

How AI And Automation Will Change The Way We Work (and Decide)

Mike Gualtieri

Vice President, Principal Analyst

June 10, 2024 – PegaWorld iNspire – Las Vegas

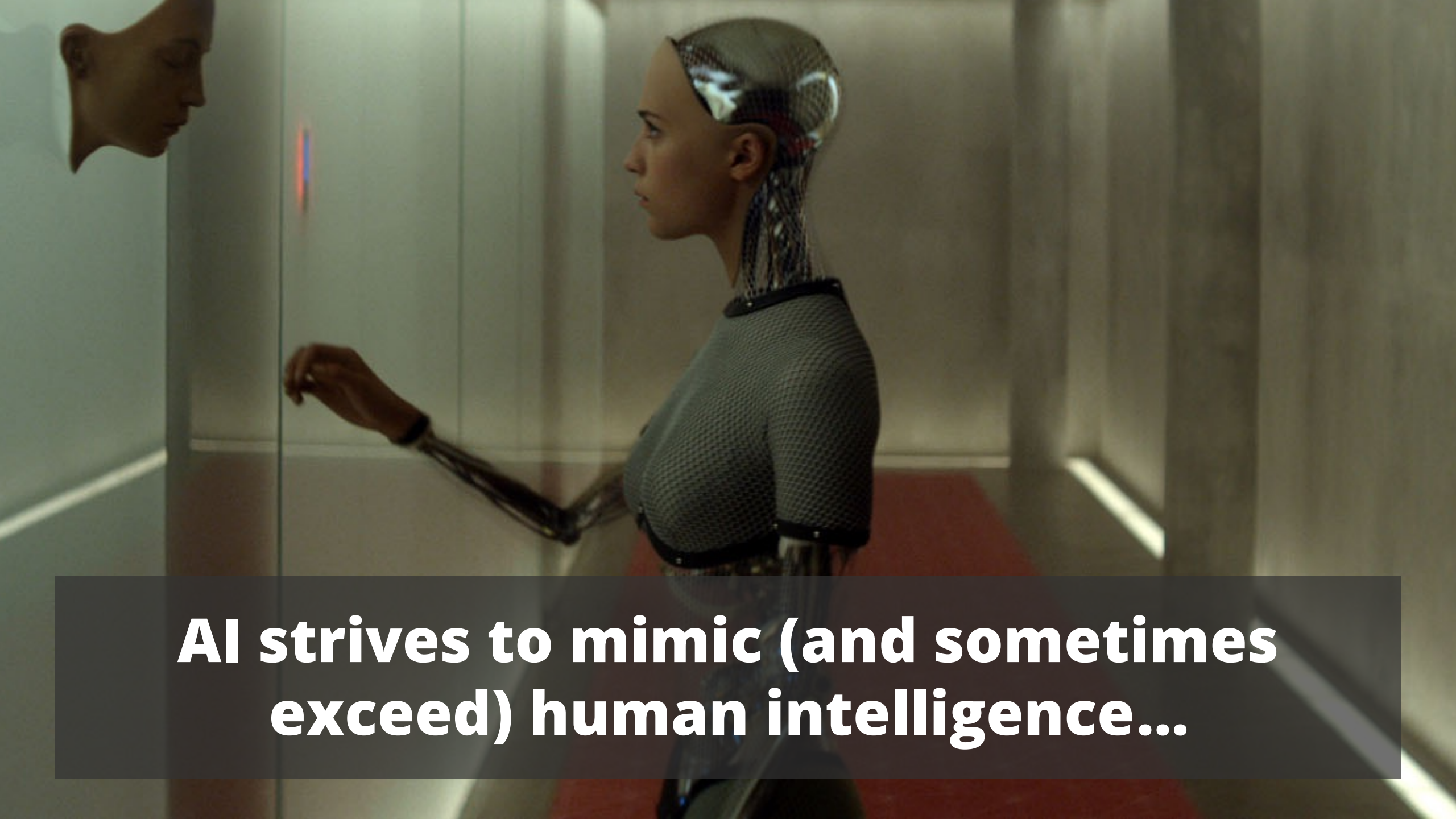
BOLD

AT

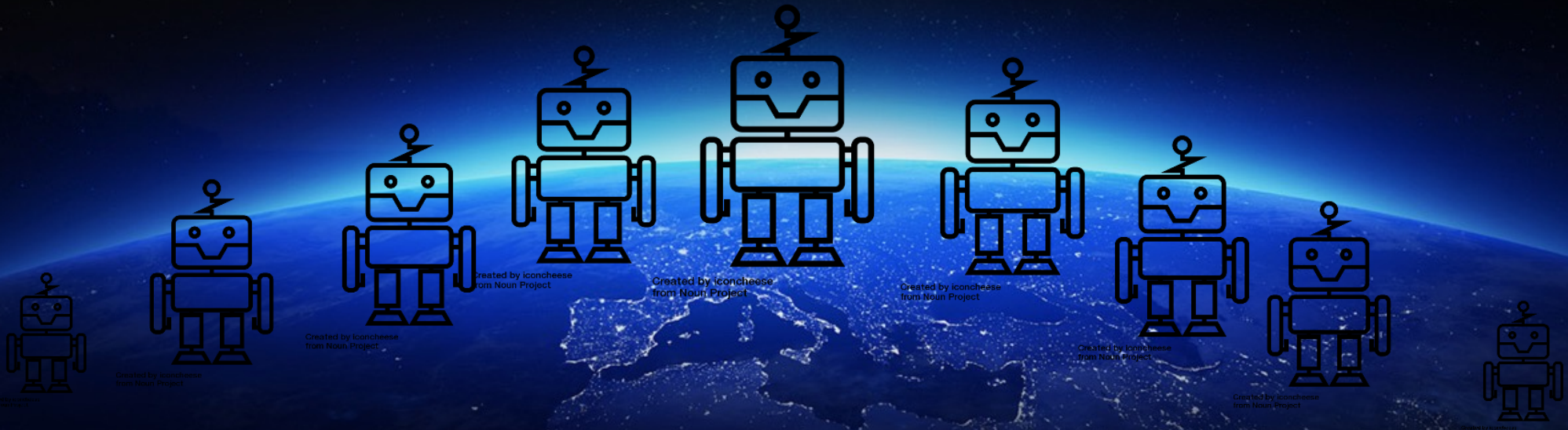
