SUPPORTING ANALYTICS THAT SCALE

CONSIDERATIONS FOR A MODERNIZED ANALYTICS SANDBOX

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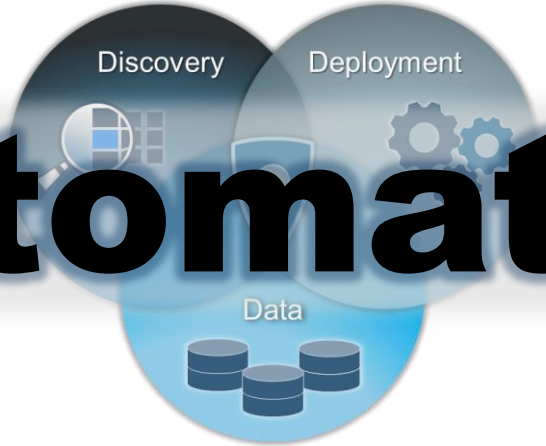
DECISIONS AT SCALE

- More Models
- More Granular Segments
- More Predictive Machine Learning Algorithms
- Model Tournaments
- Enable Non-Technical Users



Automation

- Integration
- Embedded Analytics
- Move Insights Closer to the Decision Maker
- Combine Models with Business Rules

- Using ALL the Relevant Data
- Creating More Attributes

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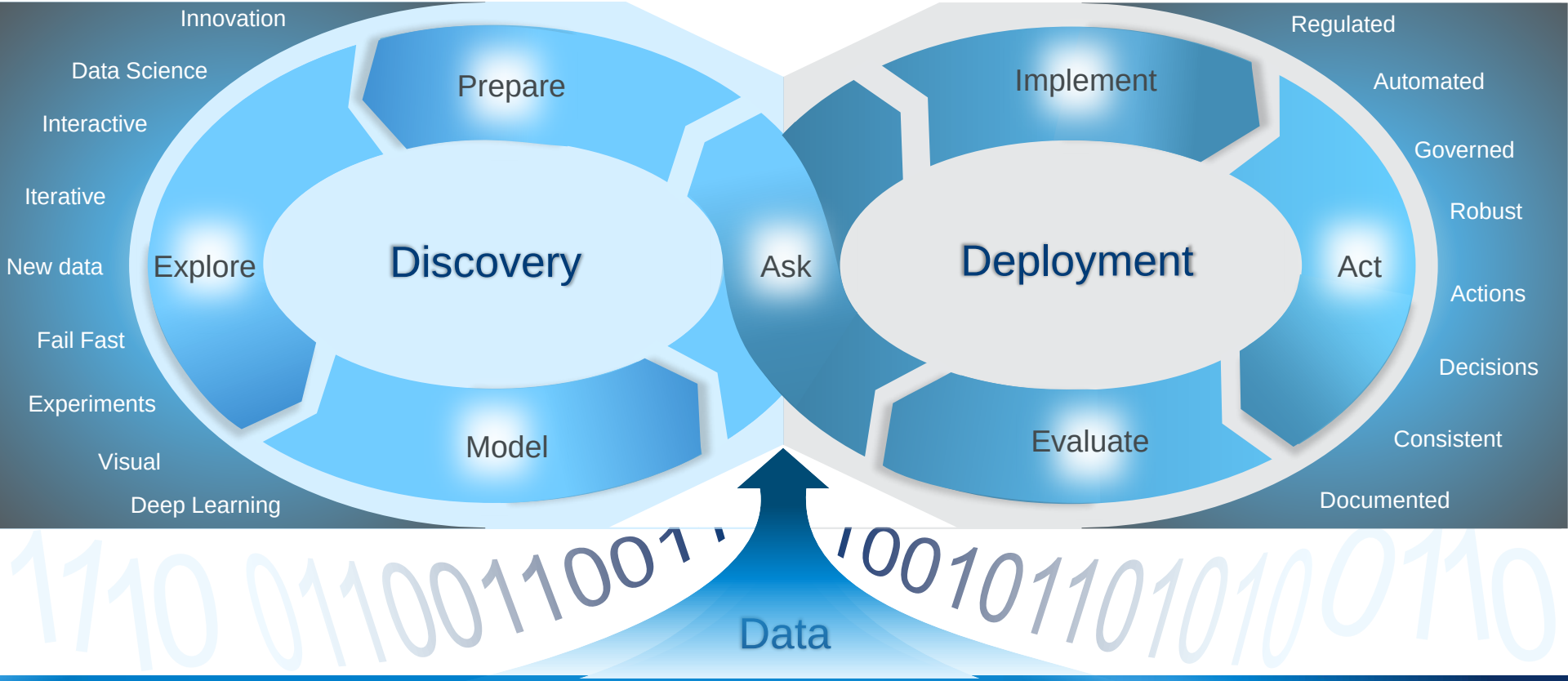
ANALYTICS LIFECYCLE

