The Seven Design Principles of Every New Product (Version 2.0)

We've been rewriting 'EVERY new product' based upon the feedback we have been receiving and this document represents the start of Version 2.0.

Version 2.0 includes two major changes

• reworking the title from 'EVERY new product' to 'EVERY new THING' as the principles apply to products, services and situations. We'll be reworking this website to reflect these changes over the next month.

• renaming the principles as verbs to make it easier to use the distinctions actively. That is, to speak the distinctions as if you are going to invent a new product. For example, instead of 'information' we are using the term 'inform: tell me something'. In other words, if you want to design a product the question to ask yourself is 'how are you going to inform me?' This also has the effect of sharpening our definitions and broadening and strengthening the examples and issues that each principles encompasses - more on this later.

In this edition we have also added some well known branded examples of the principles in action. Let us know what you think about our upgrade by emailing me at: geoff@designprobe.com

Thanks

Geoff McDonald

EVERY new THING

The seven new distinctions are:

inform: tell me something (formerly 'information')

electronify: make me electronic and let me do new things (no change)

discern: work it out for me (formerly 'intelligence')

displace: free me from my location (formerly 'location')

personalize: make it just for me (no change)

relate: work with me (formerly 'interactive')

virtualize: give me the effect without the effort (formerly 'virtual')



inform: tell me something

New Interpretation

inform = to give form to, to animate or give life to, to impart

Definition: Things that inform us, educate us, we can learn from or things that support us being informed (for example, information technology does not inform us in itself and through its use information is generated).

The key questions here are: "What do I want to know?' and 'How can I know this (quicker and easier)?'

Product Examples

Google = search engine website that helps you find things (search engine)

Big Brother = reality television show whereby a context is created for collecting information that is edited into a television show (reality television)

House and Garden = television show that is a mix of both entertainment and information (infotainment)

Omo Referral Line = a call centre for enquiries in how to make your clothes cleaner, (similar to the RACV roadside service without the cars!) (information service)

electronify: make me electronic and let me do new things

New Interpretation

Definition: Things that are based upon electronics.

When we translate mechanical or analogue things into electronic (eg. digital) a whole new set of opportunities are created. For example, a digital watch does not simply tell the time and date, it can also measure your pulse, be a stopwatch, a countdown timer, a calendar, etc. for a much cheaper price.

The key question here is: 'What additional features and benefits can be gained by adding electronics (operation and/or control) to this thing?'

Product Examples

Amazon = online sales of books, CDs, etc (electronic commerce that makes it possible to buy things without leaving home)

DVD (digital video disc) = a digitally recorded disc that allows the viewer greater control over the playing of the movie, eg. searching for specific scenes, as well as better picture and sound quality plus additional footage, interviews etc because of the extra space available on each disc.

Digital Camera = a camera that takes pictures that are processing and stored electronically enabling them to be viewed instantly and edited with ease.



discern: work it out for me

New Interpretation

discern = to distinguish clearly by the eye or understanding, to detect, to discriminate

discerning = discriminating, acute, having insight and understanding

discernment = power of faculty of discriminating, acuteness, insight

Definition: Things that can discriminate, make decisions or provide insight at some level and therefore work something out on my behalf. For example, at a simple level a calculator is a tool that can work out numerical answers. At a more complex level, IBM's Big Blue computer can work out how to beat a master chess player.

The key questions here are: 'What do I want to work out?' and 'How can you help me do that?'

There is a big difference here between 'inform' and 'discern'. 'Inform' is about 'knowing something that is generally already out there' whereas 'discern' works out the answer for you and ideally implements some action based upon the answer.

Product Examples

Fisher and Paykel = washing machines that use 'fuzzy logic' to determine the best way to wash your clothes.

Mozilla = an internet robot that collects data from websites to form search engine directories

Intelligent Toilet = enables faeces to be examined and provide a health report for the user

displace: free me from my location

New Interpretation

displace = to put out of place, disarrange, to remove from a state, office or dignity, to take the place of, or put something else in the place of

New Definition: free me from my location, 'Anytime, Anywhere'

Things that allow the user to operate independently of their location. For example, the smaller size and the use of batteries of laptop computers allow the user to move from desk to desk, wheras a desktop computer generally requires electrical power and is too big to put in your bag and carry with you to a new location. The push toward globalization is also driven by this pattern as the technology makes it easier to communicate across the globe.

The key question here is: 'What location do I want to be free of?'

Product Examples

CNN = global television news

Sony Walkman = portable CD and tape player that allows the user to listen to music anywhere, anytime

Duracell = batteries that allow the user to operate independently of electrical connections

Nokia = mobile phones enable you to be in communication no matter your location

IBM's Viavoice = voice recognition software that enables you to dictate to your personal computer and be free of your desk



personalize: make it just for me

New Interpretation

to make personal, for an individual human being

New Definition: make it just for me!

To personalize something is to make specially for one individual. The Industrial Age focussed on the mass production of standardized goods. Today, with computer controls and information inputs, making personalized products is the new goal. This includes the push to 'do-it-yourself' or 'self serve' which allows the user to personalize their own experience.

The key question here is: 'What would I like for my very own?'

Product Examples

Palm Pilot = personal digital assistant that enables the user to track and schedule their appointments in a pocket size electronic diary.

Black and Decker = power tools make it much easier to make things enabling everyone to become a home handyman making their own projects. Do-it-yourself is one form of personalize.

Dell Computers = design your own specifications for your new computer and track its individual progress as it is assembled and delivered.

relate: work with me

New Interpretation

relate = to recount, to narrate, tell, to ally by connexion or kindred; to have reference or relation

New Definition: work with me, change to make it easier /better for me

Whilst the user and the product or object have a relationship by definition, this takes it a step further such that the product or thing is designed to further the relationship, typically in the form of an interaction or exchange. For example, a regular door needs to be pushed or pulled to open whereas an automatic door opens in response to the user approaching it.

The key questions here are: 'What is my relationship with this thing?' and 'What benefit can I gain from enhancing this relationship?'

Product Examples

Gillette, Schick - shavers designed to place the cutting blade with the best possible contact on the changing contours of the face (the blade has a relationship to the hairs on the face - by varying the angle of contact, we can cut the hairs closer and gain a smoother shave).

Reach = toothbrushes designed to bend and flex to reach all areas of your mouth and teeth without added pressure on your gums (the bristles have a direct contact relationship with the teeth and the gums, by adding flexibility to the brush handle we soften the impact of the bristles on the gums)

Nike Air, Adidas Dunlop KT26 = running shoes designed to absorb road shock (running shoes have a direct relationship between our feet and the ground, by designing the shoes to absorb the road shock of hitting the ground with the foot, we increase the cushioning and protect the foot from possible injury).



virtualize: give me the effect without the effort

New Interpretation

to make virtual, virtual = to give the effect of

New Definition: give me the effect without the effort

Things that produce the effect of other things in new and easier ways. All technology is 'virtual' to the extent that it produces an effect in a new way. For example, a swimming pool is a 'virtual lake' in that it allows one to swim and play in water in places where a naturally occuring lake is not available.

The key questions here are: 'What effect would I like to create?' and 'What will this make easier in my life?'

Product Examples

Liquid Paper = a virtual eraser, it doesn't get rid of the error underneath, it merely covers over it so that it appears as if it is no longer there.

Sony Playstation Games = Video games gives the effect of being somewhere else doing something else - a virtual reality. For example, driving a formula one motor car in your lounge room. To see this effect, simply watch someone absorbed in a video game.

Sony's Cebu = Cebu is a robot toy, yet it has been designed in such a way that it responds to limited commands and acts as if it is a 'virtual pet'.