WORK

The State Of Enterprise AI – It's Amazing

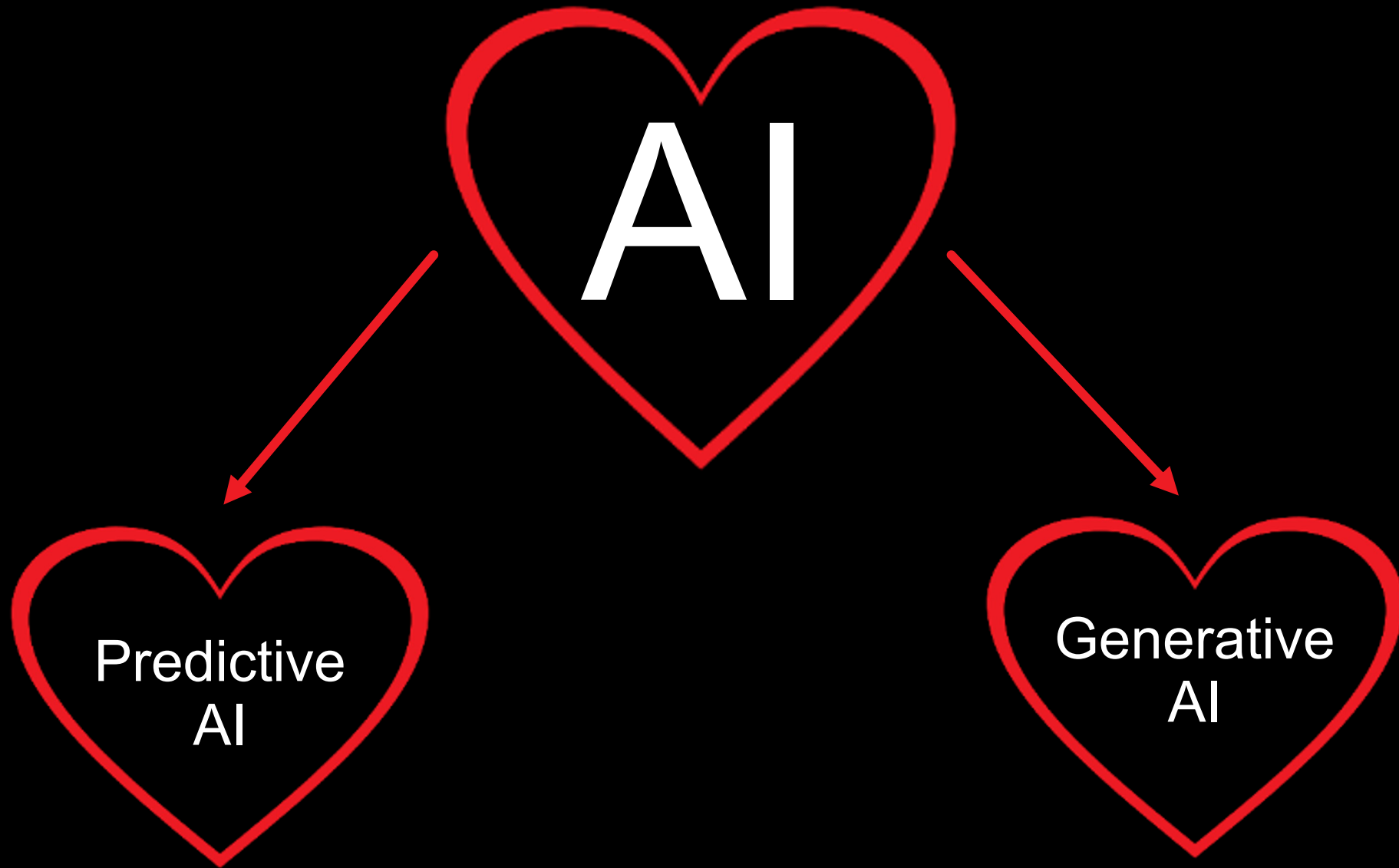
FORRESTER®



AI strives to mimic (and sometimes exceed) human intelligence...



AI is the fastest growing workload on the planet.

