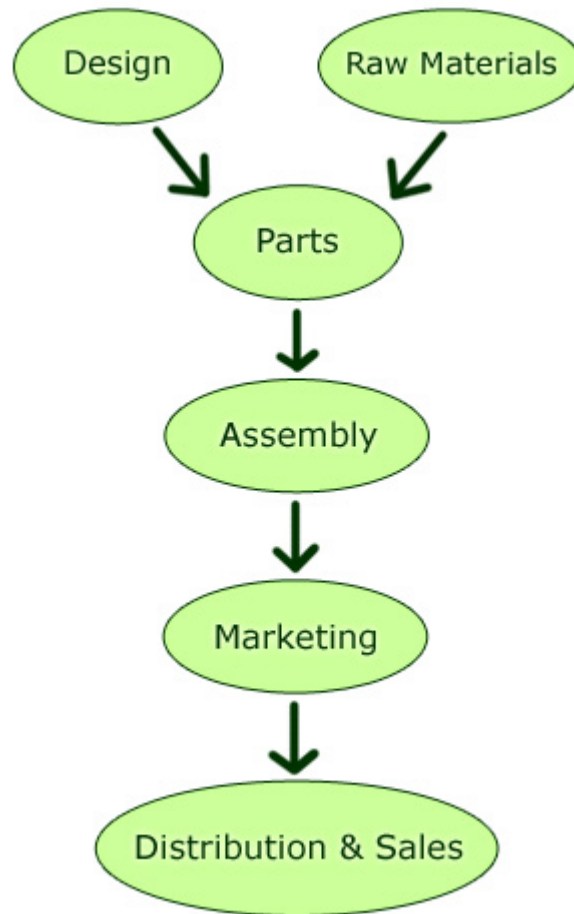


The Automotive Supply Chain



Design (High Value Added) - After researching consumer wants and needs, automakers begin designing models which are tailored to the public demand. In the past, this design process has taken up to five years. Today, however, through the extensive use of computers, it is possible to develop prototypes, or "concept cars," from sketches in less than a year.

Raw Materials (Low Value Added) - These include rubber, glass, steel, plastic, and aluminum. Over the past few years, the cost of raw materials has increased significantly, mostly due to the price increase of oil and natural rubber. Also, companies are now using aluminum and plastic in place of steel whenever possible in order to lessen the weight of the automobiles, which in turn improves fuel efficiency.

Parts (Medium Value Added) - Tires, windshields, and air bags are examples of parts. While the automobile industry as a whole has become more consolidated, the U.S. auto parts sector remains highly fragmented. It includes four primary sub-categories: original equipment manufacturers (Delphi and General Electric), replacement parts manufacturing (Cooper Tire and Rubber and Federal-Mogul), replacement parts distribution (NAPA), and rubber fabricating (Goodyear and Cooper).

Assembly (Medium Value Added)- Due to the combination of rising raw materials' costs and consumers' eternal search for the lowest price, companies are looking for ways to cut costs out of the manufacturing process. Recent trends to reduce costs include using fewer parts in each vehicle component, minimizing industrial waste and pollution, and having parts delivered to assembly plants on a just-in-time basis.

Marketing (High Value Added) - Marketing is an integral part of the value chain, since it is the primary basis for consumers' perceived values. Automakers and individual dealers work together to create national, regional, and local marketing strategies. These may include television and radio advertising or special incentives offered to customers. In addition, firms have started advertising more online. GM, for example, spent 67% more on online advertising in 2005 than it did in the previous year.

Distribution and Sales (High Value Added) - After production is complete, automobiles are shipped to dealerships around the world to be sold. As mentioned previously, dealers may offer incentives to increase sales.