2.0 Interaction Design

HISTORY OF IxD
Interaction design as a field didn’t emerge until the mid-1980s.

But, most of the qualities we seek have been valued through the ages:

useful, usable, complex, transparent, good fit, desirable, affordable, styled, adaptable
MOVING TOWARDS COMPLEXITY

SINGLE-PART TOOLS  MULTI-PART TOOLS  MECHANICAL MOTION
THE INDUSTRIAL REVOLUTION 1760-1850

The transition from hand production to machine manufacturing processes.

Largest technological developments:

Textiles
Steam Power
Iron Making
DESIGNism #4

HAVE NOTHING IN YOUR HOUSES THAT YOU DO NOT KNOW TO BE USEFUL, OR BELIEVE TO BE BEAUTIFUL.

- William Morris
PART 1

COMPUTING
First modern programmable computers were built in the 1940s and used for military operations.
IBM SYSTEM/360 MODEL 91, 1964
NASA
In 1973 Xerox Alto was the first computer to integrate the use of the mouse. Here you can also see an early version of the “desktop metaphor” for its graphical user interface.
COMMODORE PET, 1977
XEROX STAR

In 1981 Xerox Star was released as the commercial product that succeeded the Xerox Alto.
IN 1982, “THE COMPUTER” WAS NAMED MACHINE OF THE YEAR BY TIME MAGAZINE.
In the 1960s Doug Engelbart and Bill English invented the computer mouse.

The mouse was designed to be easier than light pens, cursors, keys, joysticks, and trackballs.

It was called a “mouse” because the cord was attached to the rear and it resembled a mouse.
THE DESKTOP METAPHOR

The desktop metaphor treats the computer monitor as if it is the user’s desktop, upon which objects such as documents and folders of documents can be placed.

It was first introduced by Alan Kay at Xerox PARC in 1970.
THE PAPER PARADIGM

The paper paradigm consists of black text on white background, files within folders, and a “desktop.”

“You can have a lot more paper on a desk if they overlap each other.”
- Alan Kay

Larry Tesler who worked with Alan Kay brought the new design to the Apple Lisa.
THE FIRST LAPTOP

In 1981, Bill Moggridge designed the first laptop, the GRiD compass.
After playing with the GRiD Compass he realized that the interaction with the software was more important than the physical design.

In 1984, he coined the term “interaction design” when he realized he was doing a different type of design that combined product design, communication design, computer science, and human-computer interaction.
Bill Moggridge went on to co-found IDEO and formed the first team of interaction designers comprised of industrial, information, and graphic designers.
Apple Macintosh

Steve Jobs introduced the Macintosh in 1984 which popularized the desktop metaphor.

This was the first mass-market personal computer featuring a graphical user interface and mouse.
YOU’VE GOT TO START WITH THE CUSTOMER EXPERIENCE AND WORK BACK TOWARD THE TECHNOLOGY, NOT THE OTHER WAY AROUND.

- Steve Jobs
APPLE OS X

“The biggest difference with Mac OS X was that it was completely design driving, based on what we thought novice user would need in an operating system.”

- Cordell Ratzlaff, managed Apple’s Human Interface Group for 5 years.
SIMPPLICITY AND IDENTITY

In OS X, Ratzlaff removed bulky mass in the windows, created the column view, animations, and stylized the icons to look liquid and translucent to match the physical computer.
Palm Pilot

After designing the GRiD Pad, Jeff Hawkins left GRiD, and started Palm Computing.

He designed the Palm PDA which was widely successful for it’s size, price, synchrononization, speed, and stylus.

It use new software called Graffiti that taught and traslated handwriting on the Palm Pilot.
LOOKING AHEAD

Palm’s touch devices paved the way for future handhelds such as Blackberry and iPhone.
PART 2

MULTIMEDIA
In 1972 Nolan Bushnell, co-founder of Atari, released the arcade version of Pong.

Pong was the first arcade video game with widespread success and spawned the game industry.
XBOX KINECT

Motion sensing input device by Microsoft that enables users to control and interact with their console/computer without the need for a game controller, through a natural user interface using gestures and spoken commands.
VIRTUAL WORLDS

Virtual Worlds are 3D computer environments where each user is represented with a character, or avatar.

Virtual worlds are used for entertainment, education, and corporate applications.
SECOND LIFE

Second Life was the first public virtual world that did not offer any topic, or theme.

Each user is free to create their own objects and environment. It also has an internal currency, which can be used to buy, sell, rent or trade land/goods/services with other users.
The Rift is a newer virtual reality head-mounted display developed by Oculus VR.

On March 25, 2014 Mark Zuckerberg announced that Facebook was acquiring Oculus VR for $2 billion.
Developer kit for the Oculus Rift - the first truly immersive virtual reality headset for video games.
AUGMENTED REALITY

A live direct or indirect view of a physical, real-world environment whose elements are augmented by computer-generated sensory input such as sound, video, graphics or GPS data.
GENDARMENMARKT

Der Gendarmenmarkt im Bezirk Mitte (mitunter als „schönster Platz Berlins“ bezeichnet) ist ein Platz in der historischen Mitte von Berlin, Zentrales
GOOGLE GLASS

Google Glass displays information in a smartphone-like hands-free format. Wearers communicate with the Internet via natural language voice commands.

Google Glass applications are free applications built by third-party developers.

Features: touch pad, camera, display
THE INTERNET OF THINGS

The Internet of Things (IoT) is a computing concept that describes a future where everyday physical objects will be connected to the Internet and be able to identify themselves to other devices.

smart objects > smart homes > smart cities
SOCIAL MEDIA

Social interaction that relies on mobile and web-based technologies to create highly interactive platforms through which individuals and communities share, co-create, discuss, and modify user-generated content.

73% of online adults use social networking sites (2013).
DESIGNism #6

SOMETIMES YOU HAVE TO KEEP IDEAS FOR DECADES BEFORE THEY HAVE ANY USE.

- Marc English