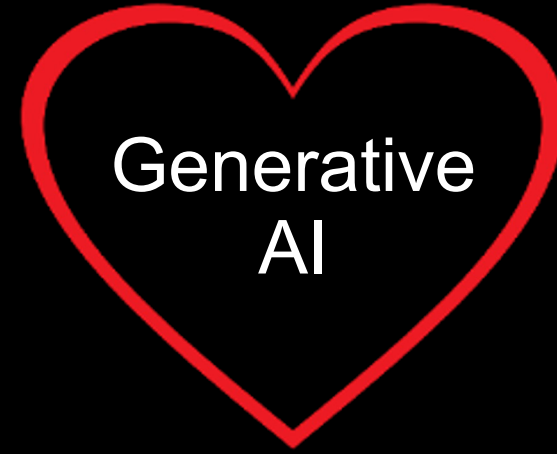




A single prediction

OG ML

This customer is likely to churn.

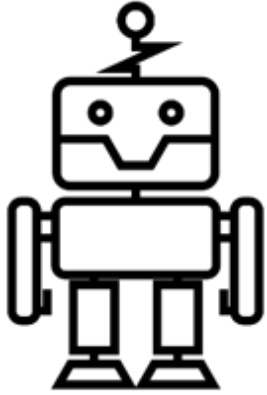


A sequence of predictions

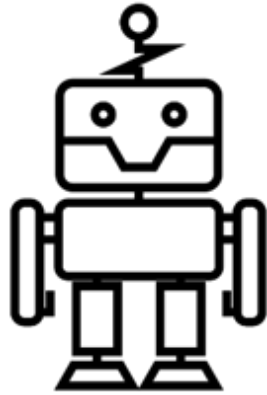
LLM

A personalized poem about the customer's hometown in the style of AC/DC lyrics.