SCALE OUT THE ENTIRE LIFECYCLE



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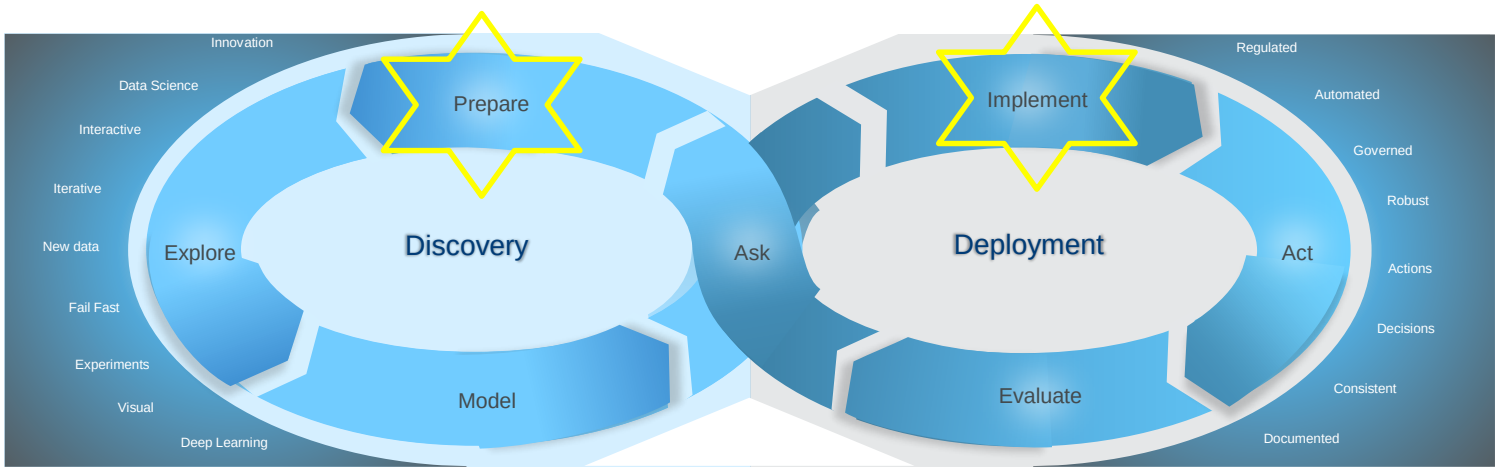
AT SCALE DATA



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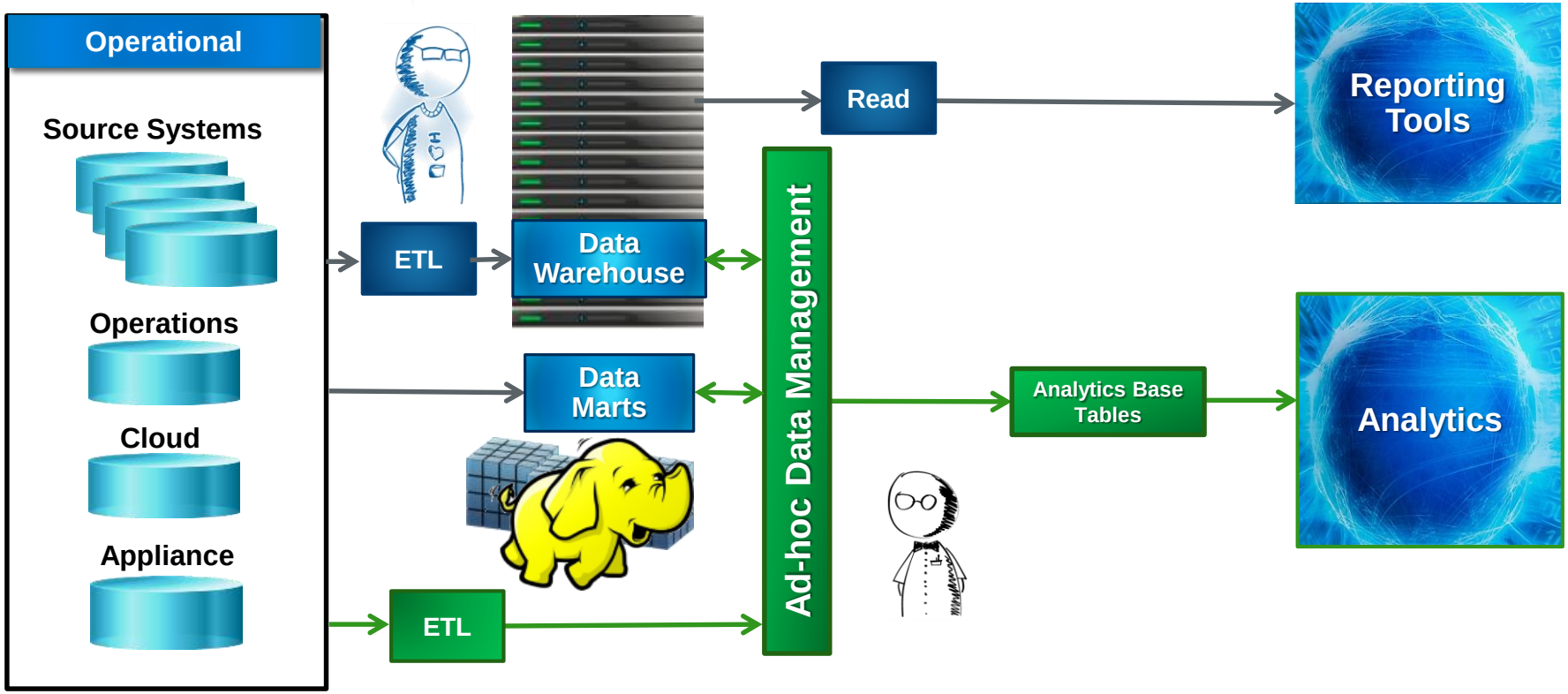
MANAGING ANALYTIC DATA

