

THE ANALYSIS OF E-COMMERCE WEBSITE FEATURES ON CUSTOMER'S PURCHASE INTENTION USING FUZZY EXPERT SYSTEM

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ABSTRACT

The rapid growth in internet users over the past few decades indicate a changing in the business model, in which previously the business only focuses on brick and mortar store whereas now, there exists a need to add another store namely the e-commerce store. Business-to-Consumer (B2C) e-commerce is one of the various type of e-commerce, which has turned into an influential key to business channel. In order to meet the demands of the current business model, numerous e-commerce websites have been developed. However, building an e-commerce website is not enough if it does not meet the customers' expectation which influences the customers' purchase intention. This study investigates the features of an e-commerce website that influences the customers' purchase intention as well as the most important feature to an e-commerce website based on the customers' perspective. The e-commerce website features being investigated are website design, information quality, security and privacy which are gained from the literature review. The data is collected through an online survey which consists of 358 respondents who are familiar with purchasing on the e-commerce website. An expert system has been developed by using a fuzzy logic approach to determine which feature possesses the biggest influence on customers in order to perform purchasing on the e-commerce website. The results performed in the MATLAB software shows that the most significant feature in the e-commerce website is the information quality. Findings from this study would assist the owner and the developer of an e-commerce website to improve its website quality in order to influence the customers' purchase intention on the e-commerce website.

Keywords: E-commerce, Purchase Intention, B2C Website, Privacy, Security, Information Quality, Website Design, Fuzzy Logic, Fuzzy Expert System.