six circles

An experience design framework

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Acknowledgements

This book started as a collection of blog posts two years ago and as a backdrop to my work as a UX designer. It became clear that I needed to put the posts together and nail my colours to the mast, to what I considered the main components of experience design. So much discussion occurs around UX that it appeared that it would disappear up its own zeitgeist.

From designing interfaces for smart homes to the sign-up flows for refugees' mobile phones, working at Hello Group has given me the opportunity to explore aspects of experience design that you would not discover in a standard digital agency. Added to this the colleagues that I am lucky enough to work alongside, it has given me the motivation and inspiration to release this book.

I would be telling a lie if I said it has been a pleasure to put together, but the relief of shipping it out is immense. I especially must thank Jeppe Henckel, UX Architect at Hello, who not only questioned themes but also steered me away from areas of potential confusion. Tine Jørgensen and Rune Andersen, also gave me the push I needed to get the book out there, especially the few passionate conversations over beer at UX London.

Finally I must thank my wife Vibeke, who is my toughest critic and greatest sub-editor. Without her support and patience you wouldn't be reading this today.

So I hope you enjoy the book.

Preface

Experience is a uniquely human condition, a mixture of cognitive processes and memory. Personality also comes into play and as such experience is a complex and unique subject that differs for every person. This complexity has led us to a place where a design discipline can grow and justify its existence due to the importance of the quality of experiences that people (customers, users or patients) can feel whilst using or interacting with "digital" products.

Technology in the last three decades has pushed the importance of how humans interact with systems, machines and each other. This has led to a fusion of disciplines now being referred to as UX. The convergence is not a coincidence but has happened due to technology as a progression from the desktop to the laptop, the mainframe to the internet.

In this context "Experience" is a user's experience of screen based interactions. However, it could easily be service design or product design that the same themes apply to. Experience, shown in the following essays, is a vast and abstract notion and features in many disciplines. The human mind perceives so much uniquely, that no one person feels exactly the same, similar undoubtedly, but the mechanisms of the mind are different from one person to the next.

From my perspective this is what I find fascinating about experience design. Reference to, and belief in, the importance of social and cognitive science needs to form part of the philosophy of today's designer. An awareness of the human condition and the general needs and wants of people must figure in how we design effective systems and products.

Design patterns are certainly a start point for an effective design but without an appreciation of context and user behaviour we have a danger of building solutions that are prescribed without an eye on the optimal and most creative solutions.

Design principles have been established for many years, even centuries, and are born through many other disciplines. Notably psychology, fine art, product design and sociology.

Their more abstract application takes away the prescriptive element that patterns sometimes take. This also becomes more important when considering the context of UX design in interfaces other than those online. If we think patterns came from common use - look deeper and we realise the successful ones are soundly based upon solid design principles.

The design principles presented in this book have been taken from the excellent book Universal Principles of Design (Lidwell, Holden and Butler). As a starting point, I am really interested in

how you can apply (some of these ancient) principles to modern day design. Here I grouped them and have illustrated some occurrences on the web.

Each principle is worth talking about in the context of user experience design. These foundations are even more relevant in the field of UX, as the design challenges we face are becoming more complex.

I have grouped the design principles into areas that are core to delivering good user experiences. Note the word user here denotes somebody using an interface.

The areas are divided into; persuasion, behavior, visual design, usability, interaction and content.

Though it could be argued that user experience is concerned with interfaces rather than interactions with products or services, design as an entity can still be looked on through the six different lenses presented here.

They form a basis of how to quality check my output and they have made me realize this; that in all successful creative work the following flow can be observed, strategy, experience, design and communication. These four pillars of what constitutes blockbuster products, killer software, staggering games or wonderful films cut through the range of creative industries and the core of the best businesses.

My hope is that the six circles represent a way of seeing any given design problem through specific lenses. Thus creating a contextual basis to look at a problem space and solve it appropriately.

Introduction

The six circles represent a way to understand how a product, software app, designed object or space really can be seen through six different aspects from an experience design perspective. The principles highlighted are those that have importance with regard to the quality of the end product – whatever it may be.

My personal reason for putting this much energy into cataloguing all of this was to try and ensure I had some framework for my experience design work. I am a designer, first and foremost, usability, analytics, business development and design management were the skills that fell on top of my core need to be able to design something that a client requested.

This way of looking at experience design is personal and many may disagree with it. But from my perspective to be fully aware of how to make the best products needs an appreciation of these critical areas. But not only to know they are there but also to see the important principles that are well trodden paths to success.

The clamour of business to embrace UX in 2011 has been interesting to observe and I feel there is a great opportunity for businesses to make what they produce achieve excellence and affect many more people. But there is also the back lash of those who feel user centred design is a fallacy and a waste of time and effort.

To those I say you cannot make something for those you know nothing about and assume you will be successful. We no longer have the luxury of launching products that fail to sell, or services that do not work, businesses that flounder because of poor testing, assumptions or process blindness. UX is a way to truly understand your customers, users or employees. Without that understanding we will repeat the same mistakes that businesses have made throughout the last 20 years.

UX can combine many different disciplines to make something truly special. Ignoring this really is no longer an option. There is a pressing need on us to do things better, make things smarter and more efficiently. The industrial age is coming to a close. UX represents the intersection of where technology meets the human being, designing for people and not solely producing for consumption.

Of the six themes within the framework, the first is persuasion that sits on the periphery of the six themes. Persuasion is core to the advertising industry and marketing profession. Good examples of this seen in our society affects our behaviour, Very often tacitly from experiences we have

had in our past only held within our memory but still affecting how we interact with the world. Behaviour is the natural outcome from the cause of persuasive elements.

The third theme is visual design - the first tangible layer that we see, and come into contact with. As human beings it is how we are hard-wired to make decisions. It is a part of our genetic and biological make up and beneath that lies usability. This is the enabler for meaningful interaction, without usability the interactions that we have with the object will be without merit and will produce a negative effect – resulting in a bad experience.

Interaction is the doorway to the content. The ability to feel, touch and gain feedback to the 'thing' you wanted to get to in the first place. Content in this series has been described as the textual material we find within websites. But of course content can be anything to anybody. Music, art, film, an object or a product could sit at the core of the other five themes within the framework. In many ways it is the object that attracts a user or users to gather around, share and interact with.
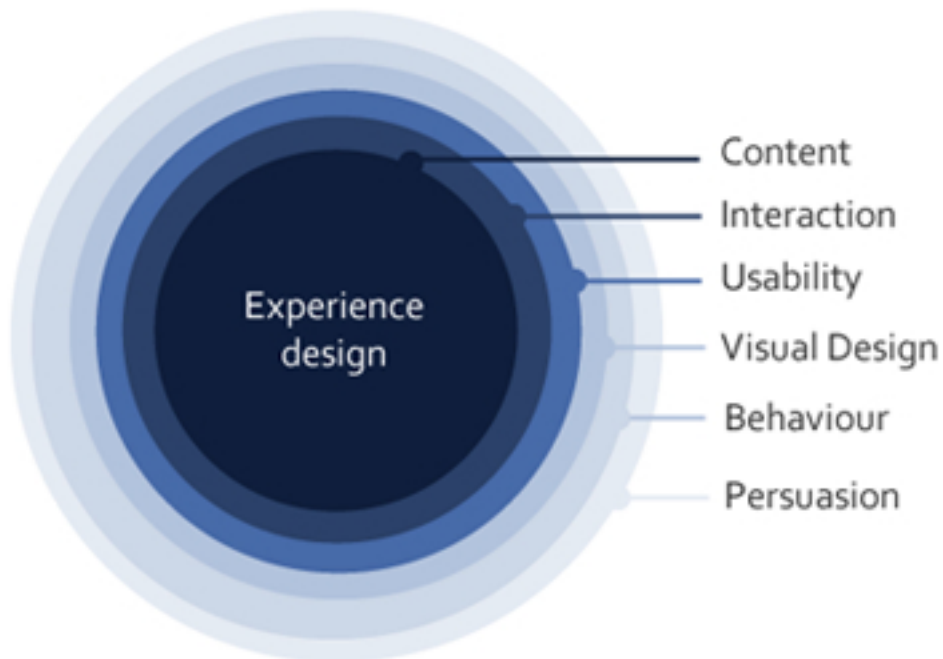
These six areas I feel represent the core of experience design. For each project I try to put the lens of each over what I am trying to achieve. I hope if nothing more it provides a different way to look at the work of design in general, and specifically those involved in the UX field. I hope the readers of this book take inspiration from the many different observations here.

User flow (user pathways) have become so important to the experience of a site (and even more in an application) that they go beyond standard best practices. Their difficulty to architect for, gives rise to the book's purpose – to form the basis of a contextually based design framework that can be used in UX design problems. This framework defines the work we do as user experience professionals and the effectiveness of the designs we produce.

Persuasion

Photo courtesy of joeymac - Flickr

The first element – Persuasion, is a part of the UX design framework that has many darker, or manipulative connotations. Some would say that persuasion does not align itself well with the ethics of designing for the user.

But as BJ Fogg in his book, Persuasive Technology, says:

"The answer to the question - Is persuasion unethical? Is neither yes or no. It depends upon how persuasion is used...The designers intent, method of persuasion and outcomes help to determine the ethics of persuasive technology...If a human were using this strategy to persuade would it be ethical? We expect ethical persuasion to include elements of empathy and reciprocity but with interactive technology there is no emotional reciprocity."

This is why we sometimes feel cheated when technology fails to deliver an experience that is empathetic, and why as designers we need to be more aware of these potential pitfalls.

Here persuasion is explored in terms of design principles that influence people and factors of motivation - competition, cooperation and recognition. These characteristics also give products that are connected (from social networks to mobile applications) the power to persuade.

Entry Point

The point of entry into a design to the goal depends on how the page components or screen is composed. Reducing barriers to the goal is an important element here as is using navigational devices to orientate the user to their location and likely destination. This is the main reason why navigation must not be distracting – to ensure the focus of a user is on the task in hand. It could be finding information, buying a product or downloading files. Products and services that are simple to use have a much greater power to persuade. The final element is luring the customer towards the goal in increments, persuading with images, well written copy and quality calls to action. These principles guide landing page design and in combination with effective search marketing provide persuasive online experiences.

