

Proceedings

Proceedings – 2019 GCC IEOM Conference

ISSN: 2169-8767 ISBN: 978-1-5323-5951-4

ID 002 Using PCM as energy storage material in water tanks: Theoretical and experimental investigation

Hasan Mousa^{1,2,*}, Jamil Naser¹ and Omar Houche¹

¹Department of Petroleum and Chemical Engineering, Sultan Qaboos University, P.O. Box 33 Al-Khod, PC 123, Muscat Oman

²Department of Chemical Engineering, Jordan University of Science and Technology, Irbid, Box 330, PC 1110, Jordan

ID 005 Using Industrial Engineering Tools in the Realization of Saudi Vision 2030 for Supporting Local Industry

Said Ali Hassan Elkality, Operations Research and Decision Support Department, Faculty of Computers and Information, Cairo University, Egypt

Wael Salah Al-Saeed Hassanein, Department of Industrial Engineering, King Abdulaziz University, Jeddah, Saudi Arabia

ID 008 Analysis of the Progress in the Implementation of the SDGs in Saudi Arabia

Misaa Alkhayat Master student, Renewable Energy Engineering Effat University Jeddah, Saudi Arabia

Maram Alqathami Master student, Renewable Energy Engineering Effat University Jeddah, Saudi Arabia

Tayeb Brahimi Assistant Professor, Electrical and Computer Engineering Effat University Jeddah, Saudi Arabia

ID 009 Using Artificial Intelligence to Analyse Wind Energy Production

Fatima Alhebsi Master student, Renewable Energy Engineering Effat University Jeddah, Saudi Arabia

Heba Anabisi Master student, Renewable Energy Engineering Effat University Jeddah, Saudi Arabia

Tayeb Brahimi Assistant Professor, Electrical and Computer Engineering Effat University Jeddah, Saudi Arabia

ID 016 Real Time Car Engine Condition Monitoring By Using Instantaneous Angular Speed Analysis (IAS)

Abdullrhman Sait and Jamal Alfifi, Mechanical Engineering Technology Department, Yanbu Industrial College, Yanbu, Kingdom of Saudi Arabia

ID 019 Design a Hybrid Wind-Solar Power System for Remote Areas of Saudi Arabia

Mashaal Rajeh and Ahmed Bensenouci, Electrical and Computer Engineering Department, Effat University, Jeddah, KSA

ID 020 Application of Lean Manufacturing to Hospitality Sector; Case Study, Ritz-Carlton Hotel, Riyadh, Kingdom of Saudi Arabia

Ziad Alhisan, Nasooh Alrifai, Alwaleed K. Dhabban, Osama A. Samour, and Abdelhakim Abdelhadi, Prince Sultan University, Saudi Arabia

Ruly Budiono, Department of Biology, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia

Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID Purification of Mercury in Water with Lime Peel

Alejandro Souza Sánchez, Sergio Alejandro Morado Frausto, Jose Adrian R. Bours Gandara, Yael Prieto González Industrial and Systems Engineer (ITESM)

ID 269 Thining MATLAB for Computer Engineering

Sabah Al-Fedaghi, Computer Engineering Department, Kuwait University, Kuwait

ID 278 Agile capabilities as necessary conditions for maximising sustainable supply chain performance: empirical evidence from oil and gas industry

Yahaya Yusuf and Dan'Asabe Godwin Geyi, Lancashire School of Business and Enterprise, Preston PR1 2HE, United Kingdom

ID 282 Analysis of Factors Affecting Consumer Decisions to Make a Purchase

Bab Foster, University of Business and Informatics Indonesia, Sukapura, Kiaracandong, Bandung City, West Java 40285, Indonesia

Muhamad Deni Johansyah, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia

Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 283 The Influence of Online Marketing Against Interest in Buying SMEs Products

Muhamad Deni Johansyah, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia

Bab Foster, University of Business and Informatics Indonesia, Sukapura, Kiaracandong, Bandung City, West Java 40285, Indonesia

Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

ID 288 Impact of Initial Public Offering on the Financial Performance of Petrochemical Industry in Saudi Arabia

Razan Maglad, Finance Department, Effat College of Business, Effat University, Jeddah, Kingdom of Saudi Arabia

Dr. Rozina Shaheen, Assistant Professor, Finance Department, Effat College of Business, Effat University, Jeddah, Kingdom of Saudi Arabia

