

The Ohio State University
Dept. Electrical and Computer Engineering

ECE 3080/7080 Ethics in Electrical and Computer Engineering

Final Project: Issues in International Engineering

Background Information:

You work for the company EETECHInc which has been focusing on the US market for many years and is doing quite well. The primary product of the company is computer automation of the manufacturing of rubber and plastic parts for automobiles, but recently they have also been developing automation methods for tires for special automobiles (e.g., electric or hybrid-electric vehicles). Your CEO has decided that the company must now pursue the international market in the following way:

- Develop manufacturing facilities in Asia, Africa, and Latin America
- Become suppliers for non-US based automobile manufacturers.
- Develop engineering centers of excellence in Asia, Africa, and Latin America

The CEO is also looking for ideas on how this expansion into the global economy should take place.

There are a multitude of issues that arise in ethics and professionalism when a company seeks to make itself truly international. Since the CEO has done some initial studies into feasibility of this project, including obtaining advice from some of her trusted colleagues, she has some concerns about the following:

- Cultural differences (e.g., how management teams should be structured)
- Safety laws for products (e.g., in some countries there seem to be no laws, or laws that disagree with US laws, so which laws should be used?)
- Working conditions (e.g., in the manufacturing facilities)
- Pay equity (e.g., how much should persons working on the manufacturing line be paid?)
- Child labor (e.g., what should the minimum age of workers be?)
- Pollution laws (e.g., she has indications that local officials will be very lax about certain laws if she will locate the company there)
- Language (e.g., should she require all US-based engineers who will help the new engineering and manufacturing centers get started to learn the local language?)
- Suppliers/bribes (e.g., it seem that bribes are a normal part of business in some countries; should this be adopted as standard company practice?)

- Community support (e.g., in the US, large companies often support the community with charitable contributions; should the company support this practice in other countries and to what extent?)

Assignment: Team to Compose Company Policy

Your company is seeking to set policy on the sorts of issues that were discussed in the last section (these issues were specified in a brainstorming session conducted by the CEO). You have been assigned to a team (2-4 people) that will analyze the professional and ethical aspects of turning your company into an international corporation. Use the above list only as a guideline; you may also specify other issues that you feel will become important. (i) Summarize the main ideas from the textbook on these issues, (ii) Write a concise company policy on each issue, (iii) Write a company policy on whistle-blowing procedures for these issues.

Due Date: Last day of class, at the beginning of class.