Levinson, Marc – The Box

Princeton University Press, *2016 (2nd ed), [Business]* Grade ★★★★

If you haven't spent much time thinking about shipping containers you should reconsider – they have revolutionized the world, as we know it. The "boxes" as they are called in the shipping industry are the building blocks of globalization. Economist Marc Levinson writes the autobiography of the box and by this vividly brings to life the phenomenon of containerization that is crucial for anything from e-commerce and just-in-time supply chains as well as trafficking and arms smuggling – very few containers are ever inspected.

The story of the box is to a large extent the story of US entrepreneur Malcom McLean. The trucking company owner McLean operating in a very regulated US 1950's environment realizes that it is would be cheaper to load a number of truck trailers on a ship, transport them along the US east coast and have new trucks picking up the trailers for the last mile of transport. Further, if the frames and the wheels were to be removed, the square trailer bodies could be stacked on top of each other. In 1956 McLean's containership Ideal-X makes its virgin journey between New Jersey and Huston carrying 58 boxes. What followed is a change that started out slow but over time gained momentum and turned into an avalanche. Along this journey no one had the overview to understand the full picture or really saw the secondary consequences. Plenty of mistakes were made but in the end economics won out. Sea freight shifted from loading, stuffing, unloading, reloading of thousands of loose items using general purpose ships and massive amounts of manpower to an automated seamless flow of anonymous steel boxes over trains, trucks and ships that all were purpose-built to handle same-size containers. Instead of being separate businesses, trains, trucks and ships are in the same business – transporting cargo.

As a result of the standardization and specialization freight costs today are a negligible part of most products' manufacturing cost, production chains have moved from being local to being global meshes where components from all over the world are shipped to a manufacturing site and the finished product again is sold anywhere in the world. Sourcing became global, competition did the same and while some companies adjusted others didn't. With foresight enough to invest in large container ports, the containerization allowed East Asia with low labor costs to enter the global economy creating the largest wealth increase the world history has ever seen.

Shipping turned from a sleepy, locally regulated industry into a scale driven, high fixed cost, global commodity business where the lowest cost producer, in terms of the cost of transporting a box a certain distance, who can offer lower rates attracts more volumes, which in turn generates higher profits to invest further into larger ships that lowers the cost per box further. For each generation the ships grew larger and ports had to grow in parallel. To maximize the utilization of the giant vessels, unloading and loading is now so fast that the crew almost hasn't time to leave the ship. And since ports have moved out of urban areas to giant transport hubs there wouldn't be much to experience anyway. About 50% of all containers pass just 20 ports globally.

Levinson builds his story around McLean but skillfully blends earlier and later history into the narrative to explain how freight transport has changed. Further, the repercussions for adjacent businesses, waterfront neighborhoods, global trade and even the general industrial manufacturing process come to life. My only minor complaint is the length of the book. The second edition pocket certainly looks like a box in itself and while I don't mind lengthy texts per se, some topics do get repeated here and there.

A prosaic metal box can be a disruptive technology. I gained a container load of knowledge from Levinson's mighty tail. If you want to understand how the world works this is an important book to have read. It doesn't hurt that it's a good read as well.

Mats Larsson, June 28, 2017