

# THE CHALLENGES OF 'FRIENDING' CHINA:

**Social Media Attempts to Scale the Great Firewall** 

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## **EXECUTIVE SUMMARY**

Social media has redefined our generation in the terms of how we socialize, do business, seek information, and above all spend the majority of our time. Specifically, Facebook is known as king of the social media landscape, and holds the title of being the most popular social network nearly all over the world. However, Japan, South Korea, Russia, and most notably, China, are areas of the world that Facebook has not been able to conquer. Currently, Facebook, along with YouTube, Twitter, and Google are all labeled 'dangerous' and banned entirely in China<sup>1</sup>. Facebook has been rumored to be plotting strategies to scale the 'Great Firewall of China', the most sophisticated censorship system in the world, with a partnership with Chinese search engine, Baidu. However, Facebook faces many obstacles complicating its entrance to China. Concerns include coexisting with extensive government censorship, competing with local popular networking sites visibly appearing as Facebook clones, and increased speculation from the Chinese government about allowing Facebook into China after it received publicity as a major catalyst of recent revolutions in the Middle East. Should Facebook decide to enter the Chinese market, it should learn from Google's catastrophic experience in China and enter through a more promising market, the Chinese mobile market.

#### AN INTRODUCTION TO SOCIAL MEDIA

The term 'social media' can be described as an umbrella term that defines the various activities that integrate technology, social interaction, and the construction of words, pictures, video, and audio<sup>2</sup>. By definition, media is an instrument on communication; therefore social media is simply a social instrument of communication. In Web 2.0 terms, social media websites are sites that not

<sup>&</sup>lt;sup>1</sup> Stone, Brad, and David Barboza. "Scaling the Digital Wall in China." *The New York Times* 16 Jan. 2010. Web. 15 Feb. 2011.

<sup>&</sup>lt;sup>2</sup> Nations, Daniel. "What Is Social Media?" *WebTrends*. About.com, 2011. Web. 25 Jan. 2011

only provide information, but allow the user to interact in the process<sup>3</sup>. Interaction in social media networking can be anything as simple as asking for comments, voting on articles, or more complex such as connecting with other users of similar interests.

Social media can be classified into many separate categories based on interactions. For instance, social bookmarking interacts by tagging websites and searching through websites that have been marked by other people. Del.icio.us is the dominant competitor in this field.

Additionally, social news allows users to vote for articles or provide their comments. Digg and Reddit are the dominant sites of this form. In social photo and video sharing sites, such as YouTube and Flickr, users interact by submitting photos or videos and commenting on others' submissions. Wikis allow users to interact by adding and editing existing articles. The most popular of this category is Wikipedia<sup>4</sup>.

Lastly, social networking is a category of social media that has received much attention due to the category's famous leader, Facebook. Social networks like Facebook allow users to interact by adding friends, commenting on profiles, joining groups, and engaging in discussions.

## **History of Social Networking**

The earliest beginnings of social networking can be traced back to 1971 when the first e-mail was sent<sup>5</sup>. In 1994, social media progressed with the introduction of an early social networking site, Geocities. The concept of the site was for users to create their own websites.

Later in 1997, instant messaging became extremely popular with the launch of AOL Instant Messenger. However, it was not until 2002 that the online connection of real-world friends was

<sup>&</sup>lt;sup>3</sup> Nations, Daniel. "What Is Social Media?"

<sup>4</sup> Ihid

<sup>&</sup>lt;sup>5</sup> "The History of Facebook-How Facebook Came to Be." Weblog post. *Sexy Social Media: Hottest News on Social Media*. 19 Dec. 2010. Web. 23 Feb. 2011.

pioneered with the introduction of the Friendster network<sup>6</sup>. Within the year, Myspace added to the depth of this category with the launch of its own network.

The introduction of Facebook in 2004 and Twitter in 2006 concreted the fascination with social interactions existent in cyberspace. Facebook surpassed Myspace in 2008 as the leading social networking site and has been the most popular of its kind ever since<sup>7</sup>. Facebook has not only become a prevailing website destination on the Internet but it has also drastically changed society and helped to define an entire generation.

## **FACEBOOK**

## **History**

Facebook was launched in 2004 by Harvard undergraduate student, Mark Zuckerberg. Originally entitled "The Facebook," the site was first launched as an online yearbook for the staff and students of Harvard. Zuckerberg quickly expanded the network to other universities in Boston, then next to all Ivy League institutions, and finally to any other university in the United States<sup>8</sup>. In 2005, the sites' name was shortened to Facebook and reached out to United States' high school networks and expanded to universities in the United Kingdom. Eventually in 2006, Facebook opened its doors to anyone who wanted to register with the network. This increased accessibility complemented Facebook's mission as a social utility that helps people communicate more efficiently with their friends, family, and coworkers<sup>9</sup>.

<sup>&</sup>lt;sup>6</sup> O'Dell, Jolie. "The History of Social Media." *Mashable Media* 24 Jan. 2011. Web. 10 Mar. 2011

<sup>&</sup>lt;sup>7</sup> "The History of Facebook-How Facebook Came to Be."

<sup>&</sup>lt;sup>9</sup> Schein, Amy. "Facebook, Inc." *Hoover's Company Records* 

Facebook boasts a membership of over 550 million users worldwide and is officially the most trafficked networking site in the United States. Google, MySpace, and Twitter are referred to as Facebook's top competitors in the Internet Content Provider Industry<sup>10</sup>.

#### **Product**

Facebook's fundamental features are based from a user's Home page and Profile. The Home page offers a News Feed; a personalized update of the user's friends' updates. The Profile displays the user's unique information they have chosen to share; including interests, education and work background, and contact information. Several core features including Photos, Events, Videos, Groups, and Pages have also improved Facebook's functionality. Facebook Chat, personal messages, wall posts, pokes, and status updates are also unique ways Facebook helps users interact. Facebook consistently updates its site structure and applications to keep the network exciting for its users.

#### **Operations**

Facebook is responsible for billions of photos, conversations, and interactions between people all around the world. Facebook functions on tens of thousands of servers all over the world<sup>11</sup>. Facebook's Technical Operations team balances the need for constant site accessibility with the company's experimental engineering culture by releasing code daily.

<sup>&</sup>lt;sup>10</sup> Schein, Amy. "Facebook, Inc."

<sup>&</sup>lt;sup>11</sup> Cook, Tom. "A Day in the Life of Facebook Operations." Open Source Bridge Conference. Morrison, Portland, Oregon. 18 Feb. 2011.

Facebook currently has over 2,000 employees and is headquarters in Palo Alto,

California. Facebook offices are extended throughout the United States and globally in twelve nations worldwide<sup>12</sup>.

#### **Finances**

Facebook predominantly generates revenue from advertising. Facebook's advertising structure includes an auction system in which marketers can pay to target small products and services to targeted demographics. Facebook has an estimated value of \$50 billion<sup>13</sup>.

Facebook is confirmed to go public in 2012 after receiving \$500 million in investment from Goldman Sachs in 2011 and reported it is expected to pass 500 shareholders in 2011.

