Chapter 15
Automation in Healthcare Services

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ABSTRACT

The health care service industry (also known as a medical industry) is an industry that is comprised of the services related to the safeguarding or enhancement of patient health or provides services to treat patients with medicinal, protective, rehabilitative, and analgesic care. For the last two decades, it has been seen that there are drastic changes in healthcare services through automation, digitalization, technological innovation, and communication. Automation has made a revolutionary change in the healthcare industry and allowed for it to be more cost-effective for the industry to run day-to-day operations. Automation-driven health care activities are free from human fatigue and error, so they can help out to provide consistency, accuracy, and potentially lead to a reduction in patient complications, infections, and deaths. Besides, automation can help hospitals, professionals, and doctors for cost-reduction measures and increased efficiency as part of their monetary benefits.

INTRODUCTION

The health care service industry (also known as a medical industry) is an industry that comprises the service related to the safeguarding or enhancement of the health of the patient or that provides the services for health care of patient with medicinal, protective, rehabilitation, and analgesic care.

The delivery of modern health services is based on an intensifying group of trained and dedicated professionals, doctors and specialists coming together as an interdisciplinary team.

For the last two decades, it has been seen that there are drastic changes in healthcare services through automation, digitalization, technological innovation, and communication.

Automation is considered as revolutionary changes to trace out the present and past data which are stored as a history of medical diagnosis of patients.

Automation in health care service make easier to share any data or information among healthcare professionals and enhanced the proficiencies of patient results. Automation has made the revolutionary change in the healthcare industry and finished it more cost-effective for the industry to run day-to-day operations.

The present business models of the health care industry are more in jeopardy of competition, increasing the pressure of cost-cutting and meet patient's demands on time without any gap.

Automation in the health care industry is now recognized as the tools of instantaneous access to information and treatment with the help of digital and automatic machinery, robots, etc. Automation helps to get rid of searching the data from the pile of files and old records stored and kept in physical form in hospitals as well as the traditional method of surgery and treatment of the patient.

Even the Government of all nations is also focusing on digitalization and computerization particularly in healthcare facilities with a dream to convert the industry into a computerization system because it will help in the wisdom of punctuality and cost-effective health care facilities for manufacturing, patients as well as civilization.

To deal with these confront, businesses are now implementing the dynamic business scenario in health care industry by digital alteration and automation that connect the industry with every unit of data and information across channels, operation, and patient outreach.

Because of the above context and background, primarily this chapter will give complete information about the market of health care industry in India, benefits of automation as cost-effective health care services for industry as well as its patients.

Secondly, it discusses how automation has improved the patients' health and their life style as and promptness in medical services facilities.

GROWTH STORY OF HEALTH CARE INDUSTRY IN INDIA

In the various service industries, the healthcare sector plays a very important role and contributing a good percentage in the GDP of the economy.

As per the data of various service industries, healthcare has to turn into one of the major sectors both in terms of Return on Investment as well as generation of employment.

The health care sector consists of Hospitals, telemedicine, clinical practices, and automated medical apparatus and tools, etc

Now a day's increasing population and Growing incidence of lifestyle diseases is increasing the need for affordable health care services due to an increase in medical expenses. Technological advancements, an automaton in diagnosis and cure of the disease as well as the use of technology, Artificial Intelligence, and robot surgery, telemedicine, health insurance penetration and the initiative was taken by the government driving the healthcare market in India.

This service industry consists of several components like trained doctors, nurses, intern people, some special medical automated machine operators, etc. Each one has their specified roles and responsibili-

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