Analysis The Factors of Cognitive Ergonomics Phenomena on Electronic Book (eBook) Readers

Muhammad

Industrial Engineering (IE) Department
Faculty of Engineering
University of Indonesia
Depok, West Java, Indonesia

muhammad42@ui.ac.id; muhammad.dasilva@gmail.com

Irwan Dharmawan

Dutch Study Program
Faculty of Humanities
University of Indonesia
Depok, West Java, Indonesia
irwan.dharmawan@ui.ac.id

Rahmat Nurcahyo

Industrial Engineering (IE) Department
Faculty of Engineering
University of Indonesia
Depok, West Java, Indonesia
rahmat@eng.ui.ac.id

Abstract

The book is a source of reading, information, knowledge, reference until entertainment for all walks and all ages, especially by students. Along with the progress and changes in technology, currently available books in digital called electronic books or eBooks. View eBook generally same as printed books but can only be opened using software such as Adobe Pdf reader, eBook formatted form pdf. The problem in this study is whether the existence or emergence phenomena eBooks or electronic books are a threat to print books that already exist or have no effect, as seen from the behavior of consumer cognition printed books. The study was conducted to obtain factual data about the assessment or the perception of consumers, especially students, to the printed book and eBook (electronic book). The method is to approach the process of cognition. Cognitive science perspective in solving this research is to analyze relevant aspects related to the characteristics of consumer cognitive behavior, characteristics of printed book and eBooks (electronic books). The result of factor analysis obtained a new factor with 7 levels, is known that characteristics into consideration that consumers buying or use two products include the price of the book, efficient / practical, quality content, the form of presentation and ease of obtain information by the book. The results of analysis that the presence of products of electronic books or eBooks is enough influence and is a threat to printed books that have been on the market before.

Keywords:

Cognitive Ergonomics, Factor Analysis, Electronic Book (e-Book, Graphic Design.

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Department of Industrial Engineering (IE), Faculty of Engineering, University of Indonesia www.ie.ui.ac.id

Biography

Muhammad, Dipl. of Engieering is an Undergraduate Student in Industrial Engineering in Department of Industrial Engineering (IE), Faculty of Engineering at University of Indonesia, Depok, Indonesia. He earned Diploma of Engineering in Physics and Instrumentation Engineering, Faculty of Industrial Technology from Institut Teknologi Bandung (ITB), Bandung, Indonesia. He is a leader in AUAV (Autonomous Unmanned Aerial Vehicle), University of Indonesia Robotics Research Team. Member of TREC Engineering Center Research Group, Faculty of Engineering University of Indonesia about Sustainable and Renewable Energy with Mr. Farizal Ph.D. He has an oral Presentation abaout Cryogenic Technology in Denmark Technical University (DTU), Copenhagen, Denmark. Muhammad has completed research projects with PT. Astra Internaional Tbk. in Astra 1st Program, Nutrifood, Aeroterascan, UI Robotic. His research projects interests include manufacturing, simulation, optimization, design, reliability, scheduling, manufacturing, and lean. He is member of IEOM University of Indonesia Chapter, YLI (Young Leader Indonesia), Astra 1st, PERHIMAK UI, Shafa Community.

Irwan Dharmawan, is an Undergraduate Student in Dutch Study Program, Faculty of Humanities at University of Indonesia, Depok, Indonesia. He is currently as a Mechanic Senior Consultant in AUAV (Autonomous Unmanned Aerial Vehicle), University Of Indonesia. He won 2 times in the national drone competitions of Indonesia (KRTI) in 2015 and 2016 as the Mechanic along with his team Athena. His interest in Artifical Intelegent, drone manufacture, and linguistics made him always thinking out of the box. When he was in high senior school, he make his own operating system based on linux platform called OLOS (Open license Operating System) and make it as the OS for his School. Irwan is member of Ikseda UI, Robotics Team UI, and Senior Resident of Universitas Indonesia's Dormitory.

Dr. Rahmat Nurcahyo S.T, M.Sc. is currently a fulltime senior lecturer and Director of Industrial Engineering (IE) Department, Faculty of Engineering University of Indonesia. Mr. Rahmat holds a Bachelor of Engineering degree in Industrial Management from University of Indonesia and a Master of Science degree in Economic and Management Science from Faculty of Economic and Business University of Indonesia. He is a Certified Management Consultant with over 35 years of experience in working with closely-held businesses. He is Director of Management System of Faculty of Engineering University of Indonesia.