



HOW GENERATIVE AI WILL TRANSFORM CSPs

Exploring the radical impact
generative AI could have on
CSP operations

GENERATIVE AI: THE CATALYST FOR AI-LED TRANSFORMATION

Generative AI holds the potential to revolutionize every facet of a CSP's operations. From customer support and internal communication, to network administration and infrastructure planning, Generative AI's ability to examine enormous volumes of data, produce valuable insights, and above all execute tasks, represents a change that could pave the way for more efficient and more customer-focused CSPs. In fact, according to Gartner, by 2025, Generative AI will account for 10% of all the data produced worldwide - up from less than 1% today.

CSPs can think of Generative AI as a sort of "virtual advisor" that possesses the collective wisdom of industry experts and is available 24x7. With Generative AI assisting them, CSPs may be able to propel their operations into an era of unprecedented efficiency and customer satisfaction. Combined with Amdocs' understanding of the CSP's systems, this AI-powered advisor will have secure access to the CSP's data, offering valuable guidance and support.

To date, AI has mostly been used to analyze and process data in a more intelligent and automated way. Today, with Generative AI, the technology can create action plans in response to insights gained from the analysis. These actions can include creating a new customer account, processing refunds, or updating a customer's billing plan. To perform these actions, the system will use custom-fitted integration with the CSPs' internal systems.

Here are some ways generative AI can impact a CSP's operations:



Transformative Customer Service Experiences

Generative AI can enhance customer service by powering chatbots and virtual assistants that can efficiently handle customer inquiries, provide personalized solutions, and reduce the workload of human agents. These AI-enabled customer service tools can better understand the context of user queries, provide relevant solutions, and anticipate customer needs based on historical interactions and data analysis. By automating routine tasks such as account updates and billing adjustments, GAI systems can free up customer service representatives to focus on more complex issues, ultimately improving the overall customer experience.



A Central Knowledge Repository

Generative AI can be used to create a centralized knowledge repository accessible to all employees. By analyzing data from various sources, such as internal documents, customer feedback and industry news, the GAI system can provide comprehensive and up-to-date information in plain language. Employees can then make more informed decisions, collaborate more effectively, and ultimately improve business processes.

For example, if a product manager wants to know, "What are the most common questions our customers ask about our latest product launch?" the GAI may tap into a CRM database to provide the relevant statistics for that product and suggest a variant of an alerting email to the Marketing team. Another is that in response to the question, "What are the most common complaints we are getting in our customer care center?", the system could pull from recordings of support calls to provide insights into the types of complaints and suggest actions to address them, such as updating the company's return policy.



Next-Gen Network Operations

CSPs can use Generative AI to optimize their network operations, predicting equipment failure, identifying potential bottlenecks, and suggesting optimal configurations. By analyzing network performance data, GAI systems can identify patterns and trends that indicate potential issues or opportunities for optimization. The AI advisor can offer expert guidance on network management, ensuring better network performance and reducing downtime. This proactive approach will help CSPs maintain network performance and minimize service disruptions.



Improving Infrastructure Planning

Working with an AI advisor, CSPs can use Generative AI to analyze factors such as population density, customer demand, and geographical constraints to suggest optimal locations for new cell towers, data centers, or other infrastructure components. This data-driven approach ensures that CSPs invest in the right infrastructure at the right time, maximizing return on investment and improving network coverage and performance.



Evolving Product Development and Marketing

Generative AI can aid CSPs in creating new products and services by analyzing customer preferences, market trends, and competitor offerings. An AI advisor can provide expert insights and recommendations for new features or services, helping CSPs stay ahead of the competition and catering to their customers' changing needs. By analyzing customer data, Generative AI can also generate personalized marketing campaigns and promotional materials tailored to individual customer preferences. The virtual advisor can help identify potential leads and upselling opportunities, enabling CSPs to target their sales efforts more effectively.



Fraud Detection and Prevention

Generative AI can assist CSPs in detecting and preventing fraudulent activities, such as unauthorized access or usage of services. The virtual advisor can provide guidance on best practices for fraud prevention, allowing CSPs to take proactive measures before significant losses occur.



A New World of Workforce Management and Training Capabilities

CSPs can use Generative AI to optimize workforce management by predicting staffing needs, identifying skill gaps, and suggesting training programs. The virtual advisor can also offer expert advice to employees whenever they need it, helping them stay up-to-date with the latest industry trends and technologies.

