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## Platform Analysis: LinkedIn

LinkedIn is a social media platform created in 2002 by Reid Hoffman, a former board member of Google, eBay, and Paypal and one of the most influential billionaires and investors in the tech industry. The initial development team consisted of product designer Allen Blue, marketing professional Konstantin Guericke, engineer Eric Ly, and engineer Jean-Luc Vaillant.<sup>1</sup> Together, this team launched the LinkedIn website in May of 2003 and received a pre-money valuation of between \$10-\$15 million by November of 2003.<sup>2</sup> With this initial valuation, they received their first funding in the form of \$4.7 million in Series A financing from Sequoia Capital, a venture capital firm.<sup>3</sup> Then, Linkedin reached over a million users in 2004 and secured \$10 million in Series B funding from Sequoia Capital, 14 angel investors, and Greylock Partners, another venture capital firm.<sup>4</sup> In 2006, LinkedIn became a profitable platform with over five million users and in 2007, LinkedIn raised another \$12.8 million in venture capital funds from Bessemer Venture Partners and European Founders Fund.<sup>5</sup> The next round was Series D fundraising in 2008, where previous investors with the addition Bain Capital Ventures invested a

<sup>1 &</sup>quot;About us." Linkedin Pressroom. Accessed Dec, 2020. https://news.linkedin.com/about-us#

<sup>&</sup>lt;sup>2</sup> "Sequoia Capital "Links In" with \$4.7 Million Investment." Linkedin Pressroom. Nov, 2003. Accessed Dec, 2020. https://news.linkedin.com/2003/11/sequoia-capital-links-in-with-47-million-investment

<sup>&</sup>lt;sup>3</sup> "Sequoia Capital "Links In" with \$4.7 Million Investment." Linkedin Pressroom. Nov, 2003. Accessed Dec, 2020. https://news.linkedin.com/2003/11/sequoia-capital-links-in-with-47-million-investment

<sup>&</sup>lt;sup>4</sup> "LinkedIn Secures \$10 Million in Series B Funding Led by Greylock." Linkedin Pressroom. Oct, 2004. Accessed Dec, 2020. https://news.linkedin.com/2004/10/linkedin-secures-10-million-in-series-b-funding-led-by-greylock <sup>5</sup> "LinkedIn Raises \$12.8 Million from Bessemer Venture Partners and European Founders Fund to Accelerate Global Growth." LinkedIn Pressroom. Jan, 2007. Accessed Dec, 2020.

https://news.linkedin.com/2007/01/linkedin-raises-128-million-from-bessemer-venture-partners-and-european-found ers-fund-to-accelerate-global-growth

total of \$53 million in June<sup>6</sup> as well as \$22.7 million in October from Goldman Sachs, McGraw-Hill Companies, SAP Ventures, and Bessemer Venture Partners.<sup>7</sup> According to LinkedIn's press release, "the valuation for the Series D funding was just over 1 billion dollars for the \$75.7 million raised." At this point, LinkedIn had over 30 million users and was growing at a rate of half a million new users a week, eventually achieving 100 million users by 2011.<sup>8</sup> LinkedIn raised \$353 million when it went public on May 19, 2011,<sup>9</sup> and was eventually sold to Microsoft for \$26 billion in 2016.<sup>10</sup> Today, LinkedIn has 722 million users.<sup>11</sup> This pattern of steady growth and funding leads us to an important question: what is LinkedIn and why are investors so confident in its growth?

LinkedIn is a social networking service designed for professionals and businesses to connect. With a vision statement of creating "economic opportunity for every member of the global workforce," it offers workers the chance to network, strengthen their resume, and apply for jobs. This is mainly done on each user's profile where the user can display a resume, show his or her interests, and have fellow professionals endorse his or her skill sets. LinkedIn can be useful to professionals and companies of any sector, which is why job offerings listed can come from local nonprofits all the way up to the national government and the users range from normal workers up to the CEOs of Fortune 500 companies. Apart from networking and endorsements,

<sup>&</sup>lt;sup>6</sup> "LinkedIn Secures \$53M of Funding Led by Bain Capital Ventures" LinkedIn Pressroom. June, 2008. Accessed Dec, 2020. https://news.linkedin.com/2008/06/linkedin-secures-53m-of-funding-led-by-bain-capital-ventures <sup>7</sup> "LinkedIn Raises \$22.7 Million from Goldman Sachs, The McGraw-Hill Companies, SAP Ventures and Bessemer Venture Partners." LinkedIn Pressroom. Oct, 2008. Accessed Dec, 2020.

