

Telecommunications service providers can save millions of dollars by implementing agile, cloud-based inventory management and logistics systems that coordinate activities among service providers, retail outlets, warehouses, OEMs, and repair shops.

# *The Benefits of Real-Time Inventory and Logistics Management for Communications Service Providers*

February 2019

**Written by:** Courtney Munroe, Group Vice President, Worldwide Telecommunications Research

## **Introduction**

Today's retail environment is evolving rapidly. Service providers spend billions of dollars every year on managing their inventory of devices, and in doing so they face significant costs managing devices that are returned because they are defective, require repairs, or need to be exchanged for other reasons. They can realize cost savings by implementing an agile cloud-based platform for inventory management.

## **Real-Time Cloud-Based Inventory and Write-Off Management**

Retail inventory management in the wireless telecom sector has a fundamental problem. The industry has one of the most inefficient inventory management supply chain platforms in place today. The workflow managing the movement of devices across the entire supply chain ecosystem faces substantial challenges, especially from the point at which a customer reports a defective device. Once a consumer problem is identified, retail personnel have to receive the device and implement a tracking process. The supply chain manager has to accurately manage and reconcile inventory and provide timely analysis and reports. The finance department has to be aware of the financial implications, including costs of repair and write offs, for devices in question.

The key issue for telecommunications service providers today is the lack of a comprehensive system that offers a seamless solution for tracking and analysis of the complex ecosystem required to realize a desirable customer experience. Any competent logistics management system should have a reliable and accurate method of tracking inventory as it moves through various stages of receiving at the point-of-sale (POS) establishment. In the perfect scenario, the service providers would have a well-defined set of procedures to monitor inventory-related tasks (e.g., receiving, returns, restocking, special

### **AT A GLANCE**

#### **KEY STAT**

Telecom operators spend hundreds of millions of dollars per year replacing devices and managing device returns.

#### **WHAT'S IMPORTANT**

Without real-time coordination among the different entities of the telco retail chain, telecommunications service providers stand to lose device sales and also risk losing subscribers via customer churn to a competitor.

An inefficient system that does not contribute to the implementation of sound inventory management can have a negative financial impact.

promotions) as well as a process for determining the financial implications for the company. However, this is not always the case. In many instances, there is a clear lack of coordination between the supply chain and corporate accounting that can have serious implications for the smooth functioning of inventory monitoring and, in some cases, the financial bottom line.

An efficient system that coordinates the movement of inventory from the retail outlet and also provides visibility to both logistics and financial managers is crucial; such coordination and visibility impact customer satisfaction as well as the overall financial health of the service providers. This can have strategic long-term implications. Today, consumer interest and demand are fluid. The demand for instant gratification is a key driver for retail. In an omni-channel world, consumers can browse online, make a purchase, and immediately seek to pick up the purchase at a retail outlet. In addition, seasonal and special events such as a new device introduction can spike demand for certain items at specific intervals. If there is no real-time coordination between retail outlets, supply chain personnel, and financial managers, service providers will not have the best options when it comes to making logical decisions that will impact both their customers and themselves.

Another key driver is the potential bottleneck between retail outlets and warehouse inventory in terms of returns and repairs. An inefficient system that does not contribute to the implementation of sound and proactive inventory management can have a negative financial impact.

