

Enterprise Analytics

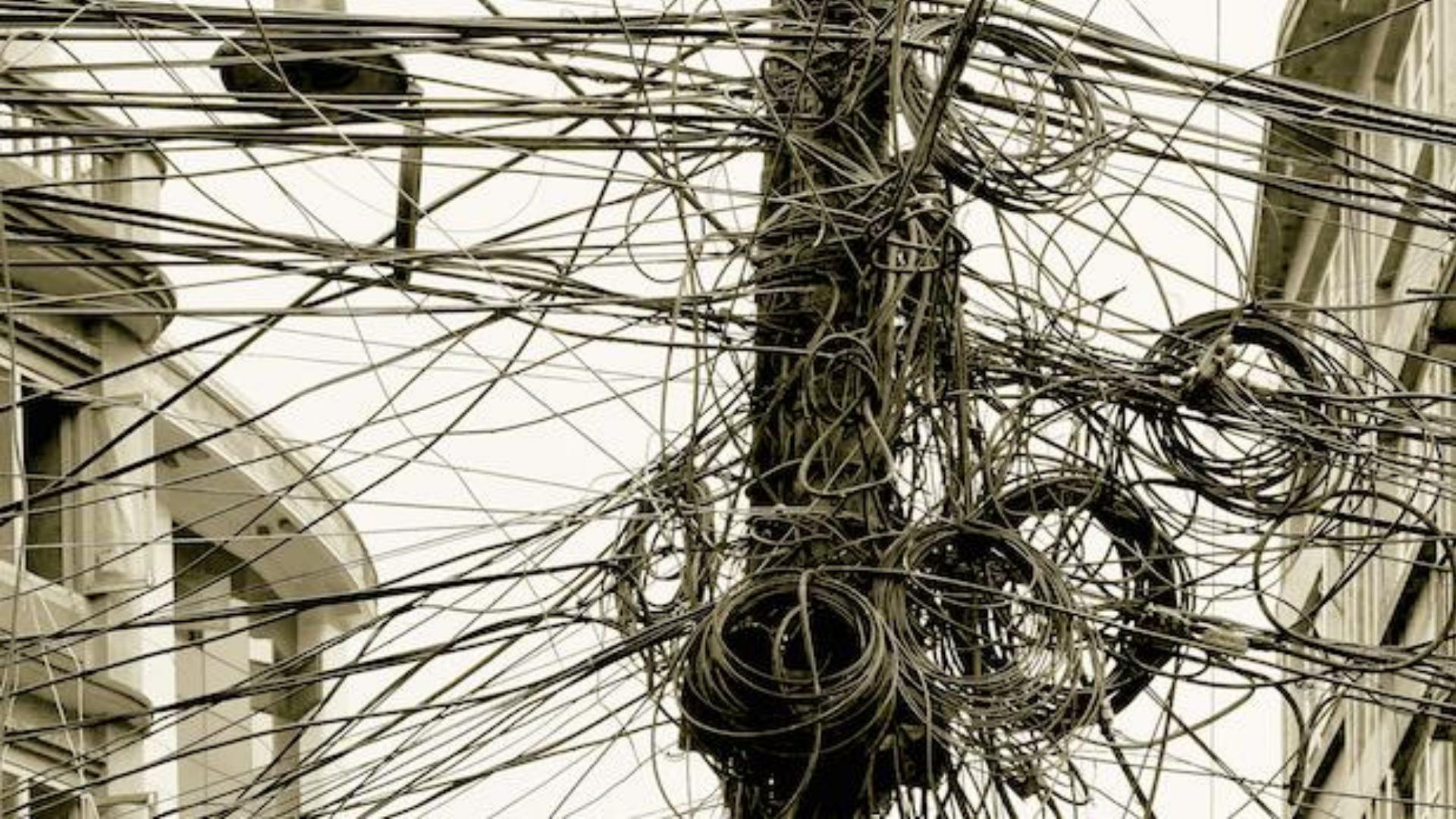
Accelerating Your Path to Value with an Open Analytics Platform

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 @feddealbpozzi

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 @macoopma







Characteristics of a badly managed platform

- No clear data ownership
- Lack of board level support for fact based decisioning
- Low trust from end users in data
- Security leaks
- Copies of copies of copies of the same data
- Unclear process for accessing data
- Multitude of end user tools
- No clear alignment between business and IT
- Lack of process to guarantee privacy of data
-

Why now ?

- Access to Technology
- Cheap / Free
- Digitalisation
- Innovation
- Cloud adoption
- Big Data Revolution
- Regulation (GDPR)
- Cost
- Ethics

The seven traits of a modern analytical platform

7

The seven traits of a modern analytical platform



Steven O'Donoghue | JANUARY 5, 2017



6665



2



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1



Vind ik leuk

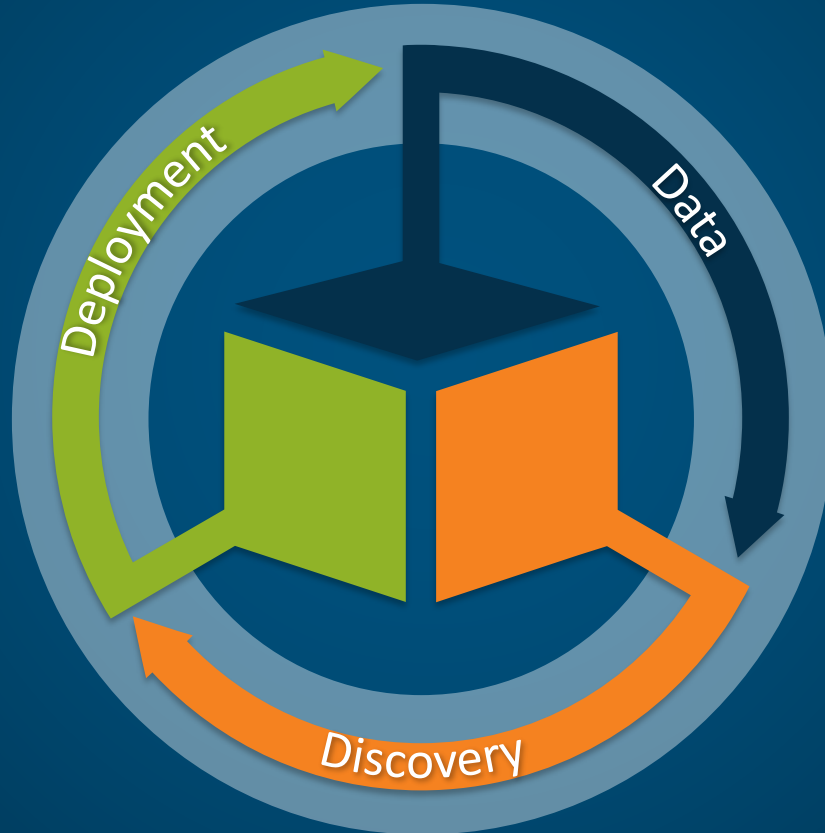


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Process supports the analytical lifecycle



1

Visual Interfaces in SAS Viya



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SAS Demo01

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Content tiles can reference folder content.



