

When a product is no longer of use, it must be disposed of and replaced. Obsolescence is a term used to explain this process. A product is considered obsolete when it is replaced by a new product which, in many cases will perform the same function is the original. The term can also be used to describe when an entire technology is replaced by a new and more effective one. For example vinyl records being replaced by CD’s, falling into disuse or becoming out of date. It can describe a situation when a service or product is not wanted any longer. This may be despite the service or product being in perfect working order. There are many categories of obsolescence. This article will be addressing the following:-

1. Planned Obsolescence, 2. Perceived obsolescence, 3. Functional Obsolescence

**Planned obsolescence**

Planned and Perceived Obsolescence. Some industries, such as the mobile phone industry, rely on obsolescence to maintain sales and their position in the market place. Planned obsolescence, (sometimes known as Built-in obsolescence) refers to products which have been designed to fail within a given period of time. Planned obsolescence is incorporated into the product at the time of designing and may involve designing products which cannot be repaired or have components replaced as well as deliberately incorporating components with a specific life span. This is usually a shortened life span. The product is designed to last long enough to develop a customer’s lasting need. The product is also designed to convince the customer that the product is a quality product, even though it eventually needs replacing. In this way, when the product fails, the customer will want to buy another, up to date version.

Take for example a washing machine. Planned obsolescence means that the washing machine is designed to last about three years, before it breaks down outside the guarantee time. Most of the parts have been manufactured from quality materials with the exception of some vital parts. Two years after purchase, the washing machine will only need minor inexpensive repairs. However, between 4 to 5 years the vitals parts begin to wear out and a replacement machine is required. For planned obsolescence to work, the customer must feel that he or she has had value for money. Furthermore, they must have enough confidence in the manufacturer, to replace the original washing
machine with the modern equivalent
machine, from the same manufacturer.

Planned obsolescence is sometimes
designed into a product, in order to
encourage the customer to buy the next
upgrade. A good example of this is a
mobile phone. Mobile phones are
often designed with only current
technology in mind, despite the
manufacturers knowledge of future
technological developments. For
instance, a mobile phone may have
USB / connections / jack plugs, that
fit current products, such as head phones and computers. This means that the phone is not
future proof. The manufacturer may already be working on updated phones, that connect using
different sizes of USB ports or connections. Although the current phone can be upgraded with software,
eventually the ‘old’ connections and jack plugs will make the product obsolete. The customer will need a
new phone, even though there may be nothing wrong with the device. The old phone becomes obsolete.

Designers following the philosophy of ‘Built In Obsolescence’, ask themselves, ‘how can a product be
designed so that it breaks down quite quickly, but it still leaves customer confidence in the product and
manufacturer intact’.

Planned obsolescence can be regarded as bad for the environment, because it leads to products being
‘dumped’ by customers, so that new updated products can be acquired. The quandary that good designers
face, is to design desirable products, with components and parts that can be recycle or reused, when the
product is thrown away, by fashion or style conscious consumers.

Planned obsolescence is sometimes deliberately and openly built into products for safety reasons. Use by
dates and Sell by dates on foods, are a guide to both the retailer and customer, highlighting when a food
product is safe to eat and at its best.
Further examples are disposable cutlery and soft drinks bottles, which are manufactured cheaply and
designed to be used once or twice. These products are sometimes manufactured from biodegradable
polylactide (PLA), which can be thrown away and yet is safe for the environment.

Perceived obsolescence

Perceived Obsolescence is when a customer is convinced, that they need an updated product, even though
the existing product is working well.

This is often based on style rather than functionality. For example, we can use the mobile phone again.
Philip Schiller, Apple's senior vice president of Worldwide Product Marketing, speaks about the iPhone 4S
at Apple headquarters in CupertinoA simple mobile phone, with keys and buttons may be perfect for most
customers. However, with the advent of the smart phone and touch screen phones, phone manufacturers
have had to persuade phone users, that their old phones are out of date.
Advertising is used constantly by manufacturers, to persuade potential customers that their existing product is out of date, old fashioned and lacks style and functionality. Key to the success of perceived obsolescence, is the customers perception of himself. The role advertising plays, is to persuade a potential customer, to purchase a new product. Potential customers sometimes perceive that their existing gadget makes them look ‘uncool’, old fashioned and out of touch with modern trends. Successful advertising leads to the customer replacing the existing product and buying the new up dated version.

Another good example of perceived obsolescence is a football shirt, for a supporter. Professional football clubs change their design in subtle ways, in time for the new season. The colour scheme remains the same. This puts pressure on many supporters, as they do not wish to be seen in last seasons shirt. The perception is that a supporter in the old shirt, is a less committed supporter, than one in the new shirt. Also, wearing a shirt that is out of date, could be embarrassing in a crowd of supporters wearing the new version. Subtle pressure is applied, so that the supporter buys the new shirt, which may be only slightly different from last seasons. The car industry uses advertising to promote new updated models. Updated models are often restyled, in order that they have increased visual appeal. Manufacturers have the advantage of asking existing customers, what they would like to see changed or updated in a new model. This reinforces perceived obsolescence. Once a new model is launched, the older model looks dated.

**Functional Obsolescence**

The term Functional Obsolescence refers to products that do not function in the way they did when they were first made. This term could be used for a product, system or environment. An example of this is the move from analogue television signals to digital. When the Analogue broadcast system was switched off, any product relying on this signal became unusable in the form for which it was initially intended. These older television sets required new technology to be integrated for it to continue to receive television broadcast signals. The television sets still functioned as a playback device such as to view movies through a DVD/ Blu Ray or VHS player.

**Want to investigate this topic further?**

Did you know that the lifetime of light bulbs once used to last for more than 2500 hours and was reduced on purpose to just 1000 hours? Did you know that nylon stockings once used to be that stable that you could even use them as tow rope for cars and its quality was reduced just to make sure that you will soon need a new one? Did you know that you might have a tiny little chip inside your printer that was just placed there so that your device will break after a predefined number of printed pages thereby assuring that you buy a
new one? Did you know that Apple originally did not intend to offer any battery exchange service for their iPods/iPhones/iPads just to enable you to continuously contribute to the growth of this corporation?

This strategy was maybe first thought through already in the 19th century and later on for example motivated by Bernhard London in 1932 in his paper Ending the Depression Through Planned Obsolescence. The intentional design and manufacturing of products with a limited lifespan to assure repeated purchases is denoted as planned/programmed obsolescence and we are all or at least most of us upright and thoroughly participating in this doubtful endeavour. Or did you not recently think about buying a new mobile phone / computer / car / clothes / because your old one unexpectedly died or just because of this very cool new feature that you oh so badly need?

Video documentary
https://archive.org/details/PlannedObsolescenceDocumentary

Youtube Video
https://www.youtube.com/watch?v=KjTq5BnbxN0

Reference - http://www.tasstudent.com/what-is-obsolescence/

Download a digital copy of this worksheet at http://goo.gl/g7nP51