# Marissa Mayer

## **Introduction**

### **Early Life/Education**

Marissa Mayer was born in Wausau, Wisconsin on the 30<sup>th</sup> of May, 1975. After leaving High School, she applied to 10 different colleges and was accepted into every college she applied to. She chose Stanford University and took pre-med classes, intending to become a paediatric neurosurgeon. She later switched her major to symbolic systems. In junior year she taught a symbolic systems class which was so successful that she was asked to teach another class during the summer. She graduated with honours with a BS in symbolic systems in 1997, and graduated with a MS in computer science in 1999. In both her degrees, she specialised in Artificial Intelligence.

#### **Career**

When she graduated from Stanford, she received 14 job offers, which included a teaching job at Carnegie Mellon University and a consulting job at McKinsey & Company. There was also an offer from Google, at the time a new and relatively unknown start-up. She passed up on the aforementioned roles and chose to start working at Google, becoming their 20<sup>th</sup> employee and their first female software engineer. Initially she was writing code and managing small teams, but she quickly rose in the ranks, designing the iconic Google Search interface, and was also at the centre of the development of many other Google products. She was one of a three-person team responsible for creating Google AdWords, Google's main source of revenue.

By 2002, Mayer had taken on a product management role. Google was struggling to find Product Managers that suited their company structure. Google's approach is to have team leaders who, rather than act just as bosses, work together with their engineers and designers. Google wanted their Product Managers to have a technical background, but this was not the norm for traditional Product Managers at the time. This caused issues when Product Managers hired from external companies who were used to different styles of leadership, such as top-down command, tried to impose their views on their teams. Mayer thought she would be able to make young, inexperienced graduates and software engineers into product managers faster than her colleague would be able to hire suitable existing product managers. This is how Google's Associate Product Manager (APM) Program was born. She started training computer science students who had just graduated or had joined the company less than 18 months previously who were also interested in product strategy and design. The hiring process was lengthy, but upon entry to the program, successful applicants were thrown straight into the deep end. Mayer provided them with some mentorship and had them manage real products – the first ever APM, Brian Rakowski, was given the task of launching Gmail.

In 2005, Mayer became Vice President of Search Products and User Experience where she held key management roles in Google Search, Google Images, Google News, Google Maps, Google Books, Google Product Search, Google Toolbar, iGoogle and Gmail. In 2010 she became Vice President of Location & Local Services, overseeing over a thousand engineers and Product Managers working on Google Maps, Google Places and Google Earth. She also secured the acquisition of Zagat for \$125 million. Throughout her career at Google, she launched over 100 features and products.

In 2012, she left Google to become the CEO of Yahoo! When she took on the role, Yahoo! had been struggling financially for some time, and Mayer was hired to try and turn things around for the company. Unfortunately, her five years at Yahoo! were not as successful as her career at Google. She faced criticism for several policies she implemented, such as forcing remote employees to move to in-office roles and implementing a performance review system that resulted in employees at the low end of a bell-curve being fired.

Mayer's appointment as CEO had been predicted to revitalise the company, but in 2017 the company's core assets were sold to Verizon Communications, and Mayer resigned.

Since then, she has founded a start-up called Lumi Labs with her former Yahoo! colleague Enrique Munoz Torres. The company is focused on artificial intelligence and consumer mobile applications.

# **Impact on Software Engineering**

I chose to write about Marissa Mayer because she is the kind of person I aspire to become - not because of her success, but because of her ambition and dedication to her work. Although her career at Yahoo! failed to revitalise the company, her contributions at Google have impacted the billion people who actively use Google and its products. Having helped build Google's core search function and Google AdWords, which is as previously mentioned Google's main source of revenue (accounting for 96% of their earnings in 2011), it is hard to argue that Google does not owe at least part of its success to her. I admire how hard she worked even when she was young, achieving academic excellence while simultaneously participating in many different non-academic pursuits such as volunteering and dancing in her university's ballet. She achieved so much at Google and becoming a CEO by the age of 37, regardless of the outcome of her appointment, is no mean feat. I have a huge amount of respect for anyone capable of achieving so much in such a short timeframe.

I believe that her success at Google far outweighs the failure at Yahoo!, and I believe that had she started on more solid footing at Yahoo!, she could have achieved even more. I admire that she went to what was already essentially a dying company and tried to fix it. I am looking forward to seeing what she has been working on at Lumi Labs which is currently in stealth, preparing for the launch of its first product.

Aside from the sheer number of products and features she contributed to, I believe one of her biggest achievements at Google was the APM program. It revolutionised the way Google hired their team leaders and fostered an environment that promotes developing strong leaders internally and providing opportunities to bright, young graduates, rather than only hiring product managers from external companies who are already successful. It promotes Google's ideal of technologically minded leaders who work alongside their engineers, which in my opinion is an ideal work environment, allowing issues to be solved more efficiently and necessary assistance be provided to the engineers more effectively.

The APM program also had another unintentional outcome: it created an informal network between the APMs, resulting from the connections they had been able to form by working together. The informal management model Google used was perfect for innovation, allowing 'lowly' engineers to work on their own ideas and if they had the potential, have them bloom into big projects. However, the downside of this system was that teams had little communication with one another, and even management at times. This meant that when projects lacked the support they needed, they often did not make it to fruition. The APMs however formed connections with one another, allowing them

to achieve things that regular Project Managers couldn't do – for example, gaining access to equipment controlled by different teams. This created an informal support network in the company, which resulted in new projects gaining access to the resources they needed, and encouraging collaboration between existing projects.

The APM program provides many opportunities to young graduates and by now, hundreds of APMs have participated in the program. The program has produced many well-known alumni who have gone far, both internally in Google and in external companies. Silicon Valley is littered with alumni of the program. Examples of the program's alumni include Bret Taylor (President and COO of Salesforce), Brian Rakowski (Vice President of Product at Google) and Jess Lee (current partner at Sequoia Capital, former CEO of Polyvore). These highly successful individuals are a testament to Mayer's success. In my opinion, giving others the opportunity to excel is an undervalued accomplishment and is arguably Mayer's greatest contribution to Software Engineering.

#### Sources

https://www.britannica.com/biography/Marissa-Mayer

https://careers.google.com/programs/apm/

https://observer.com/2019/11/yahoo-ex-ceo-marissa-mayer-unveil-artificial-intelligence-venture-lumi-labs/

https://mastersofscale.com/marissa-mayer-how-to-make-the-star-employees-you-need/

Marissa Mayer on Life and Leadership Lessons: <a href="https://www.youtube.com/watch?v=PMnkxdWUvLw">https://www.youtube.com/watch?v=PMnkxdWUvLw</a>

https://www.businessinsider.com/yahoo-marissa-mayer-rise-and-fall-2017-6?r=US&IR=T

https://medium.com/productschool/everything-about-the-google-associate-product-manager-program-apmp-1caf06c083a7

https://www.rocketblocks.me/blog/notable-google-pm-alumni.php