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<https://communities.sas.com/welcome>

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Manage Data

Prepare Data

Explore and
Visualize Data

Build Models

Manage
Models

Manage
Decisions

Manage
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SAS Enterprise Decision Management at a Global Financial Services Firm: Enabling More Rapid Implementation of Decision Models into Production



Buyer Case Study

SAS Enterprise Decision Management at a Global Financial Services Firm: Enabling More Rapid Implementation of Decision Models into Production

Brian McDonough

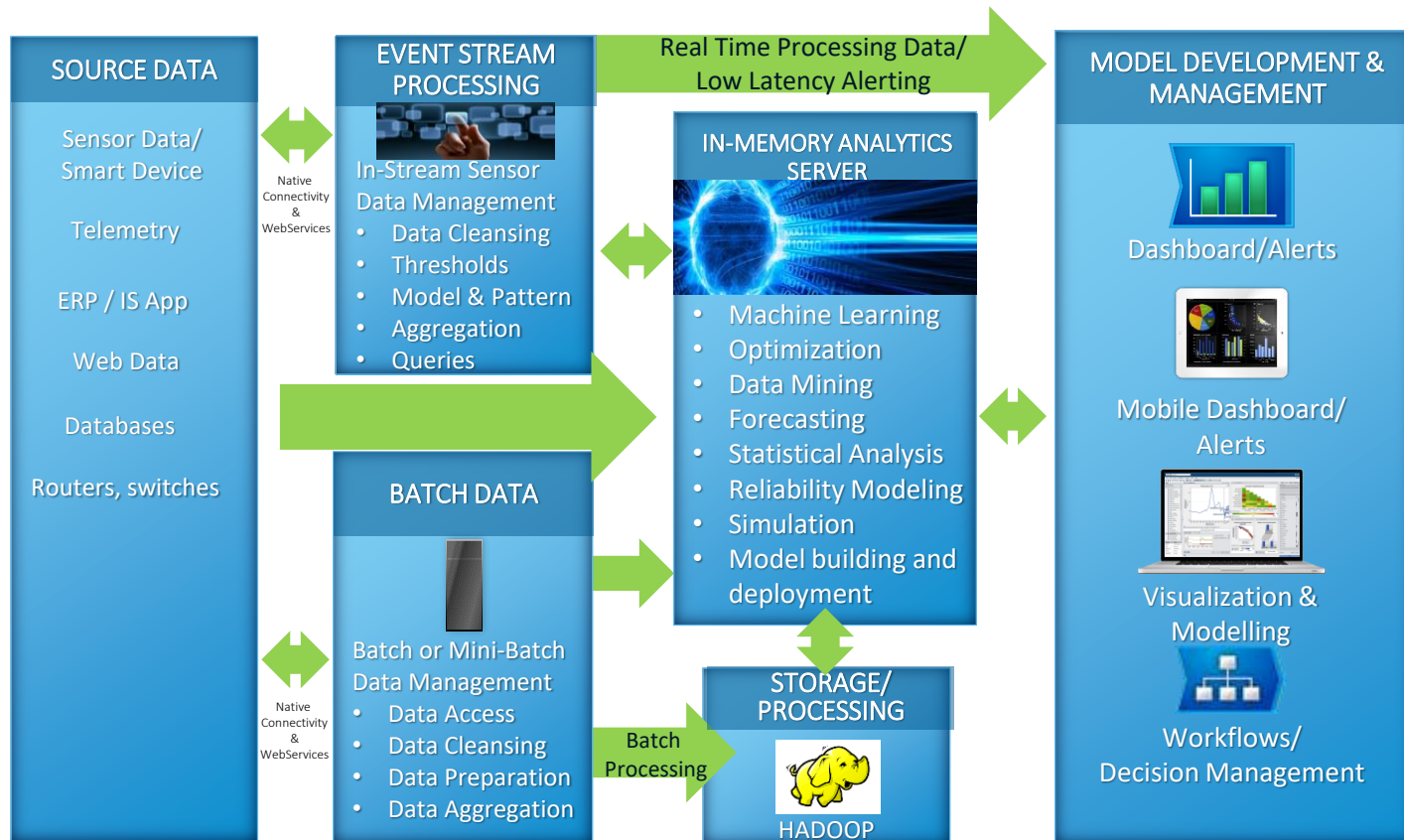
IDC OPINION

The goal of decision management is to combine analytics, process management, collaboration, and rules management functionality to support more consistent and accurate decision making. Decision management has long been addressed through analytic applications for specific decision processes as well as component technologies such as predictive analytics and business process management software. It has only been in the past few years that decision management platforms have emerged to combine component technologies in an integrated offering. Vendors of these platforms first addressed the need for integration between rules management and analytical modeling to better address high-volume transactional decision making. The goal for implementing these platforms has been to build greater intelligence and automation into a wide range of decision processes. These offerings have quickly added features and functions to enable better collaboration between business analysts and model developers, with features for data discovery, visual rules modeling, model development, and testing prior to deployment in a production environment. A financial services company implemented a decision management platform from business analytics vendor SAS Institute to improve its ability to run analytical models in production environments. The financial services company was already mature in its use of business analytics, including the development of predictive models with SAS Enterprise Decision Management, to optimize decisions in the credit risk department. The financial services company realized several benefits from the implementation:

- Model deployment times were reduced by an estimated 75% because of the capability of SAS Enterprise Decision Management to take tested models running real operational data and make them available in the production environment. This included model integration with operational systems to give all employees involved in the credit risk process instant decision support based on the latest models and rules.
- The capability of SAS Enterprise Decision Management to take tested models running real operational data and make them available in the production environment reduced the need for line-of-business employees to rely on IT for custom development and implementation every time a model or decision tree needed to be added to the production environment. This enabled the credit risk managers to be more self-sufficient and agile in responding to changing decision requirements while relying on trusted data from a data warehouse.
- The rules management capability and process design functionality enable business analysts to rapidly adjust actions that the financial services company's frontline employees take based on changes in policies and processes intended to optimize business outcomes. The integration between the functions of SAS Decision Manager enables modelers to focus on their tasks, with feedback and collaboration from the business user.

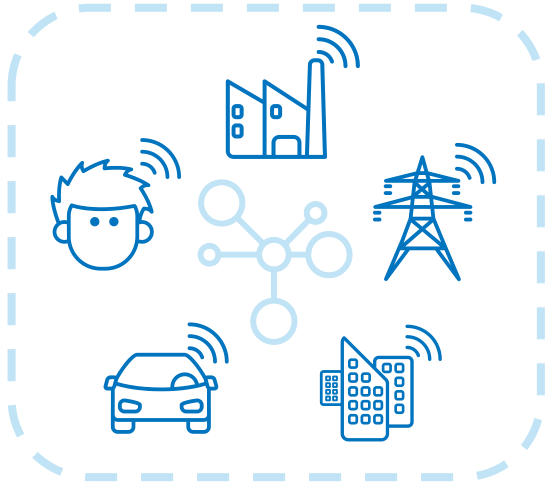
May 2014, IDC #248639

Engines for processing data in-memory, in-database and real-time streaming



2

New Landscape - New Needs



Bigger Data

Volume Velocity Variety



Act Faster

*Reduced time to decision and action
Immediate low latency answers
Continuously evaluate opportunities and risks
More agile, more responsive*