AD-HOC ANALYTIC DATA PREPARATION



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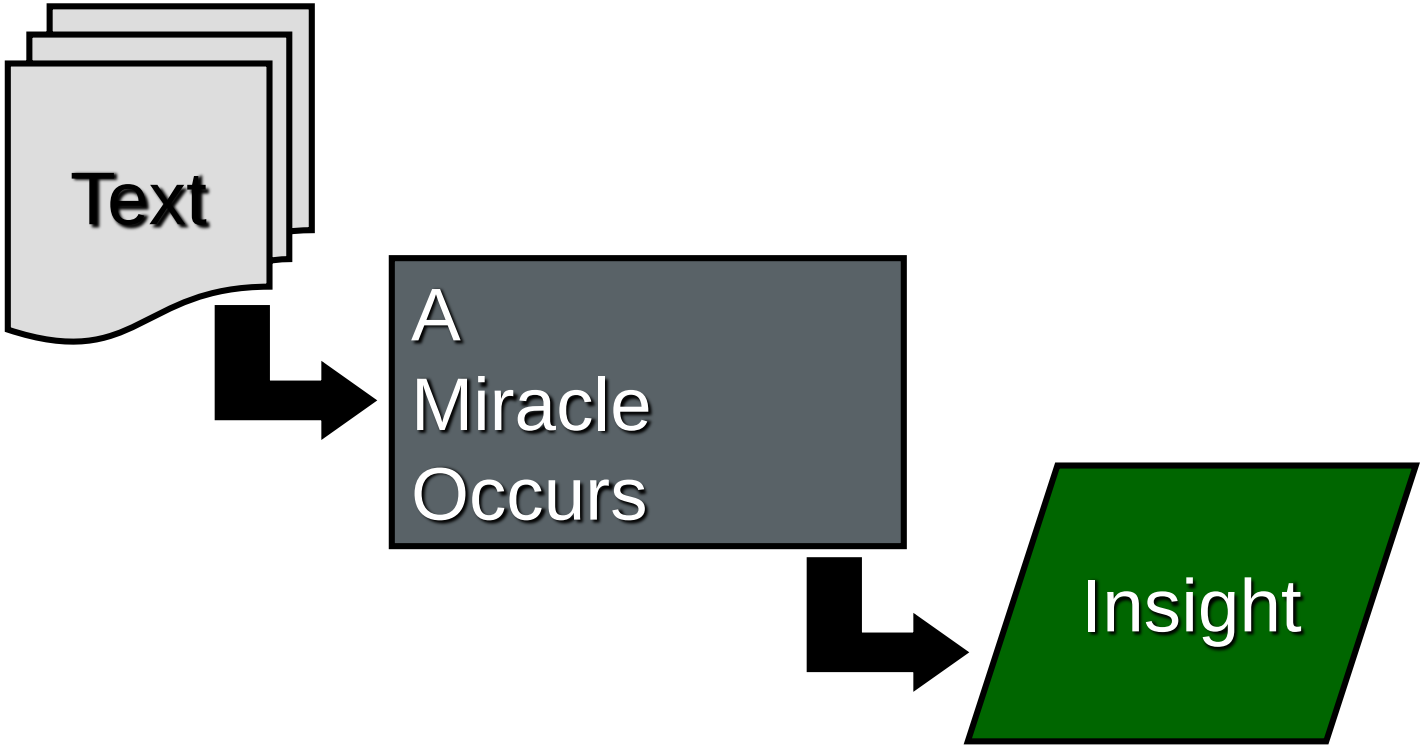
THE CHALLENGE OF UNSTRUCTURED DATA