Mawadda Samkari, Department of Operations and Information Management, Effat College of Business, Effat University, Jeddah, Kingdom of Saudi Arabia

ID 289 Development of a Computer Aided Process Planning System for Prismatic Parts in Hybrid Manufacturing

Osama Abdulhameed¹ and Abdulrahman Al-Ahmari^{1,2}

¹ Industrial Engineering Department, College of Engineering, King Saud University, Riyadh, Saudi Arabia

² Princess Fatima Alhijirir's Research Chair for Advanced Manufacturing Technology (FARCAMT Chair), Advanced Manufacturing Institute, King Saud University, Saudi Arabia

Mohamed Abd Elhamid Advanced Manufacturing Institute, King Saud University, Saudi Arabia

The Influence of Online Marketing against Interest in Buying SMEs Products

Muhamad Deni Johansyah

Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia
deni_johansyah@yahoo.com

Bab Foster

University of Business and Informatics Indonesia
Jl. Soekarno-Hatta No.643, Sukapura, Kiaracondong, Bandung City, West Java 40285, Indonesia
bobriset@unibi.ac.id

Abdul Talib Bon

Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia
talibon@gmail.com

Abstract

The purpose of this research is to find out how the influence of online marketing variables consisting of Personal Relevance, Online Interactivity, Message, and Brand Familiarity to Buy Interest. In this study, the authors take the object in the online shopping application Qlapa.com which specializes in selling handmade products. The sampling technique used by the author is a non probability sampling technique, because not all samples have criteria that are in accordance with what the author specified. Based on calculations, the sample used in this study was 100 people. The research method used in this research is to use quantitative methods. The analysis was carried out using the multiple regression analysis method to explain the effect of the variables in this study. To clarify the variables studied, from what has been formulated in the description above, that the main problem under study is *Personal Relevance* (X_1), *Online Interactivity* (X_2), *Message* (X_3), *Brand Familiarity* (X_4), and Buying Interest (Y). From the results of the research and discussion conducted, this study also found that both simultaneous and partial variables of Personal Relevance, Online Interactivity, Message, and Brand Familiar have a significant influence on buying interest.

Keywords:

Online marketing variables, buying interest, handmade products, non-probability sampling, and multiple regression.

1. Introduction

The potential development of Micro, Small and Medium Enterprises (MSMEs) in Indonesia is inseparable from the banking support in lending to MSMEs. Every year loans to MSMEs grow higher than the total bank credit. The number of Indonesian MSME industry entrepreneurs is among the highest among other countries, especially since 2014. Micro, Small and Medium Enterprises (MSMEs) are one of the economic drivers. According to the Head of the Department of MSME Development of Bank Indonesia (BI) Yunita Official Sari currently the condition of MSME in Indonesia dominated business units up to 99.9% of the total 57.89 million with a significant contribution to employment of 96.9% and GDP of 57.56% and exports of 15.68%. The figure also contributes to employment, gross domestic product (GDP) to exports. Based on data from the Central Statistics Agency, it is noted that 3.79 million MSMEs have utilized digital technology or e-commerce business. Most MSMEs utilize the main market place platforms in the country, such as Blibli, Tokopedia, Lazada, and Bukalapak. Therefore, efforts to use and optimize the use of digital technology for cooperative and MSME businesses through various policies and programs in developing cooperatives and MSMEs towards the digital economy.

Although MSMEs in Indonesia dominate business units up to 99.9% of the total 57.89 million with a significant contribution to employment of 96.9% and GDP of 57.56% and exports of 15.68%. However, foreign products still control about 60% of the e-commerce market, while the share of SMEs has only reached 40%. So that a massive increase needs to be done. Minister of Communication and Information which states that the value of e-commerce transactions in 2013 reached Rp130 trillion. It can be seen that the e-commerce market is very potential and e-commerce based companies must implement the right strategy to excel in the e-commerce industry. This figure is not surprising, because based on data from the Neisen Global survey of e-commerce in 2014, internet users in Indonesia spend more than five hours each day to access the internet. Then, four out of 15 internet users in Indonesia access e-commerce sites or online stores one to three times each week. So, in that month, these online shoppers must on average shop at least once a month. Based on data released by TNS Indonesia E-Commerce Survey in 2014 shows the online shopping behavior of internet users in Indonesia is very compatible with the characteristics of handmade products because 78% of items buyd are fashion (for example clothes, bags, shoes, accessories, and others).

