## Research and development – business studies 13939

Technology, Computer



Research and development is an important process for business today.

Consumers needs and wants are always changing and so it is vital for the business to meet these demands with R&D to hopefully exceed customer expectations. It is also important for businesses to keep with advances such and technological and medical. Otherwise they will be left behind in the competition.

As before, R&D is very important and relies on market research information. After the research the company has to have good confidence that the product is fit for sale before they produce it. If not, they will lose money due to the large cost of production. The product specifications vary depending on consumer needs, wants and competition from other firms. For example Sony have released the smallest minidisc in the world which creates competition and also covers the consumers wants/needs.

Improving the operational processes, developing new ones and developing new/improved products are part of the research and development commercial function. R&D should be looking at two areas, which are to:

- A) Take as much care for the environment as possible.
- B) Make use of materials in the most efficient way.

By doing this they must calculate their costs and make sure they can do the above without getting into debts from the costs they produce. The businesses labs keep links between the universities so that they can exchange research findings which they may be able to put into practise by

incorporating the new technology in their products possibly to create something innovative. It also can save time and unwanted investment.

R&D must consider factors outside it s research department in the external environment. When designing a product the designers must look into the legal requirements of their product and see whether or not they comply. Not only may that put the company at risk of receiving a court case but also give the company a bad reputation, which may lead to decreasing sales figures. Also Safety regulations must be considered or the same thing could happen as stated before.

Apart from all the factors mentioned above the main factor that research and development relies on is budget. Depending on how much money the business can afford to invest in research and development depends on the company. For example it may not be able to afford much, it may have a rapidly changing market, it may already be advanced and a leader in its market, or it may need a change of direction. Whatever it is the main generalisation is The more capital Invested the more successful the final product will be . Statistics show that around 2-5% of revenue is around the average figure that companies should be investing into research and development whereas 10% is seen as high.

Intel have major research and development in creating faster and more efficient micro-processors. They already have a prototype 2Ghz (2000Mhz) processor but for their own interest will not release it now so that they can milk the market. Intel release processors in stages because when a new processor is out they know that everyone wants a faster one so they will wait

until they have creamed out as much sales revenue from that product until they release the next. And as they have used heavy research and development they can be a major competitor in the market place. The reason being that if another company releases a new processor which is faster than that of Intel s then Intel can strike back by releasing an even faster one.

Research and development plays a big role in the survival of the business. It helps a product to sell and make profit which therefore aids the survival of the business. Businesses must be aware that research and development is very important and must carry it out if it wants to be pro-active.