



Project Group Business & Information Systems Engineering

Discussion Paper

Mindfully going omni-channel: An economic decision model for evaluating omni-channel strategies

by

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Abstract: Disruptive digital technologies empower customers to define how they would like to interact with organizations. Consequently, organizations often struggle to implement an appropriate omni-channel strategy (OCS) that both meets customers' interaction preferences and can be operated efficiently. Despite this strong practical need, research on omni-channel management predominantly adopts a descriptive perspective. There is little prescriptive knowledge to support organizations in assessing the business value of OCSs and comparing them accordingly. To address this research gap, we propose an economic decision model that helps select an appropriate OCS, considering online and offline channels, the opening and closing of channels, non-sequential customer journeys, and customers' channel preferences. Drawing from investment theory and value-based management, the decision model recommends implementing the OCS with the highest contribution to an organization's long-term firm value. We validate the decision model using real-world data on the omni-channel environment of a German financial service provider.

Keywords: Channel switching, customer journey analytics, decision model, Markov chain, omni-channel management, value-based management

1 Introduction

Technological innovations such as mobile devices, social media, and online channels fundamentally change customer behavior and omni-channel business (Choudhury & Karahanna, 2008; Mirsch, Lehrer, & Jung, 2016). Today, customers have access to comparison portals, reviews from online communities as well as the possibility of simultaneously seeking information using traditional, online, and mobile channels (Schoenbachler & Gordon, 2002; Rapp, Baker, Bachrach, Ogilvie, & Beitelspacher, 2015). Customers want to decide on their own how to interact with companies during their customer journey (CJ) (Schoenbachler & Gordon, 2002). In particular, new channels and the increasing number of channels affect customers' channel switching and churn behavior (Nunes & Cespedes, 2003). Customers strive to use channels interchangeably and seamlessly during the purchase decision process (PDP) (Verhoef, Kannan, & Inman, 2015). In the banking industry, 20% of customers use digital channels