

# **Technology Adoption Models (TAM) for Different e-tailer Formats: A Conceptual Framework**

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## **Abstract**

The increasing trends in technological advancements have opened up a new horizon of opportunities for organizations. With the penetration of mobile technologies, the aspirant organizations have found a new medium to engage their stakeholders. Brick and mortar retailers often seem to invest high costs on technology and infrastructure, but the need of time emphasises to change the behavior of decision making. Various technology adoption models (TAM) have been deployed in past which help to adopt new technologies to sync with current systems. A new format called ‘brick and click’ retailers has flipped the traditional format of retail models and has opened up new possibilities for upcoming technologies. Though, past researchers have identified technological compliance for ‘brick and mortar’ retailers but there is still not evident literature which connects the technological need for brick and click retailers. Also, there is no model available which could show that how segmented technological models can be used for different format of e-tailers.

This study helps in identifying the upcoming Internet of Things (IoT) technology suitable for different formats of retailers, i.e., e-hypermarkets, e-specialty stores, and e-convenient stores. The model analyses assertive compatibility of IoT and Intranet of Things with the existing retail formats. The study proposes theoretical model which helps to evaluate and adopt upcoming technologies (IoT, Intranet of Things, RFID, etc.), and comments on the adoption strategies for different e-tailers. For this study we have considered various e-tailer formats operating in asian region specifically India, and empirical investigation is performed. The study proves significant at global level as the structure of e-tailers are seminal throughout the world.

Technology adoption model, Brick and Click e-tailers, Internet of Things, technology management

**Vinayak A Drave** is a Senior Research Fellow and pursuing PhD in the Department of Industrial & Management Engineering, Indian Institute of Technology (IIT) Kanpur, INDIA. He is a management graduate specialized in the field of Operations and Human Resource, and has Bachelor of Science in Mathematics. He has published ten research papers in Scopus indexed international conferences and has published a case study with Ivey Publishing featured in Harvard Business Publishing. He has published two research papers in a journal of international repute and have authored one magazine article related to his doctorate thesis. He also received Best Creativity Award in the fully sponsored 'Startup Starts Now! 2018', Entrepreneurial Camp organized by Ministry of Education, Taiwan.

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