Centralized computing was the main model used in the 1970s. This model was used by companies that needed computers to function. Instead of every employee having their own personal computer like today’s current standard, employees would have their own terminals, each accessing the same massive processing computer called a mainframe. These mainframes would split the tasks given to it by the different terminals and after processing the tasks would return some value to the terminal for the employee that was using it.

With the decrease in cost and increase of power for microcomputers, mainframes became obsolete in the 1980s and 1990s. Instead, many companies moved from having mainframes to having a dedicated storage room that these microcomputers would get access to when needed. This change led to “rich clients” which means instead of low resource computers or terminals asking one large computer to do all the processing, powerful smaller computers would do the processing and share the data with the main storage computer for other small and powerful computers to use.

Service-oriented architecture, or SAO, is a type of architecture scales better compared to older architecture types. This is because SAO removes tasks from the program who previously had to remake existing functions or had to know how to connect to existing functions. Instead, each service has the code and storage required to run a complete function (such as processing a payment). These services are loosely coupled with the interfaces, which means they do not care how the interface gets them their data if it’s in the same format as the program is expecting.

With microcomputers becoming normalized, the development of web applications increased enough to compete with application software that was originally developed for a specific microarchitecture. This increase of web development and the increase of Service-oriented architecture are two large factors that helped drive the increase of cloud computing in the 2010s.