Real Time Marketing



Communications



Fraud Detection



Industry, Energy



Cyber Security



Health Care



IT Operations



Capital Markets



Manufacturing



Enterprise Decisions



Supply Chain

Cross-industry applicability and value

Streaming Analytics

Internet of Things



Communications



Smart Cities and Homes



Connected Customer



Surveillance



Building
Management



Agriculture



Manufacturing



Retail



Healthcare



Insurance



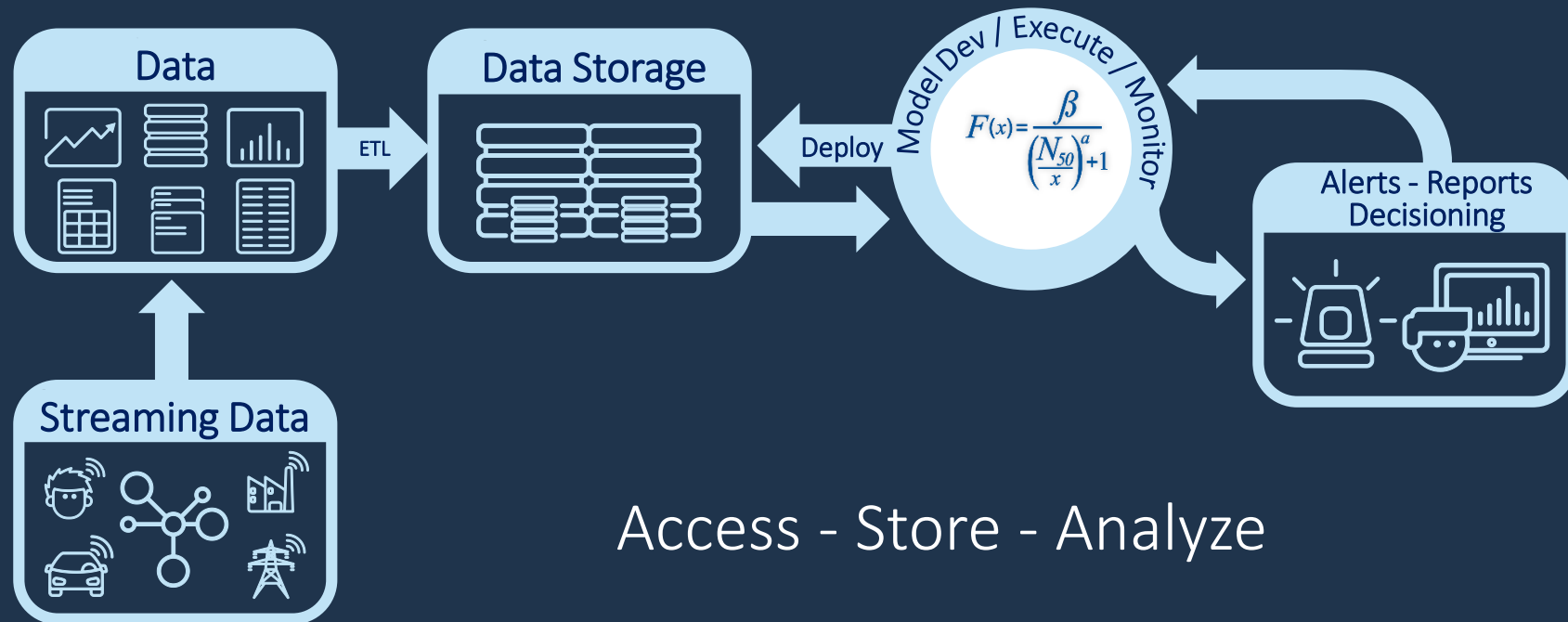
Energy



Connected Car
Transportation

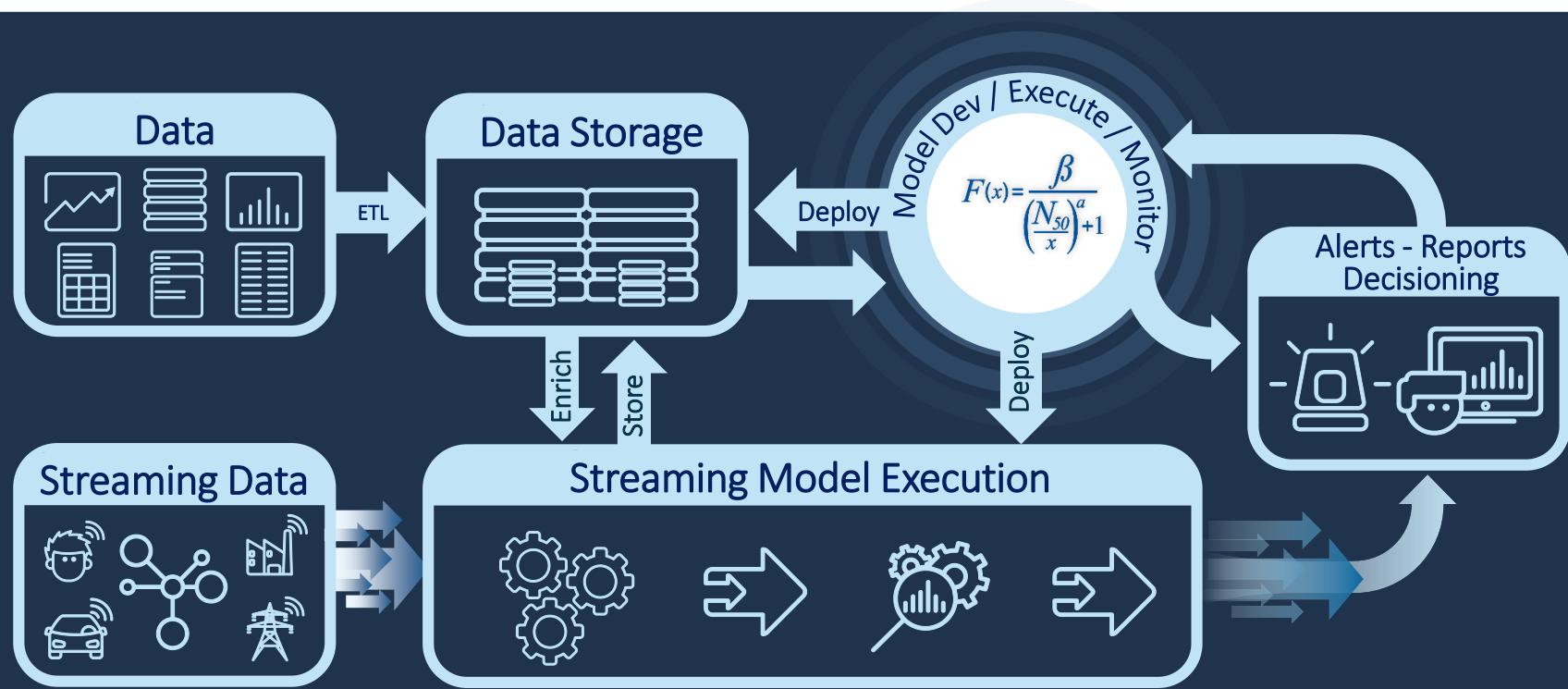
Analytics Lifecycle

