

# Walmart in china

[Business](#), [Company](#)



## **The Beginning of Walmart Logistic**

Wal-Mart as we all know it is an American multinational corporation that operation in the largest chain discount stores in the world. Sam Walton, the successful businessman from Arkansas began his retail store in 1940, worked at J. C. Penney, and later on started a small retail chain store called “ Ben Franklin”. It wasn’t till 1962; Mr. Walton opened the first Walmart store. In the beginning, Walton had his strategy set to low-income families and offered a considerably lower cost than his competitors, the low price strategy allowed Walton to steer forward with his real goal to become the supply chain, logistics giant.

By 1987, Walton has led the store into a growing rampage, Walmart had 1, 198 nationwide, sales in the 15. 9 billion and had 200, 000 associates (Walmart, <http://walmartstores.com/aboutus/7603.aspx>, 2011), In the same year the company also became the largest private satellite network in the country and implemented the first distribution monitoring system, it is a linked satellite system that offers two ways data, voice and one-way videocommunication between Walmart’s driver and distribution center which increases inventory accuracy and ability to quickly restock store inventories (Wailgum, 2007).

### **Magic of the stripes**

In addition to the satellite system, Walmart has guided the way to other ground-breaking technologies that had other retailers follow. In 1988, Walmart was the first retail company that used the barcode system as the universal labeling system (Walmart, <http://walmartstores.com/aboutus/7603.aspx>, 2011). The efficiency of the barcode system gave <https://assignbuster.com/walmart-in-china/>

Walmart the capability to reduce store inventories and the cost of keeping items in the warehouse.

The barcode system also makes it possible for Walmart to record sales of each item for more accurate sales analysis because the barcode system worked so well, 99 percent of Walmart stores adapted this technology (Walmart, <http://walmartstores.com/aboutus/7603.aspx>, 2011). But it also created another problem for Walmart suppliers. One of the key pieces of the barcode system is the Universal Product Code (UPC), the UPC is a stamp with black and white stripes and numbers on the bottom that allows a barcode scanner to scan the product.

Getting the UPC code isn't as easy as print it on the box and ship it out to Walmart. First, Walmart requires all their potential suppliers to file an evaluation with Dun & Bradstreet for an evaluation of the company's financial standing, second, buy a membership from the Uniform Code Council's GS1 that cost at least \$750 plus an annual fee that bases on the company's sales plus the cost of each UPC on the product (Washingtonpost, 2007).

Base on the cost, if you are a large company like PepsiCo or Johnson&Johnson the fees are relatively small, but if you are a small mom and pop business the fees can eat up most of your sales revenue. However, Jon Lehman who was a Walmart Manager who managed six stores said during an interview with PBS.org (PBS.org, 2004) " you can track sales on specific items, specific weeks, specific days, specific hours of the day when you sell merchandise the most. You can find out what size of toothpaste is your best seller, what times of the year you sell that toothpaste.

<https://assignbuster.com/walmart-in-china/>

You can track sales spikes during the year, during certain seasonal periods”. the benefit of the barcode system gives Walmart the leverage power to have all their suppliers include a barcode in their products, which was the first time, a retailer has power over the supplier.

### **Walmart’s Cross Docking**

In the retail race for survival, more and more retailers are finding ways to reduce inventory cost and transportation cost. Then in the 1980s, Walmart began to use a logistic technique called the “ cross-docking”.

This is a way for the finished goods to directly be pick up from a supplier’s manufacturing plant, and then transport the goods to the customers without storing it. The cross-docking provide tremendous benefit, First, reduce handling and transportation cost, the product will not have to go to another storage location to wait for pick up. Second, Cut product wait time, the product will spend less time in the warehouse and more time on the road to deliver to the customer, it is especially important if the products are time-sensitive, such as milk or produce.

Walmart stores can decrease the financial loss from having to reduce the price of the product because it is close to the expiration day. Third, the product now have fewer chances to be damaged during shipping, in the old days, products often have to be transported through many different locations before it is shipped to the stores, the cross-docking eliminates the needs of going to different distribution locations, as figure 1 shows, all products now will only go to a centralized sorting facility before it’s shipped to various Walmart stores.

However, the most significant advantage of cross-docking is the reduced warehousing, one of the cross-docking main benefits is the ability to quickly move products, therefore, increase the turnaround time during warehousing. Walmart stores can carry more products and can store more in the warehouse.