One of the online buying and selling sites with Indonesian handmade products currently developing in Indonesia is Qlapa.com, founded by Benny Fajarai as (CEO) and Fransiskus Xaverius as (CTO), Qlapa was established on November 1, 2015. Qlapa is a buying and selling site online for handmade and handicraft products such as wooden furniture, jewelry, hanging decoration, paintings, leather wallets, and other handmade products. Now, there are more than 4,000 MSMEs offering hundreds of thousands of local Indonesian handicraft products, with a collective turnover of billions of rupiahs each the products sold on this site are unique and quality local creative products with the aim of national and international markets. These have thousands of handicraft products from hundreds of sellers.

Based on the startup ranking site (startupranking.com) in 2018, Qlapa is rated 72 in Indonesia and ranks 1,369 globally. It can be seen that Qlapa is still inferior or below with other online buying and selling sites such as Blibli or Bukalapak.com in Indonesia. The Qlapa store industry is experiencing increasing growth. The growth is marked by the increasing number of new players in the industry. The number of MSMEs entering the e-commerce sector is still relatively low, according to the general chairman of the Chamber of Commerce and Industry (KADIN) Rosan Roeslani, the percentage of local products sold by the marketplace shanties in Indonesia generally only reaches 6-7%. The number of MSMEs needs to get support to be able to explore the potential of digital marketing and develop the Indonesian economy. Thus, in this study, a conceptual model and strategy for implementing Personal Relevance, Online Interactivity, Message, and Brand Familiarity will be developed to influence Buy Interest on Qlapa.com.

2. Literature Review

2.1 Marketing Management

The role of management is very large towards the success of a company's business, management becomes one of the important and needed knowledge of every company. Management is a privilege in dealing with the problem of time and human relations when it appears in the organization or company. Lots of experts express different opinions, but in principle have the same goals and objectives, then according to the author of management is a process of directing the provision of facilities for the work of people who are organized in the organization. Management is also an activity based on science and art to achieve the goals set with the help of others in achieving the goals of the organization or group and is also a process of a series of activities so that the implementation of work can take place effectively and efficiently. Marketing is one of the main activities that need to be carried out by companies both goods and services companies to gain profits and to maintain business continuity.

Some marketing experts such as Mullins and Walker (2013) suggest that marketing is a social process that involves activities needed to enable individuals and organizations to get what they need and want through exchanges with others and to develop exchange relationships sustainable. Meanwhile, according to Kotler and Armstrong (2015), marketing is the process by which companies create value for customers and build strong relationships with customers to get value from customers in return. Furthermore, Kotler and Keller (2016) state that marketing is about identifying and meeting human and social needs. One of the shortest good definitions of marketing is to meet the needs profitably. Referring to the previous definitions, the writer concludes that marketing management is the art and science of selecting target markets that are designed to create and maintain profitable exchanges to achieve the

company's goals, namely profile and sustainability. In marketing, the interaction between elements is needed. Elements in it to achieve the goals set.

2.2 Online Marketing

According to Djijtono and Chandra (2012), integrated marketing communication is a development of the term promotion. The word promotion connotes a one-way flow of information. Exactly from delivering the marketer's message to the recipient of the message or prospective consumers. Instead, marketing communication emphasizes two-way interaction. Consequently, promotion is perceived as a mass form, whereas integrated marketing communication is more personal or individual. This has been a change in marketing activities, where marketing is now more emphasis on activities carried out digitally. In general, something said online is when he is connected or connected in a network or a larger system, or more specifically known as the general conversation on, network or network. In this context, it is usually more directed to internet facilities so online is more to explain the status that it can be accessed via the internet.

Online can be said to be connected and active that is ready for communication and controlled by a computer. Online can also be interpreted as a situation where a device (computer) is connected to other devices so that they can communicate with each other. According to Kotler and Keller (2016), online marketing is marketing carried out through an interactive online computer system, which connects buyers and sellers electronically. Conduct online marketing activities several factors influence it, namely (1) Personal Relevance, i.e. personal relevance can influence a person's behavior towards buying interest through online media. Judging from the research conducted, they get the result that personal relevance subsequently influences the consumer's decision-making process individually. (2) Online Interactivity, i.e. online interactive allows a high level of customer involvement by visitors to certain sites, usually, those who are quite interested in the company or product visited by the site (Tjiptono & Chandra, 2012). (3) Message, i.e. message that is messages can be specifically designed according to the needs and desires of the target audience (Tjiptono & Chandra, 2012). (4) Brand Familiarity, i.e. a variable that greatly affects consumers who shop online. Among them is the brand familiarity, which is a very familiar brand that will have a positive response compared to we see with new brands (Bamba & Barnes, 2007).

