



# Cognizant chief data officers

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Nine chief data officers from the Communications, Media & Technology sector came together virtually to discuss mutual interests and share best practices. The session's agenda was based on pre-interviews with members, which identified three major topics: unlocking the potential of AI; trends, hurdles and innovation around data; and demonstrating the strategic value of data. While all themes were considered crucial, AI implementation sparked significant excitement and was given heightened importance, ultimately becoming the centerpiece of the session.

## Establishing AI approaches

### Key takeaways

**“This seems like the next gold rush. As you can imagine, when people were coming to the West Coast, you had companies that provided picks and shovels and blue jeans for people who were coming into the Gold Rush. We want to be that company for customers”**

- Cognizant's Badhri Krishnamoorthy introduced the conversation around recent developments in the AI field and data management. As organizations look to implement generative AI technologies, some apprehensions remain on matters like privacy, but rapid transformation has made

it important to undertake rapid changes at scale to stay competitive. Effective data architecture and utilization are also topics of interest, particularly as economic uncertainty necessitates that organizations maximize value from their data assets.

- The boom in generative AI solutions is well underway, with some tier 1 data platform vendors having hundreds of customers leveraging large language models (LLMs), even without using chat functionality due to data privacy considerations. Despite the ‘arms race’ to gain market share in this industry, lots of foundational models and materials are open source, enabling faster iterations and improvements on existing tools. As leaders acknowledge that generative AI is valuable beyond the hype, this allows for a variety of vendor-oriented and in-house to developing and deploying AI solutions within the enterprise.
- One member’s organization is utilizing LLMs for customer support purposes like their knowledge base, ingesting customer and institutional data into a vector database that large-bandwidth models can easily summarize based on inquiries. This vector database structure also helps prevent hallucinations, which are a major issue in customer-facing applications. Additionally, their organization is attempting to simplify user experiences through LLMs, as well as NLP-based database optimizations. By offering support for innovation like notebooks that can integrate easily into other models, the organization hopes to position themselves as a provider for others undertaking AI implementation journeys.
- With a clearer understanding of how LLMs function, organizations are pursuing novel use cases and piloting concepts that extend into new areas. Results have been interesting for organizations attempting to combine tools like ChatGPT with internet search functionality like Google. Others are moving towards multimodal models that can coordinate visual data with language models to enable AI use cases in areas like manufacturing, or in the medical and pharmaceutical industries, where NLP and image processing use cases are already established. Regardless of the intended purpose, organizations must carefully train and fine-tune models before incorporating external data through API calls to prevent false positives and hallucinations.

## Potential use cases

### Key takeaways

**“A lot of these things are like new cars: when you drive one off the lot, it degrades in value the instant it touches the road. ... A neural net model fills in blanks when there’s uncertainty ... When I sit back and I talk to the sales partners, and all the people who want to take it out of the box, all I do is bring up a live private sandbox ... They see the drift, they see the falsehoods, and they realized... the necessity of training it, of having the right SMEs, having the right context.”**

- As organizations adopt generative AI, executives are considering the skills needed for teams to effectively utilize AI solutions in operational contexts. While personnel may be eager to leverage innovative technology in their areas, initiative-based thinking is essential to ensure implementations are effective across the enterprise. One officer described their organization’s approach, forming agile teams for each initiative including a business owner, business subject matter expert (SME), data scientist, data architecture engineer and project manager. By establishing these core roles, organizations can more easily assess progress, support individual use cases, and maintain accountability for managing tools after models begin to “drift.” Others have implemented a Data Trust Office to guide implementation approaches and establish restrictions and best practices.

