

Aankhen Inc.

3 Myths about IoT in Logistics

Executive White Paper



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Executive Summary

The next big thing after the internet is the Internet of Things (IoT). There is so much hype about IoT. What is myth? What is real?

As an executive you are most probably being bombarded with how IoT will transform your business. Nearly every aspect of your business can be impacted by IoT. The potential impact of IoT is similar to how the internet has impacted every business. The internet obsoleted some business models. It also enabled the creation of businesses globally and globalization of existing businesses. IoT has the potential to be far more disruptive globally and force business transformation for survival.

If your business has anything to do with making, buying, selling, moving or servicing physical goods, there are layers of IoT already at work.

Discussion of IoT can encompass anything and everything. This paper focuses on IoT in logistics (IoTIL).

Using internet of things in logistics, supply chains can operate faster, cheaper and better to meet customer expectations. 'Like' a product on the internet, it may show up at your door! That's how fast IoTIL enabled supply chains 'can' be.

What is the IoT potential for your business? How can you filter the noise and make sound decisions to transform your business?

IoT is technology driven. Enterprises evaluate, adapt, integrate and deploy technology at different rates. With so many IoT technologies being unleashed, it is useful to understand some of the myths in IoT.

This paper addresses 3 common myths about implementing IoT in logistics.

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Things in Logistics



Serving 7B+ People



Myth #1: IoT benefits advanced countries.

Reality: Emerging markets can realize higher benefits with IoT.



Advanced countries and emerging countries have one common goal: grow their economies. Logistics is the common foundation for sustainable economic growth. IoT in logistics provides an opportunity for emerging markets to skip legacy technology investments and collaborate with advanced countries with less effort and investment. This is similar to the benefits realized by emerging markets going straight to wireless technologies instead of investing in land lines. Imagine a world of millennials attached to land lines!

Logistics challenges in advanced countries are of a different order than emerging markets. For example: 1) eCommerce delivery logistics challenges in an advanced country are different from eCommerce challenges in an emerging market such as India or Africa; 2) advanced countries source food/agro products from emerging markets. Visibility from origin farm/plantation to destination is a requirement that has been difficult or expensive to implement; 3) advanced countries deploying in emerging markets expect similar infrastructure and information systems to support existing processes and service levels. IoT technologies address these challenges in a cost efficient way, paving the path to economic growth for emerging markets and advanced countries.

Enterprises in advanced countries are transforming their businesses by leveraging opportunities created by IoT. GE, Cisco, Intel and Amazon are a few examples of established enterprises transforming themselves. Smart phones enable consumers to purchase goods and have them delivered to their doorstep with less friction. Emerging markets are adapting or creating new innovative models to compete and overtake established enterprises. China based Alibaba is an example of eCommerce demonstrating financial success and potential for global growth. Flipkart and Snapdeal are examples from India. Logistics is recognized as key to the growth of these entities.

Recommendation: *Consider IoT technologies in logistics to overcome previous barriers to deployment. Cloud based software solutions and wireless devices using IoT technologies require less resources and lower total cost of deployment. Develop a new strategy and architect your implementations leveraging new capabilities delivered by IoT.*

Myth #2: We mean the same thing by 'internet of things'.

Reality: 'internet of things' means different things to different people.



Internet of things in logistics is about moving physical objects from one location to another. Supply chain logistics is a cost sensitive business. Resources or things such as containers, reefers, chassis, tractors, trucks, ships, airplanes, people and information systems across the world are used in moving the objects. Most of these resources are outsourced with many hand-offs in transit. Cost reduction is a perpetual goal of resource owners and service providers in this complex global network of eco-systems. Data collection and information systems processing the collected data to provide visibility are a significant part of the total cost. Devices and sensors associated with resources automate data collection and in some cases remote command and control of the resources without human intervention. These smart devices and sensors are the billions of 'things' that can be virtually connected in a dynamic digital network with intelligent software. Frictionless information chains create new capabilities and opportunities across global logistics networks to deliver significant benefits and cost reductions.

There are many innovative application specific devices and sensors. These devices and sensors will continue to evolve and be commoditized as all technologies do. With each evolution new challenges include: cost, function, size, battery life, ruggedness, obsolescence, security, firmware upgrades, communications, software platforms and logistics to manage the devices.

Recommendation: *Given the pace of IoT innovation taking place in the industry it is difficult to make fact based decisions and not enough time to evaluate potential devices. Depending on your role in the supply chain the device or the data generated by the device may be relevant to your business transformation. Knowledge of what works and what does not can save you time, money and lower risk. Augment your knowledge with external expertise to evaluate and validate your options before committing to IoT technologies.*

Myth #3: IoT data is big data.

Reality: IoT data is not big data for every enterprise.



Data is the new 'gold rush'. Collecting all the data in the hope of finding gold nuggets caters to the fear of missing out (FOMO). Social media applications connected people using data entered by people. IoT applications connect things that automatically capture data to serve people better.

A key benefit of using IoT in logistics is automated data capture and reduced human intervention in the digital information chain. Supply chains are fragmented, segmented and distributed geographically. IoT technologies can virtually integrate data from or about disparate resources in logistics. All data captured by IoT is not required to be propagated across the network. Redundant data can be eliminated. Data can be processed intelligently at source or in-line. With cloud based computing and storage, you now have a new source of accurate data that can eliminate non-value add data feeds between enterprises. Smart use of IoT can actually reduce enterprise data.

For example, IoT technologies such as telematics have been deployed to manage fleets of trucks. The primary beneficiary of fleet management is the fleet owner. The data collected improves the operation of the fleet and reduces costs for the fleet owner. The fleet data has no direct financial benefit to the cargo owner whose cargo was moved using a truck in the fleet. However, with intelligent IoT software technology the same fleet data can be processed in-line to automate event detection such as pickup, departure, arrival and exceptions. These processed events can be communicated without creating big data. Intelligent event information can eliminate the need for systems infrastructure and effort required to on-board new customers, suppliers and services providers to grow business.

Recommendation: *The potential value of IoT data used to compute predictive analytics and prescriptive intelligence is very appealing. Realizing the potential requires transformational thinking open to new technologies, cross functional expertise in IoT data management and new applications architecture to support business transformation visions. Leverage the experience of people who have successfully implemented real world IoT solutions in multiple industries and learnt first-hand about what works and what does not to ensure your success and faster time to value.*

Contact Aankhen Inc. to schedule a free assessment

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