Humans: A Designer's Guide

Why a Designer's Guide?

Designers of physical objects have guidelines that describe their customers' characteristics.

They can use these guidelines to specify things such as:

- standard heights for bench-tops and counters
- the radius within which objects can be reached by a typical person
- light levels for different forms of work

Designers of physical objects also have readily available feedback. Events in the physical world inform designers of what design decisions need to be revised.

In contrast, designers of 'virtual' objects such as web sites and software often have very little feedback, and may have false assumptions about their customers.

It is surprising how many designers of web sites, kiosks and the like never get to interact with real users.

The relationship between designers and other humans



Designers and Humans

We know that designers are part of the human race, as shown in the first diagram on the left. The first diagram states that:

• The set of all designers is a subset of the set of all humans.

Or:

• All designers are humans.

However, an alien looking at our web sites and software might develop a different picture, as shown in the lower diagram. This states that:

• The set of all humans does not intersect with the set of all designers

In other words:

• Designers are not human.

This document describes some typical human characteristics and the implications for designers.

Since designing for 'positive' characteristics (patience, perseverance, intelligence and so on) is easy, so we need to focus on the less positive human traits.

The relationship between designers and other humans



The current state of web design

Like the shop on the left, web sites look professional and well made. If it were a web site we would say it has a nice simple address or URL ('Shop').

It presents a welcoming face to the customer. It says 'Welcome' and it has a doormat. If it were a web site, of course, stepping on the doormat would likely surprise the visitor with a splash screen or similar unnecessary interruption.

It has some visually pleasing graphical design elements (the tree outside).

It is very difficult for the customer to get in, as the steps are too high.

In addition, although you can't see it in the diagram, the inside of the shop is a bit of a mess. All products have been arranged by colour, rather than by name or any other system that the customer might recognise.

There is a burly gentleman just inside the door who grabs you as soon as you walk into the shop, sits you down and forces you to watch a 5-minute video advertisement. If you don't stand up immediately the advertisement finishes, you are forced to watch it again.

If you manage to find something you want to buy, you have to give a blood sample and sign up for lifetime membership.

Humans Don't Read



Humans Don't Read

People skim ruthlessly – particularly in online environments.

If possible, they avoid reading entirely.

They tend to pick out 'key' words and phrases. However, these may not be the words and phrases that you envisaged.

If there is a choice between doing something and reading about doing it, most people will just do it.

Larson's Dog effect

What we write...

Order Form - 'The InfoDesign Toolkit'

The toolkit costs AUD \$120.00 (US \$66, Euro 70), including postage.

This is a secure order form. If you prefer, email us (tk@infodesign.com.au) and we will telephone you for your credit card details. You can also telephone us on ±61-3-9600 33533.

Please allow up to 3 weeks for delivery.

Name	
Company	
Email	

What they read...

Order Form - blah blah

biah biah biah biah \$120.00 biah biah biah

Name	
Company	
Email	

Larson's Dog effect

One of Gary Larson's marvellous cartoons shows a man talking to his dog. Although the man is speaking sentences, all the dog hears is 'blah blah Ginger blah blah blah blah blah blah Ginger'. The cartoon is captioned 'What we say to dogs' and 'What they hear'.

The diagram at top left shows an order form. Below is an approximation of what a customer might see when reading it.

The reader may pick out a piece of salient or interesting information. In this instance, the reader has picked out \$120. This is unfortunate because the largest market for the product is in the USA, so we would rather that they noticed the US dollar price (\$66).

- Do not 'fix' user interface problems in the documentation. People who do not read documentation will not benefit from even the very best descriptions
- Be brief
- Provide succinct summaries. People are more likely to read these than large blocks of text
- Include critical information in Headings or in Field labels rather than in body text
- Use clear, simple layout
- Reduce or eliminate the need for explanatory text.

Humans Don't Care about Technology



Humans Don't Care about Technology

Some people know what an overhead camshaft is; most people neither know nor care. This may be baffling and disappointing to the auto enthusiast.