https://news.linkedin.com/2008/10/linkedin-raises-227-million-from-goldman-sachs-the-mcgraw-hill-companies-sap-ventures-and-bessemer-venture-partners

<sup>&</sup>lt;sup>8</sup> "LinkedIn Raises \$22.7 Million from Goldman Sachs, The McGraw-Hill Companies, SAP Ventures and Bessemer Venture Partners." LinkedIn Pressroom. Oct, 2008. Accessed Dec, 2020.

https://news.linkedin.com/2008/10/linkedin-raises-227-million-from-goldman-sachs-the-mcgraw-hill-companies-sap-ventures-and-bessemer-venture-partners

<sup>&</sup>lt;sup>9</sup> Gregersen, Erik. "LinkedIn." Britannica. Nov. 2020. Accessed Dec. 2020. https://www.britannica.com/topic/LinkedIn

<sup>&</sup>lt;sup>10</sup> Gregersen, Erik. "LinkedIn." Britannica. Nov. 2020. Accessed Dec. 2020. https://www.britannica.com/topic/LinkedIn

<sup>11 &</sup>quot;About us." Linkedin Pressroom. Accessed Dec, 2020. https://news.linkedin.com/about-us#

the social aspect of LinkedIn lies in the private messaging function and the home feed, where users can read or write posts. Similar to Facebook, users have the option to like, comment, share, and send content that they see on their feed. In fact, the redesign of LinkedIn's UI in 2017 was heavily scrutinized due to how similar it was to Facebook's pre-2020 UI. <sup>12</sup> Although Facebook overhauled their design template in 2020, LinkedIn still retains a template that is very similar to Facebook's previous home feed, private messaging page, people you may know page, and iconic blue navigation bar. More recently in 2020, LinkedIn added many social functions that Facebook and Instagram already had, such as the ability to post Stories, live video stream, and react to posts. <sup>13</sup>

The reason for LinkedIn high valuation is argued to be the user's willingness to pay for the services offered by LinkedIn. According to ResumeGo, a study showed that "Job seekers with a comprehensive LinkedIn profile have a 71% higher chance of getting a job interview." In addition, LinkedIn's professional environment ensures the creation and distribution of engaging content that users want to see and may even be willing to pay for. Unlike other social media platforms, LinkedIn does not allow for the distribution of viral videos, clickbait headlines, and controversial content to thrive. This professional civility and convenience can appeal to many users who have become wary of the distribution of unregulated information on private media platforms, such as Facebook. The evolution of its UI has shown that LinkedIn intends to remain a social networking site, but it has also acquired 24 companies and integrated their

<sup>&</sup>lt;sup>12</sup> DTALE Design Studio. "How LinkedIn Copied FaceBook UI and disappointed everyone." Medium. Jan, 2017. Accessed Dec, 2020.

https://medium.com/productivity-revolution/how-linked in-copied-face book-ui-and-disappointed-everyone-79 a 5 f 7 2 8 5 cac

<sup>&</sup>lt;sup>13</sup>Graham, Jefferson. "LinkedIn gets more like Facebook, Snapchat: The business social network adds more social features." USA Today. Sept, 2020. Accessed Dec, 2020.

https://www.usatoday.com/story/tech/2020/09/24/linkedin-more-like-facebook-snapchat-adds-stories-new-design/58 58586002/

<sup>&</sup>lt;sup>14</sup> Yang, Peter. "Resume Study: How LinkedIn affects the Interview Chances of Job Applicants." ResumeGo. Accessed Dec, 2020. https://www.resumego.net/research/linkedin-interview-chances/

services to assist the career development of its users.<sup>15</sup> In the midst of the COVID-19 pandemic, LinkedIn has rolled out new features to assist users in finding jobs, such as #OpenToWork or #Hiring photo frames and their new Career Explorer tool, which can help unemployed users make a career change.<sup>16</sup> This ability to adapt has allowed LinkedIn to flourish, even amidst the pandemic. According to Statista, LinkedIn's 2020 revenue is over \$8 billion, which is up from \$6.7 billion in 2019.<sup>17</sup> According to LinkedIn's quarterly SEC filings, LinkedIn's main sources of revenue lie in providing a platform for advertising (Marketing Solutions), recruitment services (Talent Solutions), and their user subscription services (LinkedIn Premium).<sup>18</sup> Despite this growth, it is worth noting that one group of users that LinkedIn has not worked well for is politicians. LinkedIn has very few politician profiles and a common tip given to users is to avoid political discussion.<sup>19</sup>

