Digital Traces and the New Era of Retailing

Today’s hyper-connected consumers are leaving digital traces everywhere. Through technological advances, e.g., clickstream analysis, facial recognition, etc., retailers can capture these traces to deliver a superior personalized experience to consumers. Whether this experience is delivered through a smartphone app or a sales associate, the retailer must be equipped with valuable data-driven insights to serve the consumer properly. It is, therefore, ever more important to understand how different types of information that consumers collect affect their behavior, e.g., purchase and return patterns. Toward this end, retailers have been making significant investments in web technologies. Broadly speaking, there are two types of web technologies – navigational and product oriented. Navigational technologies, namely, search and recommendation, are meant to steer a consumer to an appropriate product page. Once the consumer is on that page, product-oriented technologies, e.g., alternative photos, zoom, and color swatch, are meant to assist her in gathering specific information about this product. Consequently, it is critical for retailers to evaluate the impact of these technologies on sales and returns. We are among the first to empirically examine these issues in an extensive manner and provide important managerial insights. With increasing popularity of personal assistants, the importance of understanding the impact of digital traces on consumer behavior will continue to grow, creating a fertile ground for future research.