

## Using Automation Technology and IOT Based Data Capturing to Ensure High Quality Last Mile Logistics

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### **Abstract**

The field executive (FE) for any company is not just a service or delivery personnel but is the customer facing brand ambassador. A positive demeanour inspires trust and respect for the person and the company tag he / she carries. Moreover, attendance is a basic capability for any business to keep record of its employees and manage its manpower and financial resources.

In the following paper, we present various sense-&-respond concepts and technologies that can be used to track and, in-turn, enhance the performance of individual last mile resources. Sense-&-respond systems can lead to well-defined action plan enabling an efficient Last Mile service, thus improving customer experience, curtailing unnecessary costs and improving safety of all stakeholders. The different modular and customizable solutions conceptualized and evaluated below include multiple IOT platforms, like BLE beacons, GPS, recorders, and camera based solutions, that can be employed to have a multi-point sensing in Last mile delivery service. We cover aspects, ranging from attendance, FE's disposition, track and trace, and route optimization, customer and FE behaviour and a feedback mechanism to allow for continuous improvement of customer and FE experience.

**Keywords:** Last Mile, Field Executive (FE), IOT

### **Biography**

**Paras Arora** is currently working as manager in Automation Design department in Flipkart Internet Pvt Ltd and is involved with end-to-end operational efficiency improvement, through automation, robotics and IOT. He has completed his masters through European Master in Advanced Robotics (EMARO), an Erasmus Mundus program jointly completed in Ecole Centrale de Nantes (France) and Warsaw University of Technology (Poland). His bachelor studies were in Mechanical Engineering from BITS Pilani, and has worked in robotics R&D and planning and Supply Chain processes across industries.

**Swadesh Srivastava** is currently Director of Automation Design at Flipkart. Prior to Flipkart, he has worked at leading technology companies like Intel, Lam Research and Apple in the US. He is a technology leader with diverse global experience across R&D, Product Development, Design &

Operations in different industries such as ecommerce logistics, consumer electronics, semiconductors, high-tech equipment. He has a PhD from University of Minnesota and B.Tech from Indian Institute of Technology. Swadesh is also active in non-profit sector, playing executive & entrepreneurial roles.

**Snigdha Majumder** is currently working as Director, Customer Experience Design, in Flipkart. She comes from BFSI, Analytics and Services background and has worked with General Electric and ITC prior to joining Flipkart. She has broad experience developed across Consumer Experience, Compliance Management, Business Market Intelligence, Revenue Management, Project Management & Strategic Quality Management focusing on customer delight. Following her MBA & Company Secretary education, she has completed her PhD in Business Strategy from Indian Institute of Foreign Trade, New Delhi. She also writes for international business journals. When not working Snigdha loves to travel & explore various cuisines, play squash and meditate.