## Benefits

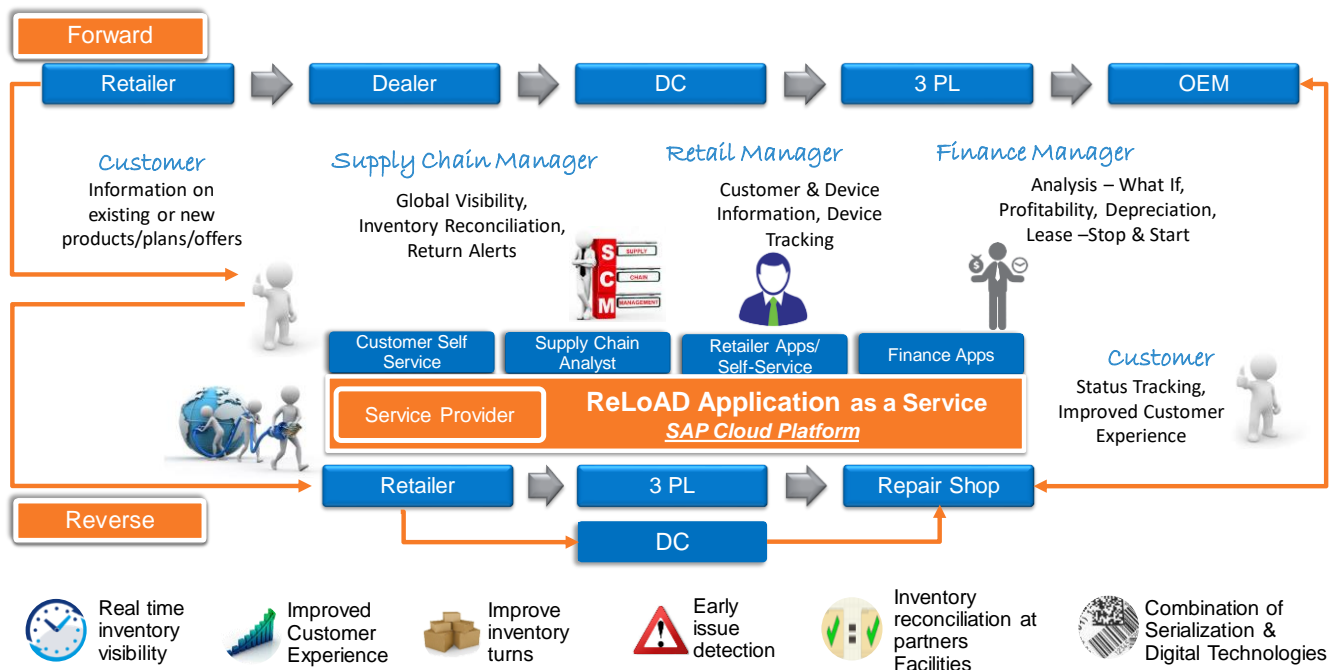
Benefits of implementing a cloud-based asset management platform include:

- » **Reduced write-off costs.** The most important benefit of a cloud-based asset management platform is the financial impact of reducing write-offs. According to IDC estimates, telecom operators will ship over 1.5 billion devices in 2019. The overwhelming majority of telecom service providers do not have an end-to-end inventory tracking system. At least 30% of consumers experience a problem with their mobile device at least once per year, but less than 10% of devices suffer from serious defects that warrant repair or replacement. Telecom operators spend at least \$1 billion per year on reverse logistics (e.g., restocking, customer support, warehousing) associated with the return and replacement of devices. Implementing a cloud-based platform will save telecom operators at least hundreds of millions of dollars per year in write-off costs.
- » **Reduced personnel costs.** By streamlining and automating the asset management process from retail to warehouse, telcos can reduce costs by saving on manual labor. Automation facilitates real-time inventory assessment so that store and technical personnel can make quick and informed decisions across the entire inventory chain. Automation of the supply chain also allows for more efficient knowledge sharing so devices can be assessed for repair much faster, reducing the involvement of labor and improving on the execution of the assessment and repair process.
- » **Accurate real-time assessment of financial implications.** Automation of the inventory management process also brings additional benefits. A manual, phone-based process involving multiple personnel checking SKUs to verify device issues and leasing or financial issues is time consuming. This process is also frustrating for consumers and leads to suboptimal customer service experience. A real-time cloud-based system can also facilitate greater accuracy while allowing rapid decision making based on appropriate assessment of repair options, financial promotions, and regional proclivities.

## Considering Tech Mahindra

Tech Mahindra's Real-Time Logistics for Assets and Devices (ReLoAD) is a supply chain management system for telecommunications service providers. It is a co-innovation solution that is certified by SAP. The solution is implemented and managed by Tech Mahindra and is developed and hosted on SAP Cloud Platform. The system facilitates a dynamic supply chain linking communications service providers, OEMs, retail stores, and customers. The goal is to offer a seamless supply chain leveraging one integrated inventory platform. This facilitates visibility from warehouse to the customer at the point of sale, resulting in a reduction in overall inventory shrinkage and asset write-off. It improves the logistics of the telecom industry by facilitating real-time tracking of devices throughout the entire device life cycle. Figure 1 provides a brief overview of the Tech Mahindra ReLoAD platform, process, and benefits.

