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AI
ANALYTICS &
AUTOMATION

Episode 6:
AI for Good

Agenda

☝️ **Cold Open**

✌️ **The Good, The Bad**

🖐️ **The Ugly**

🖐️ **Q&A with the Cast**

Cold Open

My Style

Interaction Throughout

Informal Style

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My Audience

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.

AAA Webinar 2024 Season Episodes

May 28th: Demystifying AI for Business Leaders

June 25th: Training Pre-Trained AI Models

July 23rd: Augmented Analytics Explained

August 27th: AI and Data Management

September 24th: Intelligent Automation with AI

📍 **October 22nd: AI for Good**

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Announcements!

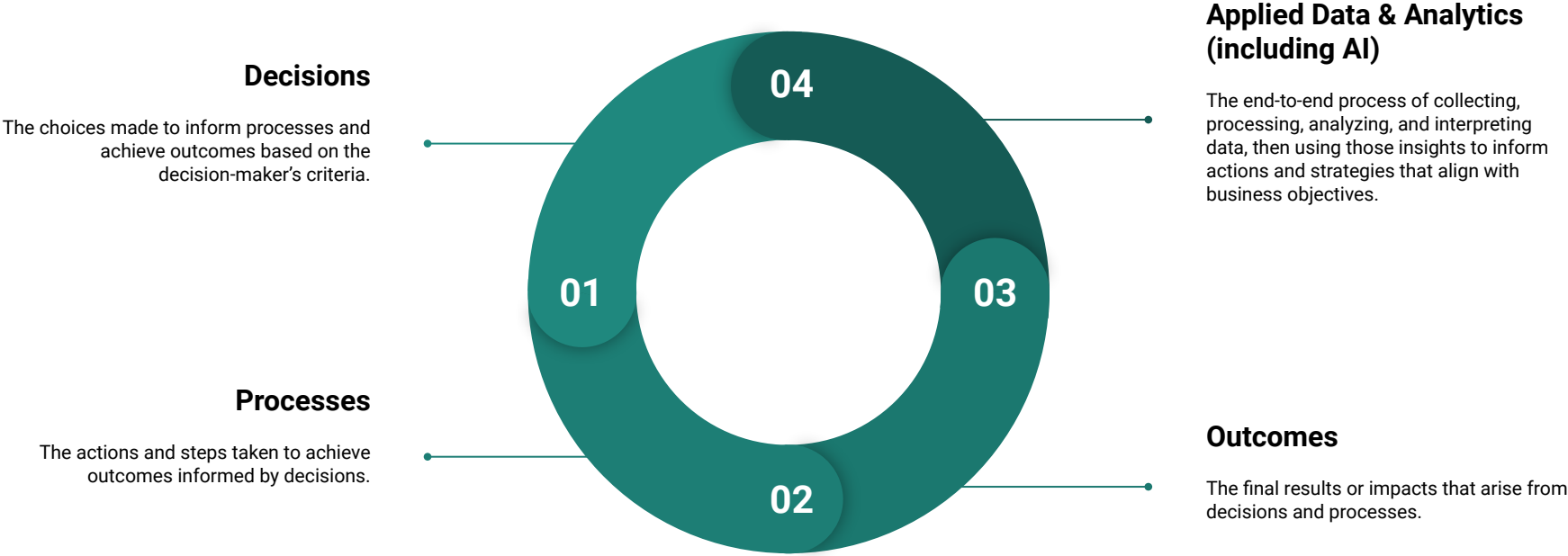Renewed for the 2025 Season!

Head of Data, Analytics and AI

Decision Intelligence Enablement

A holistic approach to decision-making, ensuring that organizations can navigate complex environments and make better strategic choices.