Facebook aims to begin filing public financial reports no later than April 30, 2012<sup>14</sup>. The agreement with Goldman Sachs involves the bank raising as much as \$1.5 billion from investors for Facebook<sup>15</sup>. Goldman revealed in the first nine months of 2010, Facebook generated \$1.2 billion in revenue and \$355 million net income<sup>16</sup>. Facebook has received buyout offers from Microsoft, Yahoo, and Viacom. Eventually, Microsoft acquired a less than 2% stake in Facebook and currently powers the site's Web search and search advertisements.

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<sup>&</sup>lt;sup>12</sup> Schein, Amy. "Facebook, Inc." *Hoover's Company Records*.

<sup>&</sup>lt;sup>13</sup> Rushe, Dominic. "Renren, China's Answer to Facebook, Plans US Float." *The Guardian* 21 Feb. 2011. Web. 2 Feb. 2011

<sup>&</sup>lt;sup>14</sup> "Facebook Raises \$1.5 Billion." *Facebook Press Room.* Facebook, Inc., 21 Jan. 2011. Web. 10 Feb. 2011.

<sup>&</sup>lt;sup>15</sup> Rappaport, Liz, Aaron Lucchetti, and Geoffrey A. Fowler. "Goldman Limits Facebook Offering." *Goldman Limits Facebook Offering* 18 Jan. 2011. Web. 10 Feb. 2011.

<sup>&</sup>lt;sup>16</sup> Kawamoto, Dawn. "Goldman's Facebook Offering Reveals Peek at Financials." *Daily Finance* 6 Jan. 2011. Web. 10 Feb. 2011.

## THE INTERNET IN CHINA

China is classified as the fastest growing major economy in the world and one of the world's fastest-growing Internet markets<sup>17</sup>. In the midst of China's digital revolution, the number of domestic Internet users in China has been doubling every six months<sup>18</sup>. China's attractive internet market has enticed and frustrated many Western technology businesses looking to capitalize on its purchasing power. Accessibility to the Internet through mobile connections is also increasing at extraordinary rates. Currently, China has over 841 million mobile subscribers at the end of 2010, a sixteen percent increase since 2009<sup>19</sup>.

China's Communist government leadership has been indecisive about the role of the Internet in society. The government desires e-commerce benefits; however they fear the political consequences of an open information economy and self-expression for their people<sup>20</sup>. This fear has caused extensive censorship and regulation on Internet content by the Chinese government.

#### Foreign Investment in China

Foreign Internet content providers are required to register with the Chinese Ministry of Information Industry and apply for permission to enter China<sup>21</sup>. The Ministry bans the distribution of information that might harm unification of the country, endanger national security, or undermine the government. Pornography as well as any material that "disturbs social order", or harms "the honor and interests of the state" are also strictly prohibited by the Ministry

<sup>&</sup>lt;sup>17</sup> Central Intelligence Agency. "China." *The World Factbook*. 2011.

<sup>&</sup>lt;sup>18</sup> Neumann, A. Lin. *The Great Wall*. Rep. CPJ Briefing, 2008.

<sup>&</sup>lt;sup>19</sup> Internet World Stats. *China: Internet Usage Stats and Population Report*. Rep. 2011

<sup>&</sup>lt;sup>20</sup> Neumann, A. Lin. *The Great Wall.* 

<sup>&</sup>lt;sup>21</sup> Ibid

of Information Industry<sup>22</sup>. The Chinese Internet, in particular social media, is a battleground between the Chinese government and population as it is a vehicle of self-expression.

## Censorship

As the majority of China's Internet is censored, only a portion the World Wide Web is available to the Chinese public. China's Internet model consists of monitoring, filtering, and analyzing Internet traffic. With a large volume of Internet traffic, laws and regulations are in place to legitimize surveillance, censorship, and disciplinary action. The regulations are often grounded on 'moral and religious standards', 'disturbance of the peace', and 'fairness in business'.

Regulation of the Chinese Internet reached a new level with the introduction of the Golden Shield Project (commonly nicknamed the Great Firewall of China) in early 2000. The project has been deemed the most sophisticated censorship system in the world<sup>24</sup>. The system consists of nearly 30,000 government regulators monitoring records of online communications around the clock<sup>25</sup>. The purpose of the Golden Shield Project is to use state-of-the-art technology as a means for effectively policing the Chinese population<sup>26</sup>.

<sup>&</sup>lt;sup>22</sup> Neumann, A. Lin. *The Great Wall.* 

<sup>&</sup>lt;sup>23</sup> "The China Model of Government Internet Censorship." *SciTech Story* 9 Mar. 2011. Web. 10 Feb. 2011

<sup>&</sup>lt;sup>24</sup> Schmundt, Hilmar, and Wieland Wagner. "How China Leads the World in Web Censorship." *Spiegel Online International* 2 May 2008. Web. 20 Mar. 2011

<sup>25</sup> Ihid

<sup>&</sup>lt;sup>26</sup> Wilson, Kristina, Yaneli Ramos, and Daniel Harvey. *Google in China: "The Great Flrewall"* Rep. Durham: Duke University, 2009

Proxy servers are utilized by a small fraction of the population to bypass the regulated Chinese Internet networks. Citizens engaged in such practices are less frequently reprimanded as the government is occupied punishing those who publish information about forbidden topics<sup>27</sup>.

While many keywords remain consistently blacklisted, other sensitive terms are implemented daily. For instance, blogs containing keywords such as Tinanmen Square massacre, Falun Gong, and Zhao Ziyang cannot be published and are permanently blocked. The increasing number of Chinese internet users and sensitive keywords has caused a portion of censorship responsibility to be delegated to individual internet service providers, content providers, and Internet café managers<sup>28</sup>. Government censors send updates of sensitive keywords to these companies multiple times a day.

## **SOCIAL MEDIA IN CHINA**

### History of Facebook in China

Facebook was blocked by the Chinese government shortly after it was launched in China in 2008. Users began having difficulty accessing the site and received 'Network Timeout' messages. Facebook expressed its own confusion as it claimed it had not made any technical changes that could account for the timeouts. As unavailability persisted, it became clear Facebook had been kicked outside the Great Firewall for good. It is estimated a small membership of at most 285,000 members of the 420 million Chinese Internet users are following Facebook through proxy server devices<sup>29</sup>.

<sup>&</sup>lt;sup>27</sup> Stone, Brad, and David Barboza. "Scaling the Digital Wall in China." *The New York Times* 16 Jan. 2010. Web. 15 Feb. 2011.

<sup>28</sup> Ihid

<sup>&</sup>lt;sup>29</sup> Rappaport, Liz, Aaron Lucchetti, and Geoffrey A. Fowler. "Goldman Limits Facebook Offering." *Goldman Limits Facebook Offering* 18 Jan. 2011. Web. 10 Feb. 2011.

#### **Major Chinese Social Networks**

Renren (formally known as Xianoei.com) is Facebook's top Chinese competitor. As one of China's largest networks, the network is a product offering nearly identical to Facebook. Other top competitors include Qzone and Kaixin001.com. While each Chinese social network claims to be the "largest", it should be clarified statistically Qzone has the most users, Renren has the most active users, and Kaixin001 has extremely highly active users<sup>30</sup>.