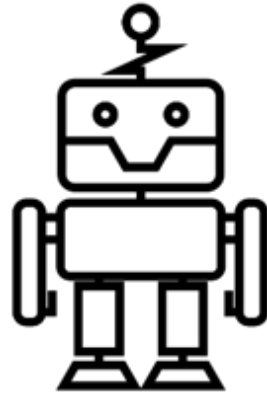
Marketer



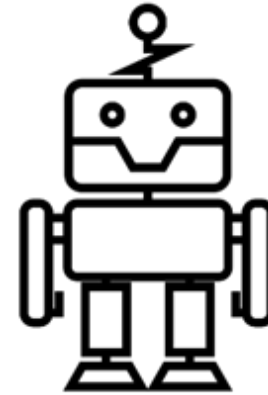
Graphic designer



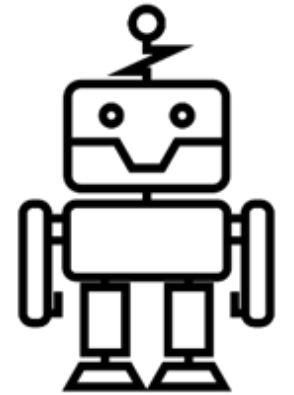
Programmer



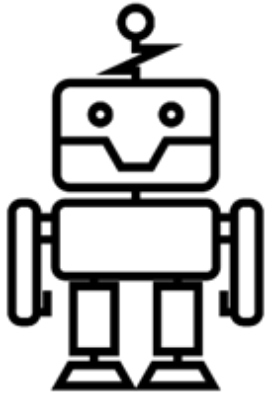
Analyst



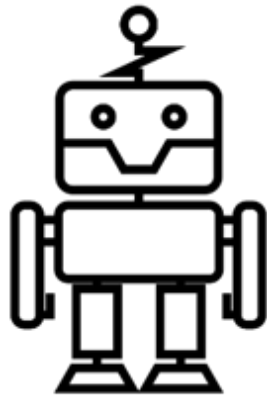
Process engineer



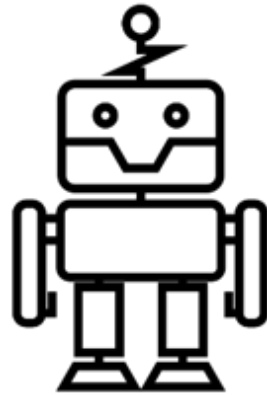
Lawyer



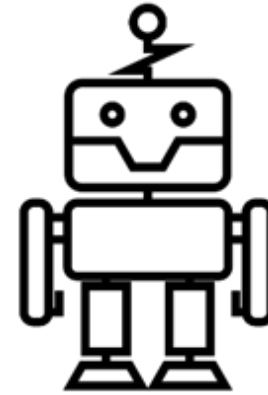
Journalist



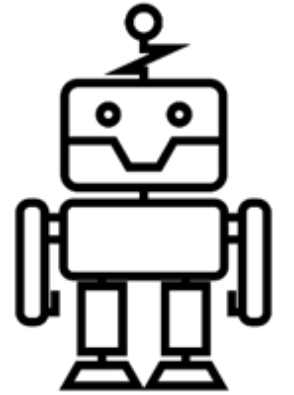
Researcher



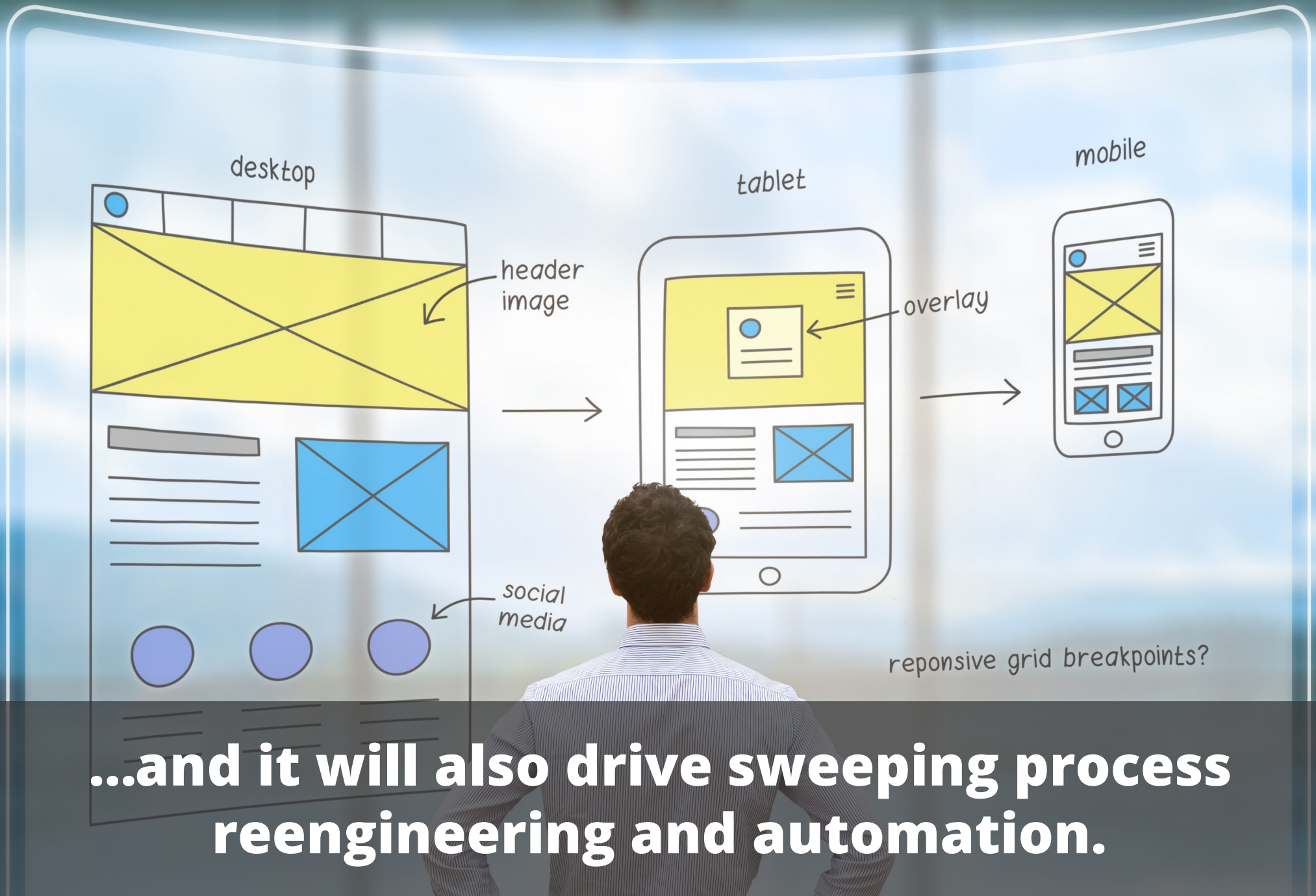
Preacher



Doctor



AI will assist workers leading to soaring productivity.



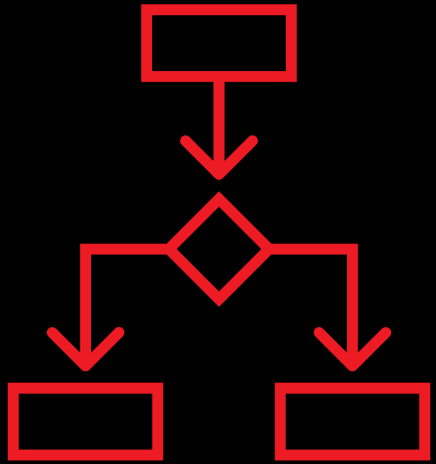
...and it will also drive sweeping process reengineering and automation.

AI Decisioning
Platforms
2023

Digital Decisioning
Platforms
2018

Business Rules
Management
Systems (BRMS)
2008

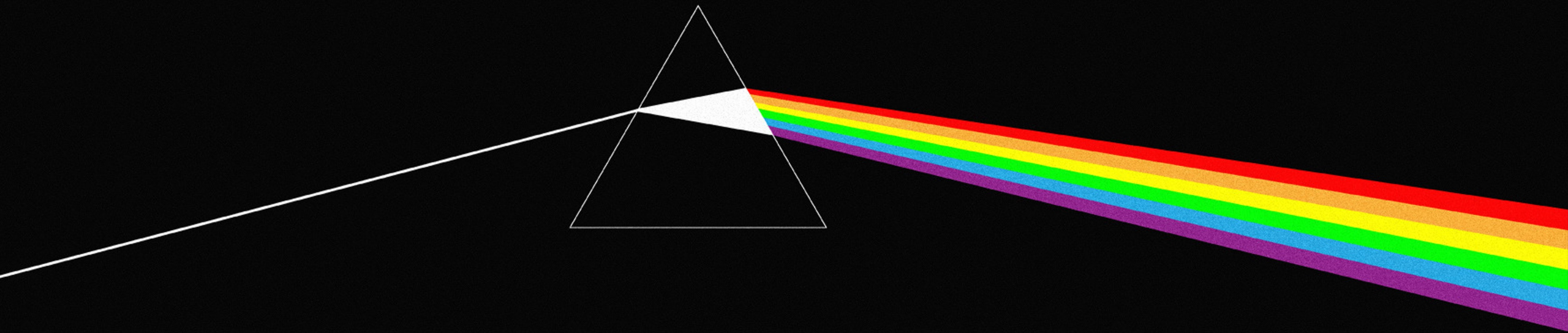
Expert Systems
1985



Decisions



Enterprises rise or fall...



