinary research area on energy, environment, health and epidemiology and information system.

The 5th ICENIS 2020 have presented 10(ten) international honorable keynote speakers from representative institutions and continents: i) Prof. Elco van Burg, Vrije University Amsterdam, The Netherlands; ii) Prof Peter Gell, Federation University, Australia., iii) Prof. Jerry Miller, Western Carolina University, USA; iv) Prof. Shabbir Gheewalla, Joint Graduate School of Energy and Environment (JGSEE), King Mongkut University, Thailand; v) Assoc. Prof. Zainul Zakaria, Chemical Engineering Department, UTM Malaysia; (vi) Dr Yurdi Yasmi; Regional representative of IRRI for Southeast Asia, Cambodia; (vii) Dr Nuki Agya Utama, Executive Director of Asean Energy research; (viii) Patrick van Schijndel, TU Delft, The Netherlands, (ix) Barokah Sri Utami, Former President Director of PT Phapros, Indonesia, and (x) Dr Liew Kian heng from Strategics Singapore. Pursuing the international network of researchers and industrial applications, this event also has been attended by overseas colleagues to share their best research works as well as local academia and practitioners. Over 320 representatives from various institutions participated in this event, involving more than 340 abstracts submitted. After a rigorous selection process, the Scientific & Editorial Board of 5th ICENIS 2020 made selection of 300 articles to be published in E3S Web of Conferences, an open-access proceedings in environment, energy and earth sciences, managed by EDP Sciences, and indexed on Scopus, Scimago, Conference Proceedings Citation Index-Science (CPCI-S) of Clarivate Analytics's Web of Science, DOAJ (Directory of Open Access Journals). The Proceedings of 5th ICENIS 2020 consists of selected articles from Kazakhstan, Libya, Netherlands, Thailand, Malaysia. The published papers have passed all necessary improvement requirements in accordance to the Web of Conferences standard, reviewer's comments, SI, similarity tests by Turnitin program.

We would like to express our gratitude to the official committee, scientific & editorial boards, organizing partners. A very special thanks to Universitas Diponegoro for financially supporting this conference especially for financing indexing of proceeding in E3S. Finally, we would like to briefly acknowledge all presenters and attendees for their efforts sharing the beautiful ideas and useful research outcomes to inspire further research and collaborations. Although, this time the conference has been successfully conducted via webinar, but the number of participants showed a great increases and we do hope that this also will be the same for the coming 6th ICENIS 2021.

See you again in the next year conference 5th ICENIS 2021

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Design and Implementation of FS-I Method to Improve Effectiveness of Product Advertising using Social Media, Based on Quality Function Deployment and Fuzzy Servqual

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Abstract. The development of advertising, many companies use social media as an alternative online advertising. It is more interactive to promote their product. The purpose of study is to determine the comparison of strategies to improve the quality of advertising services on several social media. The results of the validity and reliability test showed that the items of questions for the questionnaire were all valid and reliable. The method used in this study is fuzzy servqual and quality function deployment. The fuzzy logic integration aims to calculate the total weight, average, and gap values of the subjectivity of the results of the servqual method. The proposed improvement in this research is based on data processing using the quality function deployment method. The main target of the proposed improvement by making the most popular company advertisements, providing up-to-date information, lots of promotions, the most interesting features, and many customer interests.

Keywords. quality function deployment, effectiveness, advertising, social media

1 Introduction

The rapid development of technology makes changes in all aspects of life, especially in changes in the way humans consume information. An alternative attempt to marketing a product or service using the Internet and be more interactive can use social media (SocMed). Currently, online media have sprung up on social networks such as Twitter, Line, Instagram and corporate websites that are used for marketing [1]. The platform that refers to the use of social networking sites on mobile devices advertising for a company's products and brands is referred to as mobile social media advertising [2]. Marketing strategies using SocMed increase sales widely with relatively low costs. The availabilities of data in SocMeds are used

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Migration, environment, and country safety: analysis of touchpoints

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Abstract. This study presents the results of bibliometric analysis of publications that are thematically related to migration, environment, and safety. Vosviewer software helped to analyze the co-use of keywords in these publications, and the authors' affiliation to specific countries was performing. The works for the period 1965-2019, indexed by the scientometric database Scopus, were taken for analysis. With the help of Scopus analytical resources, and analysis of the dynamics of publication activity on the research issue was performing. The study found that scientists made the most significant number of publications related to migration, environment, and safety from the United States and the United Kingdom. The analysis by keywords showed that the concepts of migration, environment, and safety often intersect, which indicates the possibility and necessity of their joint research to identify key factors influencing these phenomena.

1 Introduction

Migration, environment, and safety are the categories that always arouse increased interest among both the scientific and political community because these phenomena affect the socio-economic development of society in a country and humanity as a whole.

Climate change, natural disasters, air pollution, land, and water resources are phenomena that occur in the environment and pose a potential threat to healthy human life. Unsatisfactory environmental conditions can force people to change their place of residence in search of better living conditions. In the event of sudden large-scale disasters, such as hurricanes, tsunamis, and floods, many people are forced to leave their homes and go into the unknown. Also, changes in the environment affect the country's security, as additional resources are needed to combat their consequences. At the same time, there may be an increase in unemployment and social inequality, causing the deterioration of the environmental situation [1-5]. That is why An important issue is identifying and studying the relationship between these concepts to build a balanced migration and environmental policy that will strengthen

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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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Pandemic, SDGs, and CSR: Case Study of Indonesia

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³Faculty of Human Sciences, Universiti Pendidikan Sultan Idris, **Perak Malaysia**

Abstract. Pandemic covid-19 does not only threat lives and health of people but also hit economic, social, and well-being. Large scale social restriction (PSBB) paralyze all economic activities, in turn, causing unemployment and escalating the number of poor people. Indonesian government provide direct social assistance and other measures to ease the burden of impacted people. Pandemic covid-19 also threatens the target of achieving SDGs specifically dealing with pillar 1 (no poverty) and pillar 2 (zero hunger). Through CSR, corporates have important role in dealing with pandemic covid-19 at the stage of emergency and rehabilitation. This paper observed two corporates, holder of Gold Proper ranking, in responding pandemic covid-19 at their areas. This is a descriptive research in which the content analysis, literature review, and webinar are employed to collect the data. The data gathered analysed qualitatively. The CSR adopted by two corporates do not only deal with emergency and rehabilitation stages but also empower people to produce products needed during the pandemic covid-19.

Keywords: pandemic covid-19; sdgs; csr

1 Introduction

All countries in the world including Indonesia have been struggling to deal with pandemic covid-19 [13]. Indonesia was relatively late in responding and anticipating pandemic covid-19. When the outbreak firstly occurred in Wuhan, China, at the end of December 2019 and other countries have announced the number of victim with variety of action to deal with, Indonesia did not take any action until March 2, 2020 when two persons stated as infected covid-19. There was no travel restriction, referred health centre, lack of diagnosis and scientific survey, also nor data transparency [2]. As of May 16, 2020 total number of infections nationwide was 17,025, bringing the death toll to 1,089 and making this country as most victim in Asia. Pandemic covid-19 does not only threat lives and severely affect

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