

Artificial intelligence is more than just generative AI

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Generative artificial intelligence (GenAI) is a hot topic in the telecoms industry and is probably the most popular AI technology in many other industries. Indeed, the hype around GenAI seems to have drawn telecoms operators' attention away from other AI technologies.

This article provides a summary of how Analysys Mason views the overall AI landscape and how it applies this view in its research and insights to provide improved clarity to our clients.

Analysys Mason divides the AI market into two key categories

AI is a concept whereby a set of technologies is used to create machines and computers that can mimic human intelligence and perform advanced functions such as seeing, understanding and translating language (in either written or spoken formats), or analysing data to make predictions and recommendations. These technologies are based primarily on machine learning (ML) and deep learning (DL) techniques. They are crafted to yield specific outcomes that can be applied to daily business operations to achieve several benefits, including automation and the simplification of complex tasks to deliver better experiences to customers and more-efficient operations.

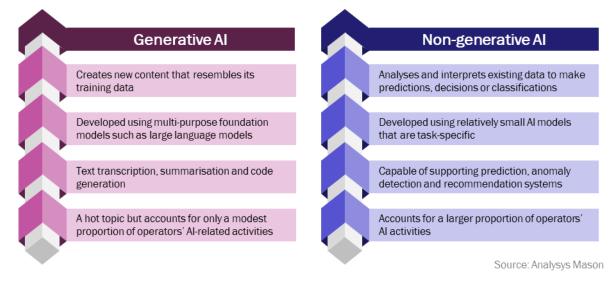
GenAI-based tools are software applications that use ML and DL models to create content such as text, images and videos. These models are trained to recognise patterns in datasets and use their learnings to perform contentgeneration-related tasks including content summarisation, translation and transcription. The introduction of OpenAI's GenAI-based tool, ChatGPT, gave telecoms operators the opportunity to experience the additional value that AI tools can bring to their operations.

ChatGPT and other GenAI-based tools form only a subset of the overall landscape of AI tools currently available in the market. Other AI-based tools such as computer vision, predictive systems and prescriptive systems (including recommendation engines) are integral to the overall AI landscape. They have been adopted by multiple industries, including telecoms, and are playing important roles in transformation journeys.

Analysys Mason's definitions for GenAI and non-GenAI are given in Figure 1. We recognise that the field of AI is constantly changing, so will evolve this categorisation accordingly.



Figure 1: Analysys Mason's definitions of GenAI and non-GenAI



Analysys Mason has adopted this categorisation to provide further clarity regarding trends in the AI market

We apply the above definitions to our AI research and insights, including our *Data, AI/analytics and development platforms: worldwide forecast, Communications service provider data platforms activity tracker* and *Communications service provider AI/analytics activity tracker*, to provide more clarity on the rate of adoption and the trends associated with these two AI categories. For example, each deal in our trackers is tagged according to this categorisation based on the toolsets used to create them. We have also adopted a three-level categorisation approach when tagging each deal to provide clients with an in-depth view of the scenarios where these technologies are best adopted. For example, non-GenAI-based tools are best-suited for tasks related to predictions and recommendations.

Adopting this categorisation helps to address some of the confusion that the hype around GenAI has created. For example, the notion that GenAI systems can perform predictive tasks is, in our opinion, a misguided view of the capabilities of such systems. It also exaggerates the capabilities of these systems, which could lead to investments in use cases that they are not intended to support.

Telecoms players can use our research and insights to guide their AI decisions

The hype around GenAI is high, but we believe that developments based on this technology are still in the early stages. They present significant potential, but their applications are quite limited. The level of maturity and adoption of non-GenAI technologies, on the other hand, is much higher. Nonetheless, there is still scope for further exploration of all AI technologies to achieve their full potential.

Operators and vendors should therefore take a balanced approach as they make decisions and provide messaging regarding their AI developments. They must clearly define the requirements of the use cases that they are developing and map these to the AI toolsets that can fulfil them. They also need to recognise that there are use cases that will require interactions between tools from both AI categories. For example, making advanced capabilities such as predictive analytical insights (derived using non-GenAI technologies) accessible to non-data



scientists by using GenAI capabilities to convert queries in natural language to commands that predictive systems can understand. Both the thorough evaluation of these use cases and advances in AI technology will help the telecoms industry to maximise its AI investments.

