

ICT in Manufacture

Information technology has had a massive effect on manufacture over the past decades making job losses bigger and creating new jobs for machines giving manufacturing company manager's easier jobs than before.

In the early fifties manufacturing companies made items such as cars and stereo systems would have been made by hand by a large group of people. These people would have a different workstation with several people working on one aspect of the item. All these would have had to have the same qualifications to do this part.

For now let's take something easy like the making of dolls like action man and Barbie. A conveyor belt would go across with one item to begin with and along the conveyor belt sat workers. These workers would each have a part that they would add to the doll as it went past them. And at the end the doll would have been made fitted with all limbs and clothes. One problem with this system was that when everyone had a tea break and lunch break at the same time stopping the line of manufacture and making hard for the workers to stick to a tight schedule.

Now this problem has been solved because machines do all the work. There are no conveyor belts or rows of workers needed. The machines do all of the work. The few people you may find are those with clipboards walking around the machines monitoring how they are working. So with this new system when people have to take breaks there is no need for these machines to stop they just keep on working till the end of the day. One small problem with this system is that if one of the major components of a machine breaks down then you would have to shut down all the other machines so that the one that is broken can be fixed. This would result in a couple of hours lost for making the product. When these sort of manufacturing companies invested in computer technology to make their dolls not many jobs were lost. But when car companies started employing machines to make their cars instead of people less jobs were needed in that industry. Both the making and the designing of cars have changed via the use ICT.

In the designing department drawings were made by hand and tests for aerodynamics and crashes were done in a special arena. But now ICT has changed all that. Drawings are made by computer with a special programme that reads the dimensions and put makes it out to be the shape of the car. With these dimensions they can then run simulations for aerodynamics and crashes and see if it scientifically possible to build the car.

Down in the production unit of the car manufacturers people use to stand in big groups making parts for cars and adjusting them, parts such as body kits, engines and the main body. These people didn't have to really be qualified they just had to be trained in how to do the job at a certain workstation. So when machines were introduced in how to do these jobs many people were left unemployed and with no qualifications. This made it harder for them to get more jobs. Companies can also take as much of the blame as ICT. If the car manufacturers were willing to pay out a bit more money on training, their existing workers how to use and control these machines then they wouldn't have to cut down on workers. They also would leave several hundred workers readily employable with qualifications if they needed to be re-employed.

The majority of car companies failed to do this, keeping the younger employees and firing the employees that had been there quite long and leaving in a position where some of them couldn't provide food for their families. Therefore ICT in manufacture has had a positive and negative effect on places all around the world.