

# Role of Artificial Intelligence in Telecommunication

### David Bardley<sup>\*</sup>

Department of Advanced Science and Technology, Southwest University for Nationalities, Chengdu, China

## DESCRIPTION

Telecommunication is the transmission of information by various types of technologies over line, radio, optic, or other electromagnetic systems. Similar transmission paths are frequently divided into communication channels, which go the advantages of multiplexing multiple concurrent communication sessions. Telecommunications are the means of electronic transmission of information over distances. The information may be in the form of voice telephone calls, data, textbook, images, or video. Today, telecommunications are used to organize more or less remote computer systems into telecommunications networks.

Numerous industries value AI for its exceptional capability to analyze big data. As an industry that has constant access to vast quantities of data, it isn't surprising that telecom and AI go together better than peanut butter and jelly. Let's take a near look at the most common ways this technology is used in telecommunications.

#### Network optimization

Common use of AI in telecommunications is building selfoptimizing networks (SONs). Similar networks are automatically covered by AI algorithms that detect and directly predict network anomalies. Likewise, they can proactively optimize and reconfigure the network to insure that end- users enjoy the stable performance. As companies realize the value of using AI in telecommunication network structure, more and more are willing to invest in it.

#### Robotic process automation

RPA is a form of digital metamorphosis that relies on enforcing AI. Telco's can use RPA to automate data entry, order processing, billing, and other back- office processes that bear lots of time and manual work. This frees up your workers' time, letting them concentrate on more important tasks, and reduces the number of errors that manual labor is prone to. As a result, your office runs smoother, your workers are more productive, and your guests enjoy error-free service.

With so important to gain, it isn't that surprising that over 53 of all associations have formerly begun their trip in RPA. Also, this number is anticipated to grow to 72 in the coming 2 years, while in 5 years RPA will achieve nearly universal relinquishment among businesses.

#### Fraud detection and prevention

With AI's excellent logical capabilities, it isn't surprising that numerous industries, including telecom, are chancing it useful at battling fraud. The most prominent advantage of AI-powered fraud analytics is its capability to help fraud altogether. The system blocks the corresponding user or service as soon as it detects suspicious exertion, not allowing the fraud to do. All of this is done automatically, making the chances of not responding to an attack in time veritably slim.

#### Virtual assistants and chatbots

Conversational AI platforms are one of the biggest influencers on the growth of the AI in telecommunication request. These virtual assistants, or chatbots, as they're also known, can automate the running of client requests.

Long waiting ages are the bane of actuality for good client service and are commodity that mortal- operated call centers are veritably prone to. By spanning exchanges to simple queries, chatbots can respond to massive quantities of client inquiries with impressive speed. This, plus the capability to give continued service24/7, reflects very appreciatively on client satisfaction. Indeed, Vodafone saw an increase in customer satisfaction by 68 when they introduced their chatbot.

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**Correspondence to:** David Bardley, Department of Advanced Science & Technology, Southwest University for Nationalities, Chengdu, China, E-mail: bardleydavid@152.com

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