

*LEGO Mindstorm Inc.* is a manufacturing company that builds the latest and greatest products out of LEGO components. The company is known far and wide as a leader in new product development and is a technological leader in manufacturing. They pride themselves on their use of Industrial and Manufacturing Engineering concepts to produce the highest quality products, and to do so in a timely manner.

Recently *LEGO Mindstorm* has been having trouble living up to their high standards. They have taken on several new projects for customers that they are struggling to develop and produce. What they have discovered is that the products are too complex to make in a timely fashion, and the cost to manufacture them is too high. *LEGO Mindstorm* is having trouble making a profit on these products.

In order to remedy the situation, and restore quality and profitability to the company, *LEGO Mindstorm* has turned to your group to use your industrial and manufacturing engineering experience and knowledge to improve the new products development. You will look at the whole production of your product and see what areas there are for improvement. Once you have a plan to improve the product design or manufacturing, you will implement this improvement and compare and contrast the results. Your goal is to increase the amount of products that *LEGO Mindstorm* can make in the given amount of time. Secondly, your team will work to make the products as simple as possible in order to reduce cost and manufacturing time.

