The Launch and Hand-off Readiness Review at Google

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The case study found in our textbook “The DevOps handbook” about Google can be very interesting to read. In this paper, we will discuss the case study and how Google handled their launch and hand-off readiness reviews. Let us start in 2004; an engineer named Ben Treynor Sloss coined the term “Site Reliability Engineer” (SRE) to describe the engineer’s position at Google. At this time Treynor Sloss only started with a staff of seven SRE’s that ended up growing to over 1,200 by 2014. Treynor resisted labeling a definition of what SRE’s are, however he once described them as “what happens when a software engineer is tasked with what used to be called operations.” These SRE’s can only assigned to the product lines that have the highest importance to the company and can only be assigned after products have self-managed their service in production for at least six months.

Google ended up developing two sets of safety checks for two critical stages of releasing new services called the Launch Readiness Review (LRR) and the Hand-Off Readiness Review (HHR), by doing this helps ensure that the self-manages product teams can still benefit from the collective experience of the SRE organization that was created at Google. Let us learn about these two stages a little more in depth.

All new Google services must have LRR performed and signed off before that service can be made available to the public. Where the HRR is performed when the service is transitioned to an Ops-managed state. This can be months after the LRR is performed and signed off on. The checklists between LRR and HRR are very similar, however the HRR is way more stringent and has higher acceptance standards compared to the LRR that is self-reported by the production team. Any product or service that is going through LRR or HRR has an SRE assigned to them, this is to help them understand the requirements and to help them achieve those requirements. By requiring product teams to self-manage their own services in production forces Development to walk in the shoes for Ops but guided by the LRR and HRR. This helps makes service transition easier and more predictable all while help create empathy between upstream and downstream work centers.

Having SREs Help product teams early is an important cultural norm that is continually reinforced at Google. When they help product teams it’s a long-term investment that will pay ff in the long run when it’s time to launch the product. The SRE team also holds reviews every quarter to evaluate how much ops work other Google teams have going on. These external reviews assess if a team is under overload and take corrective action. To the point of dissolving a team if necessary. The exercise’s aim is to ensure that teams maintain a harmonious balance together of 50% ops and dev together. While ops are solely responsible for operations, there will always be a divide. Dev’s need to take some responsibility for infrastructure and OP’s need to get involved sooner. No team can achieve true DevOps until they encourage synergy between the two teams to overcome this divide with every element of the DevOps methodology.

References

Kim, G., Debois, P., Willis, J., Humble, J., & Allspaw, J. (2017). The DevOps handbook: How to create world-class agility, reliability, and security in technology organizations. Portland, OR: IT Revolution Press, LLC.

THORPE, S. (2019, February 06). The DevOps Equation. Retrieved August 11, 2019, from https://caylent.com/devops-equation

Franco, G. (2019, January 25). Do you have an SRE team yet? How to start and assess your journey | Google Cloud Blog. Retrieved August 11, 2019, from https://cloud.google.com/blog/products/devops-sre/how-to-start-and-assess-your-sre-journey