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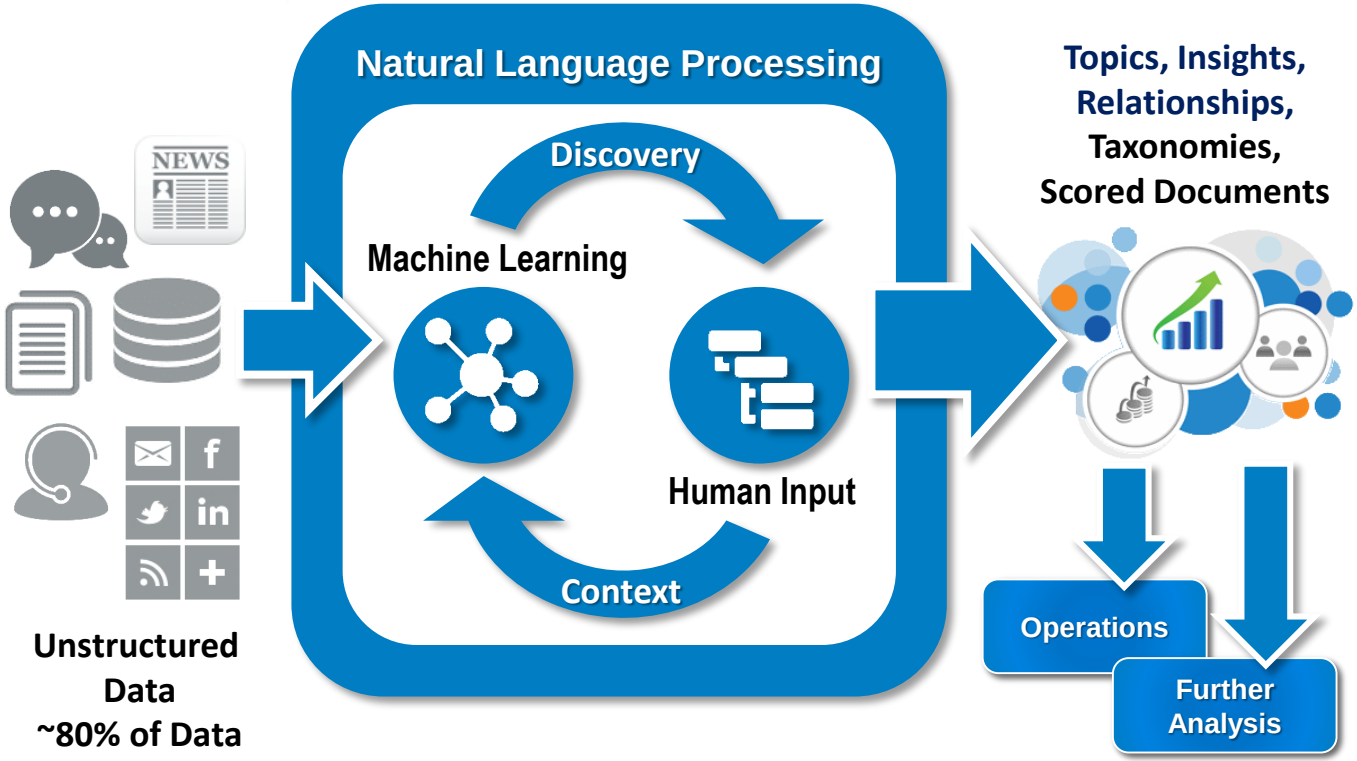
INSIGHT FROM WORDS



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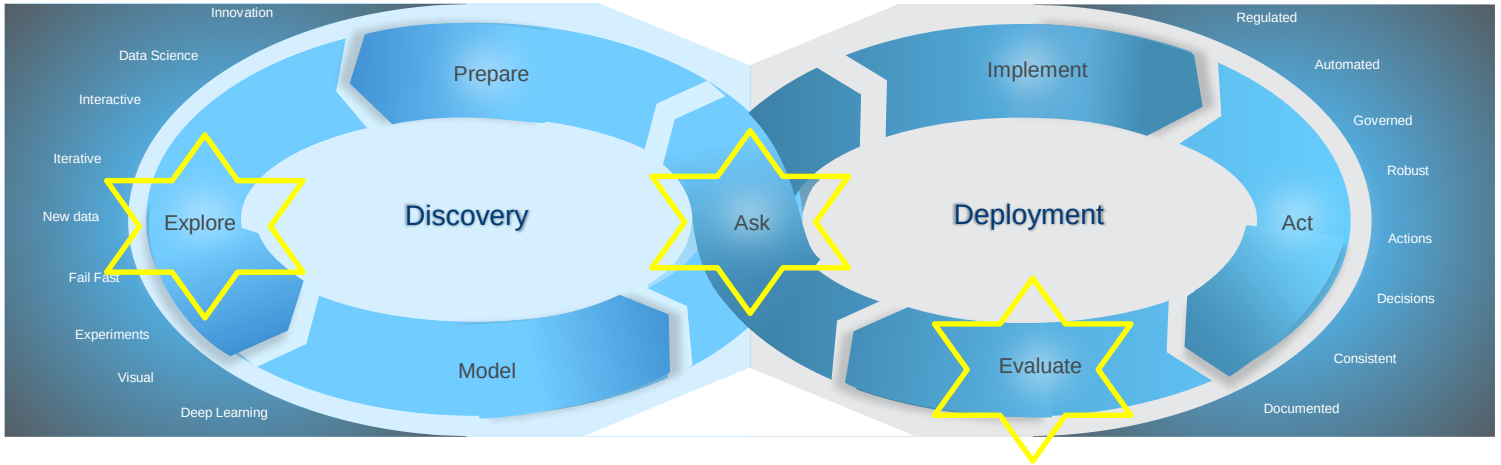
AT SCALE EXPLORATION