In terms of controversies, LinkedIn has had its fair share but is relatively less controversial compared with its social media counterparts, such as Facebook. In 2012, LinkedIn suffered from a data breach where over 6.5 million user passwords were compromised and sold on a Russian hacker forum; they settled a lawsuit with Premium LinkedIn users for \$1.25 million.<sup>20</sup> The effects of this data breach were seen again in 2016 when a hacker listed another

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<sup>&</sup>lt;sup>15</sup> "List of LinkedIn's 24 Acquisitions, including UpCounsel and Drawbridge." Accessed Dec, 2020. https://www.crunchbase.com/organization/linkedin

<sup>&</sup>lt;sup>16</sup> Murphy, Coral. "LinkedIn's new tool helps users make a career change through overlapping skills." USA Today. Oct, 2020. Accessed Dec, 2020.

https://www.usatoday.com/story/tech/2020/10/29/linkedin-launches-new-tool-help-users-discover-new-careers/5990 592002/

<sup>&</sup>lt;sup>17</sup> Clement, J. "Annual Revenue of LinkedIn from 2017 to 2020." Statista. Sept, 2020. Accessed Dec, 2020. https://www.statista.com/statistics/976194/annual-revenue-of-linkedin/#:~:text=In%20the%20fiscal%20year%2020 20,acquired%20by%20Microsoft%20in%202016.

<sup>&</sup>lt;sup>18</sup> Investopedia. "How Does LinkedIn Make Money?" Investopedia. Sept, 2019. Accessed Dec, 2020. https://www.investopedia.com/ask/answers/120214/how-does-linkedin-lnkd-make-money.asp#:~:text=According% 20to%20LinkedIn's%20quarterly%20SEC,recruitment%20services%2C%20and%20membership%20privileges.

<sup>&</sup>lt;sup>19</sup> Glazer, Robert. "5 Things to Stop Doing on LinkedIn Immediately." Forbes. Aug, 2019. Accessed Dec, 2020. https://www.forbes.com/sites/robertglazer/2019/08/14/5-things-to-stop-doing-on-linkedin-immediately/?sh=601b63 e734dd

data set of 117 million LinkedIn emails and passwords from 2012 for sale on the dark web marketplace The Real Deal. At the time, LinkedIn only had around 400 million users.<sup>21</sup> Following this data breach, LinkedIn introduced stronger security measures, including stronger encryption, email challenges, two-factor authentication, forced password resets for impacted accounts, and the invalidation of the stolen passwords.<sup>22</sup> In 2015, LinkedIn paid \$13 million to settle a 2013 lawsuit where LinkedIn was accused of abusing their access to user emails by sending multiple request-to-connect emails to the user's email contacts if the initial email was ignored, thereby considered spam emailing.<sup>23</sup> In 2018, an investigation from Ireland's Data Protection Commissioner found that LinkedIn had somehow obtained the emails of 18 million non-users and targeted them using Facebook advertisements in a bid to recruit new users. Another discovery from this investigation was that LinkedIn used social graph-building algorithms to suggest network connections to users, which is a disturbing example of extremely accurate precomputation that uses stored data from unknown origins.<sup>24</sup> A different example of the concerning usage of LinkedIn data is the court case hiQ Labs v. LinkedIn from 2019, where the court declared that in order to promote equal competition, LinkedIn cannot prevent third-party data scraping from public profiles on LinkedIn.<sup>25</sup> LinkedIn itself also provides similar services to hiQ, the third-party data scraper that assisted in employee data collection and analysis

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<sup>&</sup>lt;sup>21</sup> Perez, Sarah. "117 million LinkedIn emails and passwords from a 2012 hack just got posted online." TechCrunch. May, 2016. Accessed Dec, 2020.

https://techcrunch.com/2016/05/18/117-million-linked in-emails-and-passwords-from-a-2012-hack-just-got-posted-online/

<sup>&</sup>lt;sup>22</sup> Perez, Sarah. "117 million LinkedIn emails and passwords from a 2012 hack just got posted online." TechCrunch. May, 2016. Accessed Dec, 2020.

https://techcrunch.com/2016/05/18/117-million-linkedin-emails-and-passwords-from-a-2012-hack-just-got-posted-online/

<sup>&</sup>lt;sup>23</sup> LinkedIn to pay out \$13 million to settle email lawsuit." ABC 7 Chicago. Oct. 2015. Accessed Dec, 2020. https://abc7chicago.com/business/linkedin-to-pay-out-\$13-million-to-settle-email-lawsuit/1016460/

<sup>&</sup>lt;sup>24</sup> Lunden, Ingrid. "LinkedIn violated data protection by using 18M email addresses of non-members to buy targeted ads on Facebook." TechCrunch. Nov, 2018. Accessed Dec, 2020. https://techcrunch.com/2018/11/24/linkedin-ireland-data-protection/

<sup>&</sup>lt;sup>25</sup> "hiQ Labs, Inc. v. LinkedIn Corp., No. 17-16783 (9th Cir. 2019)." Accessed Dec, 2020. https://law.justia.com/cases/federal/appellate-courts/ca9/17-16783/17-16783-2019-09-09.html

for hiring companies. However, none of these controversies hindered Microsoft's decision to acquire LinkedIn in 2016.

