

# Measuring E-Commerce Websites Information Load with EEG Device

Sara Afkhami Rad  
Bachelor of Physic  
Ferdowsi University  
Mashhad, Iran  
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## ABSTRACT

Information overload is an ongoing problem that affects decision making process in purchasing behavior. This problem becomes more serious in online environment which the cost of obtaining information is much less than traditional market. This phenomenon in online environment may result losing prosperity in this environment. So it is important to find out the optimum amount of information to offer to the customer to attract them and also assist them to make best decision. Current research is about finding a way to measuring e-commerce websites information load. With using EEG device to measure theta and alpha mean power as two representatives of working memory load, we have shown the relationship between theta and alpha power and websites information load. We have chosen six website and test their information load in a pilot research and find out two overload website and two websites with moderate information load and two under load websites. Then we have designed an experiment and using an EEG device to measure theta and alpha power for 10 subjects while shopping from those websites. We have found an average number for theta and alpha for overload and moderate load and under load websites, which is usable in designing an e-commerce websites.