Chapter 68
Impact of COVID-19 on Cloud Business Intelligence

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ABSTRACT

The outburst of COVID-19 has affected the whole world. COVID-19 is the seventh member of the coronavirus family. There is no vaccine for the diseases, and due to this, the whole world has taken the step of social distancing that leads to lockdown. Due to the implementation of lockdown, normal working of all organizations converted to work from home. During such situation, organizations are opting to provide smooth working for the operations of business. Before the pandemic situation, each organization was concentrating on maximizing profit. But today they are opting the practices such as cloud computing, business intelligence, neural network, IoT, and many more so that business work can be done. During this pandemic situation, cloud business intelligence plays an important role for the smooth working of business. The contribution of this chapter is to show how cloud business intelligence is used to fulfill the need of the business ecosystem.

INTRODUCTION

The epidemic of COVID-19 has affected all industries, as well as consumer behavior. For economies and cultures, it has a huge effect. With the indefinite closure of workplaces, educational institutions and industrial facilities, the postponement of major sports and activities, and the introduction of work-from-home and social distancing policies globally, corporations are increasingly making efforts to introduce technology that support them through this difficult period. Analytics experts, BI professionals, and advanced analytics experts have been called upon to assist managers in making business decisions to

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adapt to the COVID-19 spread's new challenges. Due to the lockdowns imposed worldwide, Business Intelligence solutions and services providers are experiencing a slowdown in their growth.

Businesses have also begun to make attempts to return to the normal and encounter various client and organizational challenges. Some of the main challenges faced by companies are meeting consumer requirements in the terms of process optimization and also growing security issues for the connected networks, rising networking problems, and decreasing industrial and manufacturing operations. New practices such as work-from-home and social distancing, as well as the development of digital infrastructures for large-scale technology deployments, have resulted from the need for remote health monitoring of patients and assets and smart payment technologies. In addition, the implementation of lockdowns has led to an increased focus on solutions focused on the cloud. With a growing emphasis on fitness, there has been an increase in demand for wearable devices related to health and business.

Under such circumstances, solution is based on Cloud Computing known as Cloud BI. According to the new report of PMMI, BI currently using 67% of cloud computing. Cloud computing enables manufacturers to access production data and controls, remotely and in real time. By continuously uploading data to the cloud, manufacturers can obtain a comprehensive view of their operations, monitoring where products are, controlling what production lines are doing, and analyzing gathered data, without the need to be physically present at the site of production. Edge computing enables many of the same advantages of cloud computing, but without the option of remote access to data.

DEFINITION

COVID-19

COVID-19 is a disease caused by a new strain of coronavirus. 'CO' stands for corona, 'VI' for virus, and 'D' for disease. Formerly, this disease was referred to as '2019 novel coronavirus' or '2019-nCoV.' The COVID-19 virus is a new virus linked to the same family of viruses as Severe Acute Respiratory Syndrome (SARS) and some types of common cold.

Cloud Computing

Cloud computing is a construct that allows applications to be hosted on either a private or a public cloud. The software for these cloud applications are used out of the box as it is and minimum changes are required to get it working. The cloud provider does all the patching and upgrades as well as keeping the infrastructure running (Al-Shargabi et al, 2020; Aljawarneh, 2012; Aljawarneh et al, 2017; Chehbi-Gamoura et al, 2018; Esposito et al, 2018; Jaswal et al, 2019; Kalpana et al, 2018; Lizcano et al, 2020; Malhotra et al, 2019; Mohammed et al, 2019; Mouchili et al, 2018; Singh,2011).

According to Gartner definition, Cloud Computing is a computing style in which massively scalable IT-enabled capabilities are offered to external customers using Internet technology as a service (Bohn, R. B et al., 2011).

According to Quoting Chan, Cloud Computing can be described as a general, location-independent, online utility that is available on demand. This approach emphasizes the fact that on multiple applications and clients, any common resource is statistically multiplied. Thus, he can access the data in the