Mobile to Desktop Web Substitution Forecast

Mobile Web (red dots and curve [1], Fig.1) may catch up with desktop Web (blue dots and curve, Fig.1) by July or August 2015, according to areppim's forecast [2] based on the currently available data. Mobile Web's 30% world market share may seem unthreatening compared to the 69% share of desktop Web. In reality it is moving up very fast, at the rate of 5.93% per month (doubling in size every 12 months), while desktop Web is steadily losing ground at the average monthly rate of -0.52%. After having crushed fixed telephone lines, mobile phones are posed to do likewise to the fixed line Web, consigning the latter to niche professional, heavy-duty undertakings.

Fig.1 : Mobile and desktop Web may have 50% market share each by mid 2015.

Technology substitution

This forecast offers a slightly less aggressive outlook than the one published by the research firm Gartner in 2010, which anticipated that mobile phones would outstrip PCs as the most common Web access devices worldwide by 2013. Data collection methods — such as user surveys or Web hits tracking — imply a margin of uncertainty that, coupled with the inherent risks of forecasting, command high caution in accepting precise predictions at their face value. It is virtually impossible to tell the exact moment when technology substitution could occur. Nevertheless, the substitution process is familiar to the consumer public, and well known to technology forecasters. Flat TV screens supplanted the bulky cathode tube TVs. MP3 players took the place of Sony's Walkman. DVD recordings killed video cassettes. Digital cameras eradicated photographic film cameras, cellular phones ousted fixed line telephones — readers may easily create their own lists.
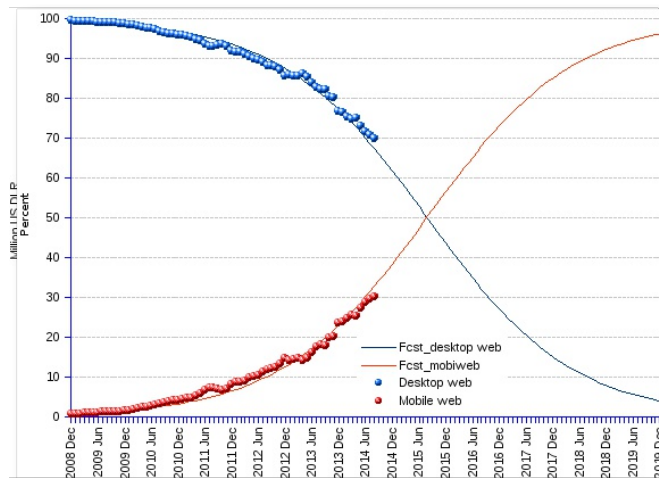
One Web ?

The substitution of mobile to fixed Web is not trivial. It impacts a wide range of human activities from the way Internet users interact with the medium in their everyday life, to the strategies that communication professionals devise to disseminate their contents, to the development of the new platforms by software engineers, to the business of designing, manufacturing, distributing and selling the new mobile Web devices.

Although the two worlds, desktop and mobile, are sub-sets of the Web, they remain very dissimilar. The communications features (voice, SMS, MMS) and signal processing

(GPS, camera, sensors) present in the mobile Internet induce an enrichment of the traditional Web, giving birth thereby to a medium distinct from the fixed Web.

Given such constraints as small screen sizes, the absence of mouse, the lack of multiple windows, or the network bandwidth, mobile devices are neither intended for extended writing sessions, nor for the precise manipulation of graphic elements, or for the comparative study of complex information.

Mobile Web's winning cards

On the other hand, mobile phones are available everywhere and at all times, may be used in contexts both mobile and stationary, and even with one single hand. Furthermore, the supply of mobile phones is considerably more diverse than that of PC : countless models, wide range of technical specifications, multiple operating systems...and carrying lower prices.

Cost and coverage advantages

Further to other advantages, mobile phones, especially the current smart-phone avatar, offer two distinct features that add to the mobile Web growing presence. They do not stipulate the pre-requisite of expensive fixed lines infrastructure. Users in Asian and African countries where infrastructure is non-existent or only incipient, can jump into Internet by leapfrogging directly to mobile technology. Secondly, mobile phones already benefit of bandwidths that rival, and even surpass fixed lines', specially for uploading (although downloading performance may often be mediocre [3]), making mobile Web a practical solution to access Internet services.

