Design for Simplicity

Designing for Simplicity

Designing a user experience that considers the user's aims and offers the simplest means of achieving these goals, is the height of design sophistication.

What is a Simple Product?

Simple products are **easy to use,** so they find a popular audience.

Simple products are **reliable**, so people develop an attachment to them.

Simple products are **adaptable,** so they end up being used in surprising ways.

Key Considerations

Complexity

The more features you add, the less chance a new feature will be of real value to anyone.

Increased complexity means users can't easily find the features that are important to them.

Control

“The more users’ expectations prove right, the more they will feel in control of the system and the more they will like it.”

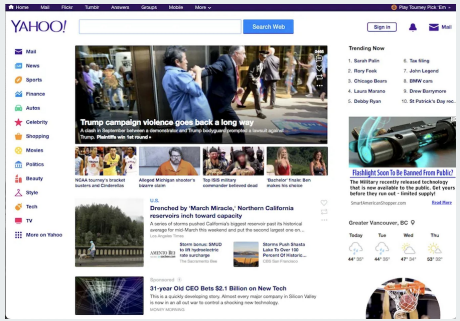
– Jacob Nielsen, co-founder of Nielsen Norman Group

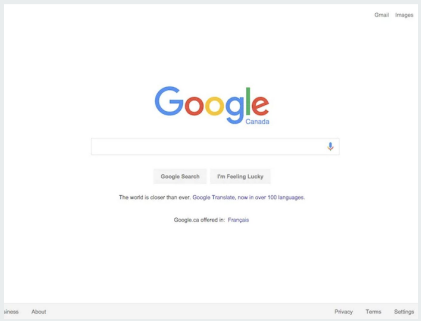
The key need for users is to feel that they’re in control of the technology they are using, and in control of their lives. Your design shouldn’t interfere with that control.

Simple experiences make users feel confident that they’re making good choices.

Simple experiences reassure users that the product will respond in a predictable way.

Clarity





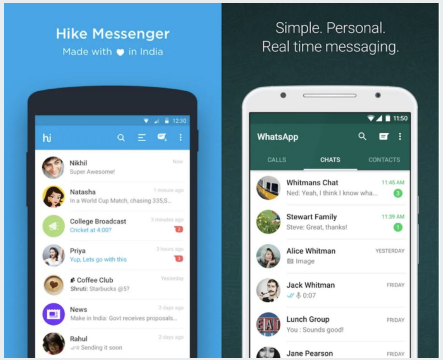
Understand & Design for Users' Main Goals

Maintaining clarity in the user interface you design is key to user success and user satisfaction.

Clarity allows your users to understand what you're trying to help them achieve.

If your design has too much extraneous information, users will have trouble navigating it.

Automation



Design for a Minimum Amount of Conscious & Cognitive Effort

Figure out what the commonly practiced tasks and processes are and incorporate them into your designs whenever possible.

Make users feel at ease and in control without much effort.

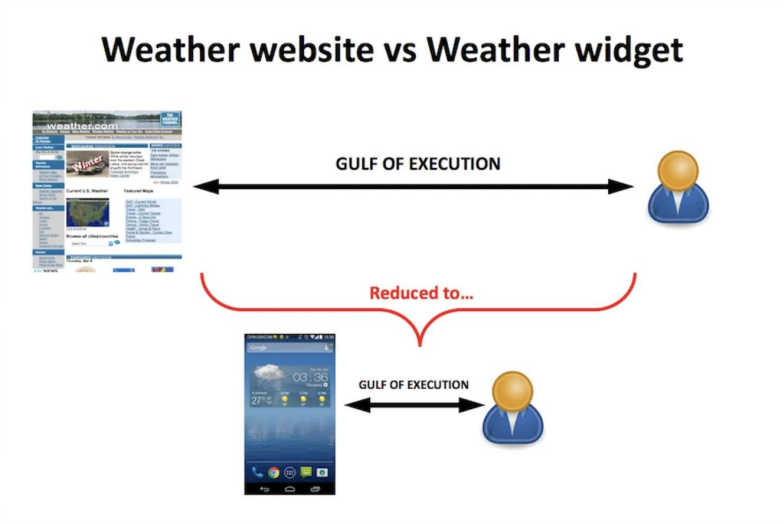
Limitations

Design for a Strong “Information Scent”

Our tendency to detect only those things that are relevant to our current goal; they called this “following the scent of information”.

The best user interfaces lead users through a desired path with clear indication of the individual steps required to complete their user goals.

Gulf of Execution



Reduce the “Gulf of Execution”

Make your users see how your product can help them achieve their goals.

The term “gulf of execution,” coined by Donald Norman, describes the gap between a user’s goal and the means to execute that goal.

It’s a psychological gap between the human and the interface, where the visible steps towards the goal should match the psychological goals of the user as much as possible.