Unfortunately for users, LinkedIn has a very broad and weak privacy policy. With the use of certain services, LinkedIn can collect the user's calendar information, which can include time, location, and people present; according to LinkedIn's Privacy Policy in *Posting and Uploading Section 1.1*,<sup>26</sup>

If you sync your contacts or calendars with our Services, we will collect your address book and calendar meeting information to keep growing your network by suggesting connections for you and others, and by providing information about events, e.g. times, places, attendees and contacts.

LinkedIn can also connect information to a user based on what other users upload and store it without the said user's consent; according to *Data From Others Section 1.2*,<sup>27</sup>

We receive personal data (including contact information) about you when **others import or sync their contacts or calendar** with our Services, associate their contacts with

Member profiles, scan and upload business cards, or send messages using our Services

(including invites or connection requests). If you or others opt-in to sync email

accounts with our Services, we will also collect "email header" information that we can

associate with Member profiles.

Moreover, LinkedIn has the ability to store data forever, even if the user closes his or her account; as written in the Privacy Policy section 4.3,<sup>28</sup>

<sup>&</sup>lt;sup>26</sup> "Privacy Policy." Linkedin. Accessed Dec, 2020. https://www.linkedin.com/legal/privacy-policy

<sup>&</sup>lt;sup>27</sup> "Privacy Policy." Linkedin. Accessed Dec, 2020. https://www.linkedin.com/legal/privacy-policy

<sup>&</sup>lt;sup>28</sup> "Privacy Policy." Linkedin. Accessed Dec, 2020. https://www.linkedin.com/legal/privacy-policy

We retain your personal data even after you have closed your account if reasonably

necessary to comply with our legal obligations (including law enforcement requests),

meet regulatory requirements, resolve disputes, maintain security, prevent fraud and

abuse, enforce our User Agreement, or fulfill your request to unsubscribe from further

messages from us.

LinkedIn has long faced scrutiny over its data collection policy, data sources, and its algorithmic

use of said data but most users don't actually read the privacy policy. These three excerpts are

examples of data retention and collection policies that I found unusual and alarming.

Although LinkedIn has been marketed by many journalists as a better version of

Facebook, it is evident that the platform is not as simple as it seems. There are many benefits and

conveniences offered by LinkedIn to both employers and job seekers, but it seems that the depths

of its controversial actions have yet to be unearthed. For the most part, LinkedIn has managed to

remain under the public's radar, which is concerning considering LinkedIn's ambiguous usage

and ineffective protection of user data. Many users, myself included, were and are still unaware

of all the potential repercussions of having a LinkedIn profile. It is only a matter of time before

LinkedIn's next data breach, and considering the scope covered by their data collection methods

and the effectiveness of their predictive algorithms, it has the potential to be far worse than any

other data breach of the 21st century.

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## Work Cited:

- "About us." Linkedin Pressroom. Accessed Dec, 2020. https://news.linkedin.com/about-us#
- Clement, J. "Annual Revenue of LinkedIn from 2017 to 2020." Statista. Sept, 2020. Accessed Dec, 2020.
  - https://www.statista.com/statistics/976194/annual-revenue-of-linkedin/#:~:text=In%20the %20fiscal%20year%202020,acquired%20by%20Microsoft%20in%202016.
- DTALE Design Studio. "How LinkedIn Copied FaceBook UI and disappointed everyone." Medium. Jan, 2017. Accessed Dec, 2020. https://medium.com/productivity-revolution/how-linkedin-copied-facebook-ui-and-disappointed-everyone-79a5f7285cac
- Franceschi-Bicchierai, Lorenzo. "Another Day, Another Hack: 117 Million LinkedIn Emails And
  - $Passwords. "Vice.\ May,\ 2016.\ Accessed\ Dec,\ 2020. \\ https://www.vice.com/en/article/78kk4z/another-day-another-hack-117-million-linkedinemails-and-password$
- Glazer, Robert. "5 Things to Stop Doing on LinkedIn Immediately." Forbes. Aug, 2019.

