# Technology Management for Different Types of Retail Formats: A Prospectus of IoT

## Vinayak A. Drave

Department of Industrial Engineering IIT Kanpur, 208016, India vinayak@iitk.ac.in

## Prof. RRK Sharma

Department of Industrial Engineering IIT Kanpur, 208016, India rrks@iitk.ac.in

#### **Abstract**

Technology centered businesses are highly motivated and accepted in the present Information age. More organizations are trying to inculcate ICT in their daily operations and making their business leaner and flexible. But technology adaptation comes with a cost (Short term/long term). Brick and Click Retail formats like hypermarkets, specialty stores and convenient stores are using technological platform for widening their reach to the customer. Internet of Things (IoT) is a commonly noted technology, specially in European markets. Mostly three layers of IoTs are used in Organizations. Convenient stores (smallest retail format) is prone to use three layered IoT system for the operations as it is less expensive and the current business requires minimum flexibility. Specialty stores go for five layer IoT since the organization size is small as compared to Hypermarkets and they require next level flexibility than convenient stores. Hypermarkets have high budget for technology incubation and require point to point communication and high level of flexibility because of their reach in diverse region, hence they go for seven layered IoT. This piece of research tries to show the relationship between the cost and the strategy of a retail format with the adaptation of IoT in their operations.

## **Keywords**

Brick and Click, IoT, Retail Formats, Supply Chain Flexibility, Technology adaption

## **Biographies**

**Prof. R.R.K. Sharma** is a professor in the Department of Industrial and Management Engineering, Indian Institute of Technology, Kanpur, India. He has published more than 160 articles of international repute.

**Vinayak A. Drave** is Ph.D. Research Scholar at Dept. of Industrial & Management Engineering, Indian Institute of Technology, Kanpur, India. He has published one real life case study with Ivey Publishing which was featured in Harvard business Publishing. He has published 2 research paper in a journal of international repute and three international conference papers.