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THE ALDO GROUP

M412: Mapping the Supply Chain | Megan Basile

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The supply chain we have studied is the map of The Aldo Group's shoe manufacturing and distribution process. The Aldo Group is headquartered in Montreal, Canada where the company was founded. The shoes we specifically followed are manufactured in China and are sold in retail stores in the United States, including its two Indianapolis locations: in the Circle Centre Mall downtown and the Castleton Mall on the North East side. The stores receive shipments weekly of new products & replenishment of existing products based on demand.

As with any retailer, the product's demand pattern is strongly influenced by seasonal factors. Most distinct is the influx in demand during the holiday season in the fall-winter, which essentially lasts from Black Friday (the day after Thanksgiving/biggest shopping day of the year) until Boxing Day (the day after Christmas). Leading up to and throughout most of this season, the stores received significantly increased shipments of new product in order to cover the increased demand. Having relatively small storefronts, Aldo does also offer a very simple ordering system with free shipping on any order placed in a store, so the stores do not tend to hold a very large amount of inventory, especially the Indianapolis stores which are both small even in comparison to most Aldo stores. Looking at the production schedule, there is also an increase in demand at the beginning of each season. As a fashion-based retailer, this allows the company to get the newest styles into the stores and keep up with evolving trends.

Each pair of shoes is packaged in an individual cardboard box made of recycled materials, as The Aldo Group is a green company. The shoes are each packaged with several sheets of special packing paper—it has the flexibility of tissue paper but is a bit thicker—stacked together and molded into a sort of rectangular shape. This is stuffed inside the shoe to keep its

shape during transportation. The boxes each then have a single sheet of tissue paper wrapped around both shoes for extra protection. The boxes also each contain an anti-mold chip stuck to the inside of the shoebox to prevent mold from growing on the leather. For transportation, these shoeboxes are packed into larger cardboard shipping boxes.

The shoes do not need to be handled specially at all. The packaging is meant to keep the shoes in impeccable condition even if they are handled more roughly. Shoes are a nonperishable product and can travel through any climate with no problems. So, besides the very low potential risk of mold (I have very rarely found mold on a shoe despite the chip), there is no concern of spoilage/perishability.

Aldo has a fully vertically integrated supply chain from design to retailer. The process begins with Aldo's in-house designers creating designs and the buyers purchasing the products that are expected to be the best fit for Aldo's target market. The shoes are then manufactured at Fei Wo Shoes Co, Ltd. in Dongguan, Guangdong Sheng, China.

Aldo's production is based on a make to stock manufacturing strategy. The shoes are not customizable; the complete product is shipped from the factory and the inventory to be sold is held in the retail stores. This inventory is also produced on a Just-in-Time basis. The stores receive shipments weekly, which is standard in the "fast fashion" industry. The product orders are also placed weekly, as needed by the buying and distribution teams at the corporate office. Order quantity varies, depending on the expected demand for the initial order of a new style, and restock orders are made as needed for the most popular but not the really trendy items, as those will go out of style quickly. The shoes are shipped from the factory as soon as they are ready; there is not a long holding period at a warehouse.

From the factory, the completed product is trucked to Aldo's China distribution center in Hong Kong. There is a minimum hold time here as the shoes are checked for quality and then sorted to be exported to other countries.

This starts with trucking the shoes to China's



http://www.seanews.com.tr/images/articles/2013_01/93705/shantou.jpg

Shantou port (right). From the port the shoes being sent to the United States are shipped out toward their next stop in Canada. For an example of the shipping schedule, one similar freight ship is departing Shantou, China on April 23, 2014 and arriving at the Port of Montreal on May 13, 2014. No issues were found in the exporting portion of the supply chain process. The cargo ship that transports the shoes from China's Shantou port to the Port of Montreal (below) has a



<http://maritime-connector.com/ship/cap-frio-9623661/>

capacity of 14,501 TEU's, which are 20-foot equivalent units. The shoes are packed into 20-foot cargo containers and then placed on the ship.



<http://pacifictycoon.files.wordpress.com/2011/08/port-montreal.jpg>

For the next stop on the supply chain, the cargo ship arrives at its final destination, the Port of Montreal (picture above) to deliver the shoes. Once the cargo ship reaches the Port of

Montreal, the shoes are loaded onto 53-foot semis, managed by a third party logistics company, Advanced Distribution who then transports the shoes to the corporate distribution center in Montreal (pictured below) which is managed by Schenker Logistics



<http://www.inboundlogistics.com/cms/article/aldo-boots-up-a-new-system/>

One problem that has slowed up the production process in the past has been importing products from China. This delay sometimes took up to 3 days. This delay was caused by a lack of notice from China coming to the Montreal distribution center regarding when orders were going to be coming in. To improve this process, the company created a system where the distribution center in Montreal would receive advance shipping notices from China. Through this improved communication, the ASN's served to alert the distribution center as to when orders would be coming in & allow it time to prepare. The installation of this system even gives stores the ability to track orders all the way back to china.