Summing up

To sum up, mobile Web is not just a "little brother", similar to, although less endowed than, the fixed Web. It is a new technological world in itself — although specific development is required to take full advantage thereof [4]. Successful exploitation of the new medium involves, on the operator and service providers' side, the adequacy of the mobile technology to the cost and coverage constraints of the users, as well as the judicious incorporation of the new tool in the existing Internet infrastructure. It also requires that Web designers and developers, as well as communication professionals and Web content owners, turn their attention to the specifics of the mobile Web and start developing for this medium right now. ◉

References :

[1] *StatCounter Global Stats [http://gs.statcounter.com/].*

[2] *Technology substitution method, http://stats.areppim.com/glossaire/substitution_def.htm*

[3] *Dauerproblem Verbindungsoptimierung,*
http://areppim.com/b2evolution/usrblogs/technotes/?p=40&more=1&c=1&tb=1&pb=1

[4] *Vers un Internet Mobile, 2012,*
http://areppim.com/b2evolution/usrblogs/technotes/?p=36&more=1&c=1&tb=1&pb=1

Sources :

  http://stats.areppim.com/stats/stats_mobiwebsubstxtime.htm

Forecast Mobile Web Substitution to Desktop Web Worldwide				
Date	Desktop Web Percent Market Share		Mobile Web Percent Market Share	
	Actual	Forecast [1]	Actual	Forecast [1]
2008 Dec	99.4	99.26	0.6	0.74
	99.33	99.21	0.67	0.79
	99.31	99.16	0.69	0.84
	99.2	99.11	0.8	0.89
	99.14	99.05	0.86	0.95
	99.14	98.99	0.86	1.01
2009 Jun	99.06	98.93	0.94	1.07
	98.95	98.86	1.05	1.14
	98.88	98.79	1.12	1.21
	98.88	98.72	1.12	1.28
	98.85	98.63	1.15	1.37
	98.79	98.55	1.21	1.45
2009 Dec	98.72	98.46	1.28	1.54
	98.44	98.36	1.56	1.64
	98.28	98.26	1.72	1.74
	98.04	98.15	1.96	1.85
	97.82	98.04	2.18	1.96
	97.68	97.92	2.32	2.08
2010 Jun	97.43	97.79	2.57	2.21
	97.14	97.65	2.86	2.35
	96.79	97.51	3.21	2.49
	96.5	97.35	3.5	2.65
	96.19	97.19	3.81	2.81
	95.98	97.02	4.02	2.98
2010 Dec	95.9	96.84	4.1	3.16
	95.7	96.64	4.3	3.36
	95.55	96.44	4.45	3.56
	95.3	96.22	4.7	3.78
	94.79	95.99	5.21	4.01
	94.25	95.75	5.75	4.25
2011 Jun	93.47	95.49	6.53	4.51
	92.98	95.22	7.02	4.78
	92.88	94.93	7.12	5.07
	93.26	94.63	6.74	5.37
	93.45	94.31	6.55	5.69
	93.05	93.97	6.95	6.03
2011 Dec	91.96	93.61	8.04	6.39
	91.51	93.24	8.49	6.76
	91.47	92.84	8.53	7.16
	91.01	92.42	8.99	7.58
	90.42	91.98	9.58	8.02
	89.89	91.51	10.11	8.49
2012 Jun	89.6	91.03	10.4	8.97
	88.91	90.51	11.09	9.49
	88.22	89.97	11.78	10.03
	87.97	89.4	12.03	10.6
	87.7	88.81	12.3	11.19
	86.92	88.18	13.08	11.82
2012 Dec	85.45	87.53	14.55	12.47
	85.87	86.84	14.13	13.16
	85.65	86.13	14.35	13.87
	85.56	85.38	14.44	14.62
	86.1	84.59	13.9	15.41
	85.38	83.78	14.62	16.22
2013 Jun	83.92	82.93	16.08	17.07
	82.65	82.04	17.35	17.96
	82	81.12	18	18.88
	82.19	80.16	17.81	19.84
	80.33	79.17	19.67	20.83
	79.96	78.14	20.04	21.86
2013 Dec	76.59	77.07	23.41	22.93
	76.23	75.97	23.77	24.03
	75.33	74.83	24.67	25.17
	74.58	73.66	25.42	26.34
	74.98	72.45	25.02	27.55
	72.96	71.21	27.04	28.79
2014 Jun	71.51	69.93	28.49	30.07
	70.52	68.63	29.48	31.37
2014 Aug	69.9	67.29	30.1	32.71
2014 Dec		61.68		38.32
2015 Jun		52.69		47.31
2015 Dec		43.53		56.47
2016 Jun		34.78		65.22
2016 Dec		26.96		73.04
2017 Jun		20.35		79.65
2017 Dec		15.02		84.98
2018 Jun		10.9		89.1
2018 Dec		7.8		92.2
2019 Jun		5.53		94.47
2019 Dec		3.9		96.1
Monthly average change rate (Dec 2008 - Aug 2014)	-0.52%	-0.57%	5.93%	5.72%

Table 1: Desktop and Mobile Web percent market shares, actual values Dec 2008 to Aug 2014, and forecasts through 2019.