



Episode 3:
Augmented Analytics
Explained

What to Expect



Interaction Throughout



Informal Style



Who Are You?



Data Professional

Data professionals are individuals who specialize in managing, analyzing, and interpreting data to support data-driven decision-making within organizations.



Business User

Business users are individuals within an organization who utilize data analytics tools and insights to make informed decisions, enhance operations, and achieve business objectives without necessarily having deep technical expertise in data science.



Leader

Business leaders are executives and managers who drive the strategic direction of an organization by leveraging data insights to make high-impact decisions, foster innovation, and ensure competitive advantage.

Objectives of this Session



As a Data Professional...

I understand the potential of augmented analytics to automate data preparation and insight generation, enhancing data governance and quality, and I know how to prepare by focusing on complex analyses and ensuring reliable, consistent data across the organization.



As a Business User...

I understand the potential of augmented analytics tools to provide actionable insights without deep technical expertise, and I know how to prepare to leverage these tools for quick and effective decision-making.



As a Leader...

I understand the potential of augmented analytics to improve organizational efficiency and competitiveness, and I know how to prepare by driving strategic initiatives and supporting data-driven decision-making across the company.

Agenda



Key Concepts & Definitions



Benefits, Risks & Mitigation



Getting Started



Dedicated Q&A



Key Concepts & Definitions



1 Question with 2 Parts



Have you heard of Augmented Analytics?



If so, what does it mean to you?

If not, just relax. In fact, relax if you want to even if you have heard of it.

Augmented Analytics Defined

Augmented analytics refers to the use of artificial intelligence (AI) and machine learning (ML) to enhance data analytics processes.



**Accelerated Data
Preparation**



**Embedded & Automated
Insights**



**Natural Language
Analytics**



AI & ML Democratization

Accelerated Data Preparation



Automate aspects of data preparation including transformation, data governance and quality.

Data Transformation

AI and ML algorithms can automate data blending, normalization, and real-time transformation, reducing manual effort. Future advancements will enhance real-time capabilities and create more user-friendly interfaces.

Data Governance

Automating data governance ensures compliance, security, and ethical use by managing metadata, enforcing policies, and tracking data lineage. Future applications include AI-driven real-time compliance monitoring and adaptive governance systems.

Data Quality

AI can profile, cleanse, and validate data automatically to maintain high data quality. Future applications will include advanced real-time anomaly detection and self-healing data quality systems.

Embedded & Automated Insights



AI-generated insights to provide real-time, contextual insights without complex analysis.

Embedded Insights

AI and ML can embed real-time insights directly into business applications, providing contextual and actionable information within users' workflows. Future developments will improve the seamless integration of insights across various platforms.

Automated Insights

Automated insights use AI to identify patterns, trends, and anomalies in data, generating actionable insights without the need for complex analysis. Future enhancements will make these insights even more intuitive and accessible for all users.

Real-Time Insights

Real-time insights leverage AI to analyze streaming data and provide immediate feedback, enabling organizations to respond quickly to changing conditions. Future improvements will focus on increasing the accuracy and speed of real-time analytics.

Natural Language Analytics



Allows users to query data, identify insights and create visualizations in natural language (NL).

NL Data Query

Natural language query allows users to interact with data using everyday language, making it accessible for non-technical users to perform data analysis. Future advancements will enhance the accuracy and comprehension of natural language interactions.

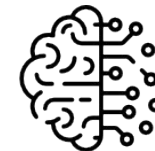
NL Insight Identification

Natural language insight identification uses AI to interpret data and generate insights in plain language, making complex data understandable for all users. Future improvements will provide even more detailed and nuanced insights.

NL Visualization

Natural language visualization enables users to create and customize visualizations by describing them in everyday language. Future developments will focus on improving the intuitiveness and flexibility of creating visualizations through natural language.

AI & ML Democratization



Advanced analytics are accessible to those without a deep understanding of data science.

Service Level	Description	Intended User	Customization	Value Realization
AI Applications	A standalone application to interact with an AI model for out of the box functionality (e.g. ChatGPT, Co-Pilot Web, etc.).	Business User	None	Up-skilling end-users to leverage AI experience with managed and curated data, content and prompts.
Applications With AI	AI is embedded in other applications to improve the user experience with greater utility, ease of use and efficiency (e.g. Office 365, Gmail, etc.).	Business User	None	
No-Code AI Platforms	Business users can create their own AI applications with an easy to use, no-code platform (e.g. Co-Pilot Studio, OpenAI GPTs, etc.).	Power Business User & AI Solution Developers	Low	All the above and light tuning & integrations.
AI Applied Models	Pre-tuned AI models exist to solve for the most common use-cases (Search, Document OCR, Chatbots, etc.). Still require customization by developers.	AI Solution Developers	Medium	All the above plus create integrations and tuning with managed content and data available in a UI.
AI Foundation Models	Pre-trained models can be leveraged for unique applications of GenAI or unstructured data mining (e.g. GPT, LaMDA, PaLM, BLOOM, etc.).	AI Solution Developers & Data Scientists	High	
AI Platforms	Provide a comprehensive environment for building and operationalizing AI solutions (e.g. Databricks, Microsoft Fabric, Snowflake, etc.).	Data Scientist, Analysts & Engineers	Highest	All the above and create and train custom models.