Figure 1: **ReLoAD Personas**



Unique solution – TechM brainchild || Co-innovation with Customer & SAP || Future proof || Track & trace with real time updates || Write off reduction : 500 mUSD

Source: Tech Mahindra, 2019

## Challenges

The challenge for Tech Mahindra is proving to telcos that there are many benefits of implementing a comprehensive asset management system. Telcos have invested billions of dollars over the years in proprietary systems. They also may need to retrain or redeploy hundreds or thousands of personnel, which can be time-consuming tasks that can involve legal and compliance restraints. However, many service providers lack a real-time interactive system that offers high-level visibility into the entire supply chain — both forward and reverse logistics that track assets and devices throughout the life cycle. Ideally, a system should also connect the multiple players of the telecom supply chain — customers, retail stores, 3PLs, service providers, and OEMs — through a single platform, thus enabling integrated inventory visibility that results in significant reduction in both overall shrinkage and write-off costs.

Implementing such a comprehensive platform will require the professional services experience of both Tech Mahindra and SAP to provide a road map and a migration scenario and toolkit to aid telcos in this process. It also will require a long-term sales cycle that involves not just selling the technical benefits of the ReLoAD platform but also the financial impact and business outcomes that will be realized from improved customer experience.

These are all mainly short-term issues; if service providers consider the long-term financial and process improvement advantages of a cloud-based inventory system, there should be few reasons to hinder adoption.

## Conclusion

There are many benefits of implementing a cloud-based real-time inventory management system, including financial savings and business process improvements. The most important benefit of a cloud-based platform is the financial impact of reducing write-offs. Telecom operators will ship over 1.5 billion devices in 2019, and implementing a cloud-based platform will save telecom operators at least hundreds of millions of dollars per year in write-off costs. In addition, telcos will experience reduced personnel costs; by streamlining and automating the asset management process across all stakeholders, including retail, supply chain, and financial personnel, telcos can realize cost savings by reducing manual processes. A real-time system can also facilitate accuracy that allows for rapid decision making based on appropriate assessment of repair options, financial promotions, and regional proclivities.

IDC believes that service providers will benefit from leveraging the expertise of Tech Mahindra and SAP in establishing a long-term road map for continuous and cutting-edge cloud-based management systems if Tech Mahindra can address the challenges in this paper.

Implementing a cloud-based platform will save telecom operators at least hundreds of millions of dollars per year in write-off costs.

## MESSAGE FROM THE SPONSOR

**Tech Mahindra ReLoAD Architecture**

ReLoAD is a cloud solution built using SAP Cloud Platform with front end as UI5 technology and HANA as cloud database. This cloud architecture ensures scalability, reliability, security and high performance and facilitates future integration with different third party applications / system of records [SAP & Non-SAP]

With ReLoAD and Tech Mahindra's extensive telecom experience, organizations can begin to realize a host of benefits including:

- » Reduce Shrinkage
- » Reduce Write offs
- » Enable Integrated Inventory Visibility and reconciliation
- » Provide Better Process Control & Compliances
- » Deliver Improved Customer & User Experience
- » Drive better accountability and inventory planning
- » Real time Inventory visibility and decision making
- » Insights on cost analysis and optimization

**About the analyst:*****Courtney Munroe, Group Vice President, Worldwide Telecommunications Research***

Courtney Munroe is responsible for IDC's continuous research on global telecommunications trends. The core research includes the evolution of WAN networking to software-defined hybrid wide area networking and the impact of digital transformation on the WAN architecture. His research focus also includes consumer and enterprise networking requirements and analysis of the strategies of communications service providers as they transform to implement new business models.

**IDC Corporate USA**

5 Speen Street  
Framingham, MA 01701, USA  
T 508.872.8200  
F 508.935.4015  
Twitter @IDC  
idc-insights-community.com  
www.idc.com

**This publication was produced by IDC Custom Solutions.** The opinion, analysis, and research results presented herein are drawn from more detailed research and analysis independently conducted and published by IDC, unless specific vendor sponsorship is noted. IDC Custom Solutions makes IDC content available in a wide range of formats for distribution by various companies. A license to distribute IDC content does not imply endorsement of or opinion about the licensee.

External Publication of IDC Information and Data — Any IDC information that is to be used in advertising, press releases, or promotional materials requires prior written approval from the appropriate IDC Vice President or Country Manager. A draft of the proposed document should accompany any such request. IDC reserves the right to deny approval of external usage for any reason.

Copyright 2019 IDC. Reproduction without written permission is completely forbidden.