Simple doesn’t equal minimal or usable

Simple doesn’t always mean minimal.

Simple is not the same as Usable

Simple is not the same as Usable

Usability

Specific group of people

Easy to use

Responds quickly

Understood quickly

Works reliably

Complete information

Works in a user test

Simplicity

Anyone can use it

Effortless to use

Responds instantly

Understood at a glance

Works always

Just enough information

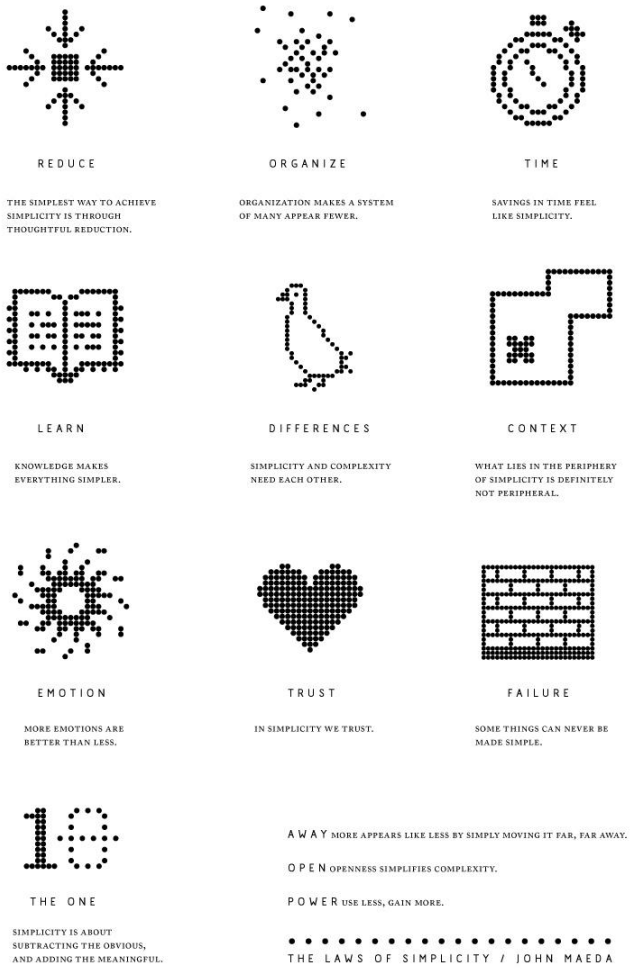
Works in chaos

The Laws of Simplicity

10 Laws of Simplicity

In 2006, John Maeda published *The Laws of Simplicity* to find ways for people to simplify their life in the face of growing complexity.

He is an American executive, designer and technologist. His work explores the area where business, design, and technology merge to make space for the "humanist technologist."



1. Reduce

The simplest way to achieve simplicity is through thoughtful reduction.

According to a 2019 Feature Adoption Report by Pendo, “80 percent of features in the average software product are rarely or never used.”

1. Reduce

Remove

Removing or omitting features can lead to successful products and allows designers to focus on solving a few important problems really well.

1. Focus on what's core
2. Kill lame features
3. Don't "what if..." about future features
4. Prioritize features
5. Choice overwhelms users
6. Get rid of distraction and clutter
7. Remove words
8. Simplify sentences

1. Reduce

Hide

Hiding means putting a barrier between a user and the feature.

You must carefully choose what to hide so not to inconvenience the user.

1. Hide infrequent but necessary items
2. Hide customizations, options and settings.
3. Give cues and clues
4. Make things easy to find

1. Reduce

Displace

Put features on a different device altogether.

However, if you displace all the features then it's hard to guess what the product can actually do?

2. Organize

Organization makes a system of many appear fewer.

Organizing is often the quickest way to make things simpler. Try to emphasize just one or two important things.

1. Chunk information into groups
2. Organize for behavior
3. Make strong distinctions
4. Utilize grid and hierarchy

3. Time

Savings in time feels like simplicity.

3. Time

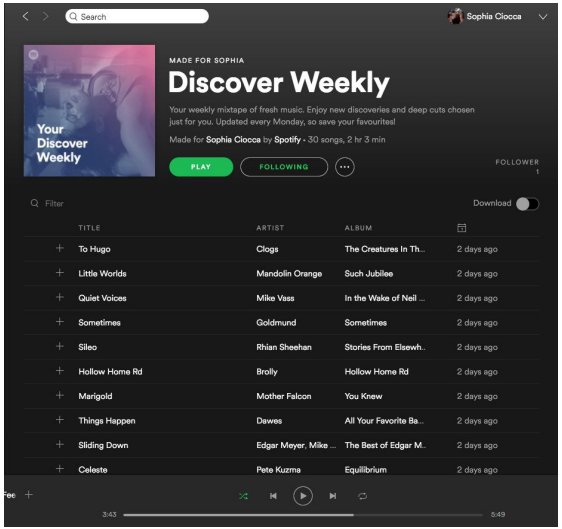
SHE:
Shrink, Hide, Embody

SHRINK

Product examples:

Eg., iPod Shuffle was a device that removed constraints and choices

Eg., Spotify knows your preferences, habits, possibly mood



3. Time

SHE: Shrink, Hide, Embody

HIDE

Hiding its passage – remove displays from environment:

Eg., In casinos, you don't see it, but know time is flowing on

Don't hide too much – seeing or hearing time progress can be reassuring:

Eg., Progress bars make a task appear to take less time

3. Time

SHE:
Shrink, Hide, Embody

EMBODY

Time can be embodied through use of **styling to create the illusion of motion and speed:**

Eg., Raymond Loewy Coke bottle, Airstream

Fast doesn't come cheap - valuable:

Eg., express delivery, direct flight, cable internet

Give extra care to a customer, making the experience of waiting more tolerable when speeding up is not an option:

Eg., Magazines in a waiting room, tea when your at the spa, entertainment while in line at Disney

4. Learn

Knowledge makes everything simpler.

Learning occurs best when there is a desire to attain specific knowledge.

Difficult tasks seem easier when they are **need to know** rather than **nice to know.**

Eg: drivers education vs. chemistry

4. Learn

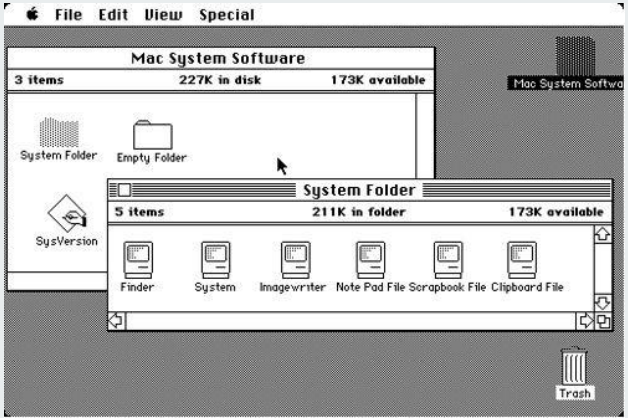
Knowledge makes you:

1. Feel safe by avoiding desperation
2. Confident by mastering the basics
3. Instinctive by conditioning through repetition

– all satisfying rational needs

4. Learn

Relate – Translate – Surprise



RELATE – TRANSLATE – SURPRISE: design approach

Design starts by leveraging the human instinct to RELATE,

followed by TRANSLATING the relationship into a tangible object or service,

and then ideally adding a little SURPRISE at the end.

Desktop Metaphor example:

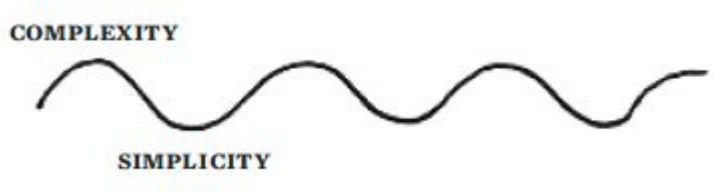
- *RELATE through the office desk paradigm*
- *TRANSLATE physical desktop aspects on the screen*
- *SURPRISE digital information management*

5. Differences

Simplicity and complexity need each other.

Without the counterpoint of complexity we wouldn't recognize simplicity when we see it.

The more complexity there is, the more something simpler stands out.



6. Context

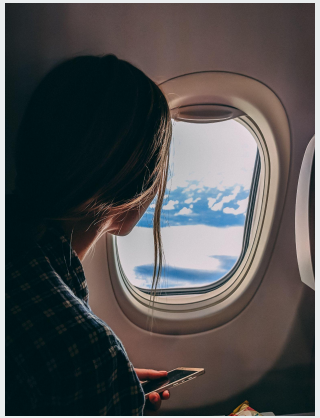
What lies in the periphery of simplicity is definitely not peripheral.

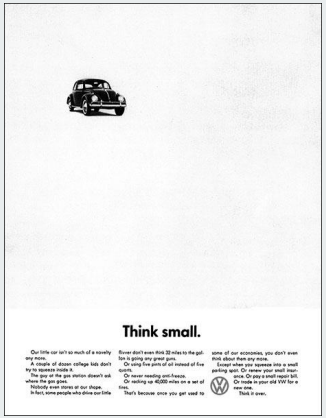
Understand the space around the user, the device, and the task.

That which appears to be of immediate relevance may not be nearly as important compared to everything else around.

6. Context

Ambience





Ambience is Everywhere

Small things in the environment matter more when you are forced to pay attention to them.

Ambient background can take precedence over foreground.

- *riding on an airplane*
- *vacation*

Creating white space can make the foreground stand out from background.