### **Downfall of Barcode System**

The barcode system provided undeniable logistical benefit since Sam Walton started the company, but as time moves forward and more supplies need to be move across the warehouse floor; the time is up for a replacement. The technological constraints of the barcode system are speed, range, and durability.

The first major shortfall is that the barcode requires the line-of-sight technology(RFID-Journal, 2011), which means for the barcode to be read, there has to be a laser scanner within the line of sight for it to pick up the information in the barcode. According to International Logistics by Richard Stewart and Pierre David “ Transportation is dependent on an infrastructure that allows the movement of goods”. Due to the line-of-sight constraint logisticians have to design the warehouse certain ways to allow the barcode system to be read or introduce expensive human labors into the picture.

Second, because it requires a laser scanner to scan the products, only one item can be read at a time. Third, barcodes labels are vulnerable to daily wear and tear. Allow me to ask, have you experienced a time where you or the store cashier try to scan the barcode and you placed the barcode over the red scanner several times, but the scanner failed to pick up the barcode.

That's an example of a damaged barcode. Due to the nature of the barcode, once the widths of the black and white lines are damaged, it is impossible for the scanners to pick up.

As a result of the limitations in barcode technology, Walmart implemented a new technology call RFID (Radio Frequency Identification) in its logistic system.

#### **Power to the RFID**

In 2003(Webster, 2008), Walmart had started the preparation to integrate the RFID technology into its supply chain. The RFID united the improvements over the barcode system in range, reading rate, and durability into a single chip. It is a system of small electronic stickers that can instantly broadcast radio signals to the RFID receiver and consistently update its location.

This way, logisticians can link between the digital and physical world without any human communication. The RFID had another advantage it's able to read the data and knows precisely what item it is and the expiration date on the item. For example, the RFID can tell Walmart which orange juices in which refrigerators are going to expire, so the employees can move the soon to expire orange juices in the front row. Walmart then required its 100 suppliers to integrate RFID technology into its packaging and hoping it will solve the issues where items are not ready on the shelf. According to Ron Moser, RFID strategy leader at Walmart, Around 2 percent of all lost sales are due to the simple fact a store has run out of an item, but 41 percent of the lost sales are due to inventory problem, If RFID can fix just 10 percent of that problem, then Wal-Mart will gain \$287 million per year by avoiding lost sales. " Since 2007, Walmart has benefited a 30 percent reduction of out-of-stocks;

reduction of excess inventory in the supply chain says Walmart CIO and Executive Vice President Rollin Ford (Walmart, Wal-Mart Continues RFID Technology Expansion, 2007). And if combine the numbers from Moser and Ford, that is a saving of 861 million a year, since the integration of RFID.

The technology has proven itself as the divinemoneysavior for Walmart's logistic system. On top of that, Walmart has also pushed the RFID into one of its most profitable foreign markets, China.

#### Walmart's RFID Influence in China

In speaking of international logistics, if Walmart requires all their suppliers to include RFID chips, then they will also need to require international companies to do the same. Started in 2009 (ChinaRetailNews.com, 2008), Walmart impacted the Chinese supply chain by forcing all Chinese suppliers to have RFID chips build into their products.

Not only so, but Walmart also created tougher standards on the Chinese suppliers which created a much stressful time for Chinese manufactures to adapt. Going back to day one, the Walmart RFID movement started in January 2005 in a distribution center in Dallas says Computerworld.com (Songini, 2006). At first, Walmart required about 100 of its suppliers to have RFID chip installed, then in two years after that, in January 2007, 600 suppliers implemented the technology. Base on the historical review of the U. S. companies, it was easier for U. S. companies to put into practice of the RFID chip, upgrade the information system and warehousing technologies. On the other hand, most of the Chinese companies were still using human labors for their supply chain management. It wasn't that the Chinese manufactures didn't want to upgrade to RFID. The technology infrastructure

just wasn't there. According to the PhysOrg. com, most of the companies in South China " Don't understand and are not familiar with the technology" There was a number of problems that Walmart needed to solve before implementing the RFID idea into the mind of Chinese suppliers.

First, at what level would it affect China? Civilian standards or government regulations or both? Second, how many of Chinese suppliers are capable of deploying the RFID technology; third, how many of them have heard of RFID technology.

#### The Chinese RFID investment

Two of the very important market entry strategies that an international logistician ought to understand before entering a foreign market are the technology infrastructure and the characteristic of different levels of development. Does the Chinese have it what it takes to upgrade its Infrastructure?