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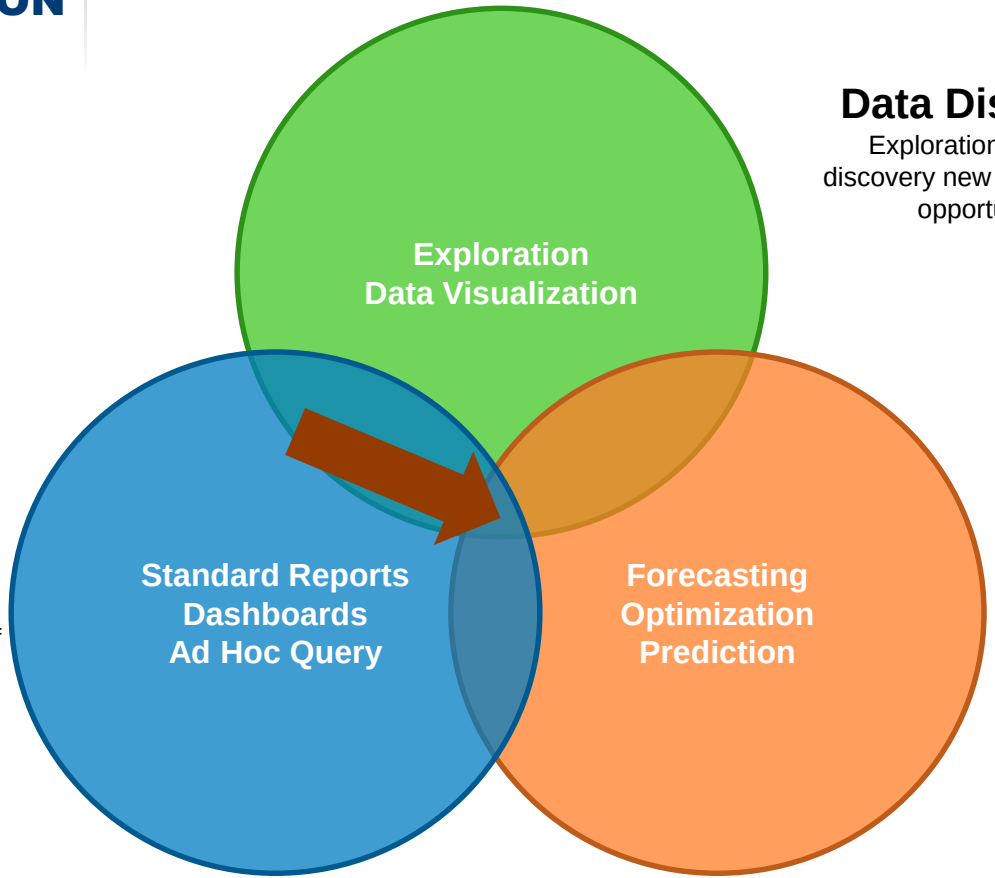
ANALYTICAL EXPLORATION



Data Discovery

Exploration of data to discovery new questions and opportunities

Traditional Reporting

Creation and sharing of known information resulting in the delivery of reports

Advanced Analytics

Leverage Data to make the best decision

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VISUAL ANALYTICS – KEY BENEFITS

Business Users

- Improves information sharing collaboration and decision making
- ***Broadens the use of analytics and drives more informed decisions across the entire business***
- Provides rapid insights for business people on the go, via the Web and iPad

Analysts

- ***Rapid exploration on vast amounts of data accelerates the model development process by quickly identifying new areas of opportunity***
- Access to all of the data, rather than subsets, provides the flexibility to think/explore freely without dependencies on new views of data
- An equation is worth a hundred words. Picture is worth a thousand words

IT

- Liberates IT to focus on more strategic initiatives by providing an easy to use, self service data exploration model to business users
- ***Maintains control and governance of data while empowering business users to have easy access to all of necessary data***
- Highly scalable solution, using commodity hardware, provides easy and cost effective growth

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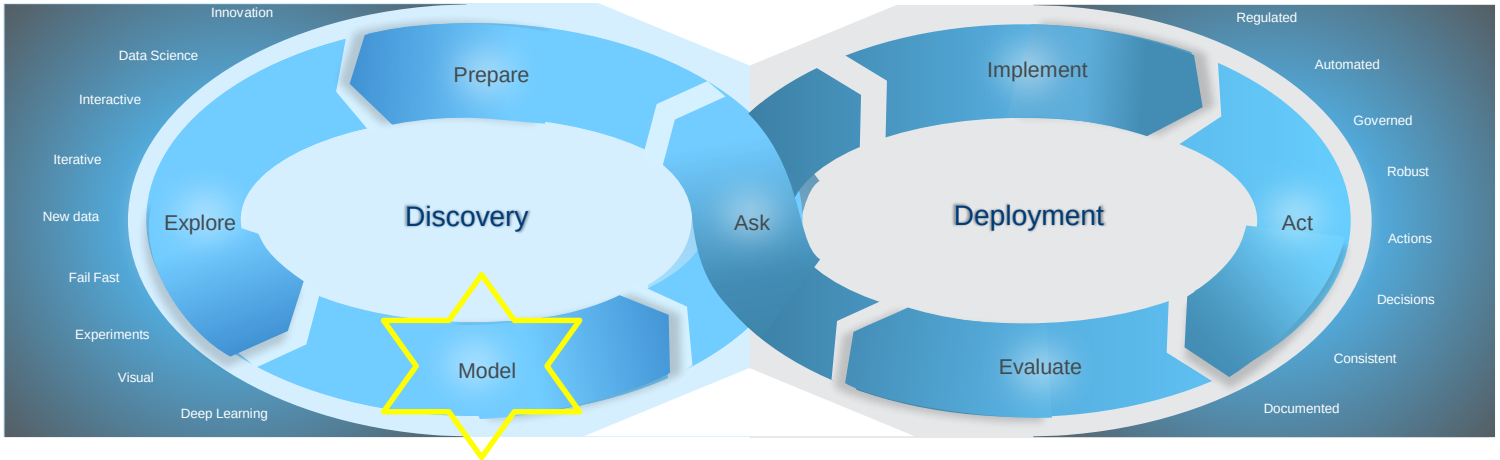
AT SCALE MODEL GENERATION



