

EPSRC NETWORK ON PRODUCT LIFE SPANS

THE THROWAWAY SOCIETY: ORIGINS, CAUSES AND CONSEQUENCES

Seminar organised by Centre for Sustainable Consumption
Sheffield Hallam University

Sheffield, 18th March 2008

Proceedings from the workshop session

This final event brought together leading thinkers on issues relating to product life spans from a range of disciplines. Integral to the event was a workshop session in which participants worked in four groups of around fifteen people to develop prototypes for a series of short case studies on product life spans for potential use on a new *Productlife* wikispace web-site. The aims of the case studies were (1) to identify good practice and consider whether the underlying principles could be replicated with other types of product and (2) to identify bad practice and consider possible ways of improving the situation.

WORKSHOP SESSION - LIFESPAN ANECDOTES: GOOD AND BAD PRACTICE

Participants in the groups were asked to propose examples of products that

- demonstrate good practice (i.e. designed to have long life spans) and may suggest possible solutions
- demonstrate bad practice (i.e. tend to have short life spans) and thereby reveal some of the causes of our throwaway culture.

Each workshop group was asked to identify six examples of each and to consider different types of obsolescence - economic, technological, psychological, socio-cultural - and the role and responsibility of designers, manufacturers, marketers, policymakers, users and repairers. They were told that examples could

- be historic or contemporary
- address types of product (e.g. toasters, furniture, spectacles) or individual products (e.g. product model X made by company Y)
- be based on personal experience (either as a producer or user), academic research or other reliable sources.

The discussions provided a range of interesting examples of good and bad practice. Good practice was seen in products with intrinsic manufacturing quality (including reliability) and the use of certain design principles (simplicity, modularity, reparability, classic styles, upgradeability). Bad practice was associated with products design for low price points (or provision free of charge), high fashion, vulnerability to breakage or damage, and a failure to allow for cheap consumables (e.g. cartridges), reparability or upgradeability.

SUMMARY OF EXAMPLES OF GOOD AND BAD PRACTICE PROVIDED BY SEMINAR PARTICIPANTS

GOOD PRACTICE

Miele washing machine

- Sold with free 10 year guarantee, which signifies that the product has been designed and manufactured to be durable.
- Durability and the long guarantee justify (and offset) the high price compared to products of similar functionality.
- The business model, based on high quality, high price, longevity and lower sales could replace the dominant (unsustainable) model based on low quality, cheap price, short life span and high volume sales.

Sony television

- Good design and manufactured to a high quality standard.
- Easy to use, reliable and long lasting, with a design life in excess of 20 years.
- Lacks 'added functionality' features that are often not required by the user and may reduce reliability.

Siemens Porsche kettle

- Has a classic design which is timeless (i.e. not influenced by fashion).
- Easy to fill, pours well and includes a replaceable element.
- Has an accurate water gauge to the side of the kettle (and so does not present an obstacle when filling).
- Simplicity of technology/design and replaceable parts are an example of good practice.

Kenwood food mixer

- Simple, compact and durable.
- Rarely need repairs (i.e. reliable), creating sentimental value to owner.
- Ages well.

Dualit toaster

- Design enables easy repair work such as replaceable elements.
- Has a more durable metal casing compared to other brands of toaster.
- Brand association attracts customer loyalty and scope for developing other product ranges.

Apple iPhones

- Software to upgrade functionality is included (unlike iPods).
- Multipurpose, enabling other products to be replaced (e.g. CD or music player).
- Upgradeable.

Computer printers

- The one service unit, the cartridge, is easy to replace and allows the main unit to enjoy a long life.
- Anecdotal experience suggests that printers are generally durable.
- A downside to durability is that consumers are locked into buying cartridges from same manufacturer.

Linux computer operating system

- Open-source, easy to upgrade, and easily configured to meet user needs.
- Free and accessible to the general public.
- Other open source products / services are currently being considered.

Le Creuset kitchenware

- Inherent durability through use of cast iron.