Qzone has the largest market share in the Chinese social media market. It was established in 2005 by Tencent Holdings Limited, a publicly-owned holding company that provides internet and mobile phone application services in China. Although Qzone has the largest Chinese membership with an estimated 480 million users, Qzone lacks user activity and product features which make it less of a threat competitively against Facebook<sup>31</sup>. Qzone's users overlap from Tencent's dominant instant messaging service and focus more on an online gaming offering. Qzone has been referred to Tencent's "Windows Vista" as a 'near-monopolist that thrive despite a terrible product and lack of vision'<sup>32</sup>.

Kaixin001.com was launched in March 2008 by Kaixinren Information Technology Company. The network's target audience is white collar, 19-35 year old, college educated users. Kaixin001.com has a large emphasis on games and micropayments<sup>33</sup>. Kaixin001.com also offers personal blogging, photo and music sharing, online chatting, online storage, and interactive games. Kaixin001.com infamously cloned the popular Facebook application, Farmville with its

<sup>&</sup>lt;sup>30</sup> "3 Reasons Why Tencent's Qzone, the Largest Social Network in China, Is a Failure." *China Social Games* 2011. Web. 15 Mar. 2011.

<sup>31</sup> Ibid

<sup>32 &</sup>quot;Ibio

<sup>&</sup>lt;sup>33</sup> "BMW Kaixin001 China Social Media Case Study." *Resonance China Social Media Agency. China Social Media Consulting and Campaign Amplification* Dec. 2010. Web. 29 Jan. 2011.

Happy Farm feature. Kaixin001.com was also the first to introduce Friends for Sale, a game that users can price and sell their friends<sup>34</sup>.

## THREATS TO FACEBOOK OPERATING IN CHINA

## **LOCAL COMPETITION**

The saturation of social networks in China and the rapidly innovating systems makes becoming involved in the Chinese market nearly impossible for Facebook. Of the dominant Chinese social networks, Renren poses the largest competitive threat to Facebook possessing a large membership of Chinese internet users. Renren's physical appearance identical to Facebook has convinced many Chinese that Facebook is a knock-off of Renren. Renren has followed an aggressive advertising and online games strategy which has allowed it to beat Facebook for a world record of its own; the first social network to offer an Initial Public Offering (IPO).

## **RENREN**

Renren (meaning 'everyone') is referred to many as "The Facebook of China". The site has accumulated more than 160 million registered users, making it one of the largest social networks in China. Entering the Chinese market would mean Facebook would finally go head to head with its aspiring cloned network; a competition that has long been halted by the Great Firewall.

<sup>&</sup>lt;sup>34</sup> "BMW Kaixin001 China Social Media Case Study." *Resonance China Social Media Agency.* 

<sup>&</sup>lt;sup>35</sup> Dimri, Himadri. "Chinese Facebook- Renren About to Win the IPO Race." *Facebook Knol* 23 Feb. 2011. Web. 3 Mar. 2011.

#### **History**

Renren defines itself as "the most real and most effective social networking platform, a network to find old friends, make new friends." In 2005, a year after Mark Zuckerberg launched Facebook from his Harvard dorm room; Renren was launched. Renren was created by University of Delaware graduate Wang Xing, Tsinghua University graduates Wang Huiwen, Lai Binquiang and Tang Yang; in Beijing. In October of 2006, then-named Xianoei.com ('Inside School') was acquired by Oak Pacific Interactive, a China Internet consortium. In 2009, the consortium renamed Xianoei officially to Renren<sup>37</sup>.

#### **Product**

Renren specifically caters to college students, with a current presence in over 32,000 universities and colleges. Additionally, 56,000 high schools and 85,000 companies in China, as well as 1,500 universities in 29 other countries all access Renren<sup>38</sup>. Like Facebook, personal profiles on Renren contain contact information, hobbies, favorite music and movies.

Fundamental Renren applications also parallel Facebook; from the ability to upload photos, share links, leave messages to commenting on photos, blogs, etc. However, Renren now has features Facebook itself does not provide. For instance, Renren has developed the unique capability to personalize unique profile music and backgrounds. Also, Renren offers a Forum that allows users to see trending topics similarly to Twitter. The forum highlights the most viewed journal entries, daily polls, and popular links being shared. Renren has received praise

<sup>&</sup>lt;sup>36</sup> Dimri, Himadri. "Chinese Facebook- Renren About to Win the IPO Race."

<sup>&</sup>lt;sup>37</sup> Womack, Brian. "Chinese Social-Networking Site Renren Files to Raise \$584 Million in IPO." *Bloomberg Business* 15 Apr. 2011. Web. 15 Apr. 2011.

<sup>&</sup>lt;sup>38</sup> Dimri, Himadri. "Chinese Facebook- Renren About to Win the IPO Race."

over this capability as it gives a larger picture than linear expressed relationships between Facebook walls.

Renren offers online mini--games, poke, virtual gifts, and Happy Farm (copycat of the popular Facebook Farmville game) directly similar to Facebook offerings. Renren also has additional applications such as 'Try to Guess' in which users match themselves to another user for friendship, relationship or hatred with his/her name and your name. Another popular application is Music Locker, where users play music and recommend music to their friends<sup>39</sup>.

The largest difference from Facebook is the ability to see who visits your Renren profile. This is seen by many as an increased benefit to only visit people users feel they have a genuine connection with and decrease the amount of mindless browsing. While many Westerners would not like this feature, the Chinese enjoy it.

#### **Finances**

Also similarly to Facebook, Renren has generated a significant amount of its revenue from advertising. Advertising revenue has more than doubled each year since the site began selling space in 2008. In China, the online advertising market will triple to almost \$13 billion by 2014<sup>40</sup>. Renren has also generated substantial profits as an online gaming provider. Forty-five percent of its total net revenue in 2010 was from online games<sup>41</sup>. Net revenue for Renren rose sixty-four percent to \$32 million in 2010 as both advertisements and online game revenue increased. In 2010, Renren had an operating income of \$7.7 million<sup>42</sup>. Currently Renren's largest

<sup>42</sup> Ibid

<sup>&</sup>lt;sup>39</sup> "BMW Kaixin001 China Social Media Case Study." *Resonance China Social Media Agency. China SocialMedia Consulting and Campaign Amplification* Dec. 2010. Web. 29 Jan. 2011.

<sup>&</sup>lt;sup>40</sup> Womack, Brian. "Chinese Social-Networking Site Renren Files to Raise \$584 Million in IPO."

<sup>&</sup>lt;sup>41</sup> Cowan, Lynn. "Chinese Social Network Renren IPO Imminent." *Market Watch* 18 Apr. 2011. Web. 18 Apr. 2011.

financial support comes from Japan's SoftBank, which owns a more than 40% stake. SoftBank is Japan's fastest growing mobile-phone carrier<sup>43</sup>.

