Mobile Design History



But first, a brief history on the internet...



Arpanet

A precursor to the internet that was an academic research project funded by Advanced Research Projects



Arpanet expanded

By 1970 cross country, 1973 international.



Email is invented

During this time, email is invented by Roy Tomlinson (1941 - 2016) who also invents the use of @ symbols in email addresses.



Usenet

By 1980s, ARPANET continued to grow, fostering a social commuity predating Facebook and MySpace.



ARPANET becomes Internet (1983)

Engineers Robert Kahn and Vint Cerf standardize network communications known as TCIP/IP. ARPANET switches to this in 1983, marking birth of modern internet.



Internet had become global by 1993.

Map of information flow on Usenet shown here.

Complete aggregate news flow, worldwide Line width proportional to directional effective flow volu

an Reid at Thu May 13 13:49), Map center [15'N, 88'W] DECWRL net Gall Stereogr



Internet becomes commercialized

By 1994, Clinton administration privitized internet backbone. Commercial firms took over long-distance traffic, allowing gov't funded NSFNET to be decomissioned.



Global Internet Penetration 2017

Shows who has access to internet. 2 main ways: through broadband connection or through mobile device.

Showing Global Internet penetration (%) V

	Internet user penetration						
			3 у	ear CAGR			
	1st	Iceland	96.5%	(+1%)			
	2nd	Bermuda	95.3%	(+4%)			
1	3rd	Norway	95.1%	(+1%)			
2	4th	Sweden	94.8%	(+2%)			
ξ, γ	5th	Denmark	94.6%	(+2%)			
	6th	Andorra	94.0%	(+5%)			
	6th	Netherlands	94.0%	(+1%)			
	7th	Luxembourg	93.8%	(+1%)			
	7th	Liechtenstein	93.8%	(+5%)			
	8th	Finland	91.5%	(+2%)			
	9th	Monaco	90.7%	(+7%)			
	10th	Faroe Islands	90.0%	(+6%)			
	10th	Bahrain	90.0%	(+18%)			
	11th	United Kingdom	89.8%	(+2%)			
	Source: IT	U 2014. Data: 2013					





Broadband Internet Penetration 2017

Showing Fixed Broadband penetration (%) V

	Fixed broadband population penetration					
			3	year CAGR		
	1st	Bermuda	61.4%	(-1%)		
J	2nd	Monaco	44.7%	(+6%)		
	3rd	Switzerland	42.5%	(+5%)		
ŝ	4th	Liechtenstein	40.7%	(-1%)		
	5th	Denmark	40.2%	(+3%)		
	6th	Netherlands	40.1%	(+2%)		
	7th	France	38.8%	(+5%)		
	8th	Norway	38.1%	(+3%)		
	9th	Korea (Rep. of)	38.0%	(+2%)		
	10th	United Kingdom	35.8%	(+5%)		
	11th	Iceland	35.1%	(+1%)		
	12th	Cayman Islands	34.8%	(+1%)		
	13th	Germany	34.6%	(+3%)		
	14th	Belgium	34.4%	(+4%)		
	Source: IT	U 2014. Data: 2013				

1.5



Mobile Internet Penetration 2017

Showing Mobile Broadband penetration (%) V

		3	year CAGI
1st	Macao, China	303.4%	(+25%)
2nd	Singapore	149.3%	(+15%)
3rd	Finland	123.5%	(+14%)
4th	Japan	120.5%	(+11%)
5th	Australia	110.5%	(+26%)
6th	Bahrain	110.0%	(+211%
7th	Sweden	108.7%	(+9%)
8th	Korea (Rep. of)	105.3%	(+3%)
9th	Denmark	103.8%	(+18%)
10th	United States	98.0%	(+18%)
11th	Hong Kong, China	94.0%	(+34%)
12th	United Arab Emirates	89.0%	(+88%)
13th	United Kingdom	87.2%	(+26%)
14th	Liechtenstein	86.8%	(+5%)

1.5

Tell me more about cell phones





Martin Cooper(1928–) invented the first cell phone in 1974.





A collection of some of my old cell phones







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ໍດໍ Nika Simovich

Google Chrome on phone

Responsive web design replaced having a totally separate mobile experience.





Responsive Web Design

Mobile Design Basics



Pokemon Go



Compass Search ●●○○○ LTE 10:42 PM ◀ ◑ ∦ 🔲 120 150 180 210 240 W 270 300 330 SE New York NY 40°46'17" N 73°54'36" W 70 ft Elevation

Zagat



Variable Location

Mobile site/app can respond to location, because it can change and be accessed somewhere specific, while desktop is accessed from 1 spot.

Star Walk 2

Artsy App



Less Real Estate

Viewport is smaller, so the experience is more streamlined allowing the user to focus on one thing at a time.

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WCMA is a vibrant hub for learning and participation.

We believe in taking risks and testing creative, future forms of scholarship and teaching. We leverage our intimate size, college setting, and interdisciplinary context to generate experimental, hands-on learning experiences.



Legibility Key

Due to the smaller screen size, legibility is key. Type sizes are generally larger, but use your best judgement.

WCMA

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WCMA is a vibrant hub for learning and participation.

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No Mouses. Simpler interactions.

Touching, not clicking. Buttons to be touchable. Certain parts of design hidden behind buttons and





Mobile phones generally carry more personal info Payments, contacts, logins, exact location. etc.





Phones have access to other senses: Sight & Touch Finger Quilt by Jeffrey Scudder uzes both sight and touch



Phones have access to other senses: Sight & Touch Photobooth by Konst & Teknik & Martin Storm (Uses both



Phones have access to other senses: Sight & Hearing Bugg by Linked by Air



Phones have access to other senses: Smell Scentee add on w/ Nose Roast app



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Screen Size

In portrait orientation, the width of the display on iPhone X matches the width of the 4.7" displays of iPhone 6, iPhone 7, and iPhone 8. The display on iPhone X, however, is 145pt taller than a 4.7" display, resulting in roughly 20 percent additional vertical space for content.





Human Interface Guidelines: Iphone X



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