Stainless steel cutlery

- 'Fit for purpose' and good value for money.
- Design is optimal, having evolved over time to become more simple and useful.
- A mature item, not subject to innovation or much influenced by fashion.

Bicycles

- Simple design adopted over a number of years.
- Easy to repair and spare parts usually available.
- Repair skills passed on through generations and often learned as a child.

Victorinox Swiss army knife

- Designed and manufactured to last.

Furniture

- Good quality furniture may be handed down between generations and acquire sentimental value.
- Furniture can be adaptable through modular designs.

High street clothing

- Retailer Marks & Spencer's clothing is both long lasting and fashionable.
- Manufacturers such as Howies and Fatface produce durable clothes.

Boilers

- Capable of undergoing diagnostic testing, and designed for disassembly.

Musical instruments

- Inherent durability, with value that is based on performance quality.

Propelling pencils

- Flexible design and consistent quality.

Shoes

- Traditional leather shoes are durable due to classic designs and reparability (e.g. Grensons).

Ford Fiesta cars

- Low cost of ownership and ease of repair (linked to simple design) prolong life span (i.e. good example of life cycle costing).

Volvo estate cars

- Solid build quality.

Volkswagen cars

- Classic, durable style.

Footnote: As a workshop summary, the above table merely records the opinions of individuals and group discussion. The examples provided are not intended to be either definitive or exhaustive.

BAD PRACTICE

Biro pens

- Have very short life spans.
- Cheap, usually bought in bulk and often treated as disposable (e.g. conference giveaway).
- Could be made of more durable plastic (i.e. PET as opposed to polystyrene) and have replaceable cartridges.

Clothing sold by discount retailers and supermarkets

- Clothes sold in discount stores such as Primark are often not made from durable fabric / materials.
- Many items have short life spans.
- Prices are so low that consumers seduced into buying unnecessary products, treating clothes as disposable.
- Much cheap clothing is subject to 'fast fashion' and a second hand market that is weak.
- Quality could be improved by making design more classical and durable, which would add re-use and re-sale value.
- Potential exists to increase average price of supermarket clothes, but difficult as the poor would be adversely affected.

DVD players

- Cheap price (<£25 from supermarkets) makes them a disposable item.
- Larger size than necessary, which is wasteful (also adds to freight cost).
- Liable to become obsolete due to technological advance (e.g. blu-ray and on-line download).

Printers and cartridges

- Printer units may be cheap and durable but are reliant on replaceable cartridges which are not designed for maximum efficiency (e.g. non-refillable).
- Some printers have limited guarantees (e.g. 1year) and technical support help-lines are often expensive, which acts as a disincentive to repair.
- Should be some form of standard for minimum operational life time of cartridges.

Inkjet printers

- Cheap, flimsy design means that they break easily and often have a very short life span.
- Consumables (cartridges and other parts) are expensive.
- Use and maintenance should be made easier and 'hidden' costs made visible to consumers.

Mobile phones

- Some mobile phone contracts come with a free phone or upgrade, which promotes premature disposal.

Apple iPod

- High frequency of upgrade.
- Subject to defects and breakdowns (e.g. scratched screens, incompatible files).

Laptops and personal computers

- Laptops often out of date after 18 months
- Although personal computers can be upgraded quite easily (e.g. memory), this usually requires technical knowledge to assess compatibility of parts or software / hardware.
- Inadequate information about maintenance (e.g. how to clean mouse).
- Online systems for replacement parts (e.g. eBay, Freecycle) could be encouraged more.

Microsoft computer operating system

- Requires updating after a short period.
- Expensive to obtain upgrades.

Shoes

- Increasingly subject to short life spans.
- Often not repairable (e.g. new soles).

Prison mattresses

- Health regulations stipulate that a new mattress is required for each new inmate.
- Life span of prison mattresses very short, resulting in a high volumes of waste.
- Mattresses could be designed for disinfection and subsequent re-use (i.e. sterilisation / washable).

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