Renren is looking to make history over Facebook as the first social-networking site to go public. Renren will raise \$584 million in its IPO for the company to invest in innovation and technological advancements<sup>44</sup>. The social networking site is scheduled to begin trading May 4<sup>th</sup>, 2011 on the New York Stock Exchange under the symbol RENN. The company plans to sell 53.1 million American depositary shares at a price between \$9 and \$11.<sup>45</sup>

### Censorship

Another fundamental difference between Facebook and Renren members is user freedom. All information circulating within Renren is strictly monitored. Renren complies with Chinese government censorship by employing ban lists of sensitive terms, both political and pornographic, and its own Internet police force who search images and video for inappropriate content<sup>46</sup>. Any journal, photo album, or status update can be removed at any point in time if the administrators feel the information undermines the government's view or policy<sup>47</sup>.

With not only the unmistakable resemblance in product offering, the success of Renren and favorability from the government as it provides detailed information from the Chinese population to the hands of the Chinese government, Facebook would have a challenging time entering China as a foreign online network. As mentioned, since Facebook has been blocked to the Chinese people, for Facebook to enter into the Chinese market second to an already existing,

<sup>&</sup>lt;sup>43</sup> Womack, Brian.

<sup>44</sup> Ibid

<sup>&</sup>lt;sup>45</sup> Cowan, Lynn.

<sup>&</sup>lt;sup>46</sup> Lukoff, Kai. "Why Mark Zuckerberg Came to China and Why Facebook Will Not." *TechRice* 27 Dec. 2010. Web. 10 Mar. 2011

<sup>&</sup>lt;sup>47</sup> Li, Lao. "Facebook, Renren, and China's Firewall." *Penn Olson: The Asian Tech Catalog* 13 Oct. 2010. Web. 15 Feb. 2011.

better culturally adapted 'Facebook' would be a failure for Facebook. Facebook would literally be competing with a better and more favorable version of itself.

## **SOCIAL MEDIA REVOLUTIONS**

Recent Middle East and North African revolutions have also greatly changed the online environment in China. The Chinese government has publicly denied feeling threatened by similar revolutions occurring, but China has shown its fears through its heightened Internet censorship. This action is believed a direct correlation with the global realization of the power of social media; as Facebook was specifically publicized as a major catalyst for the revolutions.

Word of mouth has been a consistent assistance in historical revolutions. As Sascha Meinrath, director of the New American Foundation's Open Technology Initiative explains, social media has replaced the traditional use of pamphlets utilized to connect people and inspire uprisings. As social networking has been described as 'word of mouth on steroids', it provides an outlet for people who are frustrated with the status quo to organize themselves and coordinate protests. Social media spread cognitive dissonance amongst activists and connected activists and leaders to ordinary citizens to generate a dense following. Social media succeeded in creating the necessary "density" or people willing to take action in record time. The rapidness of connecting citizens is what allowed the regime in Egypt to be overthrown in only eighteen days.

#### Facebook's Role in the Egypt

Facebook was identified as one of the earliest catalysts for the Egyptian revolution. A Facebook page was created in the honor of Khaled Said, a 28-year-old Egyptian man beaten to death by police in Alexandria in 2010<sup>48</sup>. The page, entitled "We are All Khaled Said", was

<sup>&</sup>lt;sup>48</sup> Kirkpatrick, David. "Google Executive Who Was Jailed Said He Was Part of Facebook Campaign in Egypt." *The New York Times* [New York, N.Y.] 7 Feb. 2011.

created by a young Google executive, Wael Ghonim. Ghonim has now become a symbol of Egypt's pro-democracy uprising. The initial interest with his Facebook page instigated what would be known as a "Revolution 2.0"; a revolution catapulted by Internet capabilities. <sup>49</sup> Within a few hours of posting video content to the wall of the Facebook page, nearly 60,000 people passed on the information to others across the network. Ghonim told CNN, "This revolution was started on Facebook. I want to meet Mark Zuckerbreg someday and thank him personally. <sup>50</sup>" This and other public acknowledgement of the power of Facebook for inspiring Egypt's revolution is also seen in the Tunisian and Libyan revolutions as well.

China should rightfully so be concerned about the power of Facebook as a tool for protesters if Facebook were allowed within the Great Firewall. Revolutions are caused by renowned unity. Unity is caused by density. Facebook and other social media acted as an instrument to rapidly increase the density of activists, increased density of information flow, and emotional density<sup>51</sup>.

Egyptian protesters also used Facebook to discuss issues without having to worry about organized meetings being broken up by the police. Furthermore, even those in poor urban and rural areas could access Facebook and be included in meetings as well. With China's large population of Internet users, it would be difficult for the Chinese government to track them all. Facebook provides additional anonymity for activists. The density of Facebook's network has the potential to create unity amongst China's large population to prove as a substantial threat to overthrow the People's Republic of China government regime.

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<sup>&</sup>lt;sup>49</sup> Gustin, Sam. "Social Media Sparked, Accelerated Egypt's Revolutionary Fire."

<sup>&</sup>lt;sup>ວບ</sup> Ibid

<sup>&</sup>lt;sup>51</sup> Mainwaring, Simon. "Exactly What Role Did Social Media Play in the Egyptian Revolution?" *Fast Company* 14 Feb. 2011. Web. 20 Feb. 2011.

In addition to linking similar minds within China, Facebook would also provide information about news of the protests occurring elsewhere in the world. Monitoring the massive amount of information for such a dense network would be an incredibly tedious and challenging operation. With rapid word of mouth occurring on Facebook, all it would take is one piece of information overlooked by censors to potentially collapse the Chinese government system.

## COMPLIANCE AND RISKS OF INTELLECTUAL PROPERTY

Many Western technology companies have experienced sophisticated Chinese cyber attacks. Most publicized is Google's dilemma against China. Google's experience yields powerful lessons for Facebook and other Western technology companies attempting to scale the Great Firewall.

### The Case of Google in China

Google launched a Chinese language version of Google.com in 2000. From the time of its launch, Google experienced times of temporary unavailability in China. Nearly ten percent of the time the site was inaccessible. Google users also experienced slow response time to searches and unreliability in search results due to the extensive filtering by the Chinese Internet service providers<sup>52</sup>. By 2002 when inaccessibility to the site still remained a constant issue, Google began to suspect foul play was involved<sup>53</sup>. Not surprisingly, in late 2002 Google.com became completely unavailable for extended periods of time.

Furthermore, complications continued with the launch of Google.cn in January of 2006. In return for being able to operate with a local Chinese service domain name, Google agreed to block certain websites by censoring search results. Google had hoped its decision to create a

<sup>&</sup>lt;sup>52</sup> Lau, Justine. "A History of Google in China." *Financial Times* 13 Jan. 2010. Web. 27 Mar. 2011.

<sup>&</sup>lt;sup>53</sup> Google China History: TIMELINE Of Google's Biggest China Controversies." *The Huffington Post* 18 Mar. 2010. Web. 15 Apr. 2011.

search engine in the .cn domain would lead to a more level playing field to capitalize on the largely populated Chinese Internet market<sup>54</sup>. However, there were indications from the beginning that Google's concessions would still not be able to satisfy the Chinese government's wishes. To further complicate Google's circumstances, the launch of Google.cn brought about global criticism claiming complying with Chinese censorship rules was against Google's corporate motto of "Don't Be Evil". By the time Google.cn launched, many Chinese had already written off Google as an unwelcome foreign outsider with less reliable service than the Chinese dominant search engine, Baidu<sup>56</sup>. Fierce competition from Baidu was quickly destroying Google's market share. Between 2002 and 2007, Baidu's market share increased from three percent to a dominant fifty-eight percent<sup>57</sup>.