Picture Superiority Effect

Page layout, advertising and packaging all benefit from the strength of images to convey meaning as well as the accompanying copy that may be placed alongside.

Simply put, words and pictures are more memorable to people than words alone. They also allow a reader to scan a page easily. Rather than a person having to read, images that convey meaning form a faster and less arduous method for comprehension.

Meaningful images are memorable, which in turn makes the message even more so. Images are extremely persuasive when used in the right context.

Story Telling

A story has the distinctive characteristic that each person in an audience will have a unique experience and feelings. . Their reaction to it occurs in a very personal way and when done well, this particular principle offers the most immersive and engaging experiences. A well crafted story can manipulate an audience easily, either by playing with emotions (a tragic tale) or by motivating them to take action (e.g telethon documentaries). The fundamental elements to a good story are the setting, characters, plot, mood, movement and invisibility.

'Choose a different ending' is an interactive video campaign to tell the story of how choices will change a life.

In the mostsuccessful games, real immersion is achieved, or the medium becomes invisible due to these factors. A good plot, dynamic or charismatic actor, intriguing setting and atmosphere (music and lighting) accompanied by a flow that is suitably paced, will result in the most involving game play.

An important factor in story telling, particularly when used within marketing, is that it must be authentic. As BJ Fogg states; 'credibility makes persuasion possible'. Without the belief (suspended or genuine) of the story's reality, trying to persuade the audience to be motivated to do something will be very difficult.

During this relationship between the story teller (the persuader) and the audience (the customer) there will be a time of optimal persuasion (Kairos effect). On the web this is most apparent on landing pages, where the context of a search query is mirrored for the user when they arrive and the call to action is apparent.

However, this obvious sales approach to design (data led through either A/B testing or other qualitative measurement) runs the risk of ignoring elements of persuasion that are more subtle. It is far better to take a holistic view of designing for persuasion and regard difficult metrics such as context and culture alongside the content that is being offered and the desired action that a user may take.

Framing

By manipulating the way information is presented the ability to make informed judgments and decisions can be affected. This way of framing information is often seen either in a negative or positive light that either drives decision making or purely informs. For example politicians use statistics to great effect to persuade voters to change their views or form an opinion.

Another factor to this principle which is gaining traction in our inter-connected world is how social connections influence our behaviour much more when aligned with a service or product. This social influence plays a key role in motivation and is likely to alter attitudes and create behavioural change, for example whan presenting information alongside something a friend 'likes'.

Twitter and Facebook facilitate 'social framing'. A target behaviour can be fulfilled if a user can discern that others are performing the behaviour with them.

This type of framing is a potent and powerful persuasive force that is not immediately obvious to users. Peer pressure (or normative social influence) is the catalyst that creates behavioural change.

Influence

BJ Fogg believes that influence strategy and tactics, not the interactive product, will be the unit of analysis, or the basic building block of measuring success in the future. It is entirely believable to assume that our personal networks will not only be more relevant to us than a search engine, but also influence how we spend our money and live our lives. What motivates or persuades us the most, is our desire to cooperate. We need to be recognized as giving value and compete in a manner that gives us satisfaction. Many communities flourish because of these factors. Consider writing reviews, sharing content, being rewarded for loyalty and participating in a forum as activities that hold true personal value to a user in a community or social network.

Out of all the principles, persuasion is the part of the UX design framework that has the its roots more in psychology and social science than in design. As designers, it poses the biggest challenge as it is outside the comfort zones we usually operate in. Being persuaded to do something naturally has the effect of defining our behaviour. Whether this is known or tacit, persuasive forces constantly shape the way we interact with the world. The next chapter deals with behavior – the way we behave and the second element of the six circles framework.

Behaviour

Using an image of the iPad seems a good way to talk about behaviour, the second part of the UX design framework. In this chapter I explore how Apple launched the product using a design principle relating to human behaviour.

An appreciation of why we behave in the ways we do is integral to designing a good experience. Regardless of what you think about user experience design, as designers we need to pay more attention to how and why we behave like we do . These principles derive from observations and disciplines beyond design. Psychology and sociology are as important within this list, which of course is not exhaustive.

Cognitive dissonance

Cognitive dissonance is described as an uncomfortable feeling caused by holding two contradictory ideas simultaneously. Cognition (thoughts, feelings and ideas) when in harmony are in consonance. Two unrelated thoughts do not cause dissonance, and the mind can carry on without disruption. Dissonance normally occurs when a person perceives a logical inconsistency among his or her cognitions that are related.

Take the example of street art. Bristol council has spent thousands cleaning up graffiti around its city centre and yet one of its most renowned 'offenders', Banksy, exhibited in the summer with his work paid for by the Mayor and his council.

In the eyes of the law what Banksy's art is vandalism and a criminal act, however, such is his skill some would say he has elevated himself above others to that of a modern artist. It could be said that the point of view of the council was an example of cognitive dissonance, where anybody else spraying on the wall is still a vandal but in Banksy's case it is art and therefore it justified the council's endorsement. The painting to the left is on a building opposite Bristol's council offices. The council put it's removal to a public vote and the public wanted it to remain.

Image courtesy of Greg Marshall - Flickr

Expectation and disappointment are factors of online dissonance, where the user held an original idea and experiences contradiction and holds on to the initial thought. It can be seen in the reactions of users to poor results of search engine results (they leave on the landing page) who maintain their original pursuit in finding their goal.

It should be taken into account, when designing anything for mass consumption, that there will be a group who are disenfranchised and who feel that the product or publication does not sit easily with their expectations. The bounce rate reflects users with similar feelings, namely that they were misled or mistaken, or misunderstood descriptions in a search result page.

To control this fully is impossible, but monitoring the segments of your audience, their needs and wants will make you aware of the constant shifting of visitor or customer expectations on what you provide. This encompasses all the areas of a user experience to give the air of suitability, relevance and quality.

Expectation effect

Your audience of potential customers are at their most receptive in terms of being persuaded when introducing or promoting a new design. To gain the most from this, claims made by the product or service must be made with statements that can be clearly illustrated and have credibility.

Looking at the recent iPad launch the levels of expectation were extreme and it was essential that the launch of the product was synchronized and communicated in way that was clear. Whatever your thoughts are on the product, a study of the official video (arguably the most persuasive of mediums) shows some interesting features.

The 8 minute video can be broken down as such…

0 - 60 seconds – Jonathan Ive gives the vision statement of the device, this gets the viewer intrigued, either excited or cynical, but nevertheless they are engaged and receptive.

In the next 4 minutes the VP of iPhone software explains the extreme flexibility and feature rich capabilities of the iPad. He outlines the benefits to a casual buyer, reaffirming it to the fans, his sheer enthusiasm taking the viewer into Apple's world of promise.

The next 2 minutes has the VP of Hardware take over, he states why the device is different -the parts manufactured are eco-friendly and specifically made for Apple. Their control of their technical hardware is good for them, and he makes it clear it is good for the consumer too.

The last minute sees the original two, Marketing and Design returning to sign off and end it with a statement that will put a marker down for any other devices such as this. On the one hand it is the price – and one that is pitched low to ensure the take up of the product. On the other it is the simplicity of its design and Apple's belief that this will change how we use and think about computers.
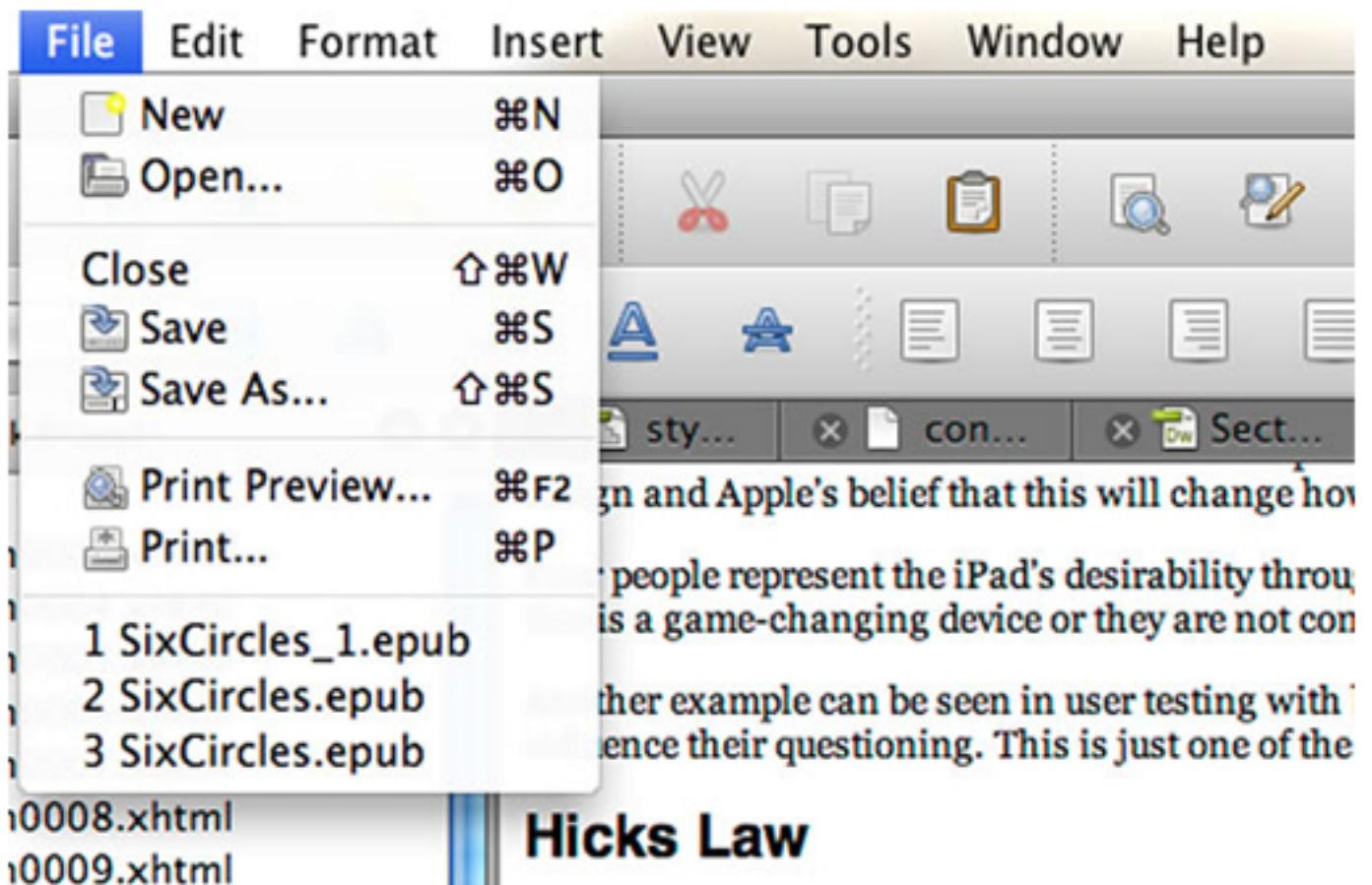
Four people represent the iPad's desirability through it's design, features, technical ability and finally (the pay-off) it's price. The viewer thinks either that this is a game-changing device or they are not convinced, in which case they either require further persuasion or will voice (publicly) their opinions against the claims.