Being attuned to what surrounds us can sometimes help manage what's immediately in front of us.

6. Context

Comfortably Lost

How directed can I stand to feel?

- *could get boring*

How directionless can I afford to be?

- *could be dangerous*

Find the balance between found vs. lost

- Google Earth – *find yourself, then you in relation to everyone else, sense of comfort then gives way to monotony*
- Progress of reading a book – *starting is easy, but somewhere in the middle you can be unsure of how far you are - page numbers and holding in your hands can help you not feel lost*
- signs on a hiking trail – *comfortably lost*

7. Emotion

More emotions are better than less.

Our society, systems, and artifacts require active engagement in care, attention, and feeling.

7. Emotion

FEEL, AND FEEL FOR: E-TIQUETTE

- *Adding emoticons so we can better express ourselves*
- *Children writing in color and large all caps in their email*

FEEL, AND FEEL FOR: NUDE ELECTRONICS

- *When using SHE to simplify, people become afraid for object's survival, self-expression, and purchase accessories*

FEEL, AND FEEL FOR: AICHAKU

Aichaku means Love-Fit: sense of attachment one can feel for an object

Everything in environment, including inanimate objects has a living spirit that deserves respect

- *Shintoism, Animism*
- *robotic dog, tamagocchi electronic keychains, farmville*

8. Trust

In simplicity we trust.

Simple feels honest and transparent.

8. Trust

Just Undo It

Undo is a relationship of convenience

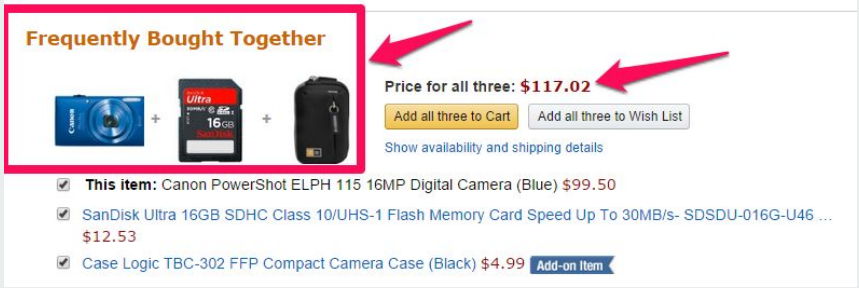
Power of undo is equally balanced and you don't have to care

Maintains many complex relationships with objects

- *letting customers return purchases builds trust*
- *computer tools let you undo*

8. Trust

Trust Me



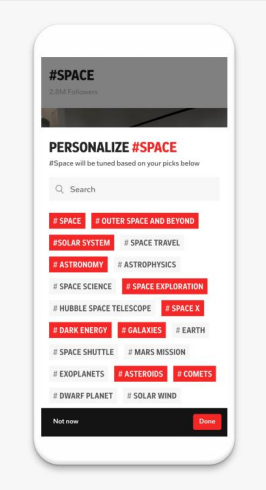
The more a system knows about you, the less you have to think

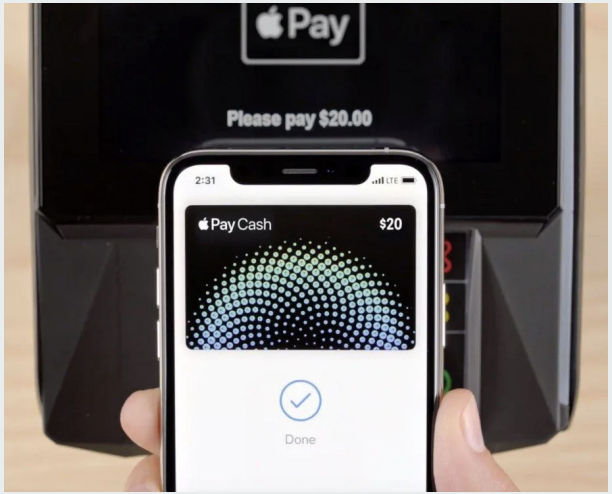
- *Amazon's 'if you like this, you might like this' and Google's 'i'm feeling lucky'*

The more you know about the system, the greater control you can exact

8. Trust

Give and Take





Find The Balance Between:

How much do you need to know about a system?

- *Effort is required to learn and master the system*

How much does the system know about you?

- *Trust must be offered to the system, that trust must be consistently repaid*

Privacy is sacrificed for extra convenience when leaving the device in control.

Undo allows us to be in control by learning to trust our own knowledge of a system

9. Failure

Some things can never be made simple.

Not all problems have simple solutions. Not everyone views simplicity the same.

Emotions are relative.

Simplicity/complexity shift with subtle changes of point of view.

10. The One

Simplicity is about subtracting the obvious, and adding the meaningful.

Focus on what matters, create clarity and purpose for the user.

What products can you think of that embody simplicity?

How will you design for simplicity?