



The Rise of Cloud Computing



Problem Formulation: Cloud computing, as discussed in Chapter 5 of the Somerville textbook, has emerged as the prevailing force in the realm of computing. This infographic delves into the intricate technologies and historical developments that have propelled its widespread adoption and catalyzed exponential growth within this crucial domain.

Literature Search:

Foot, K. D. (2023, May 4). A brief history of cloud computing. DATAVERSITY. <https://www.dataversity.net/brief-history-cloud-computing/>

Islam, M., & Reza, S. (2019). The rise of Big Data and cloud computing. Internet of Things and Cloud Computing, 7(2), 45–53. <https://doi.org/10.11648/j.iotcc.20190702.12>

Oludele, A., C. Ogu, E., 'Shade, K., & Chinecherem, U. (2014). On the evolution of virtualization and cloud computing: A Review. Journal of Computer Sciences and Applications, 2(3), 40–43. <https://doi.org/10.12691/jcsa-2-3-1>

Randal, A. (2020). The ideal versus the real. ACM Computing Surveys, 53(1), 1–31. <https://doi.org/10.1145/3365199>

Critical Analysis: The history of cloud computing appears to progress in three main stages. Starting in the 1960's, development and advancement of virtualization technology laid the groundwork. Next, the birth of the internet in the mid 1990's allowed computers to connect and collaborate worldwide. The last piece of the puzzle were containers. Docker, and then Kubernetes were introduced to the world, causing growth rates of the cloud market to explode.

Evaluation: The late 2010's finally saw all three pieces of the cloud puzzle come together, and the results were astounding. Cloud companies saw their revenues double YoY for multiple consecutive years, growth rates that were completely unheard of in any decade old industry. The number of offered SAAS, PAAS, and IAAS products has grown exponentially, and the cloud, much like the internet before it, has completely seeped into everyday life.

Most interesting: The 2015–2022 boom only recently started to cool off, and already cloud computing appears to be headed into a new age, one dominated by AI. Nvidia, the primary supplier of hardware used for ML training and inference, saw their datacenter revenues triple in their latest quarter.