**...based on the collective efficacy of all
the decisions made...**

A woman in a business suit stands by a large window overlooking a city, with a laptop and coffee cup on a desk in the foreground. The scene is brightly lit, suggesting a high-rise office environment. The woman is looking out the window with a slight smile. In the foreground, a desk holds a laptop and a coffee cup. A large, semi-transparent image of a man's face is overlaid on the right side of the image.

...by leaders, employees, and

```
private void transactTAMWithdrawals (TAMAnalyzer tam) throws ServiceException
{
    // Now it is time to make withdrawals
    Date withdrawalDate = tam.getCurrentDate();

    TAMAnalyzerEvaluation ae = tam.getCurrentAnalyzerEvaluation();

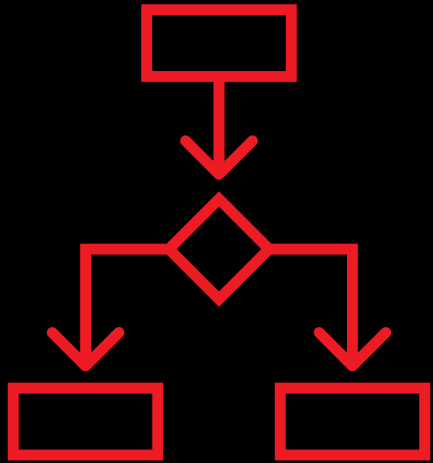
    // make sure we can withdraw on this date
    if (DateHelper.isBetweenInclusive(withdrawalDate, ae.getFirstPaymentDate(), ae.getLastPaymentDate()) == false)
    {
        return;
    }

    int periodicity = 12;

    TradeOrderService tos = new TradeOrderService(tam.getAccount());
    // cycle through this puppy and create the tradeorders
    for (int p=0; p < ae.getTamPositions().size(); p++)
    {
        TAMEvaluationPosition ep = (TAMEvaluationPosition)ae.getTamPositions().get(p);
        // create a tradeorder for this investment choice
        TradeOrder to = new TradeOrder();

        double withdrawalAmount = 0.0;
        switch (ep.getTamPurpose())
        {
            case TAMPurposeKinds.INCOME:
```

**...by decision intelligence embedded
in applications.**



Automation



Scale, efficiency, and agility....



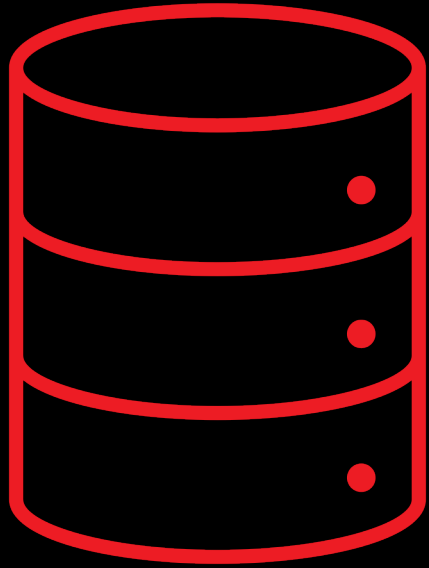
...comes from well designed processes...

The image features two glowing, blue, textured, funnel-like shapes against a dark blue background. A stream of small, bright blue particles flows from the opening of the left shape towards the right shape. The overall aesthetic is futuristic and digital.