Another example can be seen in user testing with bias shown in asking questions that are felt to influence a subject. Expected outcomes from the interviewer influence their questioning. This is just one of the reasons that user tests should not be conducted by the designer of the solution.

Hicks Law

The time it takes to make a decision increases with the amount of choices available to a user. Particularly seen in menu items for software.

For instance the file area could be seen as the equivalent to the three pedals of a car. For clutch, brake and accelerate, read open, save and print. This area needs to be quick and intuitive to use. As you travel right along the menu bar your options multiply and the length of time finding these options also increases.

File Edit Format Insert View Tools Window Help

New   ⌘N
Open...   ⌘O

Close   ⇧⌘W
Save   ⌘S
Save As...   ⇧⌘S

Print Preview...   ⌘F2
Print...   ⌘P

1 SixCircles_1.epub
2 SixCircles.epub
3 SixCircles.epub

0008.xhtml
0009.xhtml

Hicks Law

In ecommerce certain stages of a transaction are closed down in terms of available options to a user. This ensures user focus and a likelihood of them completing the task, and less likelihood in them being distracted by unnecessary promotions or ways to navigate away. Decreases in drop off rates in conversion funnels can be seen when Hicks Law is noted.

Hierarchy of needs

This is based on on the hierarchy of needs from Maslow where different steps of the pyramid from physiological (functionality), safety (reliability), love (usability), self-esteem (proficiency) and self-actualisation (creativity) can be applied to a design.

An operating system for a PC enables creativity by having a strong functional and reliable quality, and an inherent usable interface that may have innovative features enabling proficiency in its users. All of these add up to the potential of creativity being exhibited as all other lower levels of the design have been satisfied.

The twitter platform though occasionally failing in reliability has enabled hundreds of developers to adapt it and create new products from the API. Their policy of using open source wherever possible has increased it's popular adoption from so many companies.

The principle is most useful for evaluating existing designs and seeing if improvements will affect the pyramid in positive or negative ways. The evolution of the iPod is a good example of the interface becoming more intuitive (and hence more proficiency capability) without harming the 3 layers below. Creativity for this product can be seen in the Nike Plus adaptation of the iPod to be a valuable running aid and personal trainer.

Immersion

This is perhaps one of the most interesting aspects of behaviour in the design of user experience. It can be described as the feeling of total immersion from the interaction of a product that results in feelings of joy, satisfaction and escapism from reality. Particularly prevalent in the gaming world this is what the industry thrives off and success of a game hinges on this most important principle. But immersion can be seen in many different areas.

In games it may be about challenges that can be overcome, the greater the challenge the higher the immersion and sense of satisfaction when complete. In game design the passage of time is a great indicator to the playability of a game, that the longer the duration that a person plays (and unaware of time passing in the real world) the greater the immersive effect.

Image courtesy of WaldoPepper - Flickr

In the real world the attraction of a library for study is the ability to be immersed within a context that promotes learning and negates potential distraction. It would also have a modified sense of time for that person where hours pass like minutes if they are fully immersed. A film (take Avatar for example) has the ability to completely envelope an audience in the world of the film.

Time is not a part of a great film experience where the story is the focus and capturing and holding the attention. Add to that IMAX's ability to serve up panoramic cinema in 3D and you have as immersive an experience as one could wish for in cinema.
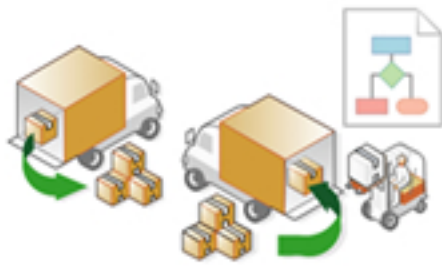
Successful ecommerce stores have a flow that is goal driven and with clearly defined steps that promote the passage of the user to an end destination. The better these flows, the higher the sale conversion rate due to its immersive properties as an online shopping experience. Forms need immediate feedback to keep the user engaged and show that the actions taken have been registered. These interactions also need to give the user the complete sense of control, over their actions and the environment that they affect.

Immersion is not an exact science, but perhaps more of an art. There is not a formula for an immersive experience that will be a success. Sensory experiences coupled with cognitive engagement seem to provide the best type of mix. The human mind can only take in so much through the five senses, so getting the balance right with the mind of the user being actively engaged is the answer to a truly immersive quality experience.

Mental model

In the design of interfaces there are system models (how systems work) and interaction models (how people interact with those systems) that in combination present a mental model to the user.This is either confirmed or denied by a user through their personal experience (the quality of their user experience in using the digital product). What is important is that the model you propose fits with their own personal interpretation. As a user experience designer it is key to have both models in place to design a solution that is effective from a user's perspective (the interaction model) whilst addressing the needs of the client (the system model).

When designing an effective web store it is critical to understand how the factory produces the goods, how they deliver them and the length of time it takes to reach the customer. All these factors need to be built within the system model for the client to understand and that they reside in the interaction model revealed to the user in the interface. Only through thorough testing can the design be confirmed as one the users are happy with, in other words that it fits their mental model of what the web shop should be from their customer perspective.

Design patterns are effectively interaction models that are established in user's minds of how certain operations should work. If there are models available it is advisable to use those as a starting point. But it is likely that your specific client will have a unique need that is reflected in their system model and needs reflection on the user's interaction with it. It is better not to use an existing model if it is nothing more than convenient. An exact fit between both models is necessary for the optimal solution.

Performance vs Preference

From a usability stand point – perhaps the most common mistake businesses make, is assuming that because the user declares a preference for something it doesn't necessarily mean they perform better when using their product or service.

People are poor at aligning what they feel they want or need and what will actually improve their

ability to use a product. Commonly people prefer designs that will not help them achieve the best results when compared to alternatives. They will be adamant that the product they chose is the best.

The best way to get around it is to observe the user actually using the product without any interview technique, but in their context of use and observing (not interacting with) the subject. The most important matter is to not record what they say they do, but what they actually have done. The best products have this type of research behind them, by being embedded with the user in the context for which the design is meant. This allows the appropriate levels of insight required to make informed design decisions.

Recognition over recall

A person's memory is more likely to recognize elements than recall them and so designs need to reflect this fact. Rather than expecting a user to recall information, introduce devices to trigger the memory, such as images, words or sounds. When giving options ensure that the decisions the user must make are aided in some way.

The power of brands have the ability to make customers choose their products because they recognize it rather than recall an unknown, better quality, competitor. Hence the ability of being recognized carries significant value in the marketplace. Within an operating system, programs have become merely icons on a task bar – such is the quicker ability of the human mind to recognize imagery over recalling program types.

Visual Design

Visual design is perhaps the most immediately emotive ingredient to a user's experience. Seeing is believing, and what our eyes see immediately tells us if we either like or dislike what they are receiving. It has a sway on the other 5 elements of the UX framework by being very tangible and creating an instant feeling in a person. As UX designers we need to be aware of the importance of visual design as a doorway to incorporate the other equally important facets in our work. Visual design, like it or not, is still king the first few seconds that a user interacts with a product or service.

Saul Bass, the legendary graphic designer and film maker, described design as 'thinking made visual'. In many ways visual design should communicate the more complex considerations of a solution in an immediately accessible way.

Aesthetic usability

Think about a website you like and there are probably a good deal of visual design that helps you understand its content better, what it offers and how easy it is for you to use.

Aesthetic usability is a quality that arguably Apple have made very much part of their product offering. Consider their most successful devices (iMac, iPod, iPhone and iPad) and there is an immediate attraction in getting to know the product, even before you really know what it can do.

As there is an emotive connection (one of delight or intrigue) it affords the product a level of forgiveness within the user when the product or system fails.

We can also see this in many websites today, the Whale fail of Twitter being a notable one. As the website about the image says:

"This image brings a human touch to a moment of frustration..."

An attractive design is initially perceived as being easier to use and tends to garner a loyalty and forgiveness in a user group that promotes positive relations between the product and the person.

Alignment

An ingredient of aesthetic usability, particularly in web pages or screen based interfaces, alignment is a design principle that is often either overlooked or considered a standard aspect of good design. However it does warrant special consideration especially as its importance is the reason why the grid is such a defacto standard in page design, for both the offline and online worlds. As alignment is the norm, elements on a page that break out cause visual tension the exception creates a focus on an element on the page.

This is a good example of a site that uses a grid but, with the use of graphics and juxtaposition, breaks it with visual trickery. Even using a small colour palette it effectively does its job of engaging the user and encouraging interaction. The visual design gives dynamism.

The content of the site is for the Digital Research Centre in Dublin but the site goes some way in getting you interested way before you start to read the content.

