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Microservices Architectures

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Blog: Innovation Insight for Microservices

Reading through the article made me understand the purpose and benefits of implementing microservice architectures in systems. Just like everything else in technology, there are many pros and cons to adding microservices to your systems. The benefits of microservices are "precise scalability and continuous delivery of new features and capabilities" (Thomas, 1). Other benefits of microservices include risk reduction, reduced dependencies, technology flexibility, and resiliency. However, the adoption of microservices can also have some massive drawbacks if users are not fully aware of the requirements and obstacles when trying to implement them. Some of those drawbacks are requirements to have a vast knowledge of different technologies and skills to implement them properly into systems. It's important to understand all the intricacies and requirements when implementing microservices in your systems. "By 2022 70% of organizations that attempt to adopt microservices will have found the effort too disruptive and will have switched to mini services instead" (Thomas, 2) which I found especially interesting with how many companies are jumping on trends.

The article was very helpful in explaining the different ways microservices can help in projects. It explains some of the business and technological processes developers must consider when choosing how to approach microservice development. The main reason why microservices are useful is that they offer agility and scalability to features making them highly efficient for dynamic systems. This would be perfect for sites like Twitter, Amazon, and Netflix which have

an increasing number of users every day. Microservices allow developers to focus on independent components of a system and add that to the current system, these components can vary in size depending on the feature being added to the system. This is what gives microservices their fast-paced development since developers do not need to wait to have a complete build to push out a big update. Developers who want to implement bigger features to a system can instead consider mini services and macro services for their system.

This article gave some interesting and useful real-world examples of how microservices are used by businesses. I thought it was interesting how many businesses are trying to adopt this format, but for some, it may be unnecessary and actually create more problems. Microservices makes sense for faster-growing platforms such as Amazon and Netflix because they need to keep pace with their users and constantly add new features. However, it doesn't work for nondynamic systems where other options such as mini services and microservices can be considered. It also makes sense that the numerous benefits of microservices also come with a heavy cost to companies since there is a steep learning curve of how to properly implement these methods. Some things people will need to consider are the flexibility of their team and how willing they are to learn new technologies. This is why many companies are not seeing the benefits when adopting these changes due to improper practices, failed expectations, project delays, and high costs. Microservices are beneficial to a system if they are implemented properly but, if not they can cause cultural disruption for the companies trying to use them.

Works Cited

Thomas, A., & Gupta, A. (2019, March 4). "Innovation Insight for Microservices". Gartner. Retrieved January 17, 2022, from

https://www.gartner.com/document/3903364?ref=solrAll&refval=312527260