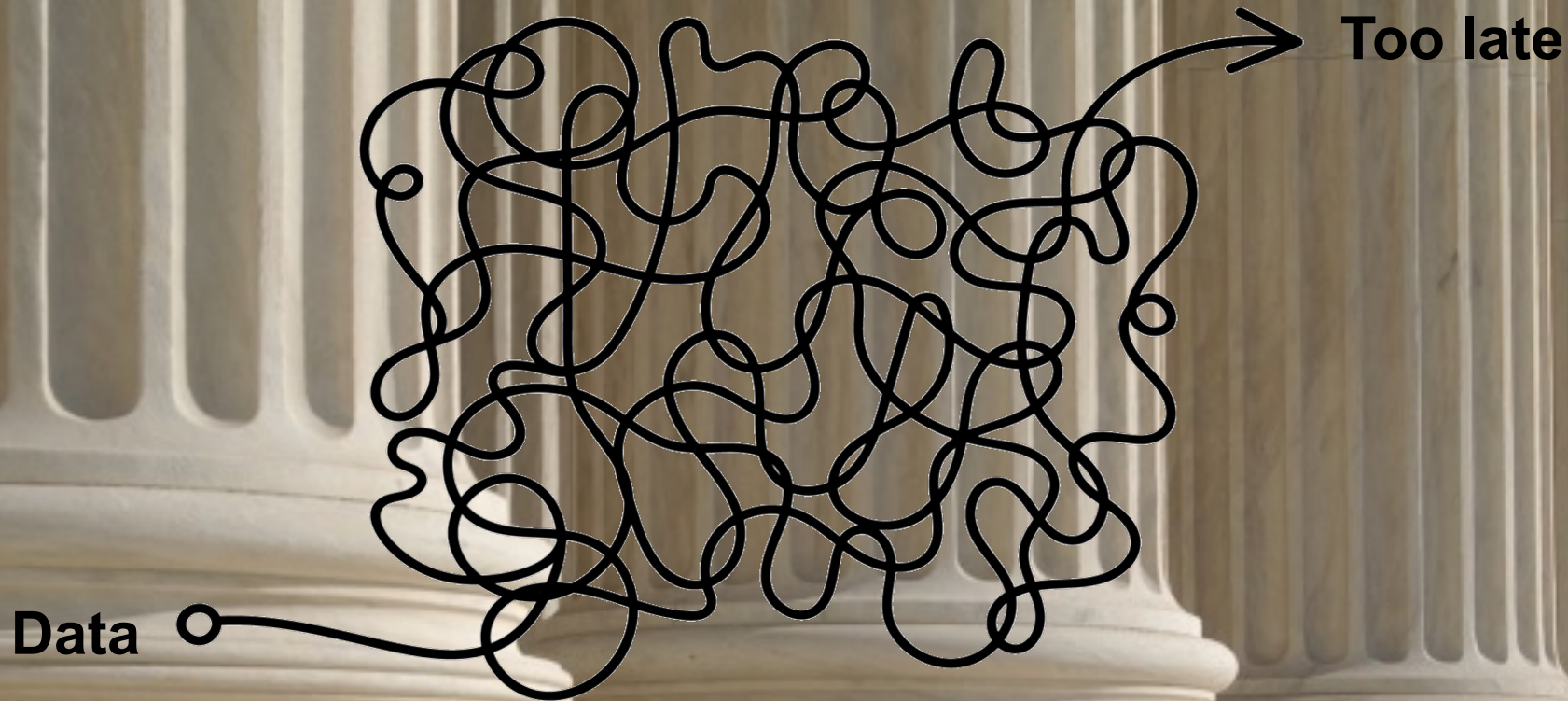
...informed by AI and data...

A close-up photograph of a young Black man with a friendly smile, wearing a black headset with a microphone. He is wearing a white collared shirt. The background is a blurred office or call center environment with other people working at desks. A semi-transparent dark grey banner is overlaid at the bottom of the image, containing white text.

...driven by human-controlled automation.



Data



Legacy data architectures are geared towards slow-motion data movement between incongruous data and analytics platform silos.

