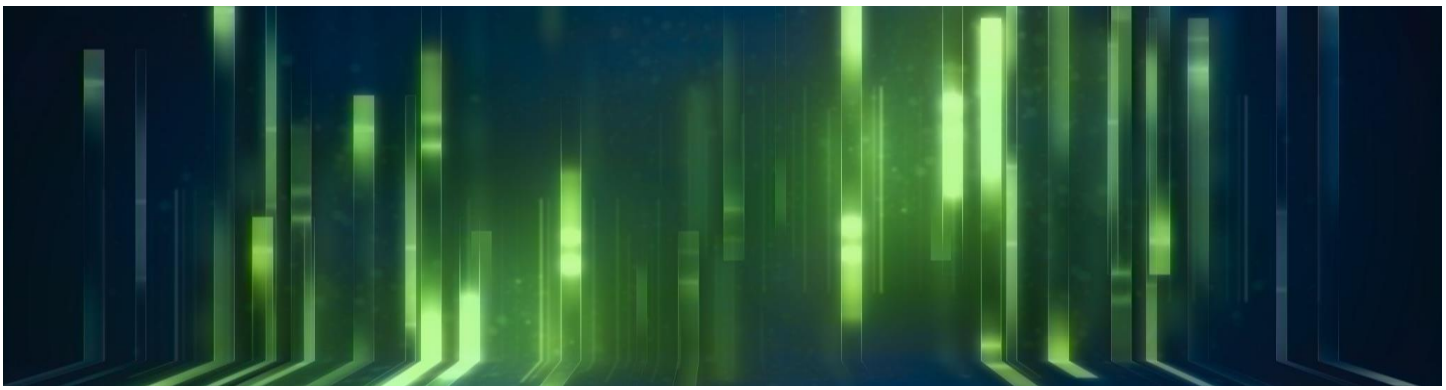
SRE: The Future



As SRE matures over the coming years I expect there to be many improvements rooted in the fundamental SRE principles and mindset established by Google. Below are some developments I anticipate over the next 5 years:

1. **Moving away from the "Google way" to "My company's way" of doing SRE**. Every company is different and thus requires a unique approach.
2. **The Hub and Spoke SRE team format will be the preferred method at enterprise scale**; combining the use of a centralized team with embedded SREs (Head SRE) for platforms and applications. The centralized team focuses on best practices, championing SRE, architecture, permit to operate path, governance, risk, audit, setting SLIs/OKRs/KPIs, defining vision and strategy. While the embedded team members focus on their domain specific knowledge, toil management, incident management, testing/releasing, monitoring, development, RCAs and product management.
3. **There will be various types of SRE** : App, Infra, etc., resulting from the hub and spoke method.
4. **Merger of operations, build/architecture, and platform engineering teams focusing on low touch maintenance / low complexity E2E platforms**. The SRE team builds it, runs it, and iterates over it.
5. **SREs will be a production-first group**, with a strict delineation and separation of non-production systems support, prioritizing production incident prevention.
6. **Extreme chaos testing.** Similar to a cybersecurity red team but instead testing resiliency and risk hunting.
7. **The Digital Immune System will be defined by the SRE team and will be integral to every platform and product.** https://www.gartner.com/en/articles/what-is-a-digital-immune-system-and-why-does-it-matter
8. **An extreme emphasis on the experiences of the Engineer, Developer, and Customer.**
9. **Newer Focus Areas:**
    a. FinOps - Integrating with the Capacity Planning focus area to improve infrastructure efficiency and relate IT infrastructure spending and business outcomes.
    b. AIOPS – Sorting observability data, acting, identifying anomalies and trends.
10. **Technological Innovation:**
    a. Push to public cloud will continue and grow.
    b. Explosion of the quantity of observability data coming in.
    c. The private cloud will continue to grow but at a slower rate. With most of the technology being cloud native such as Kubernetes and Prometheus.
    d. Tanzu /AWS firecracker will transform the Kubernetes security space with kernel/workload isolation.