



Research School for Operations
Management and Logistics

Optimizing the World's Largest Retail Channel: Drivers of the Digital Transformation in the Nanostore Supply Chain

Rafael Escamilla Gonzalez Aragon – Tilburg University

The grocery retail landscape of emerging countries is characterized by the presence of the nanostores, which are small, independent and informal microbusinesses operated by poor entrepreneurs. These stores control a large market share in emerging countries. In Latin America, for instance, nanostores account for 50% of the market, while in Africa and India they dominate the retail channel with over 80% shares. Furthermore, these businesses constitute a relevant segment for Fast-Moving Consumer Goods manufacturers, as nanostore tend to sell to the “Bottom of the Pyramid”. However, significant challenges in the supply chain arise because of limited access to financing and scarce technology. The main goal of this dissertation is to investigate drivers of and barriers to the digital transformation of the nanostores. In particular, it examines the potential of technology to create efficiency gains in the supply chain by addressing nanostores’ cash constraints, limited access to financing and limited assortment. At the same time, it examines perceptions and limiting factors for the diffusion of technologies.