Colour

Despite many people being colour blind it still has a key role in giving meaning to elements on a screen or in the physical world. Colour, and importantly hue and saturation, have effects on the way interfaces are used and perceived by users. Contrast gives users a guide: the more saturated the hue of a colour, the higher the priority. Similar contrast types are seen as part of the same group or importance. The use of contrast is an ingredients of visual design that is not immediately the most noticeable but one of the most notable to attract attention and produce focus in a user.

The designers of Barack Obama's website agonised for days over the correct shade of blue that would come to be synonymous with the campaign and eventually the Obama brand.

Throughout the site, the use of key colours, for calls to action, are used strategically to either prompt or persuade (the red here used sparingly) or to educate and inform (the muted blue grey in the right hand column).

The actual colour palette is limited and correct colour usage should always be used in this way. Too much colour variation produces visual noise and confusion.

Consistency

The site mentioned above also exhibits consistency on a huge and intricate scale. The elements within the design are part of a larger code that communicates a meaning that is consistent across all touch-points. In this case the font was used throughout the campaign from signs to captions to all types of visual communication. It is a great way to maintain focus on the message and the sender. By maintaining the message throughout the physical world it is a subtle stamp of quality that underpins many good user experiences.

Golden ratio

To enhance the aesthetic quality of an object or interface design the golden ratio is a good principle to explore largely because of its prevalence in nature, art and architecture.
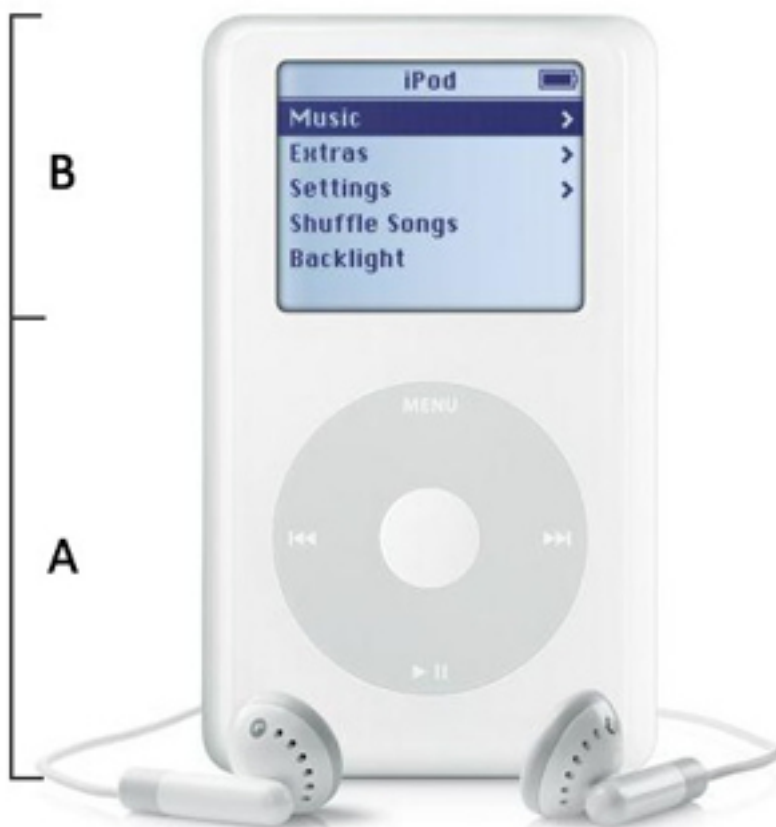
A/B=1.618   B/A=0.618

Areas where visual appeal have been long established and unquestioned can provide a good basis to explore in designs where other factors are not compromised. There is something simplistic, natural and appealing about design that exhibits the ratio of 0.618 within its form. It gives visual balance and makes the design inexplicably interesting.

Highlighting and Legibility

Typography, font size and style can guide a user when used well or lead to confusion when it isn't used consistency. Presenting a message in a particular way can reinforce the impact of the message. Ensuring it is easy to read and uses the appropriate font size helps in getting the message across. In many cases the intelligent and artful use of typography does this job brilliantly as it implicitly considers legibility and accessible text as part of its remit. That is obviously when it's purpose is to convey a message and not make a statement.

You may not agree with this statement from the Information Architects but you cannot deny the power of typography to not only deliver the message with clarity but also with meaning.

These are just words but the strength of type, colour, style and size give the statement more depth and authority.

When a website or interface has legibility problems it is often instantly reviled. People deserve a basic level of accessibility and this area is one to pay attention to first when thinking about visual design for improved user experiences.

Modularity

The strength of modular design is an ever-present in web pages and web applications. Smaller services or applications that form a larger, more complex system have really found their niche in the iPhone and contribute to the success of the product. Highly bespoke and tailored user experiences are achievable by offering the platform that can be adjusted to individual user needs.

Personalisation is achievable giving much more engaging experiences. The visual design should accommodate this need.

Occam's razor

This principle states that the unnecessary abundance of features decrease the effectiveness of the designed solution. The effects of this is easily seen in many mobile phones' features. If two solutions are placed side by side, and both are equal in terms of what they can deliver but one is simple and the other is complex, then the design that exhibits simplicity wins because it is practical.

Before the iPhone came along, the Flip video camera was one of the best sellers on Amazon and part of its success was it's no frills point-and-shoot capability. All non-essential features have been removed and stripped down to the power button, record, play, delete, zoom, lens, microphone and speaker. The only other features are a 2 inch screen and USB arm.

Proximity and Similarity

Parts of the Gestalt principles of perception - proximity is based on the premise that when elements are grouped or clustered together they are considered related to one another and those which are spaced apart are considered unrelated. When this is used well, it has the power to convey meaning in a way that is instant and may override other principles that are present on a page. For this reason the grouping of elements needs to be considered carefully and will often need to work alongside other principles. The Fritz Hansen website groups furniture by type and encourages an interaction with the elements.
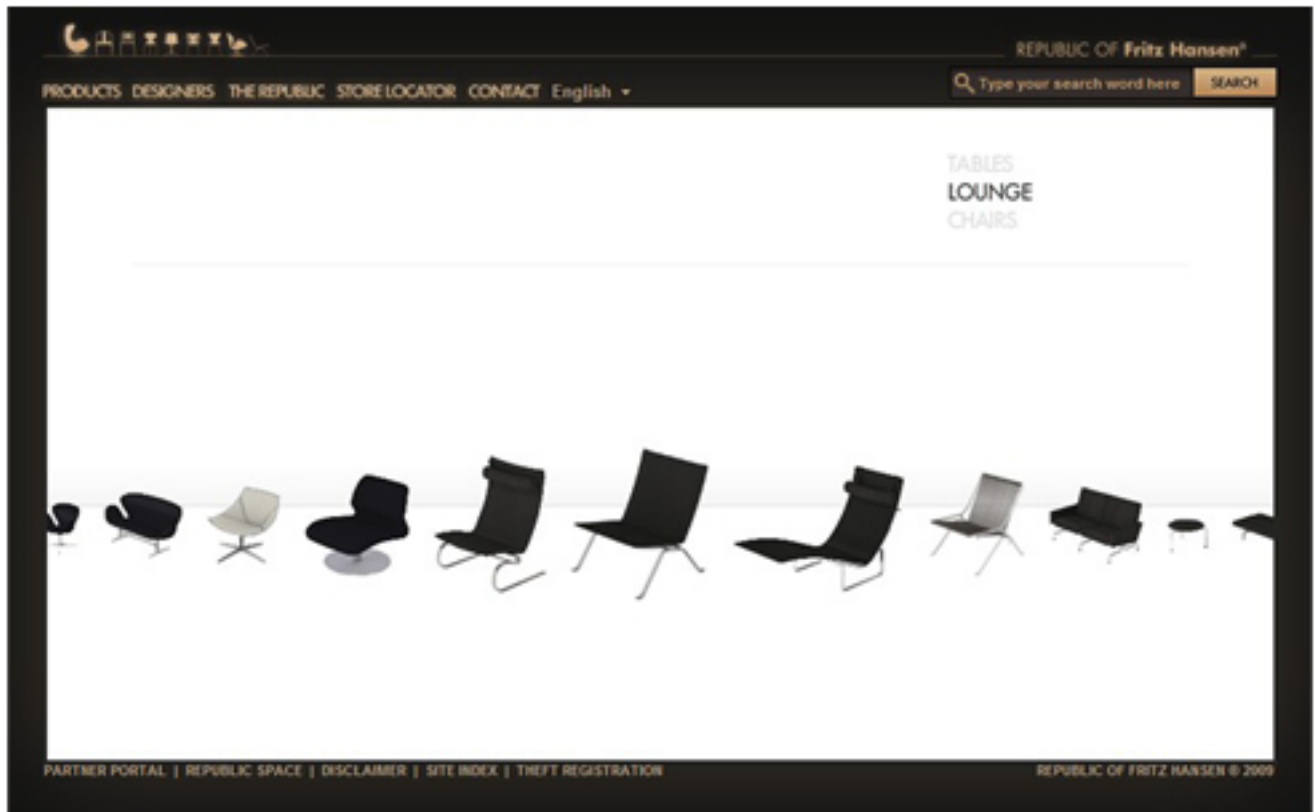
This site also uses similarity - the visual look of objects resembling each other which produces a feeling of belonging to one another (even though the furniture has been designed by different designers). Strongest grouping effects are seen with elements that use similar colours and shapes. In this instance the same perspective and use of neutral colours give a feeling of cohesiveness.