Traditional Analytics Lifecycle



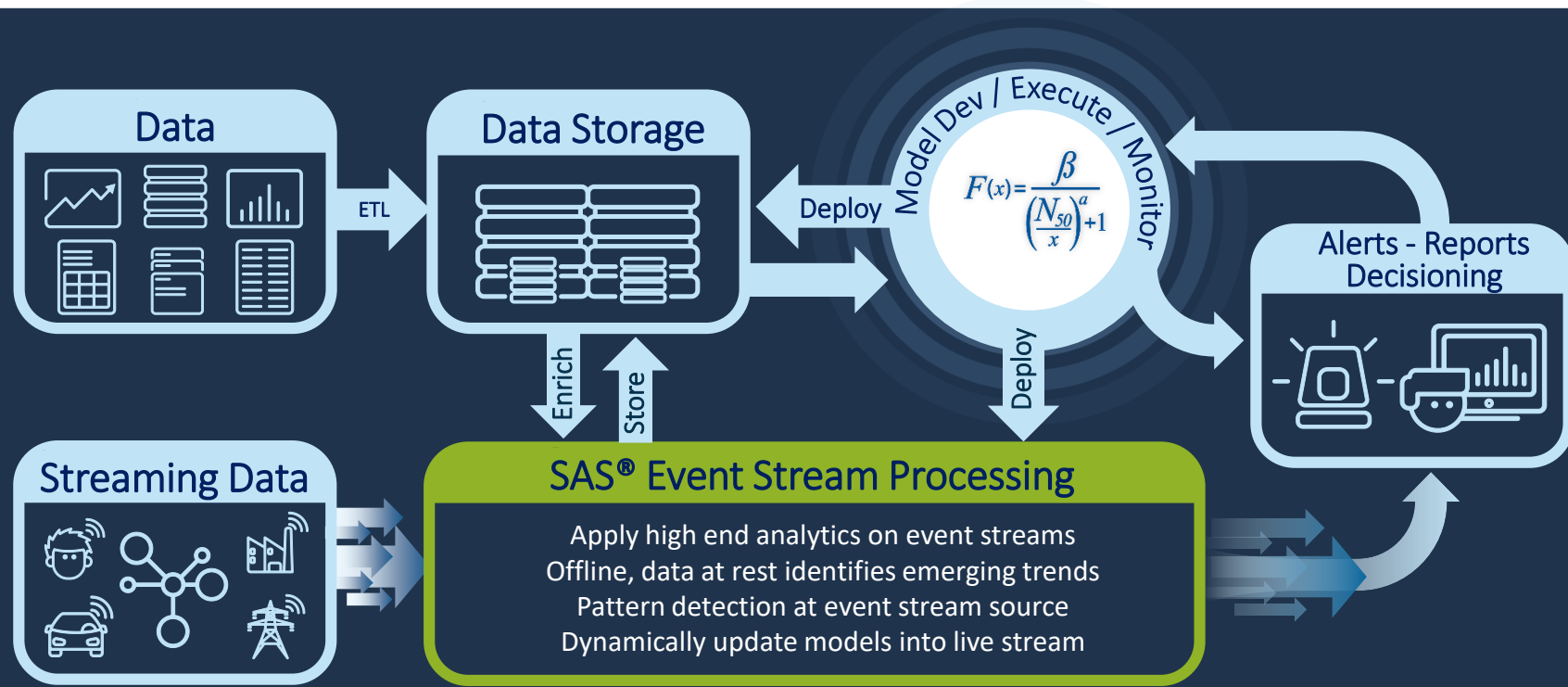
Analytics Lifecycle

Stream – Understand – Act



SAS® Event Stream Processing

Engineered For Fast And Adaptive Action

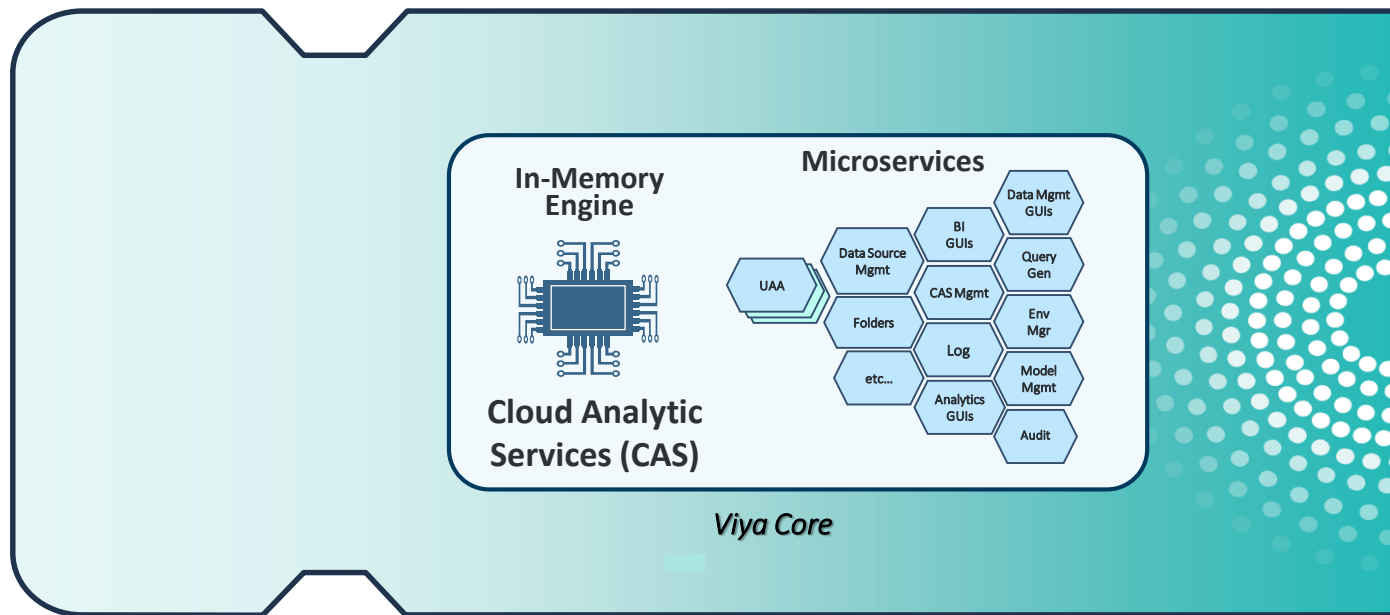


The platform is scalable and can grow

3

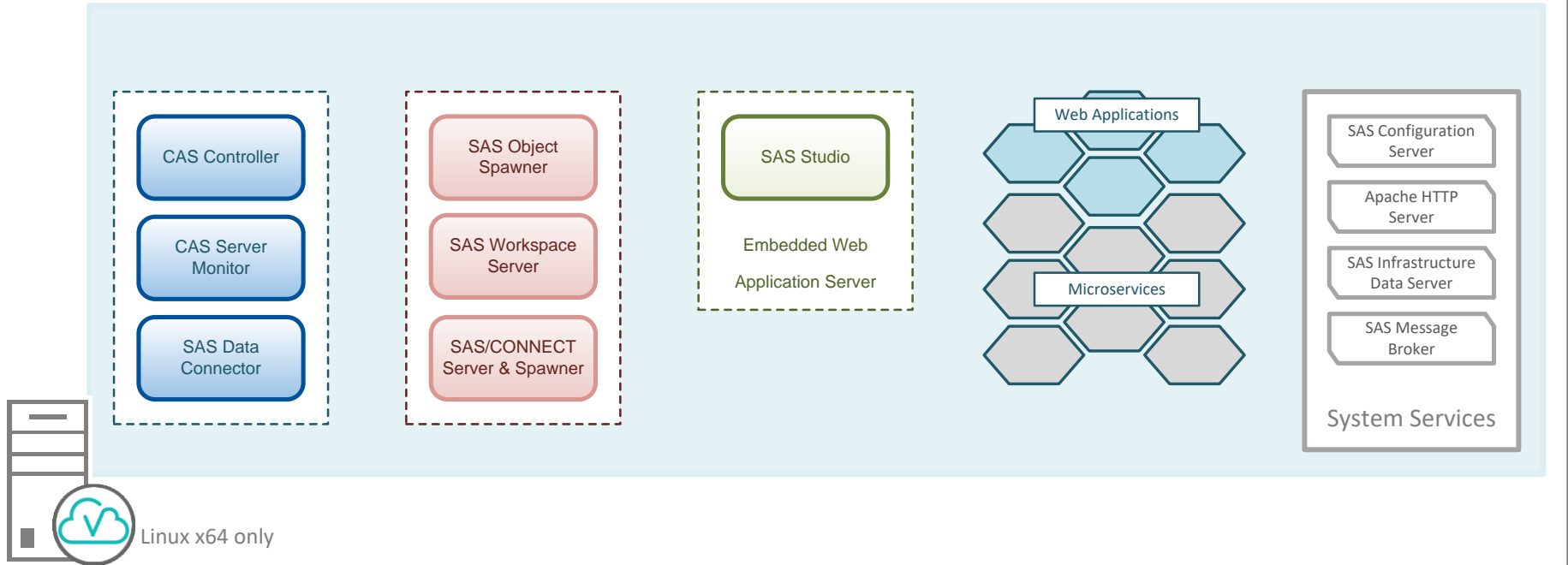


The SAS platform architecture-stripped down



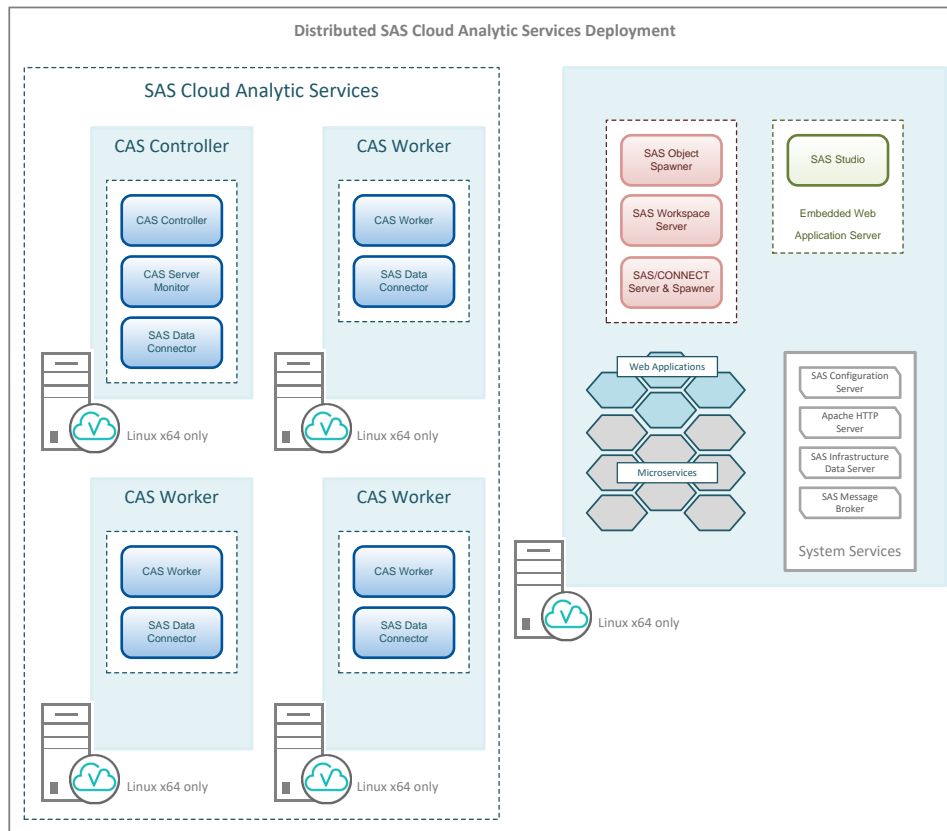
SAS Viya Single Machine Deployment

Single Machine Deployment

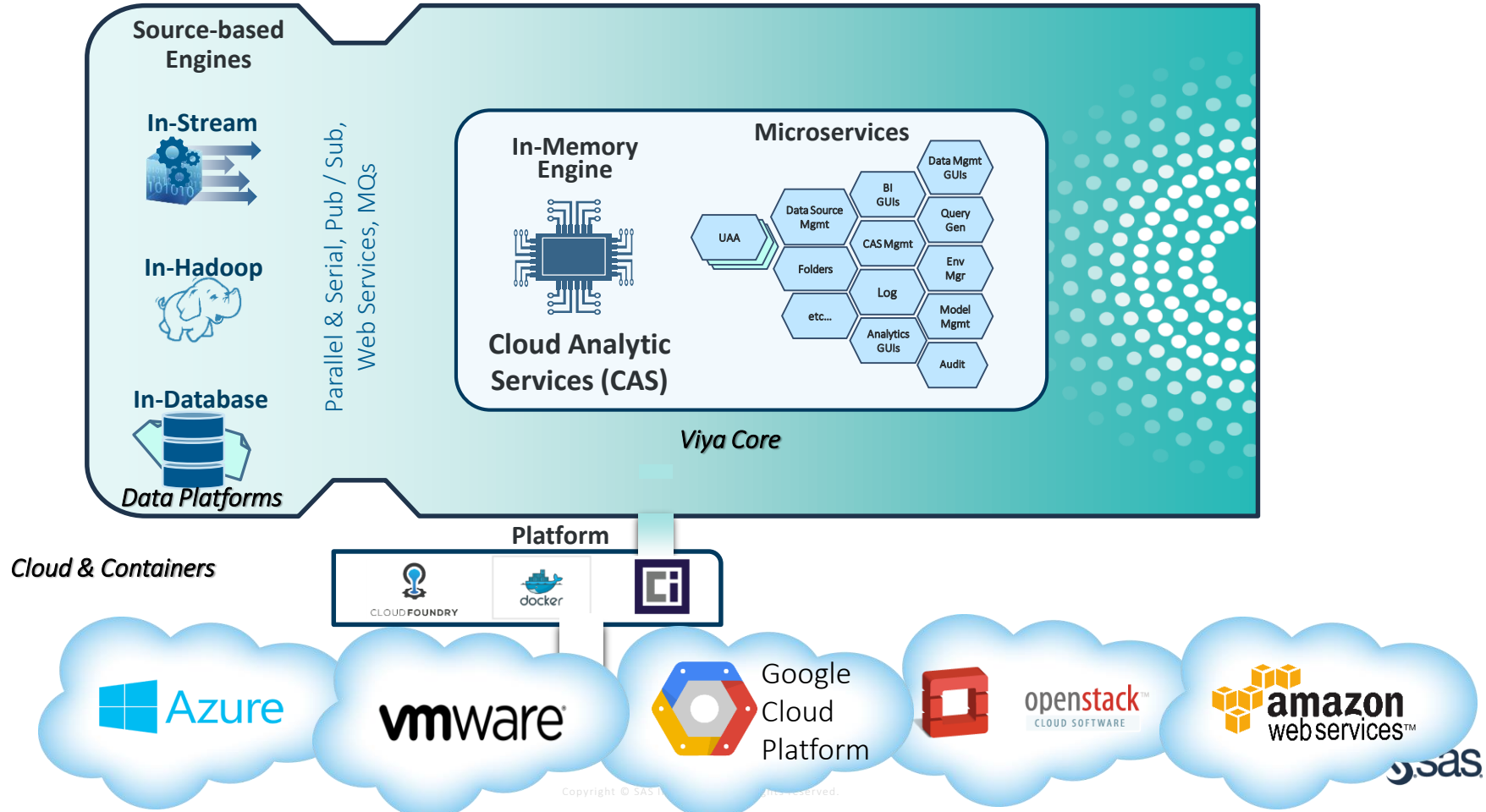


SAS Viya Multi-Machine Deployment

Distributed CAS



The SAS platform architecture



