From the guest editors: introduction to the special issue on neuromarketing

At its core, neuromarketing seeks to investigate the exposure, interpretation and impact of marketing by analyzing the mental and behavioral processes of consumers using neuroscientific measurement. This continuously developing domain lies at the intersection of a multitude of disciplines all striving to better understand human cognition and emotion associated with product design, branding, pricing, retailing, persuasion and customer satisfaction, among other areas. While the promise of neuromarketing has received considerable attention among practitioners, the need for actionable research within this complex area of marketing research remains. Thus, the purpose of this special issue is to bring together scholars from diverse disciplines interested in expanding the body of knowledge of this intriguing area of study – which we believe has been accomplished.

We kick off the issue with Lee, Chamberlain and Brandes establishing a path for new scholars to orient themselves with common practices and constructs for understanding neuromarketing. As such, the authors proclaim that for any emerging discipline to flourish it must be welcoming to newcomers, layout a path for the future and expand the boundaries of existing knowledge. Fox, Deitz, Royne and Fox then explore how physiological measures enhance and add significant value for identifying negative consumer reviews online. This work expands upon common rating practices to include arousal and emotion for predicting the spread of service failure within user-generated content. In turn, Ling, Cross, Jones and Childers take a comprehensive look at detailing how consumer neural activity is measured via electroencephalography (EEG) within neuromarketing. As a noninvasive technique, EEG relies on electrodes placed on the scalp to measure brainwave fluctuations and is a common approach used by marketers. Next, Gordon, Ciorciari and van Laer apply EEG to examine how neural correlates are impacted during narrative transportation when exposed to video messages. Their findings suggest a temporal relationship associated with message delivery across four tested stories.

Building upon the relationship of emotion to consumer action, Hubert, Hubert, Linzmajer, Riedl and Kenning introduce functional magnetic resonance imaging (fMRI) as a means for understanding how personality and impulsiveness interact to influence consumer trust. Further, the authors illustrate the potential for neurological data to be used as a segmentation variable to explain behavioral outcomes. Shan, Shen and Luan then come back to consumer decision-making by looking at aggregate ratings associated with online shopping. Specifically, they focus on identifying the underlying neural basis for these psychological ratings, once again using EEG to identify a connection between the valence of evaluations. Royo, Chulvi, Mulet and Galán, on the other hand, examine how the use of narrative messaging within marketing is capable portraying emotions when developing new products. They find that elevated emotional responses are triggered from both product experience and message order. Daugherty, Hoffman, Kennedy and Nolan then connect the past with the present in a replication of a seminal neuromarketing study. Using an event-related potential design, the authors test the effectiveness of advertising by using EEG to measure participants’ neural activity during exposure. Their results both support and extend prior work by identifying activation differences across participants.

This paper forms part of a special section on Neuromarketing.
Hsu and Cheng also look at brain activity using fMRI to understand how individual differences affect word-of-mouth (WOM) within a product crisis situation. Specifically, they find that differentiating levels of brain activation are detectable across gender involving source expertise, tie strength and information specificity when interpreting WOM. The final two articles introduce functional near-infrared spectroscopy (fNIRS) as another option in neuromarketing to measure neural spatial activation within the brain. Yurdakul, Çakır, Çakır and Yener sought to test product purchase decisions and found that the use of fNIRS to measure specific prefrontal regions of the brain result in greater predictive accuracy. Similarly, Krampe, Strelow, Haas and Kenning also point to areas of the prefrontal cortex for predicting behavior. By incorporating a mobile fNIRS system, they conduct two experiments examining retail shopping and demonstrate promising possibilities for designing neuromarketing type field experiments.

Certainly, advancements in how we measure, analyze and interpret consumer behavior in response to marketing stimuli are necessary in a continuously evolving world. As such, this special issue is an opportunity for readers to reconsider how research might be conducted. Ultimately, our intent has been to provide a forum for neuromarketing scholars while helping those exploring this nascent field for the first time a means to better understand common practices and techniques. The future will depend upon those scholars that build on the work presented within these pages and a commitment toward transparency involving this fascinating area of marketing. It is our sincere wish that this special issue will help advance both a theoretical understanding of neuromarketing and provide insight into the practical implications of the discipline – only time will tell.

On behalf of the European Journal of Marketing (EJM) and each of the contributors to this special issue, we would like to thank you for your interest in this most important topic. Finally, we would also like to express our gratitude to the numerous reviewers, the editorial EJM team and Emerald Publishing for supporting this endeavor.

Terry Daugherty
Department of Marketing, College of Business Administration, The University of Akron, Akron, Ohio, USA, and
Andrew R. Thomas
The University of Akron, Akron, Ohio, USA