Chapter 6

# Artifical Intelligence and CRM:
## A Case of Telecom Industry

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## ABSTRACT

*Disruptive technologies such as IoT, big data analytics, blockchain, and AI have changed the ways businesses operate, with AI holding immense marketing transformation potential. AI is influencing marketing strategies, business models, sales processes, customer service options, and customer behaviors. AI-CRM's improving ability to predict customer lifetime value will generate an inevitable rise in implementing adapted treatment of customers, leading to greater customer prioritization and service discrimination in markets. CSPs are working through the challenging process of digital transformation, driven by the need to compete with fast-moving OTT and consumer tech players. CSPs need to move quickly and can advance digital transformation with solutions that leverage AI which can drive value across the business from network optimization and data analytics through to customer care and marketing engagement. The chapter tries to identify how AI is impacting the CRM in the telecom industry and leveraging the benefits of this technology for better customer management and growth.*

## INTRODUCTION

AI technology is evolving faster than expected and is already surpassing human decision making in certain instances. While many are alarmed by this, AI is producing some of the most effective and dramatic results in business today. On the contrary,

using uncontrolled AI for certain business functions may cause regulatory and ethical issues that could lead to liability, thus optimizing AI for maximum benefit requires a new approach.

Telecommunications service providers face a handful of daunting market conditions. To combat profit erosion, most communications service providers (CSPs) are struggling through a process to become digital service providers more akin to web companies that offer rapidly evolving and highly customized services. According to reports, a central element of this transformation is the adoption of artificial intelligence (AI) technologies for network automation and management, customer experience management (CEM) and service delivery, virtual assistants for customer service and marketing, intelligent customer relationship management (CRM), and other key applications.

The digital revolution over the past few decades has enabled companies to collect an impressive amount of customer data and digitise many of their existing processes. Companies are now trying to leverage these assets to create improved sales engagement strategies geared at target audiences and to streamline their processes.

Artificial Intelligence in telecom isn't a new phenomenon. Adopting AI and ML just doesn't drive differentiation but has become essential for survival. Businesses are competing fiercely for every customer these days, meaning providing a good product is no longer enough. Companies are constantly finding new and innovative ways to attract new customers, deliver excellent services and retain customer loyalty.

The Telecommunications Industry is Ripe for Artificial-Intelligence Driven Solutions, with Service Providers Expected to Spend $11.2 Billion by 2025. It is forecasted that CSPs will spend $11.2 billion annually on AI-driven software solutions by 2025, up from $419.0 million in 2018. Telecom operators have begun to experiment and deploy AI-driven solutions that leverage fast, scalable interpretation, analytics, and prediction to generate revenue or reduce costs. According to a survey by Deloitte, 40% of Telecom, Media and Tech executives say they have garnered "substantial" benefits from cognitive technologies, with 25% having invested $10 million or more. More than three-quarters expect cognitive computing to "substantially transform" their companies in years to come.

## UNDERSTANDING THE CONCEPTS

## Customer Relationship Management (CRM)

CRM as defined by Paul Greenberg: "CRM is study of fundamental nature of knowledge, reality and a business strategy, supported by the system and technology, designed to improve human interactions to that of the business environment. It is a

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