2.3 Buy Interest

One form of consumer behavior is the interest or desire to buy a product or service. The form of consumer interest in buying interest is a potential consumer, that is, consumers who have not yet made a buy action at present and are likely to make a buy action in the future or can be called as a potential buyer. Buying interest is something that is obtained from the learning process and the thought process that forms a perception. Ashari (2012) revealed that buying interest is the desire to have a product buying interest will arise if a consumer has been affected by the quality and quality of an information product about the product's ways and weaknesses and product advantages compared to other brands. Simamora (2011) says that buying interest in a product arises because there is a basis of trust in the product accompanied by the ability to buy the product. Therefore it can be concluded that buying interest will arise when an individual's interest in a product has been observed and is accompanied by the ability of the individual to decide to buy the product.

3. Methodology

In this study, the writer took the object of the product at Alisha Fancy Shop. The sampling technique used by the writer is the non-probability sampling technique. According to Sugiyono (2017), non-probability sampling is a sampling technique that does not provide the same opportunity for each element or member of the population to be selected as a sample. The reason for selecting samples by using purposive sampling is because not all samples have criteria that correspond to which the authors determine. As an example, the criteria for the author to set one of them are all consumers who have bought and made repeat buys. Based on the calculations performed, the sample used in this study is 100 people. The research method used in this study is to use quantitative methods. The analysis was carried out by validity, reliability testing and data sourced from primary data (questionnaires) that had been distributed. Then the results of this questionnaire will produce data that will be analyzed by multiple regression analysis methods. Data processing is carried out using SPSS 24.00. To clarify the variables studied, from what is formulated in the description above, that the subject matter examined is Personal Relevance (X1), Online Interactivity (X2), Message (X3), and Brand Familiarity (X3) X4) and Buy Interest (Y).

4. Results and Discussion

4.1 Results of Multiple Regression Analysis

From the results of tests that have been carried out, it is known that the multiple regression equation is formed as follows.

$$Y = 0.046 + 0.129X_1 + 0.261X_2 + 0.158X_3 + 0.312X_4 + e$$

Based on the multiple regression equation, the meaning can be interpreted as follows.

- 1) Stating that if the Personal Relevance (X1), Online Interactivity (X2), Message (X3), and Brand Familiarity (X4) variables are equal to zero (0) and are permanent then the buying interest is 0.046.
- 2) The value of the regression coefficient of the Personal Relevance (X1) variable is positive with a value of 0.129 which means that each increase of 1 unit of Personal Relevance (X1) will increase the interest of the buy by 0.129 units.
- 3) The value of the regression coefficient of the Online Interactivity (X2) variable is positive at 0.261, which means that every 1 unit increase in the Online Interactivity (X2) variable will increase the buy interest by 0.261 units.
- 4) The value of the regression coefficient of the Message (X3) variable is positive with a value of 0.158 which means that each increase of 1 unit of the Message (X3) variable will increase interest in the buy by 0.158 units.
- 5) The regression coefficient value of the Brand Familiarity (X4) variable is positive with a value of 0.312 which means that each increase of 1 unit of the Brand Familiarity (X4) variable will increase the buy interest by 0.312 units.

4.2 Test Results for the Coefficient of Determination

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.683 ^a	.649	.649	.218

a. Predictors: (Constant), X4, X2, X3, X1

Based on the results of testing the coefficient of determination that has been done, the researchers found that the variables in this study consisting of Personal Relevance (X1), Online Interactivity (X2), Message (X3), and Brand Familiarity (X4) have been able to explain variations in buying interest of 64, The remaining 9% is determined by other variables outside the research model.

4.3 Results of Hypothesis Testing F

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.185	4	28.027	18.880	.000 ^b
	Residual	14.855	95	.158		
	Total	55.040	99			

a. Dependent Variable: Y

b. Predictors: (Constant), X4, X2, X3, X1

Based on the results of testing the F hypothesis that has been done, it can be seen that the statistical F value is 18.880 while the F-table with a significance level of 5% obtained the F-table of 2.47. Therefore in this test, the value of F-count or F-stats is greater than the F-table value and the resulting significance value is less than 0.05. So that this test result implies that there is a significant influence between the variables Personal Relevance (X1), Online Interactivity (X2), Message (X3), and Brand Familiarity (X4) simultaneously on Buy Interest (Y).

