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Cognizant CMT Chief Data Officer Forum

Sixteen data leaders met virtually to share leading practices and discuss topics of mutual interest based on an agenda created through advance interviews. The discussion centered on challenges with the adoption of artificial intelligence (AI) as well as the impact of AI on data architecture.

AI adoption and challenges

Key takeaways

> "How do you get the right people sensitive information using the right formulas in front of the right person? A large language model is rarely going to do that. Even if you're changing the temperature. Even if you're moving from 3.5 to 4, and it's more rational based, and so on, it's still assuming things that are either in the prompt or grounded in some other piece of information."

- The group discussed the adoption of artificial intelligence (AI), noting promising use cases and ongoing challenges. In terms of use cases, the integration of AI has been particularly successful and easier in the field of code generation, especially in scenarios where the end user possesses a higher level of technological proficiency, thereby facilitating smoother adoption. On the other hand, limited success has been observed when using AI in data analysis and the derivation of actionable insights.

- Notwithstanding the efficiency in AI, traditional machine learning models remain more appropriate for use cases involving data analysis. One participant underscored the efficiency of Business intelligence tools like Power BI and Tableau in making data discovery easier and analyzing data due to their access to certified data.

- Organizations are beginning to raise concerns about the potential risks associated with augmenting their certified data with open-source Language Learning Models (LLMs). Risks include data privacy concerns as well as inaccuracy of outputs. One member raised the issue of trust regarding open-source LLM models and questioned the possibility of the bias inherent with such models.

- To mitigate potential risks, it would be prudent for organizations to consider incorporating AI for internal use cases prior to its application in customer-facing interactions. In one example, an executive highlighted that their organization exclusively leverages AI for generative purposes within internal scenarios, refraining from its utilization in statistical analysis. Similarly, another executive mentioned that they integrated AI into an internal call center application to summarize extensive dialogues between the firm and its clientele.

- In leveraging generative AI, one leader noted the need for organizations to utilize certified data to prevent the possibility of users receiving inaccurate responses from query executions. Emphasizing the assurance of data quality, a participant highlighted the importance of instituting robust data governance practices and the incorporation of semantic models. This emphasis is particularly crucial as open AI models may lack comprehension of the diverse acronyms employed within various organizational contexts.

- With generative AI still in its infancy, there are leaders in the market, but not established, proven solutions. Many providers are touting solutions, with more emerging every day. To keep a competitive edge in the race to harness AI, organizations must stay abreast of developments from technology providers while also testing any solutions to ensure results are as promised.

- The strategic categorization of generic use cases of AI has proven instrumental in enabling organizations to formulate effective approaches for integrating AI into their daily operations. A participant shared a strategy employed within their organization, prompted by a substantial number of requests seeking AI applications across diverse facets of their operations. To address this demand, the participant detailed the implementation of a systematic categorization process for these use cases, a practice that facilitated the development of distinct approaches tailored to effectively address each respective category. This strategy has helped manage internal expectations and ensure better alignment around how AI can be used in the organization.

AI and Data Architecture
Key takeaways

> "Our plan is to come up with a proper, holistic, robust Gen AI strategy that addresses the customer journeys or the internal journeys, but more importantly, a coexistence strategy I would say between the point solutions and platform solutions and how that all can connect together."

- As generative AI strategies gain speed, organizations recognize the need to strengthen the systems that will serve as the foundation for effective use of these new tools. The burgeoning demands of AI require strong data architecture that can provide the right type and volume of data when needed. There is also a sense that the speed with which AI is evolving with demand evolution from companies as well—organizations must be prepared to continuously enhance their data foundations to keep pace with AI.

- Organizations are looking for ways to integrate their machine learning operations with AI operations to have it automated. To help achieve this, one member underscored the need for organizations to build a platform that's going to support multi-platform and different large language models.

- To leverage the full capabilities of AI, it might be necessary for organizations to move their content across different platforms to take advantage of the unique features of these different platforms. A participant stressed the importance of building a multi-cloud platform to facilitate the movement of content across different platforms while being conscious of data security.

- Organizations may find it useful to formulate adaptable enterprise architectures that can be customized to align with the unique requirements of various functions throughout the company. To facilitate this process, an executive shared a pioneering strategy implemented within their organization which involved the creation of a standardized template for all rack-based architectures pertaining to applications utilizing such frameworks company-wide. This innovative approach aimed to centralize resources, enabling easier accessibility and coherence by providing a singular repository for all similar applications.

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The Cognizant CMT Chief Data Officer Forum: Cognizant's CMT Chief Data Officer 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 inperson) to allow for executives to convene despite time and geographic constraints.

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