

Data in 20 Years

Where are we going?

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Data seems to exist outside of the confines of time, as it has been one of the most important things that humans have ever had / have been able to obtain since time immemorial and well before it was ever called data. How will data evolve over the next 20 years? What about the programming languages used to manipulate the data? It’s time to see how data will continue to increase in volume, migrate to the cloud, and how developers will likely hold the reigns as the marketplace becomes more competitive.

Data is everywhere and just about anything imaginable can be considered a data point. In fact, there’s so much that we use terms like big data have become common place in common conversations. Examine this excerpt from itransition.com: “The majority of big data experts agree that the amount of generated data will be growing exponentially in the future. In its Data Age 2025 report for Seagate, IDC forecasts the global datasphere will reach 175 zettabytes by 2025. To help you understand how big it is, let’s measure this amount in 128GB iPads. In 2013, the stack would have stretched two-thirds of the distance from the Earth to the Moon. By 2025, this stack would have grown 26 times longer.” (Khvoynitskaya, 2020) This information combined with an ever-expanding internet of=things all connected and pumping out data at these exponential rates. Data coming in at a high rate from millions of sources, all the time, and every day. Where can we keep this information?

Most familiar with the subject at all are familiar with a relational type of data base, but likely understand that as time passes, data grows, and the management of the said data becomes more intricate we have a need for non-relational database technologies. Thanks to frameworks like Hadoop and NoSQL (Faber, 2018). What if storing everything is not an option? How about DBaaS options? This will likely become more prevalent as time goes on as well (Yonkovit, 2022).

What about the developers and the languages used to manipulate / analyze the data? According to itransition.com there is going to be a huge (or exponential) demands for data scientists as the years roll on, in fact they cite a survey that KPMG conducted where 3,600 CIOs and tech executives from 108 countries and found that 67% of these CIOs and executives struggle with skill shortages; in fact, the top three that were lacking and in demand were big data analysis, security, and AI (Faber, 2018).

With this in mind it might not be hard to imagine that the programming languages that we see and use today are going to be less relevant in the not-so-distant future. As it is we have the need to use languages that are more comprehensive than something like an SQL command, with “not only SQL” stacks readily available. It might stand to reason that data analysis is going to become a bigger part of all of our lives. As a result, there will likely be a need for more simplified coding languages to arise, and just like we would not have anticipated a language like python would become so widely used, however it has done, likely as a result of the ease of understanding with python.

I think that data and data sciences are not just going to grow exponentially within the spheres they are currently growing but will extend into our daily lives. I can imagine a world where we have big data at our fingertips when deciding the right house to purchase, or the right area to live in. IT’s not impossible to do now, but I think it will evolve to become a part of our lives like the internet and mobile computing have. The reasons being that data is growing exponentially, cloud storage / computing is too, and the language and conversations around these things are going to continue to evolve in the ways that discussed here.

# Works Cited

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