4.4 Results of Hypothesis Testing t

Model		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.046	.169		.554	.488
	X1	.129	.023	.076	2.329	.036
	X2	.261	.144	.167	1.996	.015
	X3	.158	.042	.133	3.054	.028
	X4	.312	.014	.178	2.771	.041

a. Dependent Variable: Y

From the results of partial testing it is known that there is a significant influence between the variables Personal Relevance (X1), Online Interactivity (X2), Message (X3), and Brand Familiarity (X4) on Buy Interest (Y). This is known because the value of t-count / t-stat of each of these variabel is greater than t-table. The t-count / t-stat value of each variable is (2.329), (1.996), (3.054), and (2.771) > t-table (1.985).

4.5 Discussion

From this study, it was found that Personal Relevance, Online Interactivity, Message, and Brand Familiarity simultaneously influenced buying interest. Where the resulting significance value is smaller than 0.05. So that the magnitude of the influence of Personal Relevance (X1), Online Interactivity (X2), Message (X3), and Brand Familiarity (X4) on buying interest (Y) is 64.9% while 35.1% is influenced by other factors outside the variable researched. This means that when viewed from the side of online marketing which consists of four dimensions (Personal Relevance, Online Interactivity, Message, and Brand Familiarity) if it can be maximized well by the manager, based on research results can make consumers interested in making a buy. Information in an advertisement is important (Le and Nguyen, 2014). The degree of relevance of advertisements to individuals influences consumer attitudes towards advertising. The higher the relevance of the ad to the consumer's preferences, the smaller the level of advertisement annoyance and makes the ad more effective (O'Donnell and Cramer, 2015). Consumer acceptance will be greater for ads that are relevant to style. The higher the level of personal relevance, the better the attitude of consumers, and vice versa. Online interactive allows for a high level of customer involvement. Visitors to certain sites are usually those who are quite interested in the company or product visited by the site. Needs and desires of the target audience specifications. Brand Familiarity greatly affects consumers in shopping online, because a very familiar brand will have a better response than brands that are not familiar.

The results of the study indicate that there is a significant influence between Personal Relevance (X1) on buying interest in a positive direction. Where the resulting significance value is smaller than 0.05 that is equal to 0.000. This result implies that the higher the level of relevance of the advertisements provided will be able to increase consumer buying interest. Because ads that are relevant to the needs or style of consumers will make consumers more interested, so that this application can be seen when in one of the online shopping sites, advertisements that have been seen or are often seen by consumers before, this is a way for consumers do not forget the previous product and so as not to move to another product.

The results of the study indicate that there is a significant influence between Online Interactivity (X2) on buying interest in a positive direction. Where the resulting significance value is smaller than 0.05, amounting to 0.030. This result implies that the easier the communication process that occurs between consumers with the appearance of the application, the consumer will feel more interested so that there will be an interest in buying the products offered. The higher the intensity of interaction that occurs between consumers with applications will also affect consumers, because with the high intensity of interaction will have implications for ease of transaction due to consumers already familiar with the application. Of course, what is also important in Online Interactivity is the interaction that occurs between consumers and users after the buy has been carried out. Therefore, with good post-buy interaction consumers will find it easy to have complaints about the products that have been buyd.

The results of the study indicate that there is a significant influence between the Messages (X3) on buying interest in a positive direction. Where the resulting significance value is smaller than 0.05 which is equal to 0.030. These results imply that the easier the consumer is to access information, the more complete the information conveyed, and the interesting and informative information format will create buying interest. With the ease of access

to information, consumers from various backgrounds can find out information about a product so that the market created will be more extensive. The completeness of the information provided also becomes important as a consumer's reference, with incomplete information consumers will tend to be uninterested because there are doubts about uncertainty. Besides interesting and informative information formats are also important in efforts to create buying interest.