Generative AI has the potential to revolutionize all aspects of a CSP's operations. By automating tasks, providing data-driven insights, and enabling more efficient processes, Generative AI can help CSPs improve customer service, optimize network performance, and make smarter infrastructure investments. This transformation will not only make CSPs more competitive - it will also create a better experience for their customers.

INTEGRATING GENERATIVE AI WITH CORE SYSTEMS

What's important to remember, however, is that Generative AI is only as good as the data it can access, understand, and interact with. To make it valuable to CSPs, AI systems must be able to plug in to the organizations' internal data stores, in addition to accessing publicly available data. This combination can provide a wealth of insight and capabilities that can dramatically change how CSPs operate and serve their customers. A Generative AI system that incorporates direct customer interactions, such as chat transcripts - along with usage and order history from the CSP's core systems, will provide an unparalleled window into the customer's worldview. Amdocs, with its decades of experience providing business-critical systems for CSPs, is uniquely positioned to deliver solutions that'll allow CSPs to fully embrace and benefit from the massive power of Generative AI in every aspect of their operations.

CORE EXPERTISE - THE AMDOCS ADVANTAGE

Amdocs works with the majority of the world's top CSPs, providing them with billing, infrastructure, and other operational systems. As a result, Amdocs has an unrivaled understanding of and insight into CSP operations. Their expertise in 'connecting the dots' extends to an unparalleled ability to integrate with the CSPs' systems, a complex feat that other integrators might find challenging. Competing integrators would likely require more time and a greater investment from the CSP, making the process less efficient and more costly, while Amdocs has a distinctive edge in implementing action-capable Generative AIs for telcos. They can correlate diverse data points more efficiently and effectively than any competitor, ensuring a smooth and cost-effective transition towards embracing the full potential of Generative AI.

Moreover, most CSPs have domain-specific systems that are developed or customized just for them, making it unlikely that they have LLM integrations with other providers or readily available APIs. Amdocs' on-site presence, domain knowledge, and wealth of existing tools makes it a uniquely qualified candidate for these integrations.

Due to the vast amount and diversity of data across a CSPs' estate, spanning both standard and proprietary systems, no off-the-shelf solution can access, integrate, and process this data effectively. Few truly understand the meaning of this data or how it can be optimally leveraged for business impact. Amdocs, as a telecom expert, possesses the ability to unify and derive meaning from legacy systems, genuinely transforming how CSPs operate their businesses.

SECURITY AND RELIABILITY

Security and reliability are of paramount importance for CSPs. While granting access to users throughout the organization is a worthy objective, managing the data access policy is crucial to prevent unauthorized access or data breaches. Proper segmentation and categorization of the data are necessary before making it available to a wider audience.

For data to be useful, it must be accurate, complete, and up-to-date. Providing not only the evidence and references that drove a particular decision but also the "chain of thoughts" behind the decision-making process can boost the end users' confidence. This transparent approach includes access to relevant databases, consistency checks, final answers, proposed actions, and suggested follow-up investigation steps.

Generative AI technology is still relatively new, so it's advisable to support open-loop operations. This approach requires explicit confirmation from authorized personnel before executing any actions, minimizing the risk of errors or unauthorized changes due to AI "hallucination."

Legal moderation is another essential aspect. Generative AI systems must be implemented in a manner that makes CSPs confident that they will not be held legally liable for any unexpected activity on behalf of the solution.

By implementing these measures, the system's security and reliability can be ensured, offering CSPs peace of mind and the ability to trust the system's capabilities.

GENERATIVE AI: YOUR COMPETITIVE EDGE

Generative AI has the potential to significantly transform CSPs' business operations. By learning and proposing dependable workflows and processes, it can revolutionize the way telcos utilize their knowledge base, enhancing efficiency and reducing the time and effort needed to access critical information. Instant access to pertinent data sources and actionable insights will be possible, while employees will be freed to focus on more critical tasks. This in turn will lead to an improved customer experience, with more personalized service and quicker issue resolution.

By establishing a foundation now, CSPs can position themselves for future innovations that may lead to even more significant impacts. Once telcos have access to reliable, trustworthy AI data and can effortlessly interact with it and use it to generate processes, they'll be able to develop even more successful utilizations by discovering hidden correlations. The possibilities are limitless.

We currently stand at the precipice of Generative AI's potential. As people gain more experience with the technology, new use cases and applications will emerge. The rapid advancements in technology over the past few months indicate that transformative changes are underway. It is crucial for CSPs to engage with Generative AI now to avoid falling behind and losing out to competitors who capitalize on its power.