

(18) Manufacturing of the future

- o Sidebar:
 - s “Altogether, there are no more service industries in the traditional sense.
 - s There are only production industries.
 - s And to the extent that they apply principles of production that traditionally were considered manufacturing, they become competitive and successful.” Peter Drucker
 - o For manufacturing executives, Drucker’s The Emerging Theory of Manufacturing (Harvard Business Review, May-June 1990) is particularly notable.
 - s “Statistical Quality Control is changing the social organization of the factory.
 - s The new manufacturing accounting lets us make production decisions as business decisions.
 - s The ‘flotilla,’ or module, organization of the manufacturing process promises to combine the advantages of standardization and flexibility.
 - s Finally, the systems approach embeds the physical process of making things, that is, manufacturing, in the economic process of business, that is, the business of creating value.”
 - o Article highlights
 - s If we redefine manufacturing as “the systematic process of production,” manufacturing is indeed the most important part of any world-class economy.
 - s The most important technical change in the last 30 or 40 years is that of the process of production, first developed in traditional manufacturing and now embracing more and more of the economy.
 - s It is becoming the process of production.
 - s It does not necessarily produce goods.
 - s But the new “goods”—goods still usually classified as “services”—increasingly are being organized on the principles of production that were first developed in manufacturing.
 - s One example is economic-chain accounting, which is rapidly coming in, and which enables an enterprise to see the total costs and their yields throughout the entire economic process from supplier to ultimate consumer.
- i Traditional accounting still is based on the legal entity, the “firm.”
 - i But even General Motors, at the peak of its power around 1970 when it produced about 70% of everything that went into a GM car, accounted for no more than one-tenth of what the ultimate consumer paid for the finished car.
 - i This is being changed rapidly as economic-chain accounting enables an enterprise to know the entire cost stream from supplier until ultimate consumer (and perhaps even until the car is scrapped), and to move costs to where they produce the most yield.
 - s In his 1912 testimony before the U.S. Congress, Frederick W. Taylor said that the Mayo Clinic was the one example of systematic scientific management.
 - s Altogether, the greatest impact on manufacturing industries has been that the power has shifted to distributors and retailers.