Access to a variety of data sources

ORACLE®
DATABASE



Microsoft®
SQL Server®



Greenplum



ORACLE®
BUSINESS INTELLIGENCE

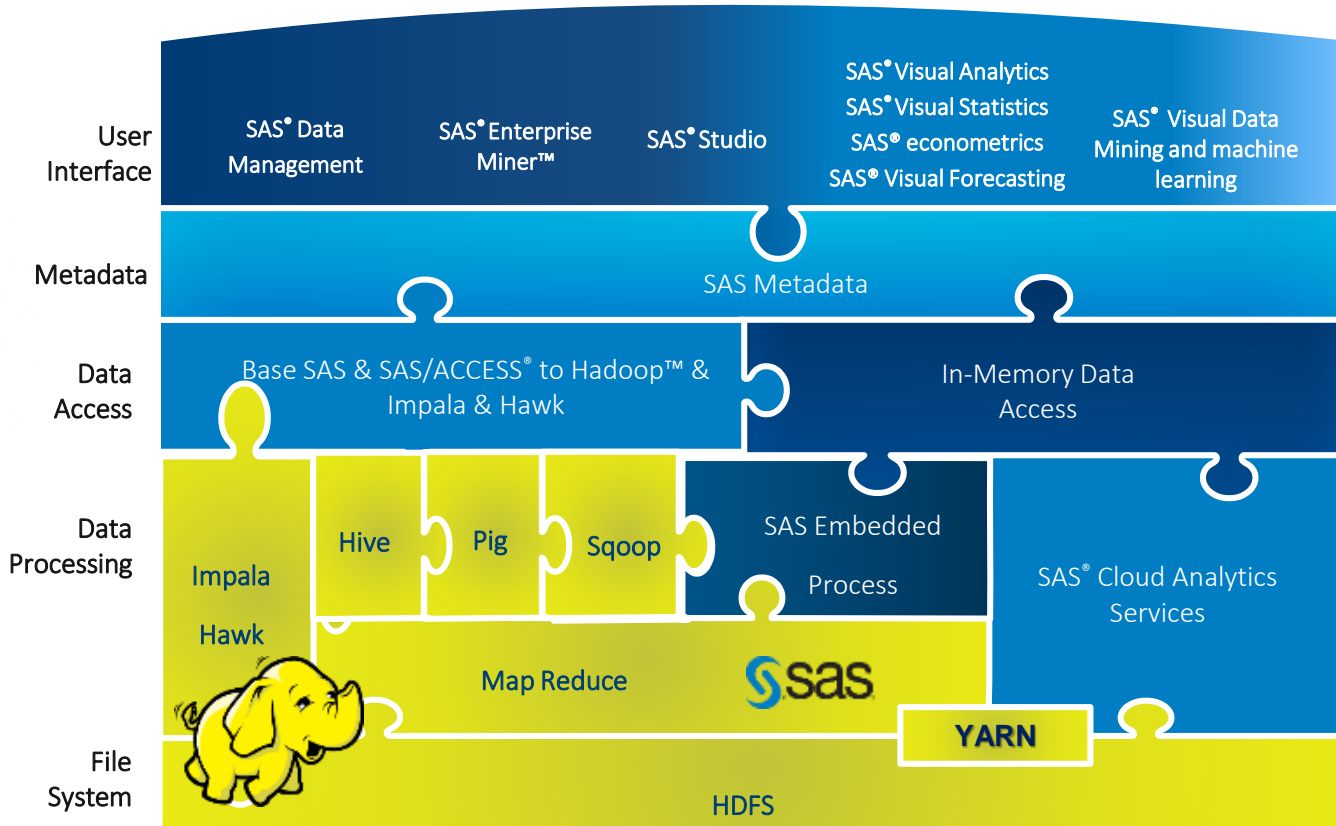


PostgreSQL

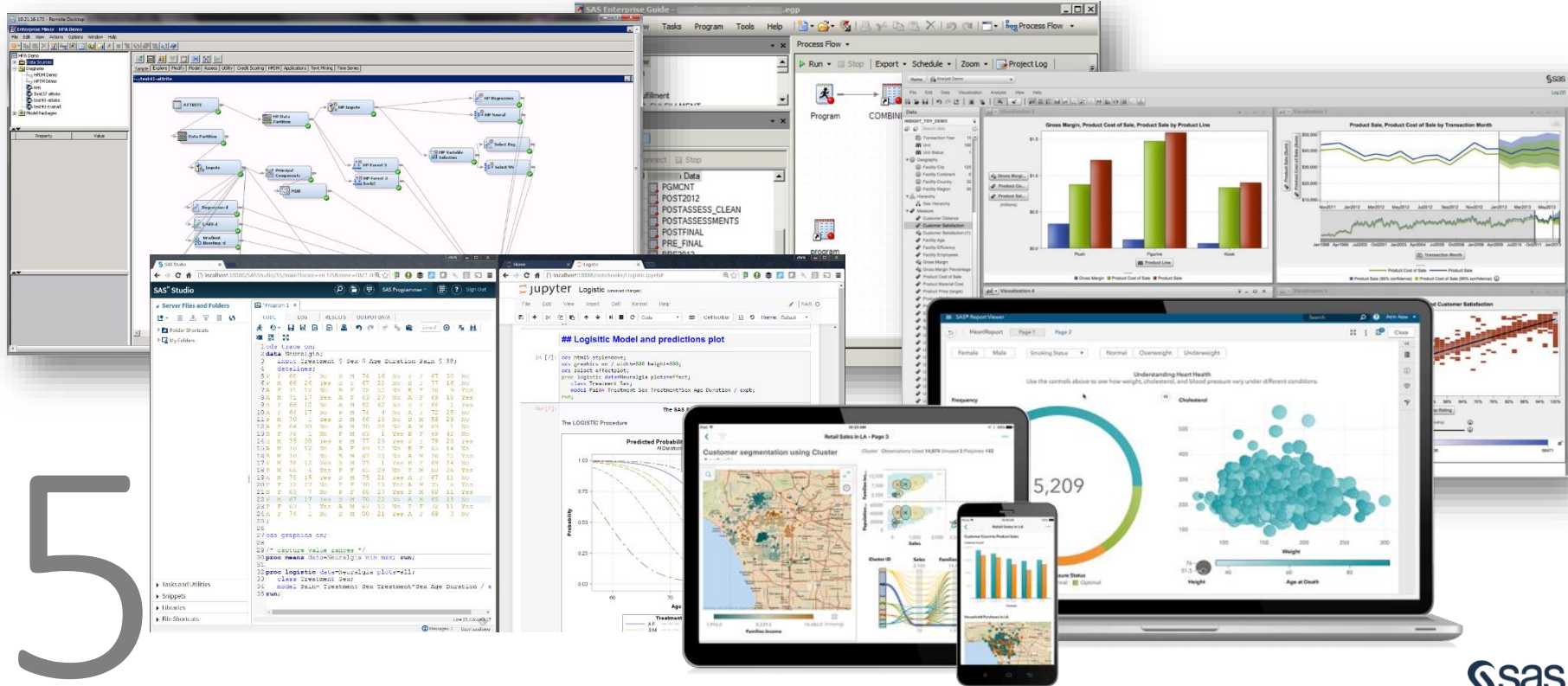
SYBASE®



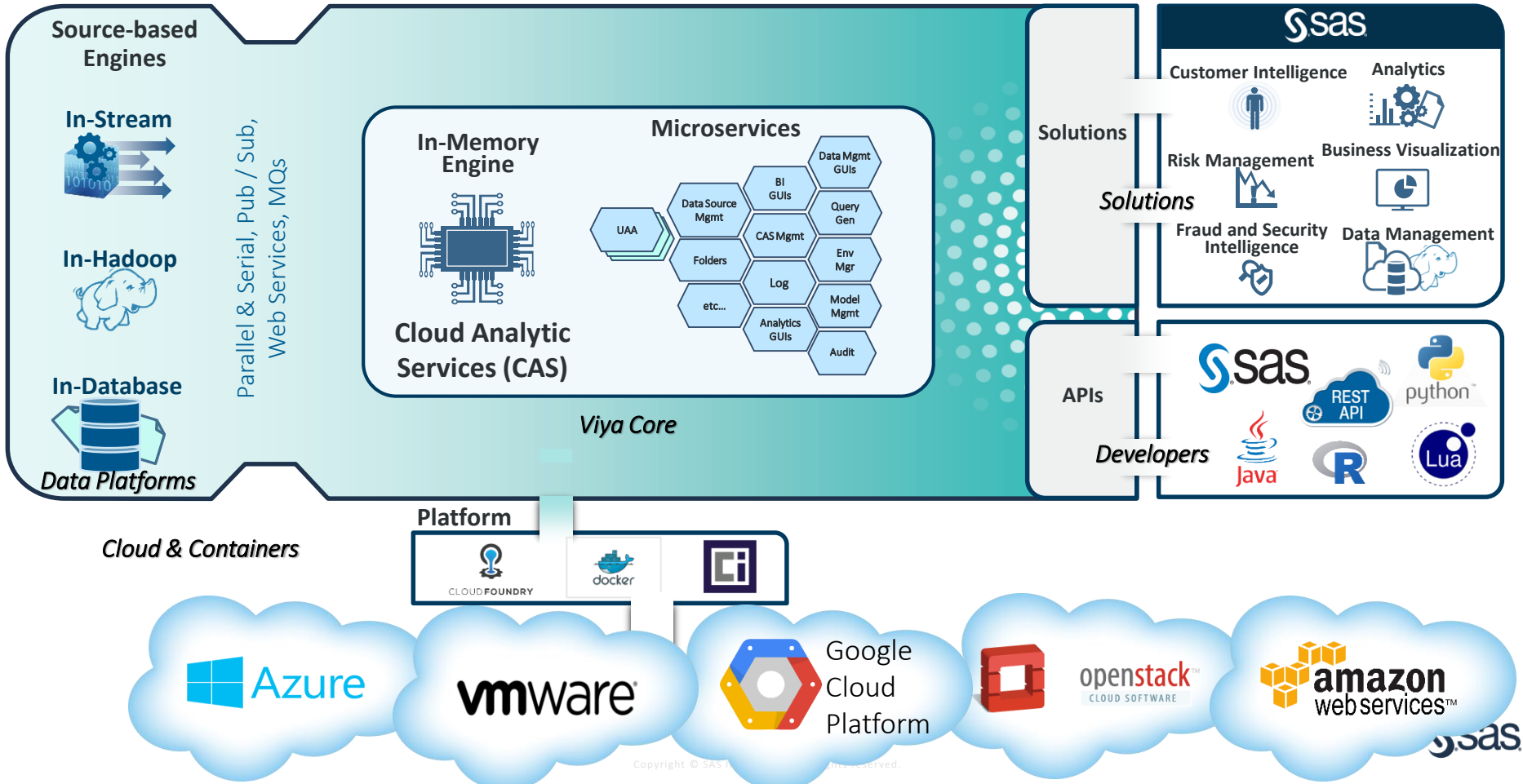
Sas & hadoop



A variety of analytical tools available to support a range of end user needs



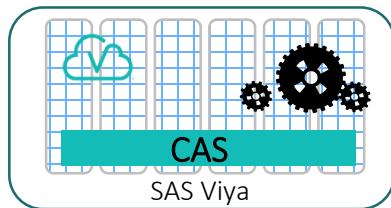
The SAS platform architecture



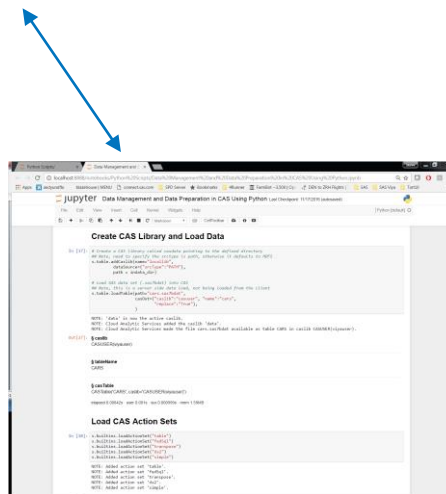
Open-source connectivity



Base SAS
SAS EG
SAS EM
SAS Studio

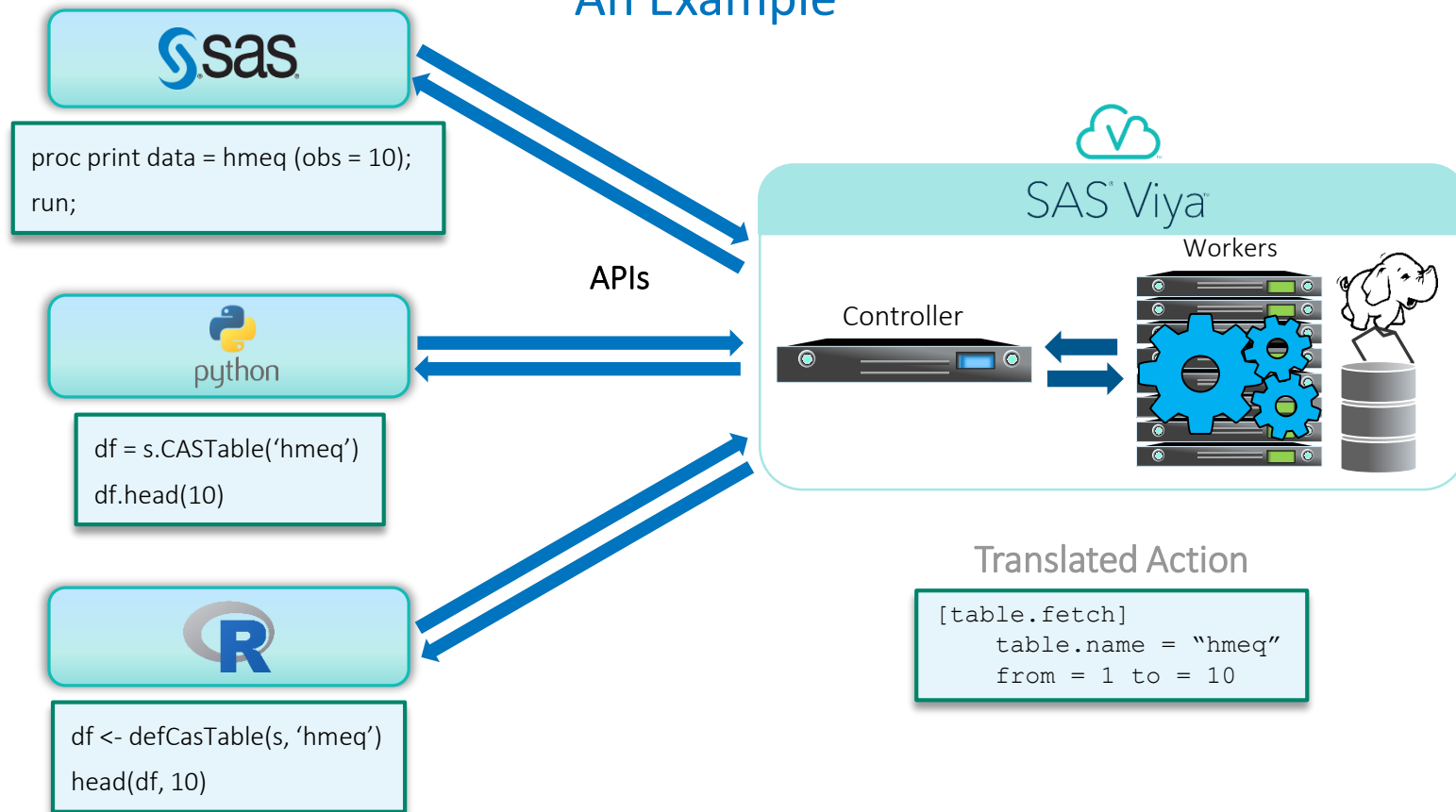


- Run R & Python from IDE eg Jupyter