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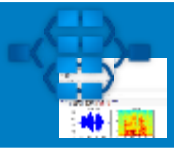
SCALABLE ANALYTICS

Automation
Scalability

SAS Factory Miner

- Automated Modeling / Segmentation– 1,000's of models, model history
- APIs
- Big data



Enterprise Miner

- Full-scale data mining and machine learning, hundreds of options to customize
- Productivity (self-documenting) and operationalized / reusable analytics

Rapid Predictive Modeler

- Easy-to-use, 3 clicks, automated approach.
- Few options to customize
- Data mining process generated behind-the-scenes.

Visual Analytics / Visual Statistics

- Exploratory modeling, part of VA experience.
- Part of pattern discovery process, less about automation/conversion to production
- Fewer modeling options, data prep, transformations – mainstream algorithms

SAS Enterprise Guide

- Procedures, Data Step
- Tasks, Code generation
- Learning/Teaching

Model Manager

- No model building
- Model lifecycle management
- Model profiling
- Workflow support
- Overlay with business rules and decision flows
- Manages R, PMML, EM, RPM, STAT models

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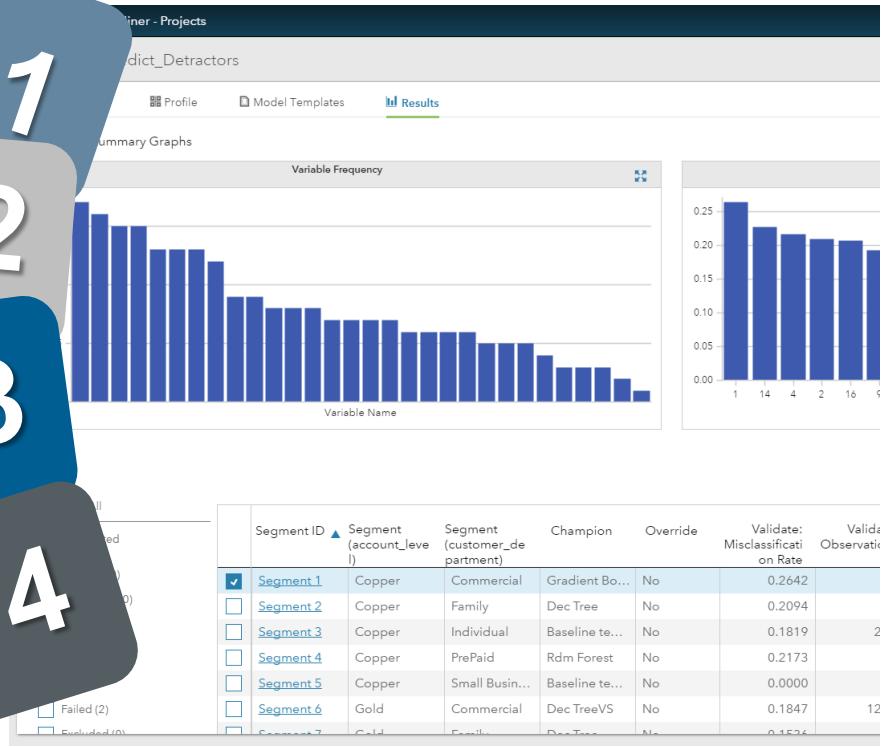
SAS® FACTORY MINER

1. Scalable Analytics in Hadoop
2. Sharable Model Templates
3. Automated, white box modeling
4. Modern machine learning algorithms



