

## Can the acquisition of video distribution technology and voice recognition technology prevent users from leaving Facebook?



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Facebook has become a worldwide communication platform, and significant numbers of people use this social networking service (SNS) to transmit and exchange large amounts of information. Moreover, the number of videos that are posted is increasing annually, with more than one billion videos played each day. Since the beginning of the year, Facebook has announced several purchases of video technology and voice recognition technology companies.

In the U.S., more than half of Facebook users are elderly individuals aged 65 or older. However, increasing numbers of young people are continuing to leave Facebook.

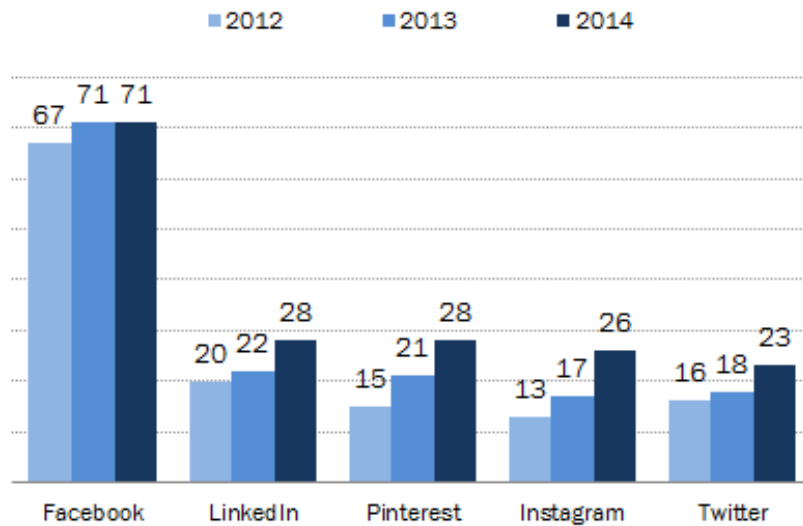
### **Facebook, the overwhelmingly popular SNS to date: Users aged 65 and older are increasing in the U.S.**

According to a report issued in January 2015 by the Pew Research Center, Facebook has dramatically more users in the U.S. than any other SNS. Among these SNS users, 71% use Facebook, which is the same proportion as in 2013 (see Figure 1).

Furthermore, although many people use multiple SNSs, such as Twitter, Instagram, Pinterest, and LinkedIn, the proportion is less than half of that of Facebook usage, which indicates that Facebook holds a very strong presence. Among Internet users aged 65 or older, in particular it became clear that for the first time, more than half (56%) were using Facebook. This indicates that the core users of Facebook comprise the elderly.

## Social media sites, 2012-2014

*% of online adults who use the following social media websites, by year*




(Figure 1) Proportions of SNS users in the United States

### **The number of videos uploaded to Facebook increased 3.6 times from the previous year and daily playbacks have topped one billion**

On January 7, 2015, Facebook released the results of a survey regarding videos on Facebook. According to the company's announcement, the number of videos submitted per user increased 75% over the previous year, and in the U.S., the increase was 94%. The number of videos viewed per day currently averages more than one billion, and the number of videos displayed on timelines increased 3.6 times from the previous year. In addition, views of videos on mobile devices comprised 65% of the total. Facebook, which has been focusing efforts on video advertising since 2014, considers videos as a "clean, time-efficient, effective method for people to transmit ideas."

The "Fry Futbol Campaign" conducted in Europe by McDonald's to complement the 2014 World Cup is one example of successful video advertising. The campaign, which used real-time video, recorded more than 400 million impressions and was watched by more than 125 million people in 158 countries. Approximately 80% percent of the viewers of these videos used mobile devices.

Facebook has been advising corporate users to effectively use videos by creating short and timely content. The company instructs corporations to be



conscious of the fact that, when automatic playback of video advertisements begins on the news feed, the video remains muted until the user clicks on it. Hence, the video has to draw the user's attention even when muted.

## **Acquisition of QuickFire Networks' video distribution technology**

With playback of videos growing rapidly, on January 8, 2015, Facebook announced that it had acquired QuickFire Networks, which develops video content distribution equipment as well as transcoding and processing software. However, Facebook has not publicized the acquisition price or other pertinent details.