  Accessed Dec, 2020.

  https://www.forbes.com/sites/robertglazer/2019/08/14/5-things-to-stop-doing-on-linkedin-immediately/?sh=601b63e734dd
- Graham, Jefferson. "LinkedIn gets more like Facebook, Snapchat: The business social network adds more social features." USA Today. Sept, 2020. Accessed Dec, 2020. https://www.usatoday.com/story/tech/2020/09/24/linkedin-more-like-facebook-snapchat-adds-stories-new-design/5858586002/
- Gregersen, Erik. "LinkedIn." Britannica. Nov. 2020. Accessed Dec. 2020. https://www.britannica.com/topic/LinkedIn
- "hiQ Labs, Inc. v. LinkedIn Corp., No. 17-16783 (9th Cir. 2019)." Accessed Dec, 2020. https://law.justia.com/cases/federal/appellate-courts/ca9/17-16783/17-16783-2019-09-09.html
- Investopedia. "How Does LinkedIn Make Money?" Investopedia. Sept, 2019. Accessed Dec, 2020. https://www.investopedia.com/ask/answers/120214/how-does-linkedin-lnkd-make-mone y.asp#:~:text=According%20to%20LinkedIn's%20quarterly%20SEC,recruitment%20ser vices%2C%20and%20membership%20privileges.
- "LinkedIn Raises \$12.8 Million from Bessemer Venture Partners and European Founders Fund to Accelerate Global Growth." LinkedIn Pressroom. Jan, 2007. Accessed Dec, 2020. https://news.linkedin.com/2007/01/linkedin-raises-128-million-from-bessemer-venture-partners-and-european-founders-fund-to-accelerate-global-growth
- "LinkedIn Raises \$22.7 Million from Goldman Sachs, The McGraw-Hill Companies, SAP

- Ventures and Bessemer Venture Partners." LinkedIn Pressroom. Oct, 2008. Accessed Dec. 2020.
- https://news.linkedin.com/2008/10/linkedin-raises-227-million-from-goldman-sachs-the-mcgraw-hill-companies-sap-ventures-and-bessemer-venture-partners
- "LinkedIn Secures \$10 Million in Series B Funding Led by Greylock." Linkedin Pressroom.
  Oct, 2004. Accessed Dec, 2020.
  https://news.linkedin.com/2004/10/linkedin-secures-10-million-in-series-b-funding-led-by-greylock
- "LinkedIn Secures \$53M of Funding Led by Bain Capital Ventures" LinkedIn Pressroom.

  June, 2008. Accessed Dec, 2020.

  https://news.linkedin.com/2008/06/linkedin-secures-53m-of-funding-led-by-bain-capital-ventures
- "LinkedIn to pay out \$13 million to settle email lawsuit." ABC 7 Chicago. Oct. 2015. Accessed Dec, 2020. https://abc7chicago.com/business/linkedin-to-pay-out-\$13-million-to-settle-email-lawsuit /1016460/
- "List of LinkedIn's 24 Acquisitions, including UpCounsel and Drawbridge." Accessed Dec, 2020. https://www.crunchbase.com/organization/linkedin
- Lunden, Ingrid. "LinkedIn violated data protection by using 18M email addresses of non-members to buy targeted ads on Facebook." TechCrunch. Nov, 2018. Accessed Dec, 2020. https://techcrunch.com/2018/11/24/linkedin-ireland-data-protection/
- Murphy, Coral. "LinkedIn's new tool helps users make a career change through overlapping skills." USA Today. Oct, 2020. Accessed Dec, 2020. https://www.usatoday.com/story/tech/2020/10/29/linkedin-launches-new-tool-help-users-discover-new-careers/5990592002/
- Perez, Sarah. "117 million LinkedIn emails and passwords from a 2012 hack just got posted online." TechCrunch. May, 2016. Accessed Dec, 2020. https://techcrunch.com/2016/05/18/117-million-linkedin-emails-and-passwords-from-a-2 012-hack-just-got-posted-online/
- "Privacy Policy." Linkedin. Accessed Dec, 2020. https://www.linkedin.com/legal/privacy-policy
- "Sequoia Capital "Links In" with \$4.7 Million Investment." Linkedin Pressroom. Nov, 2003. Accessed Dec, 2020. https://news.linkedin.com/2003/11/sequoia-capital-links-in-with-47-million-investment
- Yang, Peter. "Resume Study: How LinkedIn affects the Interview Chances of Job Applicants." ResumeGo. Accessed Dec, 2020. https://www.resumego.net/research/linkedin-interview-chances/