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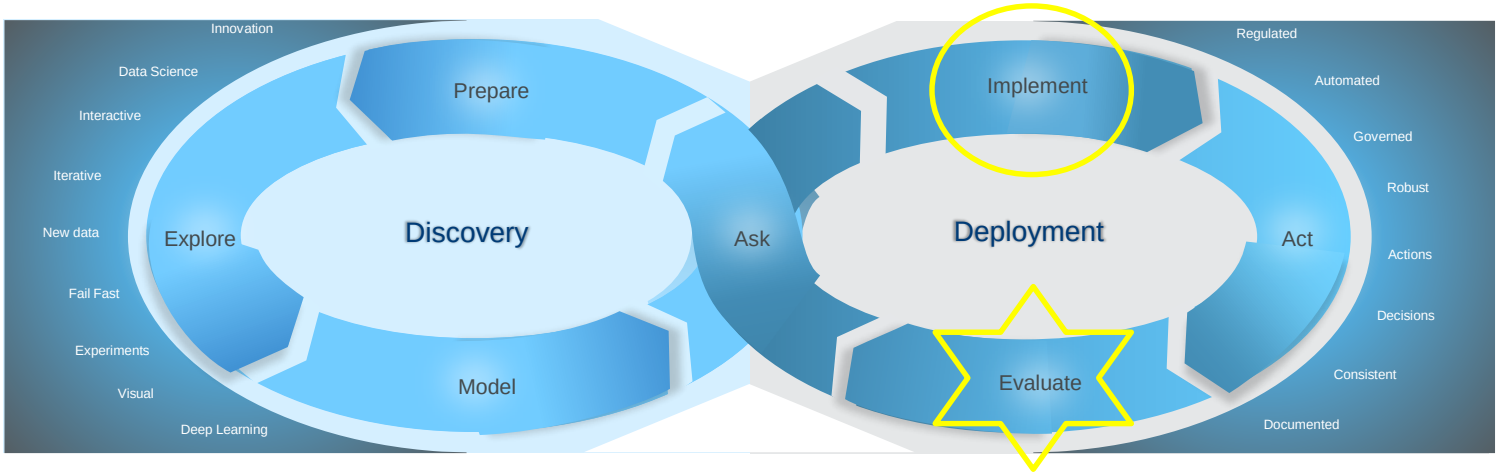
AT SCALE MODEL GOVERNANCE



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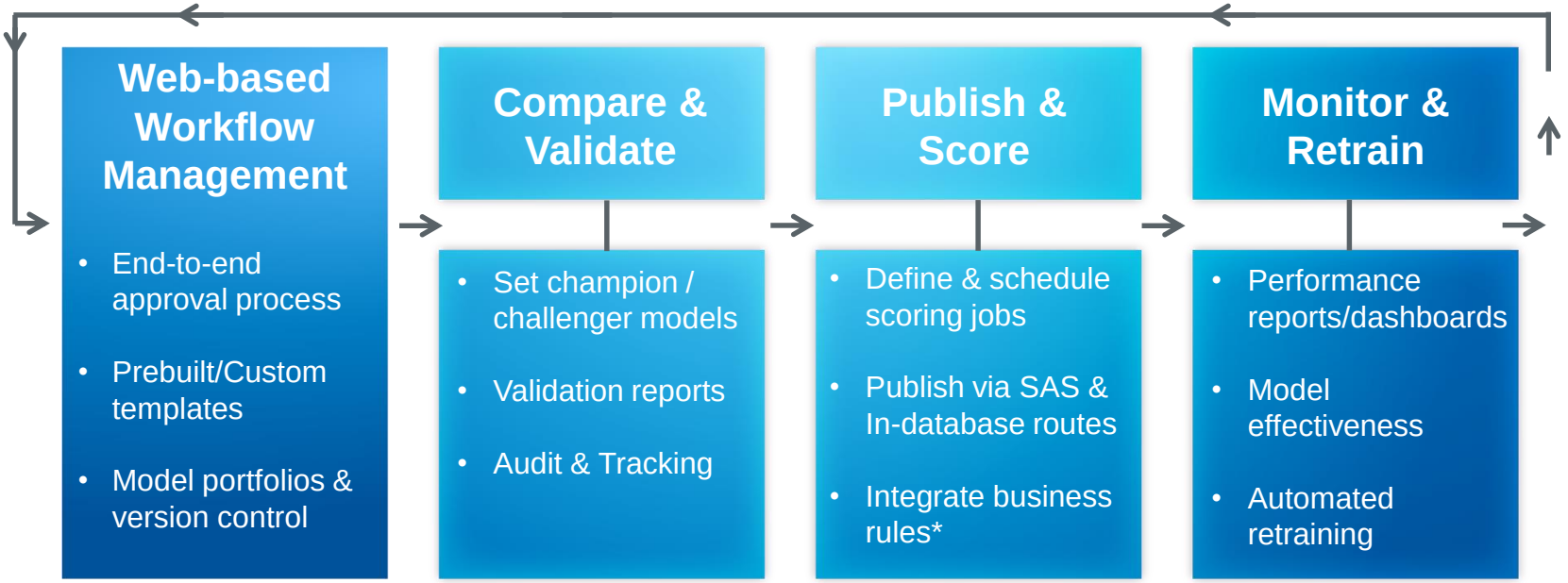
SAS® MODEL MANAGER