Facebook has been building a video platform in order to increase engagement as well as future advertising revenue. QuickFire Networks is working on a technology to reduce the bandwidth that is required to distribute online videos without compromising video quality. Moreover, its purpose is to provide consumers with an excellent quality viewing experience without placing a strain on bandwidth.

T-Video, one of QuickFire Networks' technologies, fits in a 1U sized rack and is a device that exclusively processes and transcodes video. This system is equipped with 11 Intel Core i7 processors and multiple graphics processing units (GPUs), {TL 3.1 [JP] 省略形の表記をご確認ください} and if one entire rack is filled with T-Video units, then 1,760 cores devoted to this video processing may be obtained. These devices will most likely be installed in Facebook's data center and will allow the company to achieve more than one billion video views per day.

## **Acquisition of voice recognition technology startup Wit.ai**

On January 5, 2015, Facebook announced that it had acquired the voice recognition startup Wit.ai; it has not revealed the price or purpose of the acquisition. Wit.ai is a Palo Alto-based startup established just 18 months ago that develops software for recognizing spoken and natural language. It provides developers with a decentralized, open, and community-based platform that enables voice recognition technology to be included in various applications through application programming interfaces (APIs). According to the company's announcement, more than 6,000 developers are already using the platform. In the future, 1.3 billion Facebook users will most likely be able to create posts and comments through voice commands, and recognition of daily life noises will allow for the presentation of appropriate advertising and information. Google, Microsoft, and Apple all have their own proprietary voice recognition systems. Facebook has also been increasing its involvement with mobile devices. There

is no doubt that sound recognition technology as well as natural language algorithms and related knowledge are necessary for mobile devices.

## Favorable results, but young people are leaving Facebook


On the balance sheet for July–September 2014 (released by Facebook in October 2014), sales increased by 59% over the same period the previous year to \$3.203 billion (approximately 346 billion JPY) (Figure 2), and net income increased by 90% to \$860 million. Mobile advertising for smartphones remained strong, thus, driving the company’s overall performance. Income per user was \$2.40, which was an increase from \$2.24 in April–June 2014 and \$1.72 in the same period in 2013. It is expected that as it improves user-friendliness by acquiring companies with new technologies, Facebook will increase its profits.



(Figure 2) Changes in Facebook’s revenue

The introduction stated that 71% of U.S. Internet users use Facebook, but a survey by the firm Frank N. Magid Associates revealed that in the U.S., among those aged 13–17, 95% used Facebook in 2012, and this number decreased to 94% in 2013 and then to 88% in 2014. This finding shows that teenagers are leaving Facebook.

According to the survey, among all the responses received from the survey subjects, 16% indicated that Facebook is “popular,” 18% indicated that it is “fun,” and 16% indicated that it is “beneficial.” However, only 9% indicated that Facebook is “safe” and “trustworthy.”



In spite of such results, an overwhelming 40% of teenagers used the Facebook Messenger application. The survey also revealed that 18% used Snapchat, 17% used Apple's iMessage, and 9% used WhatsApp and Google Hangouts. In other words, even users who do not use Facebook itself do make use of Facebook's Messenger platform.

### **Can introducing new technology prevent young people from leaving Facebook?**

Facebook is deeply imbedded in the daily lives of many people throughout the world, so it is unlikely that there will be a sudden decrease in the number of users. However, since many people feel that it is unsafe and untrustworthy, such dissatisfaction and unease could lead to a decrease in the number of Facebook users.

Even without Facebook, life goes on. It is not a service or product that users absolutely cannot live without. If a viable replacement emerges, then it is possible that users may transition to a new service. Japanese users once used an SNS called mixi, but when Facebook emerged, users suddenly transitioned, and Facebook's number of users increased. Similar phenomena have occurred throughout the world, and Facebook, which is well aware of this, is in a precarious position in which its users could be stolen away at any time.

Thus, Facebook must make its site more user-friendly and must also take measures to retain users and increase profit by introducing new technologies. Through this acquisition of a video technology company and a voice recognition technology company, Facebook's user-friendliness and user interface should improve. However, it will not be easy for Facebook to gain back users once they have left the site. Perhaps, there are issues that are even more important to Facebook than improving its services by acquiring technology companies.