Item	Description	Owner	Enablement Outcomes
Outcomes	The final results or impacts that arise from decisions and processes.	Executives	Clearly defined and aligned KPIs are required and must be managed as a learning tool, not a pass or fail grade.
Processes	The actions and steps taken to achieve outcomes informed by decisions.	Decision-Maker(s)	Ensure processes are in alignment with desired outcomes and decisions, and define operational KPIs.
Decisions	The choices made to inform processes and achieve outcomes based on the decision-maker's criteria.	Decision-Maker(s)	Identify the decision-maker(s) and default decisions based on bias, information and criteria.
Applied Analytics	Findings & insights from data mining and analytics are used to inform the criteria needed to make decisions.	Analytics & Application Teams	Provide transparency in how insights were derived and clearly state how they relate to questions, allowing for partial answers.
Data Mining & Analytics	The systematic computational analysis of data or statistics to discover, interpret, and communicate meaningful patterns that can inform decision-making.	Data & Analytics Teams	Fully defined models & methodologies, clear training & testing data delinations, and defined derived fields.
Data Management	The process of collecting, organizing, maintaining, and securing data to ensure it is accurate, accessible, and reliable for decision-making.	Data & Analytics Teams	Created data is understood, trusted and made available through data governance, quality and architecture.

Decision Intelligence

Decisions

The choices made to inform processes and achieve outcomes based on the decision-maker's criteria.

Applied Data & Analytics (including AI)

The end-to-end process of collecting, processing, analyzing, and interpreting data, then using those insights to inform actions and strategies that align with business objectives.

04

01

03

Processes

The actions and steps taken to achieve outcomes informed by decisions.

02

Outcomes

The final results or impacts that arise from decisions and processes.

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AI, Analytics & Data

Applied Analytics (including AI)

1

Findings & insights from data mining and analytics are used to inform the criteria needed to make decisions.

Data Mining & Analytics (including AI)

2

The systematic computational analysis of data or statistics to discover, interpret, and communicate meaningful patterns that can inform decision-making.

Data Management

3

The process of collecting, organizing, maintaining, and securing data to ensure it is accurate, accessible, and reliable for decision-making.

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AI Service Landscape

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.).	End-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.).	End-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 End-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.

New

data positive

The Good, The Bad

AI for Productivity

The near out of the box application upsides are undeniable.

14%	**40%**	**58%**
Productivity gains realized by customer service agents	Performance improvement with highly-skilled non-technical workers	5-year productivity gains for developers
Source: NBER	*Source: MIT Sloan*	*Source: IBM Study*

AI is Transformative

Forrester predicts that by the end of 2024, 60% of workers will use their own AI tools for their jobs.

Market Growth

According to Gartner, the AI software market is projected to grow from $64 billion in 2022 to nearly $251 billion in 2027, representing a compound **annual growth rate (CAGR) of 31.4%.**

Economic Impact

McKinsey reports that **generative AI alone could add as much as $4.4 trillion in economic value** across various use cases by significantly increasing productivity.

Investment Surge

According to a Goldman Sachs forecast, global AI **investments could reach around $200 billion by 2025,** reflecting the massive financial commitment and belief in AI's transformative potential.

AI Investment Types

What type of organization are you in?

Leading Edge	Proactive	Reactive
• Less than 5% of total organizations	• About a third of companies keep an open eye towards potential technology opportunity and disruption.	• The remainder of organization take a reactive perspective towards technology disruption.
• Typically have internal research teams and bandwidth to experiment with new technologies to determine opportunities	• They don't often do their own basic research but as soon as some basic research is available, they engage with consultancies and their partners to determine fit and opportunity	• This can be an intentional position to wait for others to invest in research and experimentation. This behavior can also originate from a lack of overall technology maturity, which may or may not be intentional.
• Often partner with their technology partners and management consultancies/agencies in "bleeding edge" work		

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AI Value Realization

Grow Faster

At constant cost, increase ability to generate and deliver more revenue

Get Leaner

At constant revenue, reduce costs to capture value of gained productivity

AI Fails to Deliver

According to Gartner, 85% of AI projects fail to deliver.
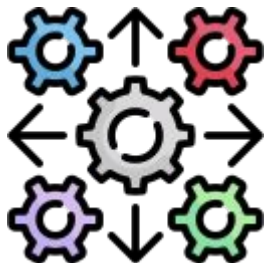
Experience & Integration

According to McKinsey, only 36% of high-performing companies report that frontline employees use AI insights in real-time for daily decision-making, which is crucial for capturing the full value of AI investments.