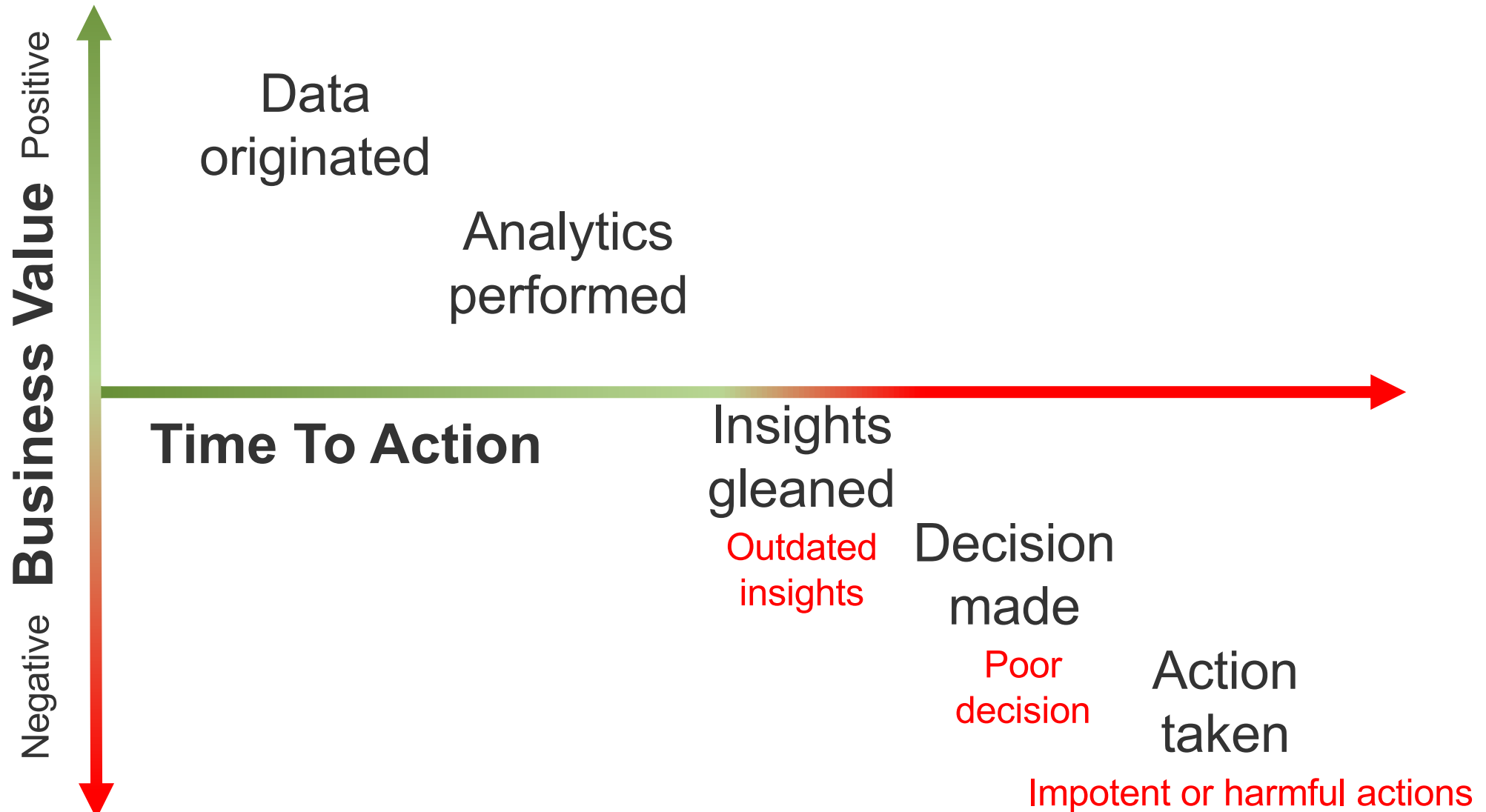


Time

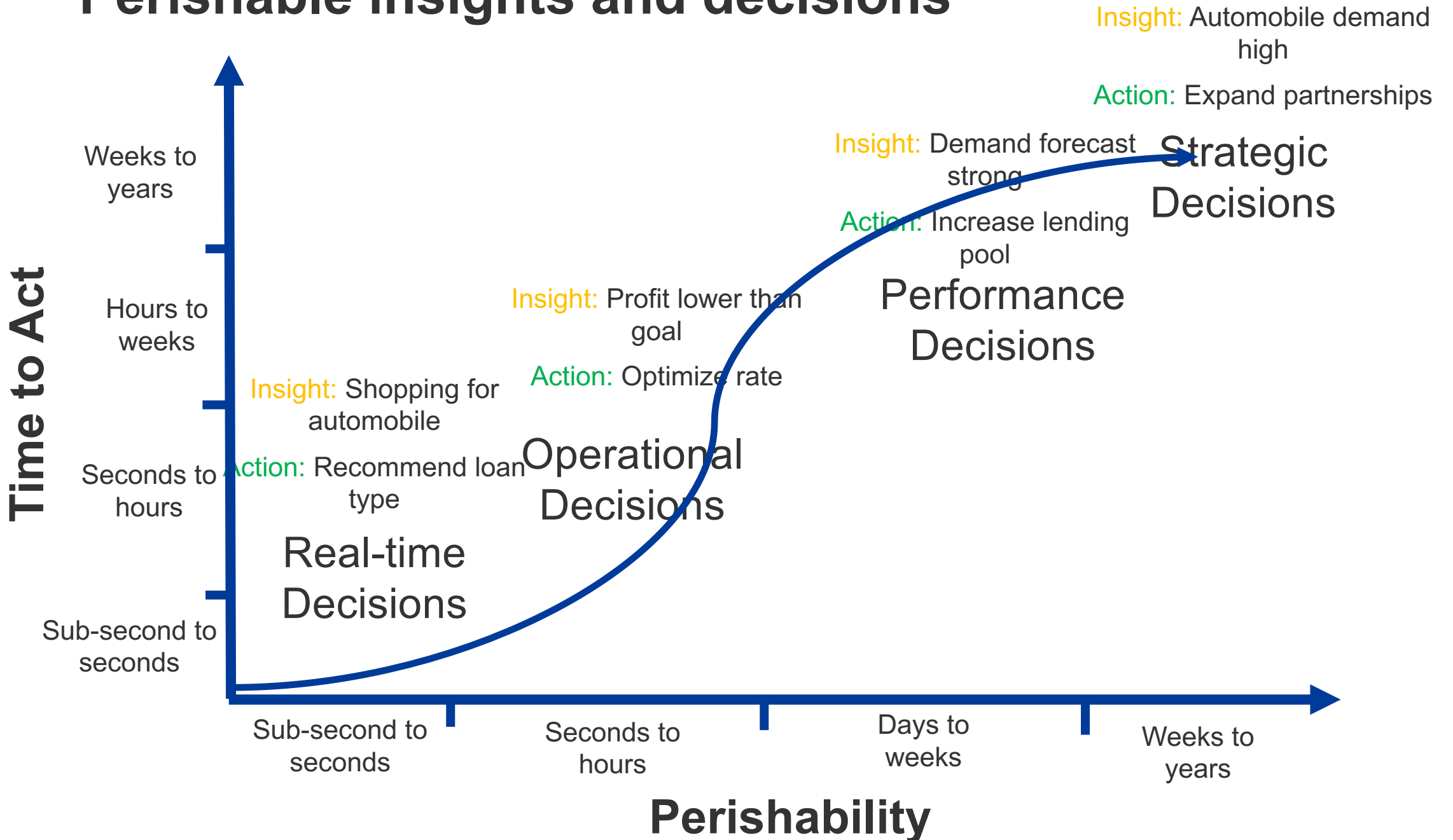


All data originates in real-time, and...