- Cross-enterprise use cases are a key area of focus for another leader's organization, including categories like content creation, chatbots and end-to-end automation. Since their impacts are further reaching than use cases in specific business areas, such initiatives offer significant value while also involving input from stakeholders up to the board level. Dedicated sponsors for these initiatives allow for more straightforward decision-making. Another area of focus is on experimentation, as they are building a funnel of smaller use cases with private sandboxes, enabling exploration of specific functionalities with input from across the enterprise. Those that demonstrate the potential for significant business impact are identified for further development with continuing input from data scientists and architects.
- One organization has established three workstreams for AI implementation. The first is oriented around commoditized capabilities where AI can easily provide efficiency and productivity gains. Identifying and evaluating business cases is the primary focus of the second workstream, as they develop a framework to assess generative AI implementations for value and feasibility. Lastly, the third stream is engineering-focused, working to establish a secure environment for product engineering teams to experiment with new capabilities and use cases. This structure allows them to advance their AI strategy with quick successes and maintain a value-driven approach as further opportunities emerge.
- Organizations have observed some successes using tools like GitHub Copilot for engineering, but the acceleration in development is not directly leading towards unsupervised production, as developers are still essential for modifications and oversight. By building an abstract layer on Copilot, one officer hopes to ensure better control and enhance management, but this is still in the pilot program stage. Others are leveraging Collibra in AWS for cataloging purposes. While cogeneration is the primary use case for these solutions at present, some leaders are interested in their potential value for other streams like documentation and unit testing.
- Cognizant's Badhri Krishnamoorthy noted the rapid change in perspectives around GenerativeAI. In a few short months, the companies have gone from debating whether to pursue GenerativeAI to viewing it as a business imperative that they are actively working on. This shift from theoretical to practical applications underscores how fast the technology is moving and how quickly organizations are leveraging it for a competitive edge.

## Considerations for caution

### Key takeaways

**“When we talk about all those different things, they are going to all look really fancy and glamorous and sexy when we talk about it, but it's not going to really make any sense if the underlying foundational data and data sources are not properly governed.”**

- Despite the push for generative AI implementation across enterprises and industries, substantial concerns remain about AI solutions and methodologies. Chief among these is data usage, as organizations are protective of proprietary data as well as customers' personal information, which may be leveraged by vendors or get incorporated into datasets used to train models.

- The legal framework around copyright and ownership of AI-generated content (including code generated) has made some organizations reluctant to leverage this content for public-facing enterprise purposes. While major providers have taken steps to begin addressing these concerns, ambiguity remains throughout much of the generative AI space. This is also the case in terms of development, as legal concerns linger around code usage and training data sources for popular solutions.
- AI ethics and data governance require significantly more attention as LLMs are implemented within organizations. Without robust data infrastructure and trustworthy

data, AI implementations will permanently ingrain existing data issues into automated processes. Some organizations maintain dedicated data governance teams or data enablement frameworks to oversee master data governance and establish guidelines around customer, production, and transactional data. Collaboration with legal, security and strategy teams can ensure value and data management are well understood across the enterprise. Balancing strong security and privacy models with organic innovation within the organization will be essential as organizations make AI a major part of operational approaches.

**Forum host:** Badhrinath (Badhri) Krishnamoorthy is Head of Cognizant's Digital Services & Solutions—Communications, Media, Technology & Education at Cognizant. Badhri is a Customer Success Leader in helping clients in their transformation agenda embracing the power of Customer Experience, AI & Data, and Digital Engineering. He hosts several industry forums and enjoys connecting leaders and sharing insights with members. He can be reached at [Badhrinath.Krishnamoorthy@Cognizant.com](mailto:Badhrinath.Krishnamoorthy@Cognizant.com).

**Cognizant Chief Data Officer Forum:** Cognizant's Chief Data Forum was established in Q4 2000 to bring Data & Analytics executives across leading Communications, Media, and Technology companies to share best practices, exchange insights, learn from one another, and navigate these unprecedented times. The group gets together on a quarterly basis for an hour to discuss various topics of mutual interest. Members decide the exchange agendas; interactions focus on the questions and interests of the members.

**Profitable Ideas Exchange (PIE):** PIE brings together communities of Fortune 500 executives from across the globe to connect, collaborate and learn from one another. PIE stands out for its ability to bring diverse voices to the table and facilitate ongoing high-value conversations. Two key components of PIE's practice are pre-interviewing participants to build relevant agendas, and a time-efficient format (virtual as well as in person) to allow for executives to convene despite time and geographic constraints.



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