In 2007, Google admitted its decision of launching a compliant Google.cn had made the company vulnerable to web attacks. The company announced its technology systems were damaged from a series of attacks from Web users in China. Google continued to face constant criticism from Chinese regulators. In 2008, Google was accused of offering online advertisements from non-licensed medical websites. The accusation was substantial enough to threaten the online advertising market in China altogether<sup>58</sup>.

Chinese regulators again criticized Google for allowing certain pornographic materials available through its search engine. The problem was within Google's feature, Google Suggest. Google Suggest instantly offered fully developed search queries when users typed just a few

<sup>&</sup>lt;sup>54</sup> Levy, Steven. "Inside Google's China Misfortune." *Fortune* 15 Apr. 2011. *CNN Money*. Web. 19 Apr. 2011.

<sup>55 &</sup>quot;Google China History: TIMELINE Of Google's Biggest China Controversies."

<sup>&</sup>lt;sup>56</sup> Levy, Steven. "Inside Google's China Misfortune." *Fortune* 15 Apr. 2011. *CNN Money*. Web. 19 Apr. 2011 Wilson, Kristina, Yaneli Ramos, and Daniel Harvey. *Google in China: "The Great Firewall"* Rep. Durham: Duke

University, 2009.

58 "Google China History: TIMELINE Of Google's Biggest China Controversies."

characters or words into the search box. Unfortunately, many of the suggestions were related to sexual matters. Google defended itself by claiming someone must have spammed keywords to artificially boost the popularity of sex sites in Google Suggest but Chinese regulators were not impressed<sup>59</sup>.

The accusations of providing pornographic material continued from January to June of 2009 when Chinese regulators decided to punish Google for not being able to remove all the pornographic content. The punishment consisted of a suspension of Google's ability to search foreign websites and its associative-word search function. This suspension further pushed away Google users to Google's local competing search engine, Baidu<sup>60</sup>.

Kai-Fu Lee, Vice-President in charge of Google in China quit later the same year. Many speculate Lee left due to the pressure to comply with Chinese authorities. Even after Kai-Fu Lee's resignation, discrepancies regarding Google's operations continued. A month after Lee's absence, a Chinese copyrights group demanded compensation for Chinese authors who had their books scanned into Google's electronic library. Shortly after, unrest from Chinese regulators surfaced about new uncensored pornographic material<sup>61</sup>.

Most damaging, Google information security manager, Heather Adkins, discovered Google's monitoring system had detected a break-in of Google's computer system, and some of the company's most precious intellectual property had been stolen. The hack was geographically

<sup>&</sup>lt;sup>59</sup> Levy, Steven. "Inside Google's China Misfortune."

<sup>&</sup>lt;sup>60</sup> "Google China History: TIMELINE Of Google's Biggest China Controversies."

<sup>&</sup>lt;sup>61</sup> Wilson, Kristina, Yaneli Ramos, and Daniel Harvey. *Google in China: "The Great Flrewall"* Rep. Durham: Duke University, 2009.

traced to China and both of the nature of its targets and sophistication of the attack pointed to the Chinese government itself as either an instigator or a party to the attack<sup>62</sup>.

All the headaches Google faced caused the company to lose its temper. In 2010, Google threatened China that it would end censorship of it search service and was prepared to pull out of the market<sup>63</sup>. A company losing its composure is the last way to be successful in operating in China and exactly what the Chinese government hopes will happen<sup>64</sup>. The Chinese welcome foreign investment to learn its technologies, but no one ever wishes foreign investment to do well in China. Without a peaceful co-existence between the Western company and the People's Republic of China, a foreign company is doomed for failure. Questioning Chinese business practices will do nothing but aggravate the country even further and cause even more complications<sup>65</sup>.

Also in 2010, US Secretary of State, Hilary Clinton, called on Beijing to carry out a thorough and transparent investigation into the cyber attacks Google experienced. China refused to make concessions on censorship for Google's operations and in March, Google stopped censoring its search services. Google redirected the site to its search site based in Hong Kong which is also uncensored<sup>66</sup>.

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<sup>&</sup>lt;sup>62</sup> Levy, Steven.

<sup>63</sup> Ibid

<sup>&</sup>lt;sup>64</sup> McGregor, James. *One Billion Customers: Lessons from the Front Lines of Doing Business in China*. New York: Free 2005 p 70

<sup>&</sup>lt;sup>65</sup> McGregor, James. One Billion Customers: Lessons from the Front Lines of Doing Business in China. P 75.

<sup>&</sup>lt;sup>66</sup> "Google China History: TIMELINE Of Google's Biggest China Controversies."

## Lessons from Google in China for Facebook

After the debacle of Google in China, Google is still currently inaccessible in China and its local competitor, Baidu, has now secured over eighty-three percent market share in China<sup>67</sup>. With all the negative publicity over the years and experienced unreliability, Google's services are practically obsolete in the populous internet market.

The case of Google in China most importantly highlights the danger to theft of intellectual property. Chief legal officer David Drummond stated after looking into the cyber hacks, the more they realized the attack was not a classic hack, but caused by people who were truly after something. Drummond described the hacks against Google as 'hacking with a purpose' 68. In addition to losing its precious intellectual property, it was also discovered by Google security specialists the hackers had disrupted Gmail accounts of Chinese dissidents and human rights activists. Each user's contacts, plans, and most private information had fallen into the hands of the Chinese government 69.

As Facebook has been in its own battles with censorship and privacy rights even within the United States, operating in China under these suspicious and dangerous conditions would be disastrous for Facebook's brand identity. Furthermore, Google faced much criticism that the company had been a tool used to identify and silence critics of a repressive government<sup>70</sup>. The open nature of Facebook could quickly accumulate a similar reputation of this nature. Also, as the world's dominant social networking community, making its prized intellectual property

<sup>&</sup>lt;sup>67</sup> "Baidu 83.6% Search Query Market Share." *Resonance China Social Media Agency* 14 Mar. 2011. Web. 18 Mar. 2011.

<sup>&</sup>lt;sup>68</sup> Wilson, Kristina, Yaneli Ramos, and Daniel Harvey. *Google in China: "The Great FIrewall"* Rep. Durham: Duke University, 2009.

<sup>&</sup>lt;sup>69</sup> Levy, Steven.

<sup>&</sup>lt;sup>70</sup> Ibid

vulnerable to sophisticated hackers would be detrimental to the company's growth. As many of the operating networks in China are clones of Facebook as is, Facebook will have to be able to innovate rapidly for a fighting chance to compete. With its private codes stolen, Facebook's local competition could continue to beat and surpass Facebook product offerings.

The damage to Google's brand equity in China after its exhausting and complicated battle with the Chinese government should educate Facebook that an entrance to the Chinese market is a one shot opportunity. The Chinese require concessions from companies and foreign investment must recognize this. If Facebook's entrance to China is messy, the entirety of its operations in China will be complicated until China can force Facebook to leave by the government.

