



Technological impact on offerings of OEM services in Logistics

KEYWORDS

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Introduction

Technology has forever been the foremost vital thrust behind logistics and even additional therefore once unleash of the transportation trade as third party logistics suppliers. Logistics professionals, imply this trend in bar coding, RFID, security, voice-activated systems and all of the opposite latest trends for ability in logistics. Generally, robots are used in industries to execute repetitive tasks that needed pace, exactitude and power.

The art in robots is ever-changing recently very quickly. Now, these robots move around, they are starting to imitate and simply look like humans. They are beginning to perform tasks like humans do likewise. These robots are operate from a distance and do tasks autonomous of direct human control.

The purpose of this technology in logistics is important. Robots can organise pallets, category boxes on pallets, and cargo them on a truck for a LTL/TL freight movement. Upon receipt they can unload the truck and place the pallet where it's needed. This frees up humans to do and do further value supplementary tasks, not eliminate jobs. Palletizing can be a natural begin line for the long-term of robots as a key a section of technology in logistics.

offered technology solutions to customers. within the past centuries, individuals sought for ways in which to maneuver product faster, in larger bulk and a lot of economically. the problems were resolved primarily by the invention of the railway, vehicles (including trucks), fashionable ships and airplanes. The invention of the computer, the web, and related technologies revolutionized the provision business with such technologies as web-based programs like transportation management systems. presently the business is on the brink of another revolution.

Today's rising technologies are extra attached speed, accuracy, security and seamless delivery. These technologies embrace 3D printing, drone, the net of things (NoT), driverless vehicle and accumulated reality.

Printing applications

The thought of 3D printing has been around since as way back as a result of the Eighties. However, it had been solely recently that the technology was a reality and became offered on a mass scale. This revolutionary technology makes it potential for anyone to form product or parts of product using metals, plastic, mixed materials and even human tissue. So however is it going to have an effect on logistics and provide chain management. Additive producing will democratize the manufacturing methodology. This solution will help in modification to manufacturers to "print" on demand, which might shorten the supply chain by making it surplus to possess large quantities of finished

product stacked in warehouses.

The implication of 3D printing for the provision business has potential prime implications. third party provision suppliers of the long-standing time will deliver raw materials instead of many finished product and can even provide 3D printing services at the purpose of delivery, which might be an additional offer of revenue.

Visibility (RFID)

Visibility is one in every of the biggest problems for product in transit. the appliance of the net of Things (IoT) beside cloud-based GPS will produce it gettable to remain track of individual things and their conditions. IoT makes use of radio frequency Identification (RFID) chips that "talk" to each alternative. Chips attached to individual things will transmit data like identification, location, temperature, pressure, and status.

The implication of this capability are reaching to be immense. product can't be lost or misplaced in transit since each product will transmit its location. With immediate notification comes objection and therefore the dodging of broken product once the chip signals oncoming adverse atmospheric condition, like high temperature or status. Not exclusively that, they're going to even be able to transmit traffic conditions and drive-specific data, like average speed and driving patterns back to the place of business. As offer chain and transportation visibility may well be a hot topic for provision Managers and directors, third party offer suppliers, who adopt this type of technology, are needless to say to reap the rewards of very glad customers.

Drones

A drone is a remote-controlled craft which will either be controlled remotely or left to fly autonomously through software-controlled flight plans embedded in their system. Drones area unit little, light, low-cost to figure and may go where completely different modes of transportation cannot. although third party logistics suppliers haven't started pattern the technology still, there is little or no doubt that they will embrace it inside the longer term.

In the future, 3PL companies will use drones to deliver small packages quickly in every urban and remote areas. thanks to their high speed and accuracy, the use will shorten the supply chain and significantly crop the costs of transportation. the only real things, that prevents the extensive use of such technical are issues related to government rules, safety, size and weight limitations.

Augmented delivery

Augmented reality (AR) provides AN on the spot or indi-

rect browse of the important world increased by computer-generated sensory inputs, beside sound and video. AR offers you AN exaggerated scan of the earth around you in real time and causes you to further responsive to your surroundings. among the longer term, workers at third party provision suppliers will use AR technology, like wearable devices, to realize essential knowledge regarding the freight they're handling, like contents, weight, and destination. clearly, such visibility through AR technology will improve the handling of product, increase the speed of delivery, and crop overall costs.

Driverless vehicles

Although still inside the trial section, driverless vehicles have shown nice potential as tools for logistics and supply chain management. the facility of driverless vehicles to sense the environment and navigate with zero human interventions makes these futurist cars/trucks ideal for delivering product to customers. a huge a region of transportation costs is that the driver's pay. third party provision suppliers may well crop their overhead by practice driverless vehicles for delivery. moreover, such hot topics among the business as a result of the driving force shortage and thus the long withstanding capability crunch may stop to exist with the supply of driverless, autonomous trucks.

Another advantage of practice driverless vehicles is that higher drivers than individuals and thus the possibility of accidents are reaching to be nearly zero. they're going to not get drunk, race with completely different cars, take risks, become angry, lose concentration, doze off, speak on the phone, or send messages whereas at the driver less vehicle doesn't have these issues.

Robotics application: Robots in the mechanized industry are evolving for greater utility with more flexibility and cooperative for autonomous application. They can work safely side by side with lesser operational cost with greater capabilities than human in manufacturing these days.

Mobile Devices

Monitoring through the remote is an emerging technology which is offered as a kind of service by someone and is on the floor for others. But, its expansion is fed by the same aspects that drove it into the bigger systems. The criticality of uptime and shortage of trained technical professional which increase the burdens on information technology professionals, at the same time the complexity also increases in terms of products design. Equipment like barcode scanners to hand held devices to smart phones, to handle the large variety of tasks to ensure the smooth operation in top level to bottom level of floor services with the help of Information technology department.

In To days world this is not possible with the help of third-party experts which provide world-class support to the end-users around the clock around the world irrespective of the organisation.

Remote monitoring of such equipment provides customers a new unique way to identify and determine mobility related issues without having physical custody of a mobile device. This reduces end-user downtime, shipping costs and processing time in the competitive and distributed environment of logistics sector.

Trustworthiness on IT department increasing day by day and which brings the department under pressure from the crush of routine operations, tactical and strategic programs. Therefore Remote control by a third party(OEM) can assist operations teams while additional user accountability in terms of misplaced equipment, stolen devices, document scanned per day and many more..

Cloud computing

Shipping companies are getting more intend towards the cloud as a software application method for the supply chain being its provide the solution offered is based on the model of SaaS. This includes the software like transportation management(TM) and global trade(GT) are among best in the area .TM and GT have long way in terms of cloud-based applications, with Ware house management(WMS) is lagging. More and more vendors moving towards the cloud and therefore the SCM cloud marketing is increasing at the pace 10.8 percent in previous year at the same time the total market in this sector was market was , \$9.9 billion, according to Gartner. These cloud based solutions attracting more and more big shippers to adopt these applications in real time to increase visibility, accuracy and integrity of operations.

Conclusion

The advantage of these technologies is that by deploying or adopting these tools/ methods by OEMS the reach to more prospective customers increases for the organization at the same time it helps in better sales and to grow network. Since these technologies brings digital store front , which helps in lead generation, improvement in sales and direct communication to customer in a better way in terms of creating corporate trust at the same time it is a win win situation for both OEMs and Organisations in along term to achieve the corporate vision and mission.