Rücksicht Respect



Benefits, Risks & Mitigation

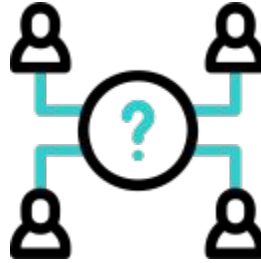
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Benefits of Augmented Analytics



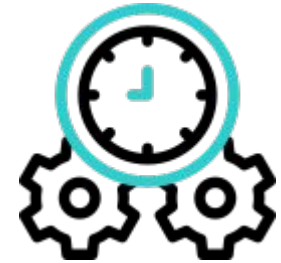
Enhanced Decision-Making

Augmented analytics provides faster, more accurate insights, enabling data-driven decisions that improve strategic and operational outcomes.



Data Democratization

Makes trusted data & analytics capabilities available throughout an organization, fostering a data-driven culture across the organization.



Data & Analytics Efficiency

Automates data preparation, insight generation, and reporting, reducing the time and effort required for manual data processing and analysis, allowing employees to focus on higher-value tasks.

Risks of Augmented Analytics



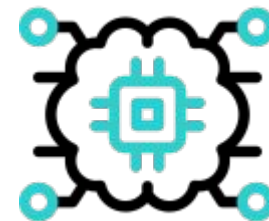
Data & Security **Privacy**

The extensive use of AI and ML in data processing can lead to concerns about data privacy and security, especially if sensitive information is mishandled or exposed.



Insight Bias & Inaccuracy

AI algorithms can inadvertently introduce or amplify biases present in the data, leading to inaccurate or unfair insights and decisions if not properly monitored and managed.



Automation Overreliance

Dependence on automated systems without sufficient human oversight can lead to misinterpretations of data and insights, particularly in complex or nuanced scenarios where human judgment is crucial.

Mitigation Strategies for Augmented Analytics Risks



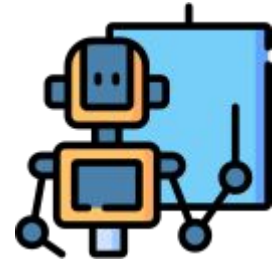
Data & AI Strategy

Carefully plan the integration of augmented analytics tools with existing systems and workflows to ensure seamless adoption and minimize disruptions.



Data & AI Governance (includes Quality)

Establish robust data governance frameworks to maintain data quality, ensure compliance with regulations, and manage data privacy and security effectively.



Data & AI Literacy

Invest in training programs to enhance data literacy and ensure that employees are equipped to leverage augmented analytics tools effectively, while also managing the cultural shift towards a more data-driven approach.

Getting Started

Think AI First

AI will completely transform the world. It is imperative that everyone has an AI first mindset now.

Embrace Available AI

Leverage AI capabilities within enterprise tools to automate workflows, enhance decision-making, and improve operational efficiency. Prioritize tools with built-in AI features that support predictive analytics, natural language processing, and intelligent automation.

Explore and Experiment

Use open-source AI frameworks, freeware, and free trial versions of AI tools to stay agile and innovative without significant upfront investment. Utilize these resources to prototype solutions and understand their potential impact before committing to larger investments.

Stay Up to Date

Regularly engage with AI communities, subscribe to industry newsletters, attend webinars, and follow key influencers to stay informed about the latest AI trends, advancements, and best practices. Continuously educate yourself and your team to maintain a competitive edge in the evolving AI landscape.



Start Small with Augmented Analytics

Think big and commit fully to using AI for analytics but always start small.

Pilot Projects

Begin with targeted pilot projects that address specific, well-defined business problems. This allows you to test AI capabilities in a controlled environment, gather valuable insights, and demonstrate quick wins without significant investment. Carefully measure the outcomes to build a case for broader AI adoption.

Scalable Framework

Design initial projects with scalability in mind, ensuring that the tools, processes, and models used can be expanded seamlessly. Start with modular solutions that can be easily integrated into larger systems, allowing for incremental scaling as the organization gains confidence and experience with AI technologies.

Iterative Improvement

Use the results and feedback from small projects to refine and enhance AI strategies. Adopt an iterative approach where continuous learning and improvement are emphasized, enabling the organization to gradually increase the scope and complexity of AI implementations. This method reduces risk and ensures sustained progress towards more ambitious AI goals.

Ask for Help

Use experts to accelerate AI time to value.

Formal Training

Leverage Data & AI learning platforms (like Dataversity) to provide formal training sessions, ensuring your team gains comprehensive, up-to-date knowledge in AI technologies and best practices. This not only accelerates your time to value but also builds a strong foundation for future AI initiatives.

Mitigation Strategy Consultations

Engage Data & AI strategy consultants as mitigation strategy consultants to identify potential risks and develop robust strategies. Their specialized insights help anticipate challenges and create effective solutions, ensuring a smoother and quicker AI implementation with minimized disruptions.

Implementation Augmentation

Leverage Data & AI integration experts to augment your implementation team, bringing in specialized knowledge and experience to streamline the deployment process. This collaboration ensures rapid achievement of measurable AI benefits and enhances the overall effectiveness of your AI projects.





Dedicated Q&A

Did we do it?



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