### STRATEGY RECOMMENDATION FOR FACEBOOK

Facebook should not enter the Chinese Internet market with its product offering as a social networking website. As realistic immediate options for Facebook of this nature would include a censored, compliant version abiding by Chinese government regulation or offering a separate, internal China Facebook disconnected from the rest of the world, Facebook should look for alternative product offerings to enter the Chinese market.

#### Concerns for Facebook as a Censored or an Isolated Network

With the volume of content and open nature of Facebook, it is highly unlikely that

Facebook will ever be able to fully comply with Chinese regulation without aggravating other
international users or jeopardizing its global interconnectedness. As Google experienced, the

Chinese government is out to find any problem they can to punish foreign sites and manipulate
the sites as a tool to access information about its population and better enhance its own domestic
capabilities.

Also, as Renren has outperformed Facebook with increased features and is localized to Chinese culture, the global aspect of Facebook's network would be its strongest competitive advantage. However, as a network internal to China, members would have little or no incentive to join as most likely they are already active on existing networks.

Furthermore, as Facebook is consistently on its tip toes to avoid negative publicity over sharing user information and privacy and censorship concerns even in the United States, trying to suffice both user privacy and Chinese government regulations would be a losing battle for Facebook. The Chinese public would be weary to even put themselves into an open nature network like Facebook as they are aware of it being highly monitored by the Chinese government. In light of recent revolutions and Facebook's claim to fame for being a catalyst in the movement, the Chinese government would monitor Facebook users extremely closely. In addition to challenges such as turning over personal details of user accounts to the government, isolating the Facebook network to only Chinese users would also pose significant challenges. Facebook will be faced with controversial decisions involving walling off Chinese students studying overseas and being responsible to halt trending topics over a massive amount of content created by a large population.

The expense of complying by Chinese regulations would be extremely trying for Facebook. Facebook would be responsible for employing its own manual censors; an internet army of enough employees to monitor an estimated 50,000+ sensitive keywords. As China offers a very large labor force willing to work, wages are increasing in China to complement its growing economy and rising middle classes<sup>71</sup>. The scale of internet monitors Facebook would

<sup>&</sup>lt;sup>71</sup> Central Intelligence Agency. "China." *The World Factbook*. 2011.

need to employ in hopes to appease the government would be an additional significant cost to expanding to China.

Zuckerberg said unlike Google's temper tantrum and decision to quit censoring results, Facebook would be willing to play by the Chinese government's rules. However, it seems unfeasible to meet their standards and expectations for censorship on such an open network of massive proportions. Although Facebook censors extreme cases such as content referring to Nazism in Germany, the scale of the estimated sensitive topics would be an absolute nightmare to attempt to control in China<sup>72</sup>. Lastly, Mark Zuckerberg has claimed he does not wish to market Facebook as an 'American' company but a truly global one. Unfortunately in this market it seems Facebook would have to capitalize on its American identity to entice Chinese users who highly value American culture. This course of action would not be favorable marketing for Zucerkberg's wishes.

## Steps to Building an Effective Entrance in China

Facebook should continue to build relationships with Chinese online search engine,
Baidu to have an ally to help understand the Chinese internet environment. Rumored
speculations of Facebook joining forces with Baidu to create Baidu its own social network will
not be successful as there is no incentive to join Baidu when Renren already exists<sup>73</sup>. Facebook is
also helping to develop its Chinese competition in the long run, the same way its brief presence
in China in 2008 catapulted its now most direct competitor, Renren.

<sup>&</sup>lt;sup>72</sup> Marshall, Matt. "What Facebook's Zuckerberg Won't Be Able Do in China: End the Blockade." *Venture Beat* 20 Dec. 2010. Web. 15 Mar. 2011.

<sup>73</sup> Ibid

Facebook must recognize the Chinese government will always view Facebook as a threat due the open nature. Particularly in light of Facebook's role in recent governmental revolutions, China is extra sensitive and unwelcoming for Facebook to enter China. The only way Facebook can be successful in China is if it becomes a fact of life and something the government does not want to uproot from its country.

As Google, eBay and other Western companies have learned the hard way, in China, the market will always win. Facebook should prepare itself to make concession of its technological capabilities and intellectual property if it wants to capitalize in the Chinese internet market. China has a survival culture with a zero-sum mentality. For somebody to win, somebody has to lose. The concept of a "win-win" scenario does not exist in China<sup>74</sup>.

## **Capitalize on Developing Mobile Industry**

However, while the online environment is very strictly regulated, the Chinese Government is determined to further invest in innovation regarding the telecommunications industry. China is persistently looking for ways to get ahead in this market and would welcome the Western tyrant Facebook to capture its technology. The Chinese urban mobile market has matured but will continue to grow with the increased accessibility to rural markets in China in years to come. In the likely chance its network's systems will be stolen in the process of entering the Chinese mobile market, Facebook will still be able to retain its dominant intellectual property. Likewise, Facebook is looking to expand its mobile capabilities as mobile is expected to be the next large technology advancement rather than the World Wide Web.

<sup>&</sup>lt;sup>74</sup> McGregor, James. *One Billion Customers: Lessons from the Front Lines of Doing Business in China*. New York: Free, 2005. P 55

<sup>&</sup>lt;sup>75</sup> Business Monitor International. *China Telecommunications Report*. Rep. London: Business Monitor International, 2011

#### The China Mobile Market

China has the largest mobile market in the world. With over 841.693 million mobile subscribers and an estimated value at \$7.55 billion per month in revenue, there is large opportunity for Facebook to capitalize on the Chinese market after all<sup>76</sup>. Entering through mobile may also lessen the burden of censorship compliance as Chinese censorship currently is not as sophisticated as Internet surveillance<sup>77</sup>. Facebook will also be able to establish brand awareness and differentiate itself from local cloned online networks. Due to similar website architecture and established familiarity with Renren, many Chinese online users will not be motivated to switch to a less culturally adapted, physically similar 'knock-off' version of Renren. As Renren already offers additional features Facebook doesn't, pressure for constant innovation would be extremely high to compete online.

Facebook recently utilized a similar mobile entrance strategy to increase its popularity in Japan. Facebook introduced a Japan-specific mobile application to help university students connect with each other and alumni as they hunt for jobs post-graduation. As the first application Facebook has built specifically for a foreign market, Facebook's growth has continued to steadily climb with its highest numbers yet recorded this past October with 1.69 million monthly active users 78. With Facebook's recent acquisition of Snaptu, a mobile application developer, and its recent creation of a foreign mobile application, the costs of launching a Facebook application

<sup>&</sup>lt;sup>76</sup> Business Monitor International. *China Telecommunications Report*.

<sup>77</sup> Ihid

<sup>&</sup>lt;sup>78</sup> Lomas, Natasha. "Want to Build a Mobile App? Here's How to Convince the CFO." *Silicon.com*11 Feb. 2010. Web. 20 Mar. 2011.

would be fairly inexpensive. Mobile application development fees vary depending on the sophistication of the technology. Rough estimates include \$50,000-\$250,000<sup>79</sup>.

Facebook should plan to continue to concentrate on unconquered areas of social media dominance online, including South Korea, Russia, and Japan while introducing a mobile application in Chinese markets. Judging from how the mobile application is received and the Chinese government reacts; Facebook could eventually branch out its mobile presence online, perhaps in a joint-venture partnership with dominant Chinese search engine, Baidu.

