

Hannah Granneman '08
Trip: Japan
Idea: Better hand dryers.

In Japan, many of the public bathrooms had wall-mounted air hand dryers that were significantly better than those used in the US. First, hands were inserted down between two powerful streams of air from small holes. Air began flowing automatically when hands were inserted. Drying was fast because the air blowing was powerful and came from both sides. Since hands are flat, more surface area of the hand is covered. One pass would dry them completely. The air was cool, not hot. The water was blown off by the air streams and captured by the trough on the bottom. View the picture of Mitsubishi's [Jet Towel Model](#).

Air hand dryers used in the US now are slow and ineffective at drying hands completely during use. A US dryer has a 30-second¹ cycle, blowing at 4.35 m³ (2)² and works by evaporating the water. On no-touch machines, the sensors on US machines are difficult to locate and often turn off during use. This is not a problem on the Japanese machines, perhaps because the sensors are better placed and better designed. In the US, using machines that require a push of a button somewhat defeats the purpose of using a more sanitary device. The Japanese-style dryers may be more energy efficient because of the cold air used, but that may be offset by the more powerful air jets. Mitsubishi estimates costs at \$.0002 per use³. Businesses may claim that customers won't like the cool air or that they are less vandal-proof than the current models in use in the US. These dryers may also be more expensive, at least until there is wide adoption in the US. (Prices available at several websites showed US models for high volume use ranged from \$250 to \$600. Price for the Japanese models was not available.)

This hand dryer was typical of many products we encountered in Japan – an everyday, widely used and distributed item that was *just better* than we have in the US. Products were easier to use, more aesthetically pleasing, smaller, and more efficient at helping the user complete the task they were trying to accomplish. Japan's superior design skills are widely recognized, but what is it about Japan and Japanese product development that yields better products? Are the standards of product developers or customers higher than in the US, therefore driving superior design? In looking at the websites of US hand dryer makers, I only saw the slow, hot, evaporation style machines. Are US manufacturers in this industry not looking to innovate or has the high-speed, low-temperature design been tried and dismissed? This hand dryer made me interested in the structures and processes behind product design in the US and why we are seemingly behind Japan. Reasons might have to do with the homogeneity of the Japanese marketplace making products easier to introduce, how the government healthcare system combined with a lifetime employment system might give companies more leeway to spend more time on R&D or it might be the more culturally ingrained practice of *kaizen*, or continuous improvement.

As I plan to work in the theater industry, an industry that is very set in its ways, this hand dryer made me think about the structure, processes and leadership required at a company for it to capture the customer's attention and differentiate in the market.

¹ Excel Dryer, Inc. website: <http://www.exceldryer.com/products/lexan.asp>

² Speed of Nova 4 model dryer for high-volume use. Source: Nova Dryer website: <http://www.novadryer.com/airforce.html>

³ Mitsubishi website: <http://www.mitsubishijettowel.com/overview/costSavings/>