Symmetry

Simon Page's illustration captures the attractive qualities of symmetrical forms that are often seen in nature. Symmetrical elements arranged to make a pattern of reflection, transition or rotation is an instantly recognizable way to achieve a great aesthetic quality, and often beauty.
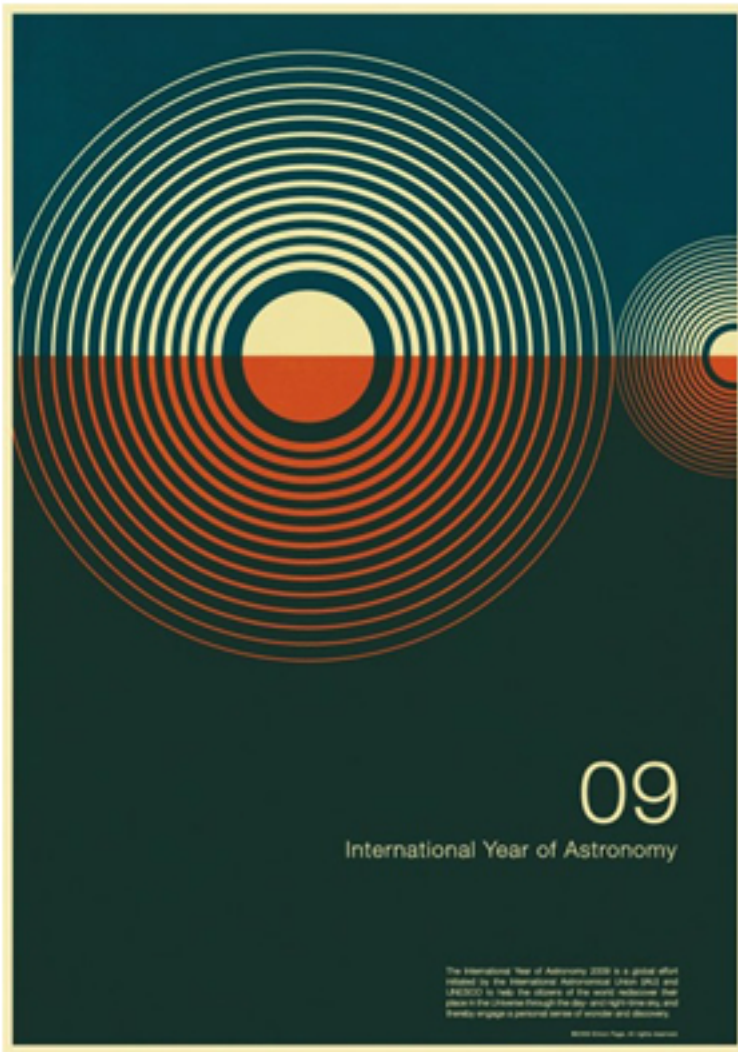
Simon Page is a visual designer who manages to have that innate ability to produce stunning visual designs. So much so, I wonder what his work would look like if he designed an interface for a client.

Would it be usable? Would it be organized correctly, or communicate in the user's language? Would it give a great experience? I have a feeling that it would, because of his ability as a visual designer.

Visual design is so important because we are easily stimulated and manipulated by visual cues. An awareness of this important theme to an experience framework is essential and if we are calling ourselves UX designers we need to consider this as a core part of our toolbox.

The next section is about what many consider to be the core of UX, namely usability of interfaces and systems.

Usability

Image courtesy of Shannon Coffey - Flickr

To some, usability is a de facto standard of good design, but sadly much of what is produced fails in this area, and not just in digital design. Products, buildings, vehicles and urban planning often lack sufficient consideration of the human being.

Usability has become the easy bat to wield in the boardroom - primarily to help gain sponsorship. It is the element of UX that is easy to understand and very transparent to see. So much so, that usability and research consultancies have become widespread and are thriving - serving up endless recommendations and expert reviews to companies that feel they need to improve on their user's experience.

The challenge to those who actually design is to accept that this part of the job is a necessity and unavoidable, and must be learnt and always considered. To not have a sound appreciation of usability leaves a proposed solution open to attack from any source. Many times design aspirations are shot down because of the 'it's not best practice' statement. This is why usability has a bad name in design circles, and to some extent rubs off onto other areas of UX.

However, usability is the starting point, and when placed alongside context, it becomes a positive design constraint. Played right, and quality design can be achieved that serves many people easily whilst still being beautiful, showing elegance and simplicity. The designer embracing usability will reward the user every time they use the product. That is the goal of any designer, to produce a meaningful experience by allowing a person to use a tool, service or product with the minimum of friction.

People's interaction with computers must rely on increased usability because it is an abstract experience. The designer must assume that the user navigates, interacts with and controls a device without help from an other human. As UX designers this makes usability core to our design practice.

The following principles explore areas of usability that have direct impact on the quality of a person's experience.

Way finding

Finding your way through a website to their sign up page or making your way through a city to get to your hotel - the principles of way finding are the same. Four phases are present; orientation, route decision, route monitoring and destination recognition.

Transport for London felt the Mayor of London's very public frustration when he demanded that a redesigned tube map without the Thames displayed should be scrapped and the old one reinstated. To remove a physical attribute such as the Thames on this wholly abstract, geographically inaccurate map, was enough to cause public outrage.

It illustrates how we need a reference point – even in an abstract representation to give clarity and meaning. But the story also represents that the object, be it map or sign, takes on an emotional significance to the person who uses it.

The proposed map of the London tube network

The reinstated Thames features on the map

There is an attachment to it because the object helps in attaining our goals, and these goals carry a personal value. A map or sign that is established can not be changed dramatically without disturbance to the user. The same applies to established navigation elements in websites or applications.

Flexibility Usability Trade-off

The more flexible a system becomes the less usable it tends to be. This trade-off can be seen in mobile phones and cameras that are feature rich. The difficulty of use tends to increase with the added 'flexibility' of the product. Over time the flexible nature becomes more specialised as the user needs become more defined in customer segments. Their experience of the product is optimised and as a result niche products or services become more prevalent. When research defines those needs, a product is produced that may seem a mistake to those customers outside the target market.

Sony's recent publicised work with Google has resulted in this creation. It is a fine example of how, when flexibility is pushed to the limit (in this case a QWERTY keyboard attached to a tv remote control), usability is so diminished in a way that it potentially renders the object useless. Ergonomically it appears to be uncomfortable, and by looking at the thumbs in the photo not unlike typing into a pocket-calculator.

Garbage in garbage out

This principle concerns problems of type and quality in the collation of information. In the online world this is typically seen in form design. Clarifying the type of data can be defined by the constraints afforded by design elements (input fields, dropdown lists etc). Quality of information can be determined by verification checks and distinct instructions relating to the areas under current focus in the form.

5. House insurance

For year-round house and holiday cottage

For registration of both cottage and vacation home complete a registration form for each house

Cottage - Want / I to create insurance for full-house? If yes, which?

Cottage - Want / I to create insurance for holiday homes? If yes, which?

Only for vacation. Would you / I extend vacation insurance with a home insurance policy?

Has the house hard roof, flat roof and the house is built in one or more level?

Is the house a timber, polished wooden or timber?

Has the housing pool?

Heats the whole house by electricity?

Is there a status report prepared for the house?

Change of ownership (purchase of house):
Are there insect / fungal insurance on previous owner's insurance?

Is there a reservation at the previous owner's insurance? ☐ No. ☐ Yes - If yes - what?

Are there visible signs of advice? ☐ No. ☐ Yes - If yes - where? (Eg windows / doors)

By switching insurance
Is there a reservation on the current insurance? ☐ No. ☐ Yes - If yes - what?

Are there visible signs of advice? ☐ No. ☐ Yes - If yes - where? (Eg windows / doors)

Other information about housing. From BBR owner notification shall:

For full-house living, holiday homes for the built-up area.

Built year	Area in m²	Area of outbuilding and garage in m²	Cadastral Number	Ejerlav

Have you bought a house disclosed transfer date

Change of ownership date

When insurance should come into force?
Read Practical information on entry into and termination

Effective Date

House current insurance must always be terminated by the member store, but when?

Current insurer	Current policy number	Date: Main Maturity / termination

Change - Note - House insurance

(Go to top of page)

This form is a great example of poor layout which, regardless of the type of input fields, will have an effect on the efficiency of the form to collect useful data. It is extremely important to balance the usability of a form with the requirements of data that the form must supply. Where larger amounts are required, break down the data entry into steps. Reveal the necessary data in stages to the user and use visual cues to communicate progress.

Performance load

Complexity is an unavoidable element when involved in the process of designing a solution. As computers become increasingly pervasive in society the amount of data that will be managed and transmitted will give an increasing pressure on the user to filter, rationalise and act upon information communicated to them. This principle can be divided into cognitive and kinetic load.

Cognitive load refers to the amount of thought required to achieve a goal. With screen based systems this largely depends on reading and understanding written text. The form above has a high degree of cognitive load. It illustrates that it is prudent to keep emails short, as people tend not to read due to the cognitive stress of digesting large amounts of information.

Kinetic load is the physical effort required to complete a task. With touch technology, even pushing keys has been replaced by a tap on glass. Dimmer switches are not even dials to turn anymore - kinetic load is something product designers are extremely aware of. Software systems should also replicate this attention to detail, ensure minimal scrolling, and the least number of clicks to get a job done.

Visibility

Indicating a system's status to a user, the possible interactions and the results of their inputs is described as visibility. Revealing information at the relevant moment, is key to a user responding and acting on information in the quickest time. Too much information or too many options will create confusion and delay. Context sensitivity of a system allows this to happen, influencing the interface to respond depending on the situation.

Image courtesy of cgull - Flickr

Dashboards were originally examples of efficient design. The basic mechanics of a car meant only a certain amount of information would ever be displayed. Cars made in the last century had a clarity that modern manufacturers find hard to emulate.


Image courtesy of ogilvyprworldwide - Flickr

With the added complexity of hybrid motoring there appears to be a trend to emulate a smart phone interface on the dashboard. The consciousness of the design team towards the technological advancement of the car pervades into the dashboard's design. Note the warning lights are separate entities above the electronic display here. Is it because the visibility of these essential items could be diluted by the electronic dash?

The electronic area is to help the motorist figure out their most ecologically efficient way of motoring. The far right of the screen grows an image of a vine for eco-friendly motoring and kills off the plant if excess fuel is being used. The Ford Fusion physically separates warnings from information here.