KEY CAPABILITIES



*Available through SAS Decision Manager

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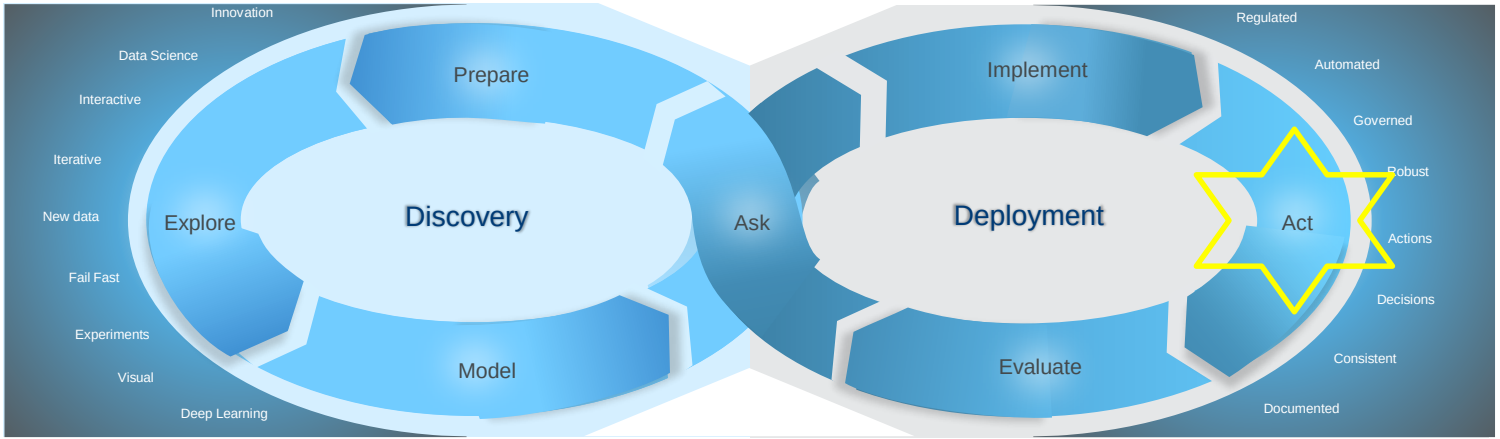
AT SCALE DEPLOYMENT



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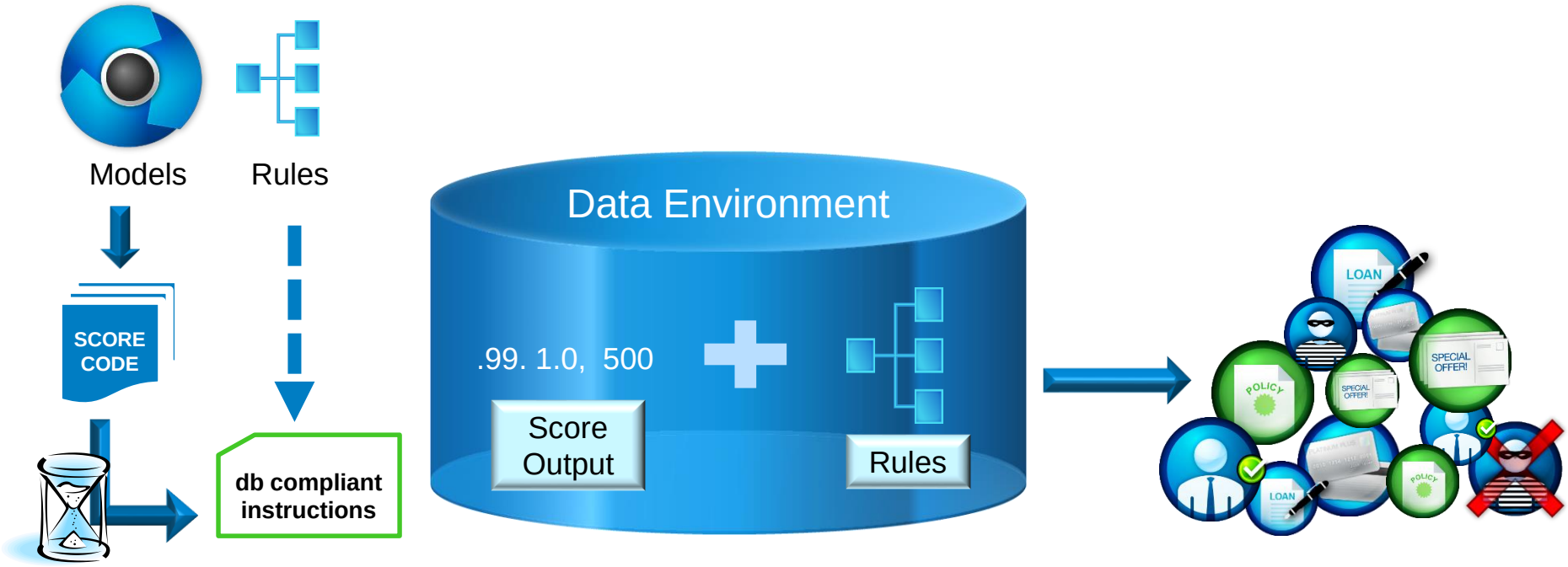
OPERATIONALIZING DECISION MAKING



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DISCUSSION AND QUESTION

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