- GIT sassoftware/python-swat package (SAS Scripting Wrapper for Analytics Transfer (SWAT))
- GIT sassoftware/R-swat



Language versus actions

An Example



A shared services operating model

Decentralisation

- Higher costs
- Variable Standards
- Different Control Environments
- Duplications of Efforts

Shared

- Business Units retain Control
- Recognition of Local Priorities
- Lean, Flat Organisation
- Independent of Businesses
- Identification of Efficiencies between Business Units
- Understanding of Group Functions and Missions
- Dissemination of Best Practices

Centralised

- Common Systems & Support
- Efficient Knowledge Transfer, Standards & Tools
- Economies of Scale
- Unresponsive
- No Business Unit control of Central Overhead Costs
- Inflexible to Business Unit Needs
- Disconnect from Business Units

6

A governed environment, with room for experimentation

- IT governance
- Data governance
- Analytic governance



7





WARGAMING.NET

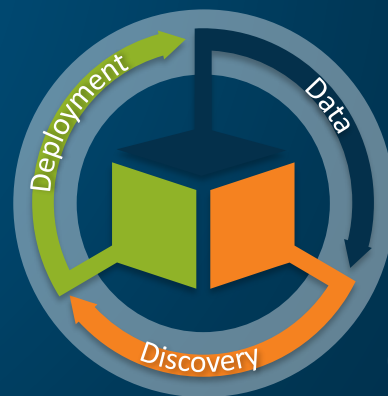
LET'S BATTLE

ALEXANDER RYABOV

Head of Data Services, Business Intelligence

The seven traits of a modern analytical platform

1. Process supports the analytical lifecycle
2. Engines for processing data in-memory, in-database and real-time streaming