Layering
When conveying relationships between groups of information the layering approach allows a build of complex information groups around an object. Think of the weather map as a simple

illustration of this. The object being the physical satellite view of the geographical location. The images describe the layers of air pressure, temperature and cloud cover placed over it. Not only does layering help manage complexity by breaking down complex data into stages, but by grouping information together it can also reinforce the relationship between the information types.
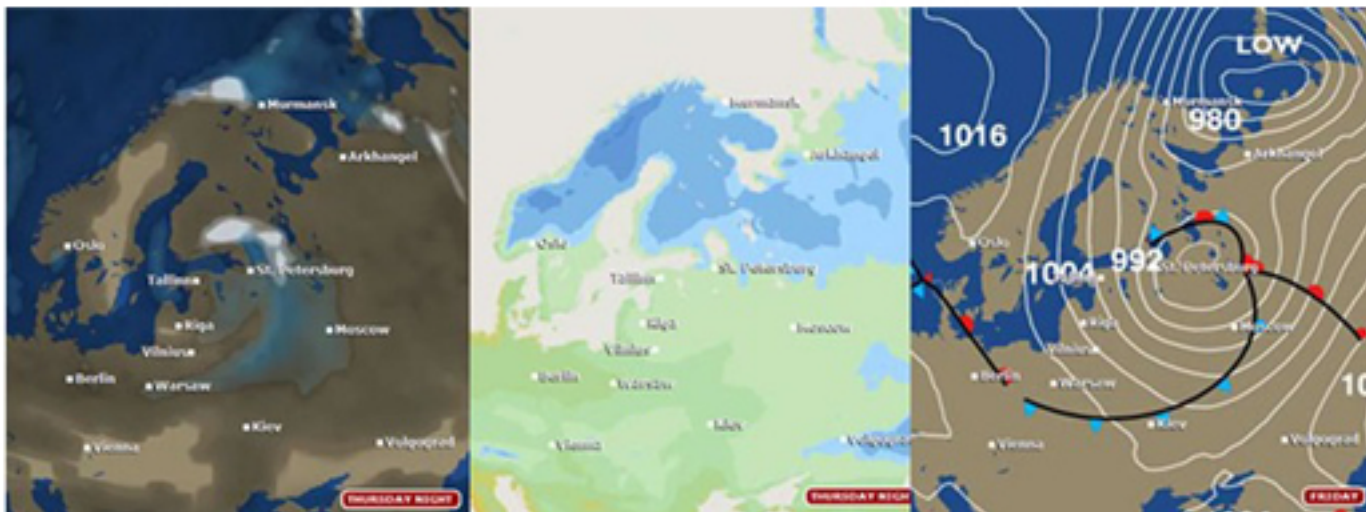
Two-dimensional layering can be sequential (linear), and can be used to manage complexity by introducing the content in stages with context changing easily. It can also be non-liner, for example hierarchical (site structure diagram), parallel (swim lanes) or web-like. Three-dimensional layering uses transparent layers to introduce conceptual ideas around a particular context that does not change.

Accessibility

Of all the principles in the experience design framework, arguably the most important one, has been left until last. Without this principle of accessibility being acknowledged and adhered to, the world would be a much more frustrating, and potentially dangerous place to live in. The four elements below, define if a solution is accessible or not, and if barriers are present to users that inhibits their usage of a product. Addressing accessibility goes some way in producing naturally usable products.

Perceptibility

Can the design be perceived irrespective of sensory capabilities? Common ways to address this is to make sensory alerts (visual and auditory) when an action is performed. From the doors of a train to the alert box of a computer system, sound and visual alerts are used. Physical objects can be made more perceptive to touch by using size and texture. Online elements can use the ALT tag and code structure of the page can ensure screen readers focus on content and not superfluous graphic items.

Operability and Simplicity

This Paris Metro ticket machine has a large spinning roller that controls the screen above and two very large buttons either side to cancel or accept cues on screen. The machine also talks to the user, is positioned so a sitting person can still operate it and is highly sensitive – so the roller can move with the minimum of physical effort. The design is marred by the credit card area being positioned up and away from the focus area, but generally it is operable to multiple user types. It also manages to achieve simplicity as the control inputs are simple, and the choices can be understood with the use of pictorial elements, text and audio. Even without knowledge of French, the machine can still be used to produce a ticket, revealing relevant steps to ensure the user continues through the sales flow and achieves their goal.

Forgiveness

When designs minimise the occurrence and consequence of errors the design exhibits forgiveness. Reversible actions (undo), controls that can only be used in the correct way and the use of confirmations and consistent messaging all ensure that safety nets are available for the user (and the ability to not be punished for making errors). E-payment systems consistently ensure that their payment system is forgiving and gives ample opportunity to allow a user to decline or leave the process. The next theme in the Six Circles is Interaction. The ability to get the interface to achieve what you intended once the usability of a solution has either been a non-issue and been navigated or where the exasperated user has finally overcome the bad experience and is still hanging in there.

Interaction

Image courtesy of Gobble Monster - Flickr

Perhaps the most well known and dominant aspect of UX, it has been described as

"the design of behavior, positioned as dialogue between a person and an artifact. A person commonly doesn't talk to an object; they use it, touch it, manipulate it, and control it. Usage, touching, manipulation and control are all dialogical acts, unspoken but conversational." – Jon Kolko

and also...

"a design discipline dedicated to defining the behavior of artifacts, environments, and systems (i.e., products)". - Robert Reimann

Undoubtedly interaction design is a design discipline that has become a defining element of UX. Though the preceding two quotes assert the alignment with a user's behaviour they do so here in relation to their interaction (the person and the artifact).

Progressive disclosure

Good interfaces display this all the time. By only revealing necessary information at a specific point on the user journey, or within a specific context, the tasks presented are relevant. This is a type of layering , but in the case of the interface, the layers are interactions. In the physical world we see this exhibited on road signs as we reach a destination. In sign up forms, revealing necessary steps in stages to allow an easier route to completing a form.

Affordance

In design, affordance is defined as the properties an object or environment has that defines its usage. The hammer is a very basic example. For hitting nails, it is the best tool for the job - a handle to pick it up and a heavy end to hit a nail with.

In website design affordance is perceived and describes how interactive elements showcase functionality and how an element looks indicates use. The input field, the carousel, the scroll bar all have a way of describing their interactive qualities. But it is important to remember they are perceived, in other words prior knowledge has been gleaned somewhere before a user fully understands how these elements act within a web browser.

This is important to consider when using new interactive paradigms - there may be no prior experience that a user can take from, which will result in initial poor usability. However the experience of the product may eventually be better once the interaction has been learnt.
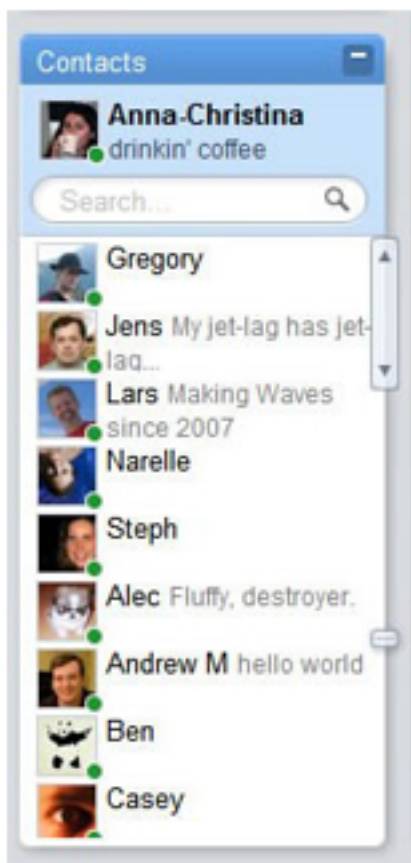
An example of perceived affordance and the glitch with usability could be seen in (the now defunct) Google Wave's scrollbar. Though it works a little like a normal scrollbar, it grows with the length of a list and has an elasticity to its behaviour. The purpose is to save space but see what one user thinks;

'I'd be content with an option to use normal scrollbars.

For me, the issue is that scrollbars are easy and don't need to be reinvented; at the risk of sounding Luddite somehow (though how Luddite can I be, being a Wave early adopter?) there was nothing wrong with the standard widgets, and Google didn't need to make changes.

Second, they break the rule of "don't move the controls around." I don't want to have to go find the scroll arrows again.As it is, I avoid using them whenever possible.'

Confirmation, Errors and Forgiveness

The avoidance of errors online is a major consideration especially when one considers the increasingly important role websites have to play in tasks that are important. The online vote for a general election may not be too far away but the system for the voting paper would need to be designed to minimize user errors and allow a user to navigate and be clear in their actions.

These three qualities are all closely linked and are in fact related to a user's mistake. It is widely accepted that errors will be made, and the system must forgive these faults. One way is to ensure a confirmation stage is instilled before a deletion or a payment. Past this point of confirmation it is easy to see how the user's experience of a service can be rated in terms of forgiveness. If you have mistakenly paid for an item how easy is it to regain your money? If you have deleted a record can you undo?

An optimal pattern of interaction maybe that the user decides on an action, the system asks the user to confirm it. The user confirms but realises their error and the system 'forgives' the mistake by allowing them to rectify the issue. How many systems do not allow this to happen? Many online banks, for example, will not reverse a confirmed payment without a call to customer services.

Fitts law

Size and location of interactive items (eg buttons) can denote an ease and speed of use. The smaller and more distant the area of interaction, the longer it takes to move from a resting position to the target and accuracy is also affected if speed and distance is a factor. However in touch screen technology the extra dimension of what you are pointing with, (in this case the finger) plays a part in this principle. Moving objects with the finger can become tiresome if repetitive, and Fitts Law again plays a role by the ensuring the least amount of effort is required when interacting with an interface.

Constraints

In the interface a physical constrain can be seen in the slider to select appropriate parameters (price available for flights for example) or in form input fields with the radio button (select one) or the check box (select one or many of several options). The screen is also a physical constraint and leads to the inevitable frame effect on the design of a page. However Windows 7 for mobile and the iPad see the screen more as a window to look through at the content than a frame to be bound by. Used well constraints will simplify and reduce errors by improving usability.

