

Evolution of Software Development: 2021 and Beyond

Technology has been evolving rapidly over the past few decades at an extraordinary speed most of us never thought possible. It currently has infinite uses and has impacted and improved the lives of global citizens, whether at home, work, in classrooms or leisure activities.

During 2020, businesses had to come face-to-face with the COVID-19 pandemic and the effects it had on all our livelihoods. For some, going through an intense digital transformation was the only way to allow employees to work remotely and maintain productivity in response to the lockdown restrictions.

Software developers were at the forefront of this change, and their teams had to start incorporating functionality that enabled social engagement. Some of them had their work cut out for them, having to quickly adapt in such an agile environment to their customers' new and growing needs.

Now that we're in 2021, more people have grown to appreciate the importance of software development. There are a number of trends that have been seen in the software development industry. We'll discuss some of these below and the future outlook.



Rising demand for developers

The increasing demand for digital solutions by businesses around the globe meant companies had to hire developers to transform their business models, particularly through e-commerce.

Developers [increased in demand by 25%](#) between 2019 and 2020, and job portals around the globe are continuing to see a rapid recruitment boom.

While other industries and sectors started to teeter on the brink of collapse, software development continued on an upward trend during the pandemic. This trend is expected to continue over the next decade as new opportunities continue to come out of this industry.

In fact, what is evident is that developers who upskill themselves in various emerging technologies will benefit most from this trend. The [top skills that will be in demand](#) going into the future will be IT automation, AI and machine learning. With the number of tech start-ups also on an upward trend, the future looks promising for software development.

A hybrid and flexible work environment

Due to the pandemic, businesses everywhere were forced to both digitise and digitalise. Software developers had to respond to this call and became more flexible by collaborating on projects more remotely than ever before.

Where developers were used to running projects mostly in person, they had to now adapt to a hybrid work approach. This has seen a reduction in meeting lengths as teams aim to become more efficient in the wake of increasing workloads.

Things are constantly changing, as the year 2020 has shown. This has necessitated the use of an agile approach on workstreams. With the emerging in-demand coding skills, self-teaching is becoming another major trend in the industry to keep up with the rapid transformation.

Growth of the Cloud

As software teams are now working remote-first, most development projects have now moved to the Cloud, incorporating social and collaborative tools. Value stream management software will help drive agility right now and going forward. The cloud computing market is [forecast to grow 18%](#) in 2021, with the trend set to continue over the next five years.

The focus on cloud-native skills will gain more importance going into the future and this will be supported by virtual colocation infrastructure which allows for scalability to cope with the increased agility. The scalability offered by the Cloud is allowing developers to adjust to ever changing demand.

Sectors such as tourism, travel and hospitality experienced reduced demand. Scalability allowed some to reduce their server needs without bearing the full costs of a physical data centre.

Agility and the shift to cloud infrastructure has led to an increased demand for full-stack developers to support the flexibility requirements and increasing software development needs. If you

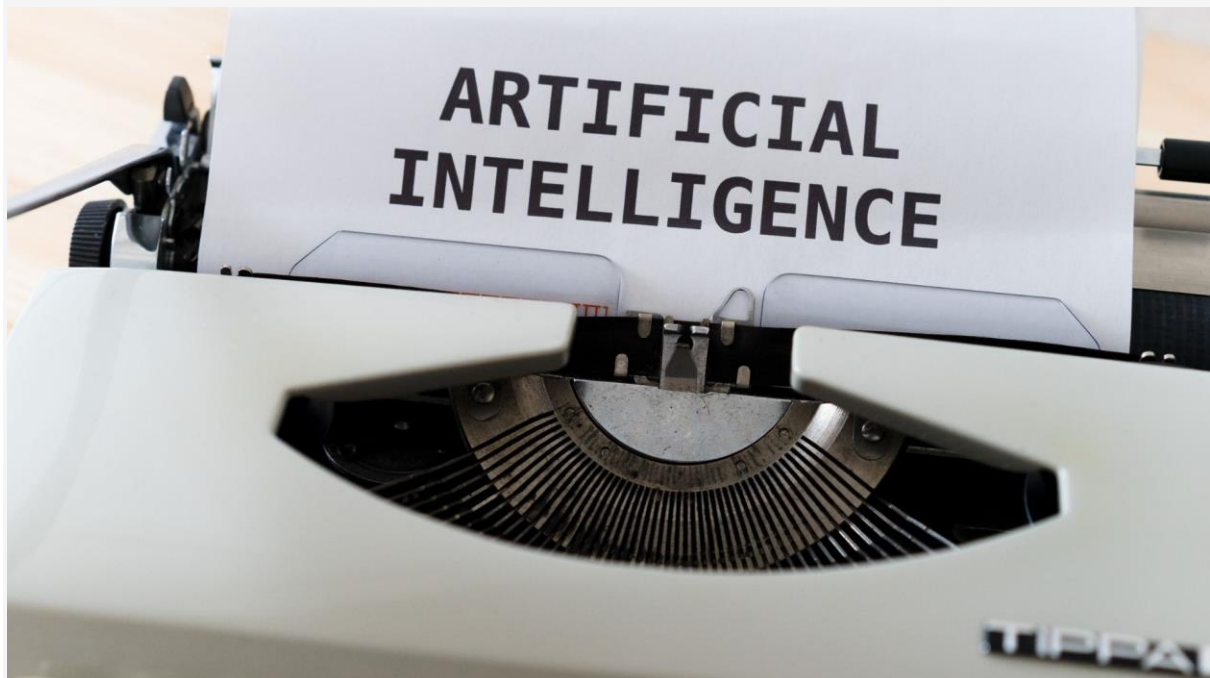
haven't already migrated to the Cloud, then this is the best time to start looking at some options that can benefit your organisation.

Low-code and no-code adoption

As organisations scrambled to adopt digital solutions in 2020, developers were left with higher workload. This led to an increase in low-code products that could be quickly deployed and free up developer capacity.

These low-code solutions are easily scalable and components can be reused on multiple clients. This is particularly useful given that the demand for developers is surpassing the ability of recruiters to fill vacancies. One example of these solutions is the [Bubble](#) platform.

Low-code and no-code allow for rapid development and deployment of web apps primarily. People with great ideas will benefit mostly from these developments, speeding up their implementation. Going forward, this market segment is expected to continue on a positive uptick, powered by the Cloud.



AI and automation

Trends currently show that AI and machine learning will be at the forefront of software development automation going into the future. This will particularly be of benefit in test automation, helping to identify problems faster through natural language processing.

AI helps make more informed decisions as it can provide predictive analytics, ultimately improving user experience. You may need to start thinking whether you think you might need to find a software developer to help incorporate AI to speed up business processes and get ahead of your competition.

5G is here to stay

What is certain is that 5G was one of the most talked about topics in 2020, mostly for all the wrong reasons. Now that the dust has mostly settled, 5G is set to contribute to the rapid growth of software solutions.

5G is expected to have a [15% share of the global mobile industry](#) by 2025. The outstanding speeds that can be achieved using this mobile technology, among several benefits, provide endless possibilities for developers.

For those looking to incorporate AR and VR in their business, the speeds provided by 5G will be a perfect fit as they are resource-intensive technologies. In addition, the growing trends of progressive web apps and IoT will continue in 2021 and beyond. Their development and use will be enhanced even further by 5G technology.

The technology trends we witnessed starting in 2020 are expected to continue to grow in the long run. One thing for sure is that life will never be the same again as before the pandemic.

Are you future-looking and thinking of jumping onto one of these trends for your business? If you were searching for software development experts, then look no further. [REDACTED]