Governance & Quality

According to a Forrester report, 56% of organizations identified data quality as the primary factor limiting the successful adoption of AI technologies. Issues such as unstructured data and lack of data lineage, significantly impairs the performance and reliability of AI models.

Literacy & Talent

According to a study by the World Economic Forum, 60% of AI projects fail to move beyond the pilot stage due to insufficient AI skills and poor understanding of AI technologies among employees.

AI Risks

Not unlike rule-based data & analytics, but just more amplified.

Bias

AI is trained on large amounts of data, which can contain biases and perpetuate existing societal inequalities and prevent innovative thinking.

Fraud

AI can be used to generate convincing fake text or media, which can be used to spread misinformation or open organizations up to internal and external fraud.

Breaches

AI requires huge volumes of data to be effective potential exposing more private data subject to security breaches.

Consumption

AI is a complex and resource-intensive technology that requires significant computing energy consumption and costs if not managed efficiently.

Hallucinations

While AI can generate highly convincing text, images and audio, it is not always accurate or reliable opening organizations up to costly errors.

Lost Ground to Competitors

Wasted Investment

Broken Trust

The Ugly

AI for Good is about doing the right things, right

Bring an Innovation Mindset

Cross-functional Teams
A culture of innovation promotes collaboration, enabling cross-functional teams to work together and drive the success of AI projects
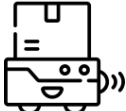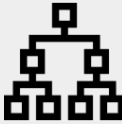
Continuous Learning
Innovation culture fosters an environment of continuous learning and adaptation, allowing AI projects to constantly evolve and improve

Design-Thinking
Innovation culture promotes a service design mindset, allowing AI projects to quickly respond and adapt to changing conditions

Remember the Big Picture

Applied Analytics	Decision Support & Optimization	Intelligent Automation	Recommendations & Personalization
Data Mining & Analytics	Rule-Based Analytics	AI Model Creation	AI Model Use-Case Tuning
Data Management	Data Architecture & Integration	Data Governance & Quality	Data Privacy & Security

Start with a Strategy

Prioritize Use-Cases

Identify the specific use-cases where AI is the appropriate tool to add value in line with business objectives. Prioritize use-cases by value, effort urgency and competitive differentiation.

Use-Case Analysis

Identify the correct AI services, additional integrations and data required to deliver AI solutions that deliver iterative value against use-cases. Perform a buy vs. build analysis as part of this strategy.

Assess Expertise

Determine the expertise needed to both build and use a AI solution. Consider training, change management and bringing in outside experts to help close gaps.