The results of the study indicate that there is a significant influence between Brand Familiarity (X4) on buying interest in a positive direction. Where the resulting significance value is less than 0.05, which is equal to 0.030. This result implies that the more famous a brand, the higher the interest to have. In addition, the impression that arises in the mind of a person related to his memory of a brand-related impression will increase with the increasing experience of consumers in consuming a brand or by showing the brand more frequently in their communication strategies, plus if the link is supported by a network of other links, an established brand will have a prominent position in competition if it is supported by a variety of strong associations. Business competition is getting tighter, various innovations and uniqueness must be excellence. Product differentiation or uniqueness is the key to winning competition business. Businesses must be different when compared with other businesses. Besides, the characteristics will make it easier for consumers or customers to easily recognize the products or services offered. If the product is not much different from the existing product or service, the market, and does not have a characteristic. Many customers or consumers may not be able to distinguish products or services, and even worse, our products and services will not be recognized by many people.

5. Conclusions

Based on simultaneous testing (together) it can be concluded that the variables Personal Relevance (X1), Online Interactivity (X2), Message (X3), and Brand Familiarity (X4) have a significant effect on buying interest. While based on partial testing it is known that all research variables consisting of Personal Relevance (X1), Online Interactivity (X2), Message (X3), and Brand Familiarity (X4) also have a significant influence on buying interest. Qlapa.com as an application that provides products Handmade-based products must pay attention to and continue to evaluate the Personal Relevance (X1), Online Interactivity (X2), Message (X3), and Brand Familiarity (X4) variables, because with the right application will have a positive impact on the company because it will be able to increase interest buy. Buying interest is the tendency of consumers to buy a brand or take actions related to buys as measured by the level of the likelihood of consumers making a buy so that if consumers are interested, it will continue to the buy decision, this becomes important because it is able to provide profits for the company.

References

- Ashari, N. A. (2012). Effect of Promotion of Women's Clothing Sales in Blackberry Messenger Group Against Interest in Communication Studies at Hasanudin University Students. *Thesis*. Fakultas Ilmu Sosial dan Politik Universitas Hasanuddin, Makasar.
- Simamora, B. (2011). *Win the Market with Effective and Professional Marketing*. Jakarta: Gramedia Pusaka Utama.
- Kotler, P. & Armstrong, G. (2015). *Principle of Marketing*, 15th Edition. New Jersey: Prentice Hall.
- Kotler, P. & Keller, K. L. (2016). *Marketing Management*, 15th Edition. Pearson Education.
- Le, T. & Nguyen, B. H. (2014). Attitudes toward Mobile Advertising: A Study of Mobile Web Display and Mobile App Display Advertising. *Asian Academy of Management Journal*, 19(2), 87–103.
- Mullins, J. W. & Walker Jr, O. C. (2013). *Marketing Management: A Strategic Decision-Making Approach*, 8th Edition. McGraw-Hill International.
- O'Donnel, K. & Cramer, H. (2015). People's Perceptions of Personalized Ads. *International World Wide Web Conference Committee*, 1293-1298. doi:10.1145/2740908.2742003.
- Sugiyono. (2017). *Quantitative, Qualitative, and R&D Research Methods*. Bandung: Alfabeta.
- Solomon, M. R. (2015). *Consumer Behavior: Buying, Having and Being*, 11th Edition. New Jersey: Prentice Hall.
- Verina, E., Yulianto, E. & Latief, W. A. (2014). Factors that Influence Buying Decisions on Fashion Stores on Facebook Social Networks (Survey of Fashion Store Consumers on Facebook Social Networks Located in Indonesia). *Jurnal Administrasi Bisnis*, 10(1). 1-11.

Biographies

Muhamad Deni Johansyah is a lecturer in the Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran. The field of pure mathematics, with a field of concentration of fractional derivative.

Bob Foster is a lecturer in University of Business and Informatics Indonesia. Currently as Rector of University of Business and Informatics Indonesia, the field of applied mathematics, with a field of concentration of financial mathematics and actuarial sciences.

Abdul Talib Bon is a professor of Production and Operations Management in the Faculty of Technology Management and Business at the Universiti Tun Hussein Onn Malaysia since 1999. He has a PhD in Computer Science, which he obtained from the Universite de La Rochelle, France in the year 2008. His doctoral thesis was on topic Process Quality Improvement on Beltline Moulding Manufacturing. He studied Business Administration in the Universiti Kebangsaan Malaysia for which he was awarded the MBA in the year 1998. He's bachelor degree and diploma in Mechanical Engineering which his obtained from the Universiti Teknologi Malaysia. He received his postgraduate certificate in Mechatronics and Robotics from Carlisle, United Kingdom in 1997. He had published more 150 International Proceedings and International Journals and 8 books. He is a member of MSORSM, IIF, IEOM, IIE, INFORMS, TAM and MIM.