And does the potential trade benefit outweigh the cost? Fortunately, the Chinese government had a plan to expand its logistics infrastructure in 2007. The China State Radio Regulation Committee (SRRC) has approved the bandwidths needed to transmit RFID frequency in China, the two UHF bands 840. 25 to 844. 75 MHz and 920. 25 to 924. 75 MHz (Swedberg, 2007). The Chinese government's intention of this approval is to bring itself up to speed with rest of the world. According to Craig K. Harmon, President and CEO of Standards development organization " can be viewed as good news for U.

S. and European companies. China's 920 to 925 MHz band overlaps the 902 to 928 MHz band used in the United States, so U. S. RFID tags will be readable by interrogators approved for use in China". In other words, The



Chinese government did not blindly upgrade its RFID infrastructure; it made sure the radio frequencies are compatible with foreign companies like Walmart. In order to support and keep up with the rest of the world, the Chinese government is making an enormous amount of investments in the RFID market.

Between 2009 and 2014, the Chinese market will have grown to \$1.4 billion in 2010, and by 2014, the RFID will reach \$2.4 billion, more than double the total from 2009, said by an iSuppli, a China market research firm. The RFID infrastructure is growing, and will dramatically develop to a mature stage that has the same level playing field with the United States.

#### Chinese market potential

Since the early 90s, the world has witnessed China's huge growth economy and the potential to grow more, the logistics in China also have been growing along.

Nevertheless, international logistics is a part of international business, the market, supply & demand, and GDP; those elements are the support beams of the logistics infrastructure. In addition, The Chinese and Walmart's RFID infrastructures are dependent on this growth. In 2010, the Chinese GDP growth was 10.3 percent. In the same year, Chinese domestic logistics grew to \$15.75 Trillion and will have a 9% compound annual growth rate between 2011 to 2013, said by (Logistic Industry in China set for Tremendous Growth, 2011).

On a general level, rapid market and GDP growth is a perfect business incubator for Walmart to accelerate the RFID adaption among Chinese suppliers.

**Conclusion**

The Logistics infrastructure is a key component for Walmart to penetrate the Chinese market, in view of the fact that the country's economy is export-oriented. RFID is one of the most important technologies for both Walmart and China to communicate both at the physical level and software level. But without the physical warehouse planning of Cross Docking, introducing the RFID can only win half of the battle.

Ever since, Sam Walton created Walmart, moving products to customers have been the key development for the company, from human labor to the barcode system, and finally the RFID. With the pushing and help from Walmart, local Chinese manufactures and logistics companies are able to adapt this piece of technology and continue to compete with the rest of the world. There is also noticeable evidence that the Chinese government is aware of the problem and taking action on, for example approving the RFID spectrums. So far, the Chinese logistics information system that can support the RFID is still smaller than the U. S., even with that, Walmart should not back down in pushing the RFID technology to rest of the Chinese manufactures. We have to remember, what happened from the 100 supplies in the U. S. will happen to the Chinese suppliers. The adaption rate is slow and painful, but Walmart will get there.

**References:**

1. Works Cited China faces barriers in RFID adoption. (2005, 12 22).
2. Retrieved 04 25, 2011, from [www. physorg. com](http://www.physorg.com):
3. [http://www. physorg. com/news9312. html](http://www.physorg.com/news9312.html) ChinaRetailNews. com. (2008, 11 06).

4. Wal-Mart To Adopt Radio Frequency Identification On Chinese Mainland. Retrieved 04 26, 2011, from <http://www.chinaretailnews.com>:
5. <http://www.chinaretailnews.com/2008/11/06/1730-wal-mart-to-adopt-radio-frequency-identification-on-chinese-mainland/> Geography, D. o. (2011).
6. THE GEOGRAPHY OF TRANSPORT SYSTEMS. Retrieved 04 18, 2011, from Hofstra University: <http://people.hofstra.edu/geotrans/eng/ch5en/conc5en/crossdocking.html> Gu, V. (2011, 01 03).
7. Press Release. Retrieved 05 01, 2011, from isuppli: <http://www.isuppli.com/China-Electronics-Supply-Chain/News/Pages/Chinas-RFID-Market-Set-to-Double-by-2014.aspx>
8. Logistic Industry in China set for Tremendous Growth. (2011, 03 09). Retrieved 05 08, 2011, from [whattech.com](http://whattech.com)