Create Roadmap
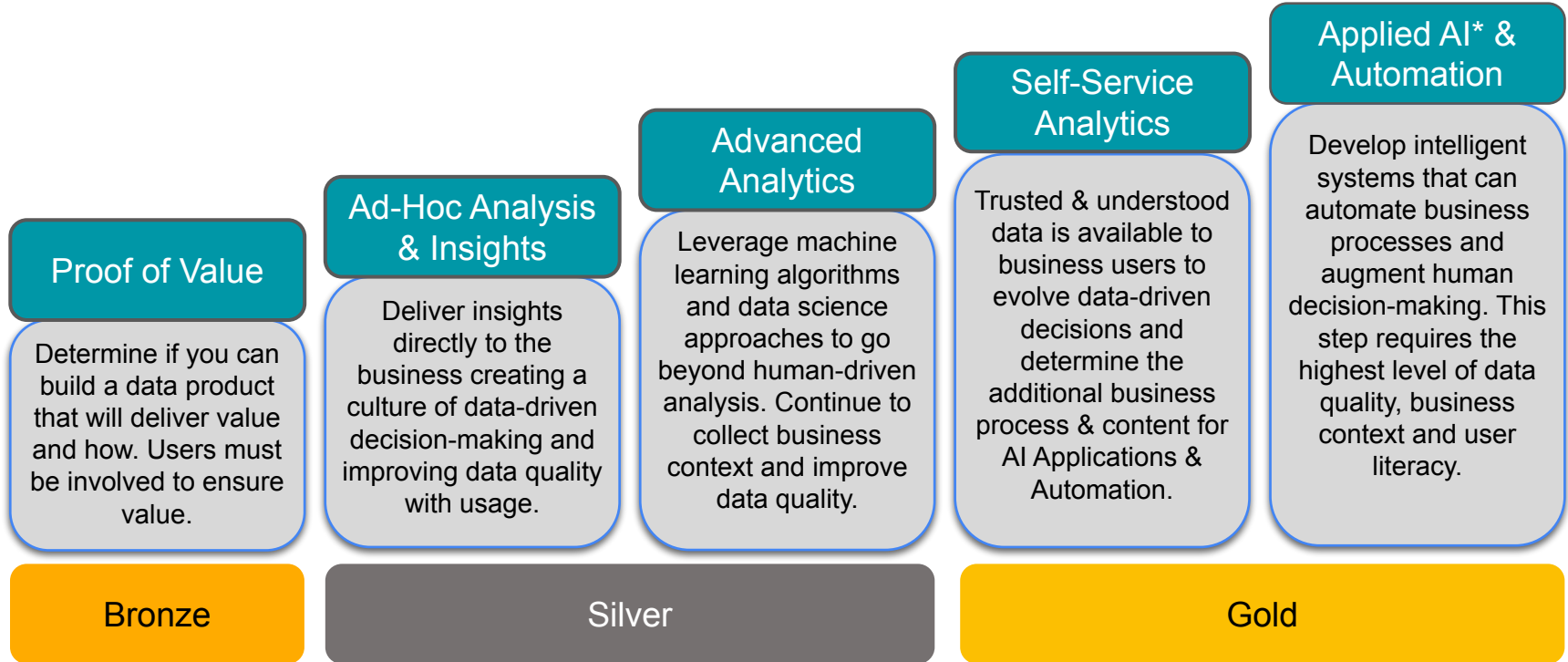
Define how to deliver value with features on the user interface, prompt tuning, improved grounding data, adding integrations and growing organizational data & AI maturity in an agile manner over time.

Deliver Collaboratively

Business, technology and data should work in concert to deliver valuable, scalable and trustable AI experiences for end users. A consistent captive team is ideal.

Be Iterative & Pragmatic

Proof of Value

Determine if you can build a data product that will deliver value and how. Users must be involved to ensure value.

Ad-Hoc Analysis & Insights

Deliver insights directly to the business creating a culture of data-driven decision-making and improving data quality with usage.

Advanced Analytics

Leverage machine learning algorithms and data science approaches to go beyond human-driven analysis. Continue to collect business context and improve data quality.

Self-Service Analytics

Trusted & understood data is available to business users to evolve data-driven decisions and determine the additional business process & content for AI Applications & Automation.

Applied AI* & Automation

Develop intelligent systems that can automate business processes and augment human decision-making. This step requires the highest level of data quality, business context and user literacy.

Bronze

Silver

Gold

Be Vigilant

Documentation and Versioning

- Maintain detailed documentation for each AI model, including its purpose, features, and assumptions.
- Version control helps track changes, making it easier to understand model evolution and ensure reproducibility.

Access Control

- Define who can access, modify, and deploy AI models.
- Implement role-based access controls to restrict unauthorized changes or misuse.

Testing and Validation

- Regularly test and validate AI models against new data.
- Assess model performance, accuracy, and robustness.
- Detect any drift or degradation in model quality.

Monitoring and Alerts

- Continuously monitor model behavior in production.
- Set up alerts for anomalies, unexpected outputs, or performance deviations.
- Address issues promptly to maintain model reliability.

Ethical Considerations

- Evaluate AI models for fairness, bias, and ethical implications.
- Mitigate any unintended consequences or discriminatory outcomes.

Traceability and Transparency

- Keep track of model lineage, including data sources, preprocessing steps, and training details.
- Transparently communicate model decisions and limitations to stakeholders.

Q&A with the Cast