A few years ago the distribution center in Montreal held enough inventory to supply 600 stores. Today the distribution center can supply up to 850 stores. The distribution center is mostly automated with a 464-chute tit tray and almost 12 miles worth of conveyers throughout the distribution center. The center is 2 levels has 58 shipping docks and is approximately 1,000,000 square feet combined on both levels. The automated system and the implementation of advance shipping notices have allowed Aldo to cut production lead-time by almost 2 weeks.



<http://www.aldogroup.com/distribution-centres.html>

Next, trucks leave the Aldo distribution center in Montreal, Canada with a 53-foot trailer full of shoes headed for the distribution center in Hebron, Kentucky—managed by Advanced Distribution. The type of dry van trailer

that would transport the shoes into the United States has 3,975 cubic feet of capacity. Assuming

that the shipping boxes are approximately 24 cubic feet, the trailer would haul 165 shipping boxes or 1,980 pairs of shoes. The picture of the truck below is what would be used to bring the shoes into the United States.

The trucks come into the United States via the Thousand Islands Bridge in New York (right). Once the trucks cross the border into New York, they travel down along Lake Erie and Lake Huron through Cincinnati, Ohio and to Hebron, Kentucky. The picture below is the Thousand Islands Bridge in Alexandria Bay in New York. The toll for a semi-truck and trailer to cross into the United States is \$11.



<http://www.tibrige.com/study/>



<http://www.trucksmarketsales.com>

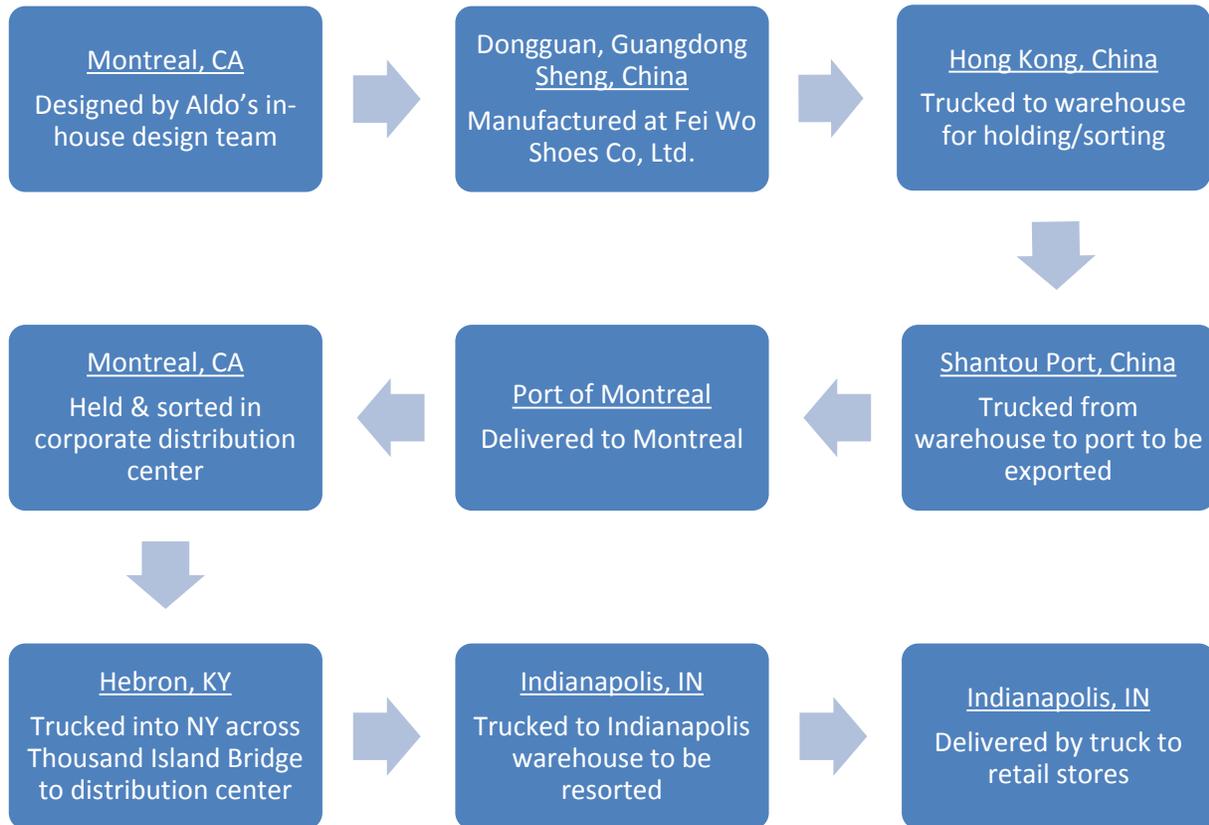
Once the shoes are in the Advanced Distribution warehouse in Kentucky, they are then reloaded onto another trailer and taken to the Advanced Distribution warehouse in Indianapolis. Once the shoes are ready to be distributed to retail stores, they are transported by 28-foot box trucks. The shipping cost to Aldo is based on the weight of the items per pound. The box truck pictured below (left) represents the type of truck used to transport the shoes from the warehouse in Indianapolis to the two Aldo stores in Indianapolis every Tuesday.