Control

The principle of allowing a user control over a system regardless of their proficiency or experience. 'Expert' modes allow advanced features to be made use of but should never inhibit the minimum requirements of operating the interface and getting expected responses from it. The advanced user is considered the secondary audience where popular interfaces (such as on a web browser) are seen.
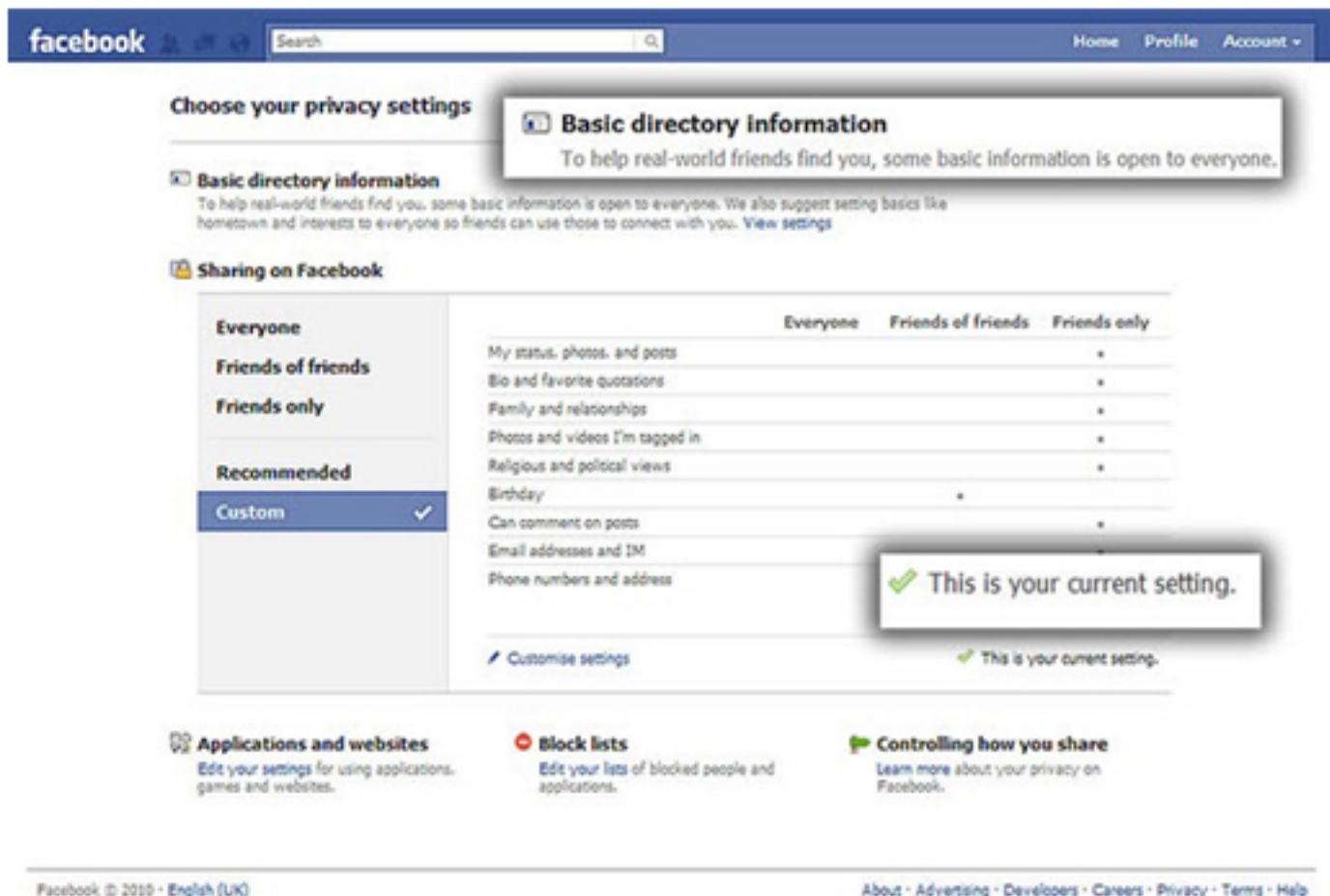

Facebook (with a user base of 800 million) has struggled with confusion over it's public and private settings. The line between shared and private information is undefined and as a result disconcerting to users. In an effort to address this the security settings have undergone a redesign - to give control back in a way that is clearer to the user.

Many feel that by using a service they should not feel violated by their interaction with it but unfortunately as a design exercise the failings are still evident and have led to many giving up their profiles. The design still fails to communicate effectively which privacy settings apply to areas of a profile and at the time of writing this post, basic information design rules have still not been observed.

Cost benefit

Activity (and interactivity) will be pursued by a user only if the benefits are greater than the costs. The costs in this case are typically time and attention spent by the user. Advertising is a typical annoyance but only when deemed irrelevant. In the proper context the cost benefit is increased and will likely lead to increased results.

Sometimes, as in the case of Flickr, the tools developed end up being of more value than the product itself. Flickr was originally a component of Game Neverending, an online multiplayer game produced by the Canadian company Ludicorp.
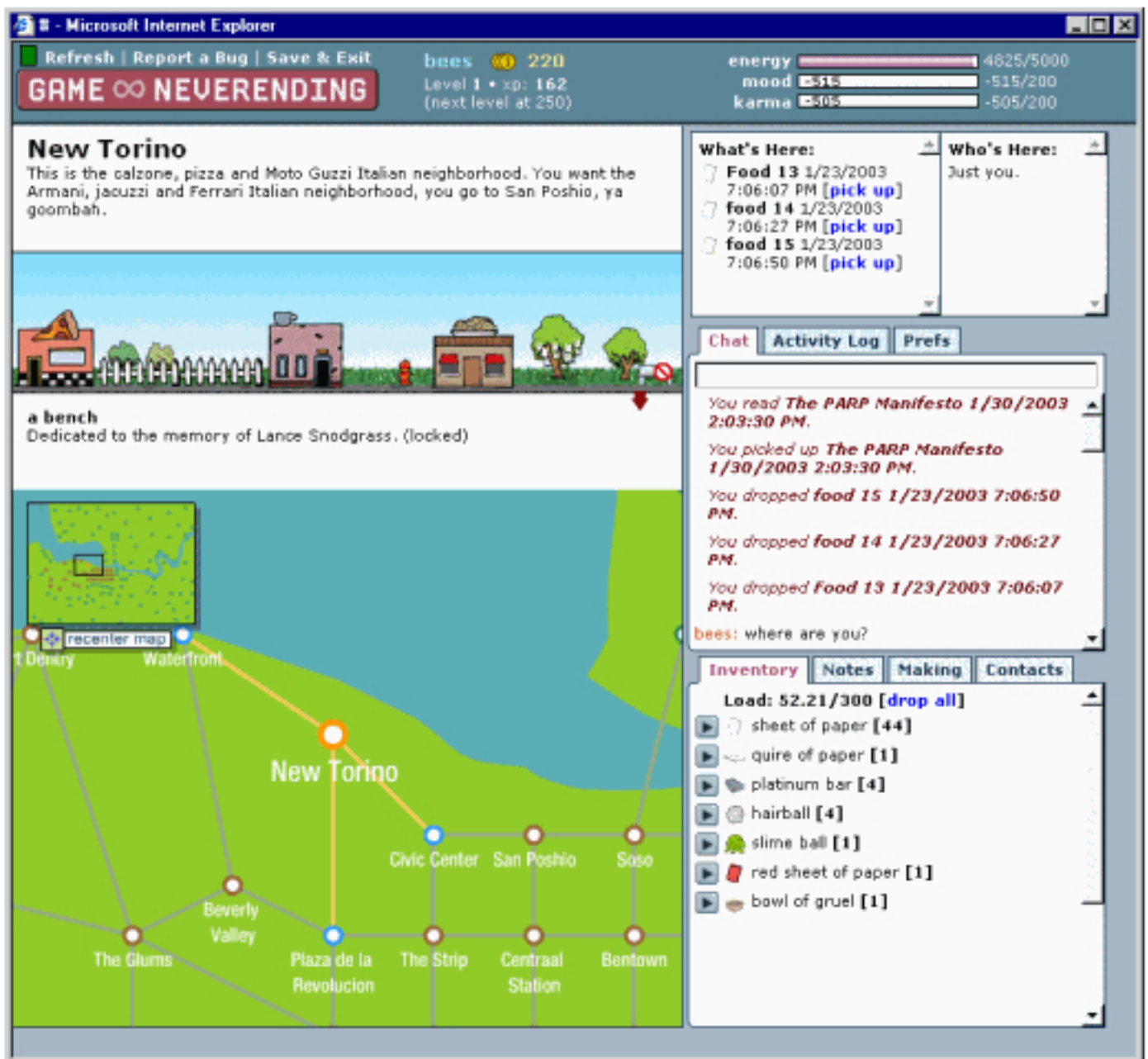
The image sharing component of the game became Flickr as it was deemed a more feasible project. The cost invested in producing an element of the interface resulted in a massive benefit

for the company who sold to Yahoo!

However this good fortune is a rarity in design, where features ofthen have little cost benefit, are expensive and drain resources of a development group. One must be mindful of the impact of spending energy on elements with little discernible value to the user - they run the risk of being expensive distractions and potentially harmful to the user experience.

Such is the established nature of the discipline of interaction design, that you easily forget that the design principles at its foundation have been in existence as a core of product design for decades. Interaction as a component of UX is vital but it is important to view all the elements as part of the cohesive whole. Designing with user's experiences in mind effectively means that all areas of the UX design framework need to be taken into account to give the best results. UX is a part of good design practice and should not be treated as a separate entity.

