Mitigating Covid-19 Business Disruption With Cloud Computing

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Unrecognised Business Threats

Business disruptions have become a known threat that business leaders plan for across multiple scenarios in order to mitigate negative impacts and ensure business continuity. However, a majority of business leaders did not see a global pandemic as a threat to their business and many did not plan accordingly.

COVID-19 was declared a pandemic on 11 March 2020 by the World Health Organisation. A pandemic is the spread of a disease on a large scale across multiple continents or worldwide. An unforeseen disruptive event of this magnitude is referred to as a "Black Swan" event. A black swan event is one that has not been predicted and has a critical impact on all aspects of life and business, and mitigation of these impacts is often limited.

As a result, the COVID-19 pandemic has and will have a profound impact on the global economy, unlike anything since the Great Depression of the 1930s. Due to the widespread lockdowns and social distancing requirements employed worldwide, COVID-19 created an immediate short-term disruption on businesses that was felt throughout the world. It is expected that this pandemic and its disruption will lead to long-term economic, social, and cultural changes.

Mitigating Business Disruption

A common response from Governments around the world with the aim to contain the pandemic were lockdowns. These significantly restricted the mobility of people. In Australia, many businesses were faced with business disruptions as their staff were unable to travel to work.

A common and quick response to this disruption was working from home (WFH) arrangements for employees. A key catalyst in WFH arrangements was providing employees with remote access to the organisation's systems and applications so that day-to-day business operations could smoothly continue. This was done by increasing the capacity of the available remote access facilities, which were typically limited to a small number of employees, to all employees by leveraging cloud computing.

What Is Cloud Computing?

Cloud computing (CC) is a technology innovation providing information technology (IT) services by utilising remotely located servers over an internet connection. CC is an innovative way of allowing the delivery of greater flexibility and speed to IT services. CC services are immediately available as businesses do not need to install complex hardware and software systems. Installation of a comprehensive IT system requires huge investment and time which makes it challenging not only for a medium and small size business because of resource constraints, but also for large businesses due to the required timeframe. This is where CC fits well to serve the purpose with less resources and shorter time frame required. The impact of the global COVID-19 pandemic has rapidly altered the way people live, work, learn and shop among other areas of daily life. CC as a technology has enabled organisations to mitigate the impact of the pandemic.

In a CC model, users pay on a consumption basis only, that is, they pay only for the services they use and for the time period these services are used.

The initial benefit of utilising CC was a reduction in information technology (IT) costs. However, the key benefits of CC for managing business disruption include flexibility, scalability and accessibility. This flexibility and scalability have been a critical feature enabling businesses to increase their IT capacity to accommodate increased volumes of users.

Different Cloud Computing Services

There are three key CC services: Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS). These can be made available in four hosting models – specifically, a private, public, community and hybrid cloud. IaaS provides the basic computing resources (e.g., servers and storage) for users to use as required. PaaS provides an additional layer of services (e.g., operating systems and development platforms) allowing users to develop applications. SaaS allows users to access and use pre-configured software services directly via the internet.

Of the three, SaaS has become a popular CC solution as it enables businesses to provide access to their business IT services to their staff anytime, anywhere and on any device. These functionalities assisted businesses to mitigate productivity losses due to lack of physical access to business sites during lockdown.

Thriving In Uncertainty

Using CC as a catalyst to drive digital transformation, businesses are able to develop and deliver new digital services, extend their current product and service offerings, as well as expand into new markets. Digital transformation has accelerated by three to four years due to the COVID-19 pandemic.

Remote working has enabled changes in recruitment practices with employees not restricted to a specific geographic location. This allows for an increased talent pool and recruiting the best available skills globally. Travel restrictions have prompted business to explore cloud-based collaboration tools to bring together employees on a global scale to work together in virtual environments. Not only has this virtual collaboration improved productivity but has enabled people to connect with one another, improving mental wellbeing by reducing the sense of isolation.

Data analytics and visualisation, previously the domain of large businesses, are now within the reach of most businesses using cost effective cloud-based solutions allowing them to gain new insights into their customers and the markets they operate in. Understanding new trends and being able to forecast demand allows businesses to respond proactively to customer needs. Low cost, flexible CC solutions allows business to experiment with changes in digital services enabling them to innovate at speed and improve customer experience in the digital domain to attract and retain customers.

Businesses are increasingly utilising CC to drive digital transformation focusing on innovation to thrive and become a disrupter by launching new products and services. Leveraging cost effective CC capabilities, businesses are extending their capabilities internally and externally using machine learning, artificial intelligence and data analytics to reengineer business processes and reduce effort. This frees employees to focus on other value adding activities including customer service, innovation and corporate social responsibility initiatives.

The restriction of movement led to an increase in online shopping, prompting businesses to increase their capacity of the online services to accommodate the increased user traffic. Businesses were able to use CC to quickly and cost effectively scale up their online facilities to accommodate the change in customer shopping behaviour. Responding quickly to and managing the disruptions caused by COVID-19 has created a strategic approach to CC where cost reduction is no longer the main objective of utilising CC. This results in opportunities to focus on growth as businesses pivot away from mere survival to becoming leaders in their industries.

These are a few examples of how businesses are utilising CC to mitigate COVID-19 based disruptions while exploring opportunities to improve business operations and become more competitive.

Conclusions

CC has enabled businesses to become more resilient in the face of unexpected changes as they are able to respond to these changes by adapting their business model, processes and service offerings quickly and economically. Increasing automation in operational processes reduces reliance on people which limits the effects of COVID-19. Closer integration with global suppliers and partners utilising cloud-based services increases collaboration, decreases turnaround times and potential supply chain disruptions.

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