## **CONCLUSION**

As Facebook is anxious to capitalize on China's populous internet environment and complete its mission of connecting the world, Facebook is confronted with several challenges. As Google in China has experienced, the threats of sacrificing precious intellectual property, heightened censorship and speculation regarding social networking as Facebook was a catalyst of recent revolutions, and intense local competition, Facebook should not enter the Chinese market with its current product offering as a social networking site. Facebook should concentrate on securing supremacy in areas Facebook lacks social media dominance, such as South Korea, Japan, and Russia and begin investigating an entrance to China through the mobile market. The mobile market is currently less regulated than the Internet and growing rapidly with a large emerging Chinese middle class. Entering the Chinese market through this outlet will allow Facebook to get a foothold in the Chinese market, as well as help China to be more innovative in mobile technologies. This will prove to be the closest circumstance to a win-win scenario Facebook and China will be able to reach.

<sup>&</sup>lt;sup>79</sup> Lomas, Natasha. "Want to Build a Mobile App? Here's How to Convince the CFO."

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## **APPENDIX A: History of Facebook Product Timeline**

#### Company Timeline (Source: Facebook.com)

2010

August-Facebook launches Places

July-Facebook reaches over 500 million active users

2009

**December-**Facebook reaches over 350 million active users

June-Facebook launches Facebook Usernames

**May-**Digital Sky Technologies makes a \$200 million investment for preferred stock at a \$10 billion valuation **February-**Facebook reaches over 175 million active users; Facebook joins OpenID board; "Like" feature added 2008

**December-**Facebook Connect becomes generally available

August-Facebook reaches over 100 million active users

**April**-Facebook launches Facebook Chat; Facebook releases Translation application to 21 additional languages **March**-Facebook updates privacy controls to include Friend List privacy; Facebook launches in German **February**-Facebook launches in Spanish and French 2007

**November-**Facebook launches Facebook Ads

October-Facebook reaches over 50 million active users; Facebook launches Facebook Platform for Mobile Facebook and Microsoft expand advertising deal to cover international markets; Microsoft: \$240 million equity stake May-Facebook launches Marketplace application for classified listings; Facebook launches Facebook Platform April-Facebook reaches 20 million active users; Facebook updates site design and adds network portals 2006

December-Facebook reaches more than 12 million active users

**September**-News Feed and Mini-Feed are introduced with additional privacy controls; Facebook expands registration so anyone can join

**August-**Facebook development platform launches; Notes application is introduced; Facebook and Microsoft form strategic relationship for banner ad syndication

**April**-Facebook raises \$27.5 million from Greylock Partners, Meritech Capital Partners; Facebook Mobile launches 2005

December-Facebook reaches more than 5.5 million active users

October-Photos is added as an application; Facebook begins to add international school networks

September-Facebook expands to add high school networks

August-The company officially changes its name to Facebook from thefacebook.com

May-Facebook raises \$12.7 million in venture capital from Accel Partners; Facebook grows to 800 college networks+

**December-**Facebook reaches nearly 1 million active users

September-Groups application is added; the Wall is added as a Profile feature

June-Facebook moves its base of operations to Palo Alto, Calif.

**February**-Mark Zuckerberg and co-founders Dustin Moskovitz, Chris Hughes and Eduardo Saverin launch Facebook from their Harvard dorm room

## **APPENDIX B: Facebook Statistics and Accomplishments**

#### People of Facebook

- Facebook membership of over 500,000,000 active users roughly translates to 1 out of every 13 people on Earth having a Facebook.
- On any given day, fifty percent of the users are logged in on Facebook
- Collectively, people spend over 700 billion minutes per month on Facebook.
- Approximately seventy percent of Facebook users are located outside of the United States and access Facebook from one of seventy or more language translations of the website.
- The 18-24 college demographic grew the fastest at seventy four percent in one year
- The 35% demographic now represents more than thirty percent of the entire membership

## **Activity on Facebook**

- 58% of 18 to 34 year olds check Facebook right when they wake up
- There are over 900 million objects; such as pages, groups, events, etc., that people can interact with.
- The average user creates more than ninety pieces of content each month.
- Additionally, more than 30 billion pieces of content; including web links, news stories, blog posts, photo albums, etc., are shared each month.

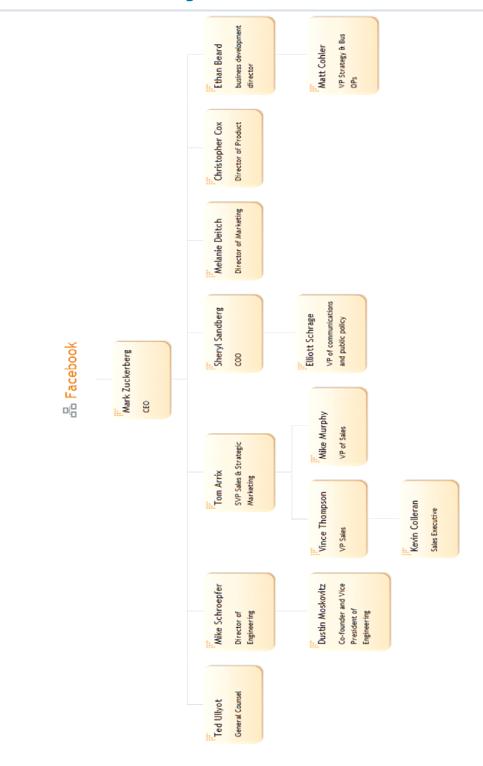
## **Facebook Platform**

- Facebook Platform has allowed entrepreneurs from nearly two-hundred countries build with its technology.
- Monthly, more than 250 million people engage with Facebook on external websites.
- In the past year since its launch in April 2010, on average 10,000 new websites integrate with Facebook daily

#### Mobile

- More than 200 million active users currently accessing Facebook through mobile devices
- People using Facebook on mobile devices are twice more as active on Facebook than non-mobile users
- More than 200 mobile operators in 60 countries working to deploy and promote Facebook through mobile products
- 58% of 18 to 34 year olds check Facebook before getting out of bed, 28% of 18 to 34 year olds check Facebook on their smart phones before getting out of bed

# **APPENDIX C: Facebook Organizational Structure**



## **APPENDIX D: Estimated Facebook Revenues**

Revenue Stream	Rumored Run Rate, July 2009	Estimate, EoY 2009	
Brand Advertising	\$125,000,000	\$225,000,000	
Microsoft Advertising	\$150,000,000	\$50,000,000	
Virtual Goods (Credits)	\$75,000,000	\$10,000,000	
Performance Advertising	\$200,000,000	\$350,000,000	
Total	\$550,000,000	\$635,000,000	

InsideFacebook.com

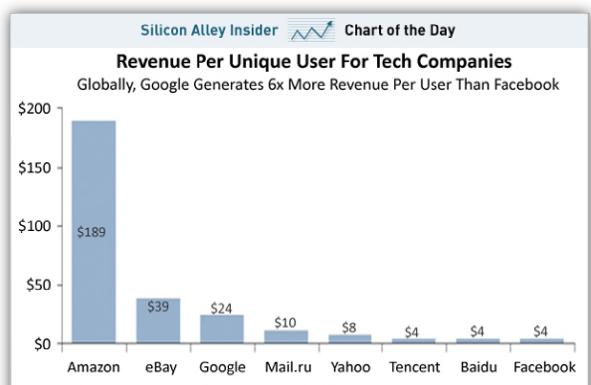
## Goldman Sachs Unveils Facebook Financial Information:

## 2010:

- -For the first nine months of 2010, Facebook saw revenue rise to \$1.2 billion from \$450 million in the same period a year earlier. Net income rose to over \$350 million from less than \$50 million.
- -Facebook's operating margin was roughly 48% for the fight nine months. (For comparison, Google had an operating margin at 40%).