In the final part of the series, Content is introduced. The reason for the journey that a user has experienced to get to the object that they want to read, see, listen to or play with.
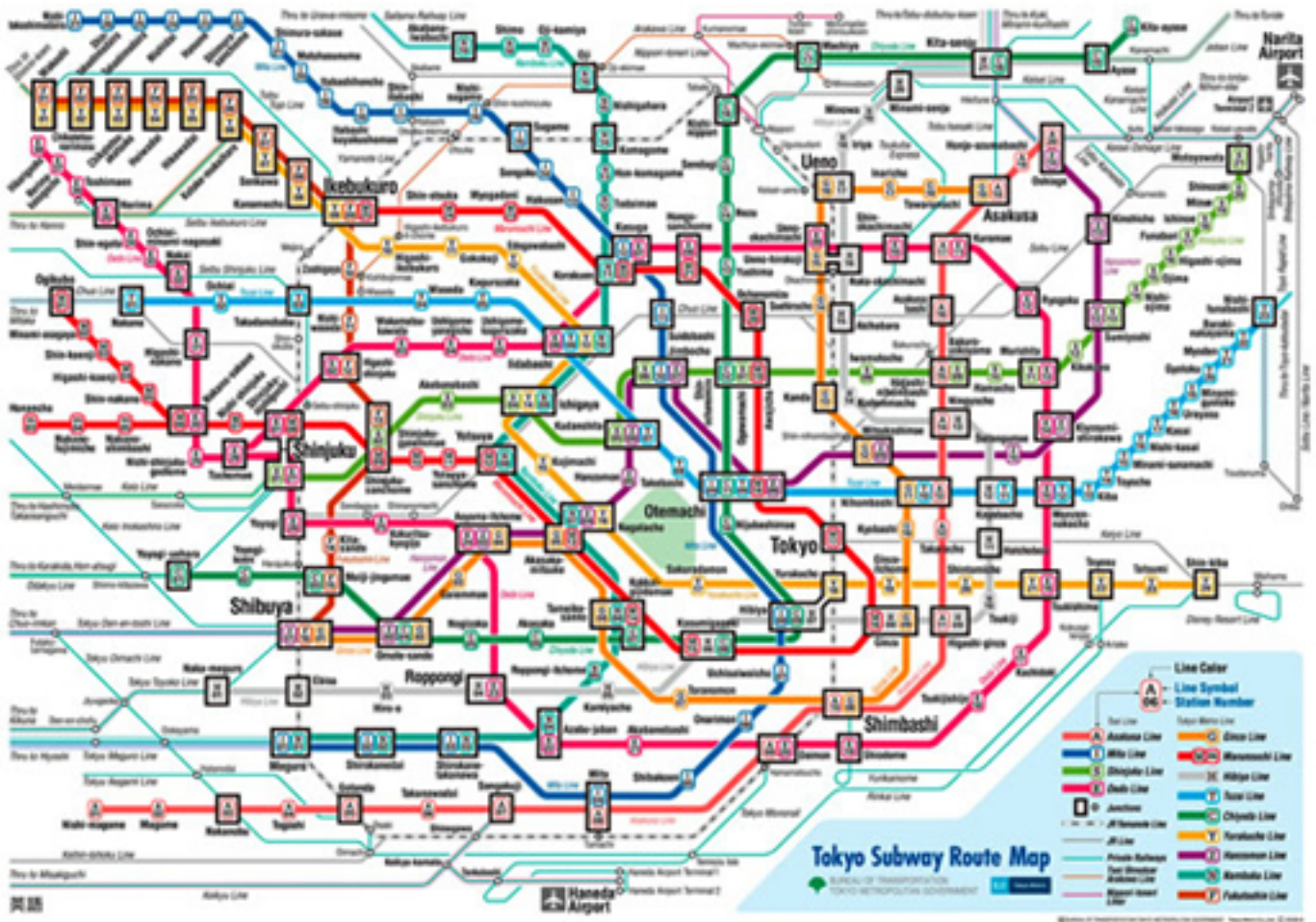
Content

Image courtesy of oceandesetoiles - Flickr

Content is the end point and a natural place to finish because without it the experience has no reason to exist. Here are six principles that are critically important in the design of user experiences with regard to content.

80/20

The 80/20 rule is a principle we need to always have in mind . For instance on my blog 20% of the content is accessed by 80% of the traffic. Using software, I have also categorized 100,000 articles, where 80% of the content sat within only 20% of the categories (people wrote for popularity in that case). But be aware of the remaining 20% that could be the key decision maker in a deal for your business. Create optimised pages with content that ensures visibility between content types and categories. As the principle holds true, cater for it in your content strategy.

Chunking

Content needs to be broken down into digestible elements. The brain cannot take in too much information at once. Headers and formatting can help here and conveying the meaning through a logical progression or flow down a page is essential to achieve a good information design. People-edigest content differently on screen. Font size needs to be large enough to be read and clear enough to communicate to those with visual impairments. Effective chunking allows quicker task completion times. The step-by-step system in a sign-up is a great example of this.

Depth of processing

This leads nicely on to the depth of processing rule. Cascade the most important elements down the page as people are more receptive at the top. Get the core message over quickly and develop this down the page. Use diagrams to highlight and reinforce points and keep user focus by drawing attention to these areas using visual design techniques. Use of contrast, colour and textual emphasis will help. Context is the prime focus here and avoid generic elements in the sections relating to why the user came to this area in the first place.

This page from the Guardian newspaper website shows good use of chunking and depth of processing. The image and font size breaks up the weight of text in the article and the use of white space allows the eye to scan quickly down the page.

The most important elements are brought out – the headline, author, date and use of bullets to describe the key takeaways from the story. The body of the story appears further down the page below the image. The column also allows segregation from the story content and related content and tools or features.

Five hat racks

The five hat racks is a technique used to help order information quickly. This is an effective principle when deciding how to order elements. It refers to the ability to order all information according to alphabetical standing, time, location, continuum (lowest to highest for example) and categories (how one object relates to another). Of course many jobs require a more involved organisation type but it always helps to have a start point when faced with a large challenge.

Hierarchy

The organisation of information which is immediately understandable from a user's perspective uses hierarchy - placing elements that have a direct correlation to each other conveyed in a visually related way. Consider how complex systems like software rely on menus that cascade out, allowing a user to see relationships between controls and how they interact with each other. Hierarchy is a major factor of how people understand systems, controls and relationships.

There is something about the cascading menu that is imprinted into every user of a pc, be it Mac or Windows. The design pattern is so established that for certain sites with vast taxonomies it is the only option to convey the breadth of content and allow a user to explore the inventory in an intuitive way.

Amazon is a great example of this and if you remember the tabs debacle you can see why they chose a safe option that works in a way that stays true to the trinity of tried, tested and trusted.

However this approach may change with the advent of improved user interfaces and touch technology.

Readability

Complex information requires the simplest form of presentation possible. This is transferred down to the language used and is often overlooked when designs of systems are built. Sentence length, word commonality, word length and syllable amount all contribute to whether the information is easy to absorb or encounters unnecessary hurdles. Although there is a readability graph that allows a reading age to be calculated from any text, you should aim to use language that is concise and has clarity when conveying complex instructions, product descriptions or theories.

Epilogue

As designers who cater for experiences in the UX or service design fields, the levels of understanding we need to acquire will only increase as technology will allow us to do more, with more speed and with more societal ramifications. Ensuring we factor in the design principle of forgiveness would be a good place to start in this increasingly turbulent time of technological flux.

UX has afforded us another way to look at the world. It deals with the microelements of an experience – down to the button colour, dimensions, placement and tone of copy used. The appreciation of these details that can ruin an otherwise perfect product is enough to make this work worthwhile. We make things work better - a critical aspect of successful design.

This micro view of the constituent parts that make up an experience is of course a part of the overall spectrum, and where the six circles paint the larger picture. But an appreciation of the other disciplines that contribute to a person's view of a brand, product or service make us more rounded and appreciative when doing UX work.

The other key parts to the experience design process, the macro view of a customer experience made by service designers for example, are an essential part of the complex inter-relationships that experience design involves. Realising that many of us strive to achieve the same goals is important. It helps to keep the design community strong and inhibits yet more divergence in our thinking and overall goals of creating cohesive cross-channel experiences.

The context of one's experience with different types of interaction is subject to change and inevitably defines an experience in different ways. For example, mobile devices allow connectivity, communication and freedom of movement. Add a camera, and the previous interaction of making a phone call becomes a magical experience of seeing a face move with their voice.

The importance of designing for context is at the heart of experience design and certainly will become more important as the complexity of our world grows and the quest for simplicity becomes the most important goal for many businesses.

Many creative design agencies are realising that UX and the traditional disciplines of communication and strategic planning need to play well together to define solutions. Unsurprisingly both need each other to ensure the creation of ecosystems have the appreciation of brands and products at their core, and that the different contextually designed experiences are well considered and perfectly executed.

UX cannot do it all alone, and more importantly should not. The cross-disciplinary team will always trump like-minds. The six circles is a basis for a team's methodology with different skill-sets and backgrounds, and is wide enough to allow variations in skills but a common agreement towards the importance of these factors. The six circles should be seen as a series of lenses to view a problem space and help define the solutions dependent on context that the solution should exist in.

A team may encompass the roles of a marketing person with a grasp of the brand, a person who understands the behaviours of people either from an analytical or psychological sense. A person who has visual design ability is critical, perhaps (if you are lucky) with a sound understanding of interface usability and interaction design factors. Finally, a person who can communicate the content or convey the social object in a way that is instantly engaging to the user.

Already you may have 6 people to conduct this experience design job, but it needs this commitment from companies to have the force ready and able to execute on the user-centred solutions that have been researched in the discovery phase. The buzz-word of the boardroom – innovation should occur in an environment that allows it to flourish and with the right ingredients for it to happen.

People's application to a task using an agreed point of reference is critical to success. SCRUM is no better than Waterfall, for it is the culture of a company that helps define which method is most successful for their specific situation. The people define the success, not the process. The industrial way of thinking about creating products as if on a production line no longer works.

We need to remember how to look inwards, to reflect and realize our creative potentials and produce meaningful and valuable products again. Create value by realizing what others find valuable. Innovate by executing on the ideas that arise from research.

Experience design allows us to see these facts and to make business wake up to them. It is in some ways a reboot on staid industrial thinking. Let's remember what makes us human and create products and services that people need and want. Simple 'delight' will only take us halfway, but being deliberate in our solutions will establish a lasting logical legacy.

I hope you have enjoyed this ebook, the observations and the areas that fit within an experience design practice framework.

Follow me on twitter @jameskelway for more musings around the Six Circles.