Some people know about digital certificates, processor speeds, HTML, XML, and the like; most neither know nor care.

Most people don't care how much design effort went into your web site or application, and they don't care how clever you are.

Some people may like detailed information on who built a supermarket and whether structural steel or reinforced concrete was used, but most will be happy as long as it doesn't fall down.

In the drawing, the people on deck don't really care about the efforts of the design and production staff rowing in the galley.

- Do not assume that people have anything other than basic web skills. Basic skills are the ability to click on links (provided they are clearly identifiable as links), and to use the back button
- Assume that people do not know (or care) what browser or browser version they are using
- Assume they do not understand (or care about) terms such as Flash, digital certificate, cookie, screen size, resolution, font size, HTML, and so on.

Humans Protect their Privacy



Humans Protect their Privacy

People are often reluctant to provide personal information.

Many people will simply lie to you if you try to force them to reveal personal information.

The ASDFGHJKL effect describes the way that people type meaningless junk into mandatory fields.

People rate privacy policies as being an important factor in their perceptions of web sites.

- Ask only for necessary information
- Indicate clearly what information is mandatory
- Do not force people to register unnecessarily
- Have a clearly-stated and highly visible privacy policy
- Do not try to force people to give you information, unless you are willing to accept the risk that they will leave your site or tell you lies
- Scan your data to see whether you are getting a high incidence of nonsensical information
- Respect your customers and be honest with them.

Humans are Lazy



Humans are Lazy

Given a choice between the easy way and the right way, people will choose the easy way.

If it is easier to pick up the phone or visit the store, people will do that rather than use your web site.

If it is easier to use someone else's web site, people will do that rather than use your web site.

Design implications

- Make things as easy as possible. People who enjoy puzzles and challenges can get them in abundance elsewhere
- Design for the customer experience, not to match internal systems or structures
- Be consistent with general practice
- Add value to the online transaction, so that customers have a clear reason to use your web site. Online banking is a good example of the way in which organisations can make a web site more attractive than other channels.

Some people bemoan a supposed 'dumbing down' effect, saying that by simplifying everything we are treating people as if they were stupid. This argument is not logical, however. Difficult concepts and problems exist in the real world; it is neither necessary nor appropriate to add to their numbers.

Humans circumvent security measures



Humans circumvent security measures

Many people disclose their PIN to others.

Many people allow colleagues to 'impersonate' them to log on to computers and networks.

Many people use the same PIN for multiple purposes.

People decide for themselves what level of security they will accept.

- Don't assume that people follow your current security regime
- Find out what people do in the real world before devising a security system
- Don't try to impose an unrealistic security system
- Consider allowing people to use their real names or email addresses
- Provide a mechanism for people to retrieve lost user names and passwords.

Humans are busy

Most people have a task in mind when they approach a web site.

It is unlikely that they will be interested in watching a video or animation if it prevents them from completing their task.

They may go elsewhere or abandon the task if it takes too long.

It is not possible to quantify what 'too long' means.

- Use scenarios to focus your design efforts on your customers' tasks
- Avoid things that slow down the task (such as large graphics) or unavoidable splash screens
- View the web site in a realistic environment the boardroom presentation with a direct connection to the server is probably not a realistic environment.

There are no ePeople



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In humans, no great evolutionary leaps have occurred in the last 10 years, nor are they likely in the next 10.

People are still driven by the same things that motivated them before the advent of the Internet.

It is unlikely that people will change the way they think and behave just because your company has launched a new web site or service.

- Provide traditional levels of customer service
- Make it easy for customers to contact you
- A web site should be at least as useful as a business card always include a telephone number
- Respond to all email and feedback within the same time as you would to a telephone message.

Things to do when designing for humans

If you don't interact with real people during analysis and design, how can you design products that they can use? Involving customers is simple, cost-effective and productive.

How can you design good web sites if you don't test them with customers? Testing is simple, effective and cheap.

Be sceptical of technologies that will change the world, revolutionise the way we think, and transform the way we do business

Remember - people are intuitive. Web sites, software and mobile telephones are not.