It’s difficult to imagine how quickly Google has evolved over its 25 years. From the early days of 1998 Google provided us with a search engine for our web browsers that gained popularity fast. Over the years Google began other services as well. Services such as their e-mail platform Gmail, their web browser Google Chrome, lots of software for phones, tablets, and computers a like and other Google services such as chat, classroom, alerts, forms, drive, earth etc. But in order to provide such services Google has more than just software engineers and a few strict protocols called launch readiness review or LRR and hand off readiness review or HRR with the assistance of a site reliability engineer or SRE.

Ben Treynor Sloss first started the idea of site reliability engineers at Google in 2004 with a team of just seven. But then later in 2014 growing to more than 1200 site reliability engineers. (Kim et al., 2016) Ben stated that “if Google ever goes down, its my fault.” (Kim et al., 2016) But due to the low numbers of staffed site reliability engineers, not all teams may be assigned one. (Kim et al., 2016) Only the most important tasks or have some sort of regulatory duty to perform will have site reliability engineers on their team. (Kim et al., 2016) It’s also to note that the services “must have low operational burden.” (Kim et al., 2016)

But site reliability engineers still aren’t enough for Google’s software development. Googles a massive company they can’t just be releasing any project. This is where the hand off readiness reviews come into play. The hand off readiness reviews are just one of the two critical safety checks Google uses before the public gets to use the software. The hand off readiness is essentially a strict check list that has a “higher acceptance standard” (Kim et al., 2016) This is done when Google’s new service is moved into a state of Ops managed. (Kim et al., 2016)

The next checklist is the second part of the critical safety check Google uses. Launch readiness review is sort of like the hand off readiness review except it’s not as strict. This review stays local within the team and is self reported. (Kim et al., 2016) This is the last checklist performed before a software is launched. Once launched it is then ready for customers to use.

Google’s success probably doesn’t hinge on just those three things, but it does owe a lot of credit to the creation of large or important software creations. Every engineer at Google plays a specific role in developing software, but with the creation of site reliability engineers and the two checklists plays an important part in the development success. It is because of Ben Treynor Sloss that site reliability engineers are now ingrained into the work software developers do at Google and will likely continue and aid to their growth of future and current software products. A quote from the book is speaks wonders to the culture of software engineers at google, “having product teams self manage their own services brings learning to the front, giving them valuable insight into how their code behaves in true production conditions.” (Kim et al., 2016)

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