

# Telecoms operators' approaches to GenAI solutions should be shaped by priorities, experience and budget

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Adaora Okeleke

Operators are progressing with their adoption of GenAI. In the first few months of 2024, some operators rolled out new GenAI-based services; some of which were created internally and others via partnerships with vendors. Other operators are investing to enhance existing data centres with AI cloud infrastructure so they can create enterprise services that are based on GenAI and generate new revenue. Despite this progress, operators are facing challenges with GenAI deployments, including the complexity associated with using GenAI capabilities from multiple environments. Operators need to adopt a GenAI platform that can accommodate a common set of tools to support the lifecycle of foundation models/large language models (FMs/LLMs) and planned GenAI use cases. Operators will also need to develop a clear view on how to implement this platform.

This article summarises the three GenAI platform implementation strategies covered in our [recent report on GenAI and the telecoms sector](#) and outlines how operators can decide which approach to adopt.

## As operators advance with GenAI, they should consider adopting a GenAI platform to facilitate and fully deploy GenAI solutions

Operators are continuing to deploy GenAI solutions and are engaging with vendors to extend existing AI platforms to support GenAI-related development. At MWC 2024, for example, operators such as [Deutsche Telekom](#) and [KT](#) launched 'ready-to-consume' GenAI solutions for their customers to improve employee productivity and customer experience. Maxis Telecom established partnerships with public cloud providers (PCPs) including Amazon Web Services (AWS) and Google Cloud to leverage their AI cloud infrastructure and foundation models/large language models (FMs/LLMs), in order to develop applications for internal operations and revenue-generating services for enterprise customers. Meanwhile, [Rakuten Mobile](#) and [Telefónica](#) announced collaborations with OpenAI and Microsoft Azure respectively, to integrate these vendors' GenAI capabilities with the operators' pre-existing AI development environments.

These activities indicate operators' growing interest in GenAI and the increasing maturity of their journeys. However, they also highlight the urgent need for operators to assess how they deploy and manage their GenAI use cases to ensure consistency and alignment with organisational priorities, especially around governance. They also need to ensure that GenAI development practices occur in an environment that will ease the full deployment of these use cases across the business and generate a quick return on investment (ROI). Without such an assessment, the operator may encounter avoidable problems, including slow time to market and inability to comply with regulations.

The adoption of a GenAI platform will create an environment that will enable operators to consistently manage the lifecycles of GenAI use cases; in the development, deployment and management of FMs; and the inclusion

of these FMs within existing and new applications.<sup>1</sup> These platforms will ensure that operators adopt common development and management processes when dealing with the complexities associated with working with multiple FMs/LLMs.

## Analysys Mason's recent research and insights highlight three strategies for GenAI platform implementation

Operators may decide to:

- build their own GenAI platforms based on proprietary FMs/LLMs they have created on their own
- build a GenAI platform based on commercially available or open-source FMs/LLMs
- partner with a third-party GenAI platform provider that offers a commercial off-the-shelf (COTS) GenAI platform solution.

However, selecting the optimal approach to implement a GenAI platform requires careful assessment of several factors: financial and technical resources are a significant consideration; operators will also require an approach agile enough to support their need to launch GenAI use cases quickly; and they should seek to minimise potential problems associated with vendor lock-in. Operators therefore need clear guidelines on how to select a GenAI platform implementation strategy.

To address this need, Analysys Mason researched the market and spoke to operators and vendors to determine the possible implementation strategies that operators can consider. We identified three strategies and analysed their benefits and requirements (Figure 1). These are covered in our recently published report, [GenAI and the telecoms sector: three GenAI platform implementation strategies](#).

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<sup>1</sup> A GenAI platform is a software environment that includes a suite of tools that enables operators to discover, access, customize, and augment FMs, as well as enable the development of GenAI based applications (for internal or external revenue generating use cases). It will also provide a common governance framework to support the use of GenAI.

**Figure 1: Three GenAI platform implementation approaches**

Source: Analysys Mason

## A GenAI platform implementation strategy should be based on operators' business priorities, AI maturity and GenAI budgets

Operators' decisions on which GenAI platform approach to adopt should be driven by three key factors:

- business priorities, such as increasing revenue, improving productivity or enhancing customer experience
- the maturity of the operator's overall AI strategy
- GenAI budget levels to support the operator's GenAI ambitions.

Operators with ambitions to use GenAI to create new business opportunities via a proprietary FM/LLM should consider building their own GenAI platforms to support their external revenue generating use cases. This approach will require significant initial investment in terms of capex, data, AI expertise and ongoing human resources, as well as a favourable regulatory environment to encourage investment. The return on this investment is maximum flexibility, capability and control. It will support revenue-generating assets that can be reused to create differentiated new services.

Operators that are not focused on creating their own GenAI models for new revenue generating opportunities but intend to use third party FMs/LLMs to improve internal operational productivity can also decide to build

their own GenAI platforms. These operators have already built an AI platform (supporting non-GenAI models and associated development activities) and can extend these existing AI platforms to support GenAI by including APIs that provide access to third-party FMs/LLMs, and other GenAI related toolsets. This approach assumes the operator already has in-house AI, data and software development expertise. However, it offers these operators control over the platform and data, and will reduce costs in the long term. However, operators must make large investments in the short-to-medium term.

Operators that plan to increase their revenue and reduce costs quickly but do not have the relevant AI skillset should consider partnering with a GenAI platform provider. This approach brings the benefits of a faster time to market (thanks to the use of an off-the-shelf GenAI platform) and ready access to vendor support and updates. Requirements for this approach include software development, data management and governance to control GenAI outputs.