World Academy of Science, Engineering and Technology International Journal of Social and Business Sciences Vol:14, No:07, 2020

Radio Frequency Identification Chips in Colour Preference Tracking

Authors: A. Ballard

Abstract : The ability to track goods and products en route in the delivery system, in the warehouse, and on the top floor is a huge advantage to shippers and retailers. Recently the emergence of radio frequency identification (RFID) technology has enabled this better than ever before. However, a significant problem exists in that RFID technology depends on the quality of the information stored for each tagged product. Because of the profusion of names for colours, it is very difficult to ascertain that stored values are recognised by all users who view the product visually. This paper reports the findings of a study in which 50 consumers and 50 logistics workers were shown colour swatches and asked to choose the name of the colour from a multiple choice list. They were then asked to match consumer products, including toasters, jumpers, and toothbrushes, with the identifying inventory information available for each one. The findings show that the ability to match colours was significantly stronger with the color swatches than with the consumer products and that while logistics professionals made more frequent correct identification than the consumers, their results were still unsatisfactorily low. Based on these findings, a proposed universal model of colour identification numbers has been developed.

Keywords: consumer preferences, supply chain logistics, radio frequency identification, RFID, colour preference **Conference Title:** ICSSEM 2020: International Conference on Social Science, Economics and Management

Conference Location : Tokyo, Japan **Conference Dates :** July 14-15, 2020