

Addicted to Facebook: Usage of social networking websites

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Facebook has been celebrating recently, having breached a significant milestone in the number of users of its website. Meanwhile, other social networking websites – such as *Twitter*, *LinkedIn* and *Pinterest* – have also been gaining in popularity. With so many people now placing their lives online, we *check in* on how much time we spend on social networking sites.

Undoubtedly, Facebook is one of the most recognised websites in the world. The total number of active users reached a staggering 1 billion by the end of 2012, as shown in table 1; 10 times the 100 million users registered less than 5 years ago. But a major question is: “with 6 billion people left to sign up, will another social networking site rise to the top?”

Date	Sep '08	Mar '09	Sep '09	Mar '10	Sep '10
Users	100.00	179.98	285.93	418.08	523.80
Date	Mar '11	Sep '11	Mar '12	Sep '12	Mar '13
Users	637.95	782.59	874.48	981.64	1083.30

Table 1: Users of Facebook (millions)

Arguably, 2007 was the time when Facebook took over competitor MySpace. Although in principal it sounds like a good idea, one problem with MySpace was the amount of freedom people had with customisation – the issue with this being that it was a lot more difficult to just sign on and do whatever you needed to quickly, making it harder to subtly use it at work or school (come on – we all do it!). In contrast, the more standardised layout of Facebook makes it much easier to “come and go”. Results of a recent survey, shown in figure 1, show that the peak time of usage for Facebook is when we might expect most people to be at work.

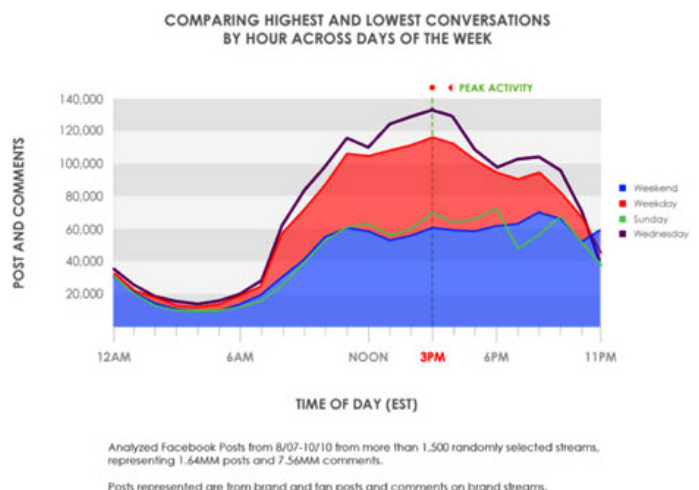


Figure 1: Number of hourly posts/comments in the Facebook feeds of 1500 female students at John Hopkins University, Baltimore.

A notable and important development, around 2007, was the release of Facebook’s app for smartphones. Although not immediately a staple for most Facebook users, it’s fair to say that the ability to view it from anywhere, at any time, has definitely helped sustain the site’s popularity. The primary aim of a recent survey of smartphone users in London was to figure out how often people *check* their mobile phones during the normal 16 waking hours of the day. The results in table 2 show the average waiting times, in minutes, between each *check* for 118 survey respondents. As you can see, even

the longest wait time was less than 15 minutes, so it isn't hard to understand how Facebook remains so busy!

Minutes (X)	Frequency	
	Male	Female
$3 \leq X < 4$	5	1
$4 \leq X < 5$	15	2
$5 \leq X < 6$	20	4
$6 \leq X < 7$	11	7
$7 \leq X < 8$	8	9
$8 \leq X < 9$	6	14
$9 \leq X < 10$	4	5
$10 \leq X < 11$	3	3
$11 \leq X < 15$	0	1

Table 2: The average time (in minutes) between each check of a user's phone

So it would appear that Facebook's lifespan has been lengthened by it embracing the smartphone world. At about the same time, that other social networking "juggernaut" Twitter was beginning to build momentum. Twitter

has proven to be an extremely useful vehicle for businesses, celebrities, athletes etc. to promote themselves and what they are working on. Indeed, it is has been estimated that half of Twitter users are likely to buy a product if it has been endorsed by a "celebrity Tweet". Table 3 below shows the number of followers on Twitter for 16 randomly selected celebrities in the U.K. (November 2013). The first value is for TV celebrity chef James Martin, who just announced the release of his latest book to his 52,345 followers on Twitter.

0.05	0.75	1.10	0.80	1.55	0.90	1.05	1.45
1.25	10.25	1.20	1.50	1.80	0.40	0.45	0.90

Table 3: Number of Twitter followers for 16 U.K. "celebrities" (millions)

It is thought that the use of Twitter by businesses and celebrities has contributed to the larger number of "older" users when compared to Facebook; the age breakdown for Facebook and Twitter users is shown in figure 2.

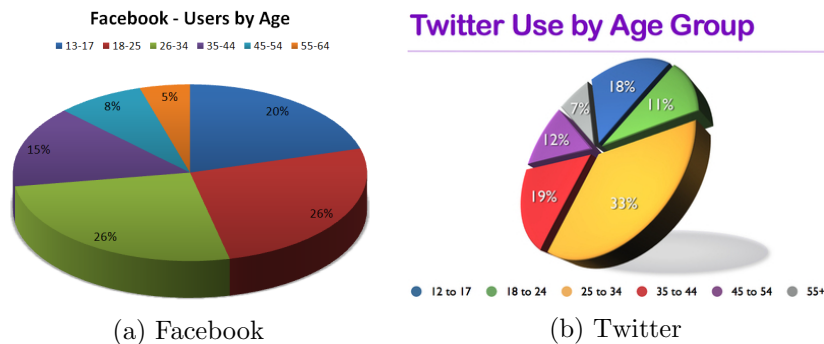


Figure 2: Proportions of users in each age group for different social networking websites

Suggested topics to investigate

- Can you think of a good way to graphically display the trend in users of Facebook since 2007? How could your graph be used to forecast future users of Facebook?
- Are you surprised to see that the peak time for usage of Facebook is mid-afternoon?
- Can you think of useful graphical and numerical summaries to compare male and female mobile phone usage, in terms of the number of times people "check" their phones? What do these summaries reveal?
- Can you suggest an appropriate numerical summary for the average number of Twitter followers of U.K. celebrities? In a random sample of 5 of James Martin's followers on Twitter, how likely is it that more than half will buy his new book?
- What can you say about the age breakdown of Twitter and Facebook users?