## 2011

-Advertising spending on Facebook, Inc. will total \$4.05 billion this year, more than double from 2010.



Source: comScore, Bloomberg, JP Morgan estimates (Jan 2011)

Note: For public companies, F'10E revenue. Amazon, eBay, Google, Mail.ru, Yahoo! and Facebook unique users from comScore. For Facebook, revenue estimates of \$2.0B is based on press reports, as cited by Bloomberg 12/16/10. Tencent and Baidu usage numbers are JP Morgan estimates.

## **APPENDIX F: Chinese Networking Site Duplication**

#### Renren



\* Dimri, Himadri. "Chinese Facebook- Renren About to Win the IPO Race." Facebook Knol 23

#### Facebook

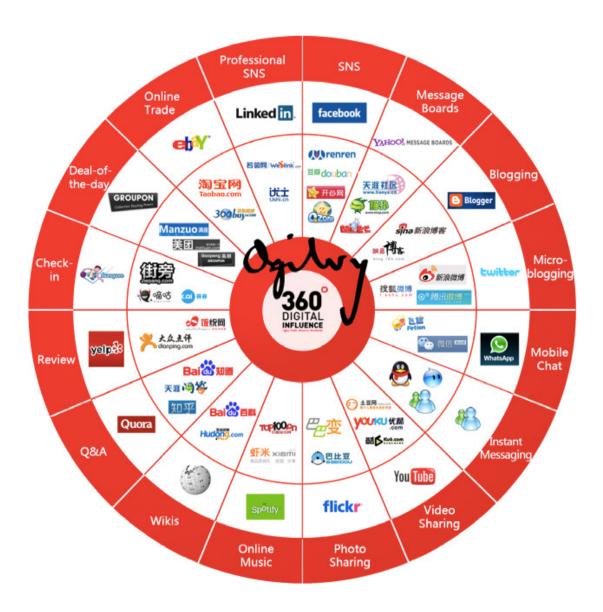


http://www.guardian.co.uk/media/2008/jun/23/facebook.chinathemedia

# **APPENDIX G: World Map of Facebook's Global Presence**



Source: Insidefacebook.com



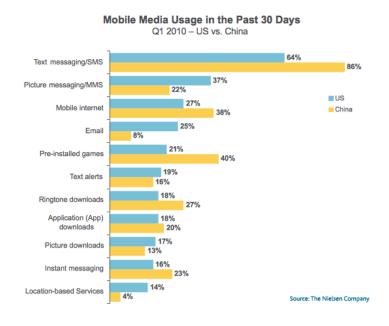
http://www.thomascrampton.com/china/social-media-china/

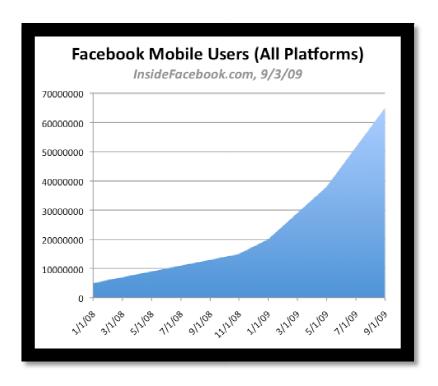
## **APPENDIX I: Internet Users in China**

YEAR	Users	Population	% Pen.	Usage Source
2000	22,500,000	1,288,307,100	1.7 %	ITU
2001	33,700,000	1,288,307,100	2.6 %	ITU
2002	59,100,000	1,288,307,100	4.6 %	ITU
2003	69,000,000	1,288,307,100	5.4 %	CNNIC
2004	94,000,000	1,288,307,100	7.3 %	CNNIC
2005	103,000,000	1,289,664,808	7.9 %	<u>CNNIC</u>
2006	137,000,000	1,317,431,495	10.4 %	<u>CNNIC</u>
2007	162,000,000	1,317,431,495	12.3 %	<u>CNNIC</u>
2008	253,000,000	1,330,044,605	19.0 %	<u>CNNIC</u>
2009	384,000,000	1,338,612,968	28.7 %	<u>CNNIC</u>
2010	420,000,000	1,330,141,295	31.6 %	<u>CNNIC</u>

Business Monitor International. China Telecommunications Report.

# **APPENDIX J: Chinese Mobile Market in Comparison to US Market**





Source: insidefacebook.com

## **APPENDIX L: Japanese-Specific Mobile Application**



Source: insidefacebook.com

## **APPENDIX M: China Mobile Business Environment SWOT**

#### China Mobile Business Environment SWOT

#### Strengths

- The size of the mobile market; China Mobile is the world's largest operator in terms of subscriber numbers.
- China has launched its own domestic 3G mobile technology standard TD-SCDMA, which will challenge CDMA2000 and W-CDMA.
- Strength of domestic manufacturers Huawei Technologies and ZTE, which are both likely to continue winning TD-SCDMA equipment contracts.
- 3G equipment spending on the back of licence awards will fuel the telecoms capex spend during 2009 for China and the wider Asia Pacific region.
- Government determination to invest in China's telecommunications industry ensuring that it becomes innovative.
- Demand for mobile broadband will aid growth of 3G subscribers.

#### Weaknesses

- Many rural areas have neither fixed-line nor mobile telephony services available.
- Many local handset manufacturers (Soutec, Eastcom and Kejian) are beginning to suffer as Nokia, Motorola and Samsung have all picked up in handset sales due to better distribution.
- Handset sales in general are being impacted as customers refrain from upgrading.
- Economic downturn in the export-reliant China has meant that migrant workers have relinquished their services as they leave for their hometowns; local, regional-based operators have reported a drop in mobile revenues.
- Falling ARPUs due to the continue dominance of the prepaid market, and subscriber growth arising from rural areas.

#### Opportunities

- 3G licences awarded in 2009. Several infrastructure providers are investing heavily in 3G research and development (R&D).
- Growth in usage of wireless value-added services (WVAS) should translate to 3G success
- Reduced tariffs for long-distance and international calls for mobile from January 2010 will contribute to the popularity of mobile above that of fixed line.
- LTE trials are under way, although the government said it will refrain from providing licences until operators recouped their investments for 3G.

#### Threats

- Several US equipment vendors expecting to win 3G contracts could miss out on TD-SCDMA infrastructure deals, with carriers more likely to award contracts to local companies or Western companies in joint ventures (JVs) with local companies.
- Multinational handset manufacturers are facing more opposition from the likes of