3. The platform is scalable and can grow
4. Access to a variety of data sources
5. A variety of analytical tools available to support a range of end user needs
6. A shared services operating model
7. A governed environment, with room for experimentation



Thank you for joining the the
data science jam sessions.

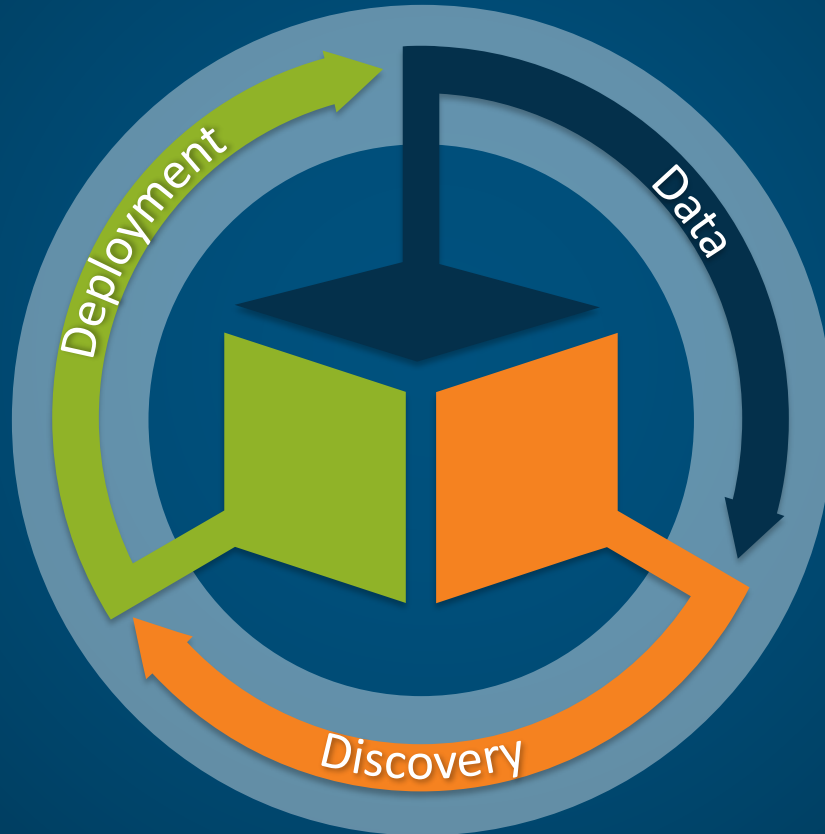
Enjoy the networking drink & music!

Going to and& festival or
technology expedition?

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Thanks for your attention



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