Once the shoes are delivered to the store, they are stored in a stock room until they are purchased by a customer in-store or packaged by store team members and shipped out to fulfill customer orders placed online or in other stores. The shoes are organized by type, style name,

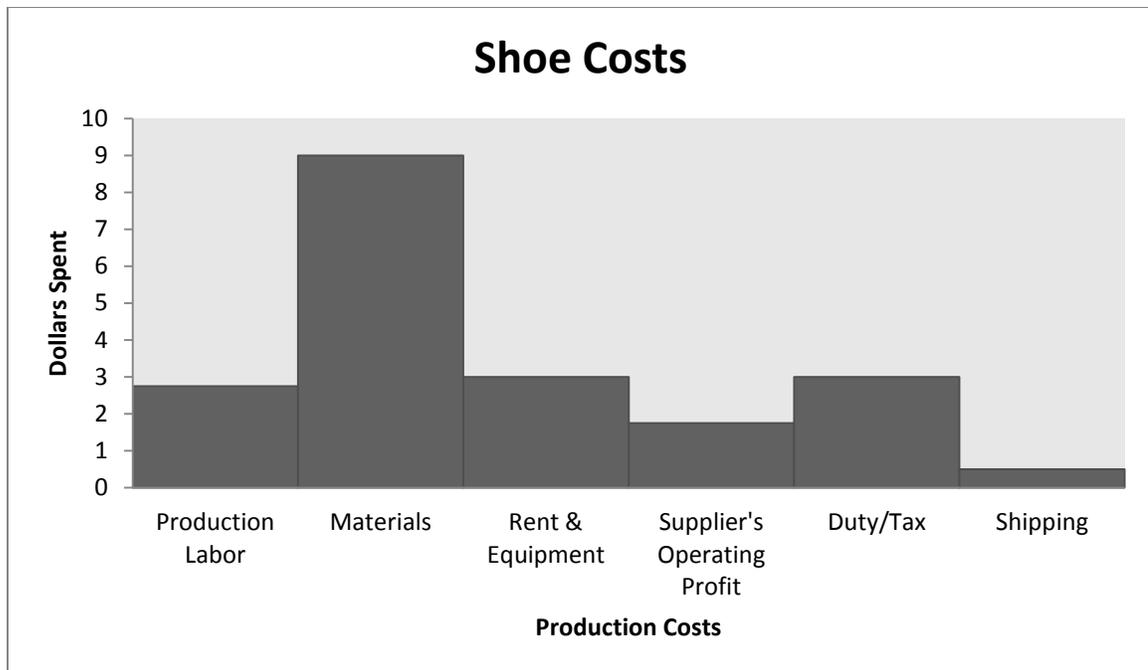
color and size so that the workers can easily find the shoes in the stock room. The pictures below show the set-up of the stock room in the Aldo shoe store in the Castleton Square Mall and an example of the label on one of the shoe boxes which shows the staff where to place the merchandise.



Following is the supply chain map we created:



We were unable to obtain actual cost data from the company. However, as an approximation, we researched and found the following graph showing costs in the shoe industry which we believe would be reasonably comparable to the costs that Aldo incurs:



Graph source: "The Making of the Shoe"

Aldo's supply chain is a very efficient system that has recently undergone major changes and improvements. With Aldo operating in fast fashion they have short lead times in comparison with much of the retail industry. After the introduction of new technology in 2004, the company was able to cut two weeks off lead times. Since then they have continued to decrease lead times by about 14% every year. The company recently received a Progressive Manufacturing award for Supply Network Mastery. Our only recommendation for the company concerning improvement of the supply chain is for them to consider making shipments directly from China to the U.S. With the current supply chain taking the shoes to Canada before coming into the U.S., it creates longer lead times and possible delays through customs. The company already operates a distribution center in North Carolina, which could be used to process and sort the shoes that need to be delivered to retail stores in the U.S. Implementing this change could help to make their supply chain even more efficient.

Works Cited

"The Making of the Shoe." *The Making of the Shoe*. N.p., n.d. Web. 08 May 2014.