

As technology has advanced, the place for electronic design, engineering, and manufacturing in the global community has greatly grown. This industry, which hardly existed a few decades ago has grown to the point where by 2020 it is expected to be worth three trillion dollars (1). While America is great and very well advanced in technology, it is still only a small part of the world, and the market for electronic sales. "Asia Pacific was the largest region in the electrical and electronics manufacturing market in 2017, accounting for around 55% market share. North America was the second largest region accounting for around 17% market share "(2). Thus, the interest in the global market is evident.

Interacting in the global market does not come without problems. Venture Outsource presented four potential problems with working in a global economy: communication issues, cultural issues, difficulty in building a good team, and legal complexities (3). While these problems are very real, they are not without solutions. These problems are not new, neither are they unique to the electronics industry. Thus, those with experience in overcoming these issues could be consulted in view of any difficult situations.

My vision of electronic design, engineering, and manufacturing in the global economy is that it could have a very positive impact on the world. I spent 2 years of my life living in French Polynesia. While any technology designed or sold in America could be bought there, the general population cannot afford these technologies because of their high price. As the global market for electronics develops, and as more countries become involved in these projects, then it will become easier to transport product because of the increase of manufacturing plants in locations other than America. As a result, a larger customer pool will then be available to a company's products. Which will in turn will lead to an increase of sales. There will be other positive impacts as well, such as the increase of local interest in the development and production of electronics. During my time in French Polynesia I learned that many youths of that country have little to no interest in science, technology, engineering, or math. Their highest aspirations are often geared more towards that which their parents do, construction, farming, or fishing. While these professions provide a sustainable income for a family, they rarely provide enough cash inflow to support a child's higher education. The lack of income discourages parents from even wanting their children to attend any educational institute beyond college. I believe that an increase in the electronics industry in a country like this would first, provide more job opportunities for locals, and second would help students have a higher interest in science, technology, engineering, and math centered careers. This interest would lead to higher income jobs so that the youth of countries like French Polynesia would be able to move past doing what their parents have always done into doing what they have dreamed about doing. Thus, the increase of the electronics industry on a global scale would have a positive impact on the business through a larger customer pool, and on the population as well.

My personal experience with manufacturing has taught me that the value that upgrading a machine would bring, rarely outweighs the cost of purchasing the new machine. Other than the initial cost, there would also need to be time spent training the machine operator and machine mechanics how to operate and fix the new machine. The company would rather run an old machine until it dies than pay to upgrade it. As the global market grows for the electronics industry, these companies would be able to better see the impact of having high quality machinery and electronic interface systems. My vision is that this would encourage and persuade companies running older machines to more profoundly consider upgrading a better system. Which in turn would increase sales for the electronics industry.

Regarding entrepreneurial ideas, there arises the problem of the expense related to expanding one's business outside of the United States. There would need to be extensive research done and preparations made. One idea to assist with this cost would be to seek foreign investors from the country where one plans to develop a business. Those originating from a foreign country who could see the potential good for their own country through the growth of electronics industry may be more willing to invest than investors in America whose main motivation would be simply making a profit. My management style would include working closer with the managers of foreign teams. In thinking of hiring managers, I would be more inclined to choose a foreigner who speaks English in order to ensure good communication between the main corporation and the foreign entity. This local manager, once they understand clearly company goals and procedures, would easily be able to explain such to other foreign workers. This would then lower the need to speak and understand the English language in order to work for the company. Which in turn would lower hiring and employment costs. Thus, a positive boost would be given to the foreign company by providing jobs and income for members of their country.

In conclusion, there are many steps and pieces to consider regarding working in the global economy, including potential problems, impacts on others, as well as management styles. This is my vision of electronic design, engineering, and manufacturing in the global economy based on experience and what I learned through the below mentioned sources.

Sources:

1. <https://blog.marketresearch.com/top-5-trends-in-the-electronics-industry>
2. <https://www.businesswire.com/news/home/20180219005646/en/Electrical-Electronics-Manufacturing-Market-Global-Briefing-2018>
3. <https://www.ventureoutsource.com/contract-manufacturing/benchmarks-best-practices/program-project-management/managing-electronics-manufacturing-projects-in-a-glo>