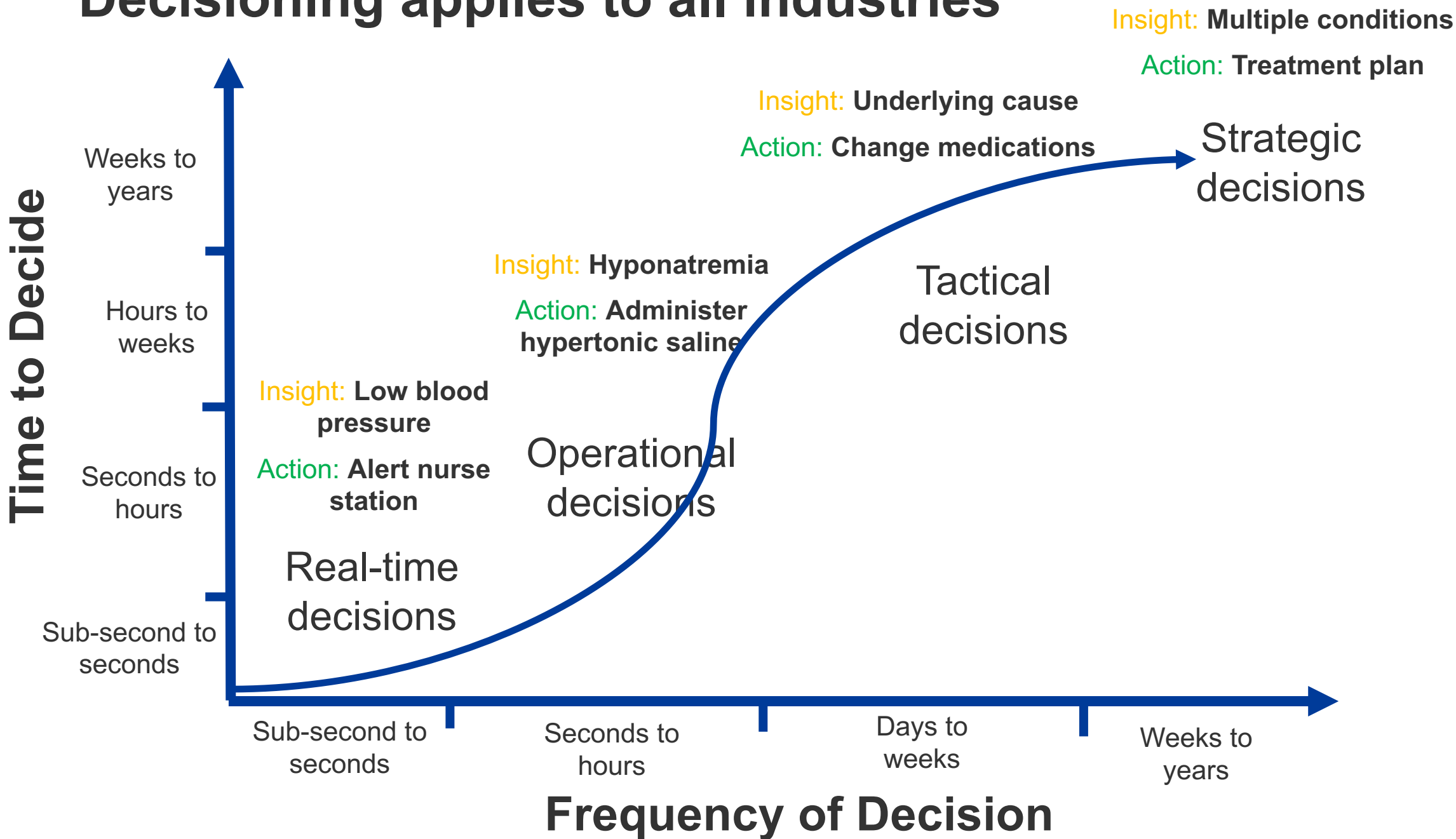
...the time to decide is shrinking



Perishable insights and decisions



Decisioning applies to all industries





You compete on fast decisions.



AI



AI is the future of every enterprise.



Platform

The AI Decisioning Platforms Landscape, Q1 2023

Forrester's Overview Of 20 Vendors

March 6th, 2023 • 8 min read



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With contributors:

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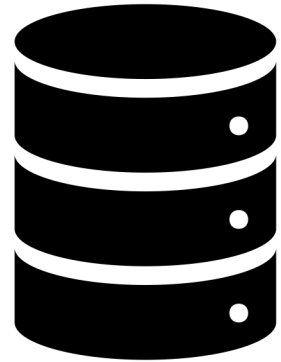
Forrester defines AI decisioning platforms as:

Software that provides enterprise business and technology teams with tools to author, automate, and ameliorate business decision logic in a wide variety of applications by leveraging combinations of decision intelligence technologies such as business rules, machine learning models, mathematical optimizations, and more.

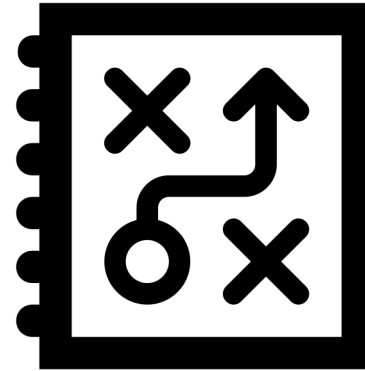
AI Decisioning Platforms Bring The Best Decision Intelligence Technologies Together.



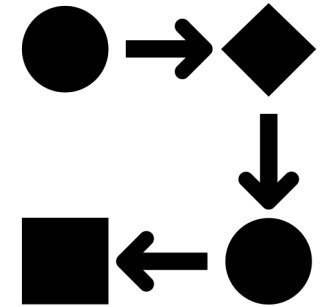
Business Experts



Analytics



AI



Enterprise Automation

Decisioning use cases exist across operational business processes.

1. Lending Decisions
2. Fraud detection
3. Regulatory Compliance
4. Customer experience and offers
5. Risk management
6. Any automated decision in any business process



There are as many AI Decisioning use cases as there are business processes.

It's common for a single enterprise use case to yield millions in economic value.

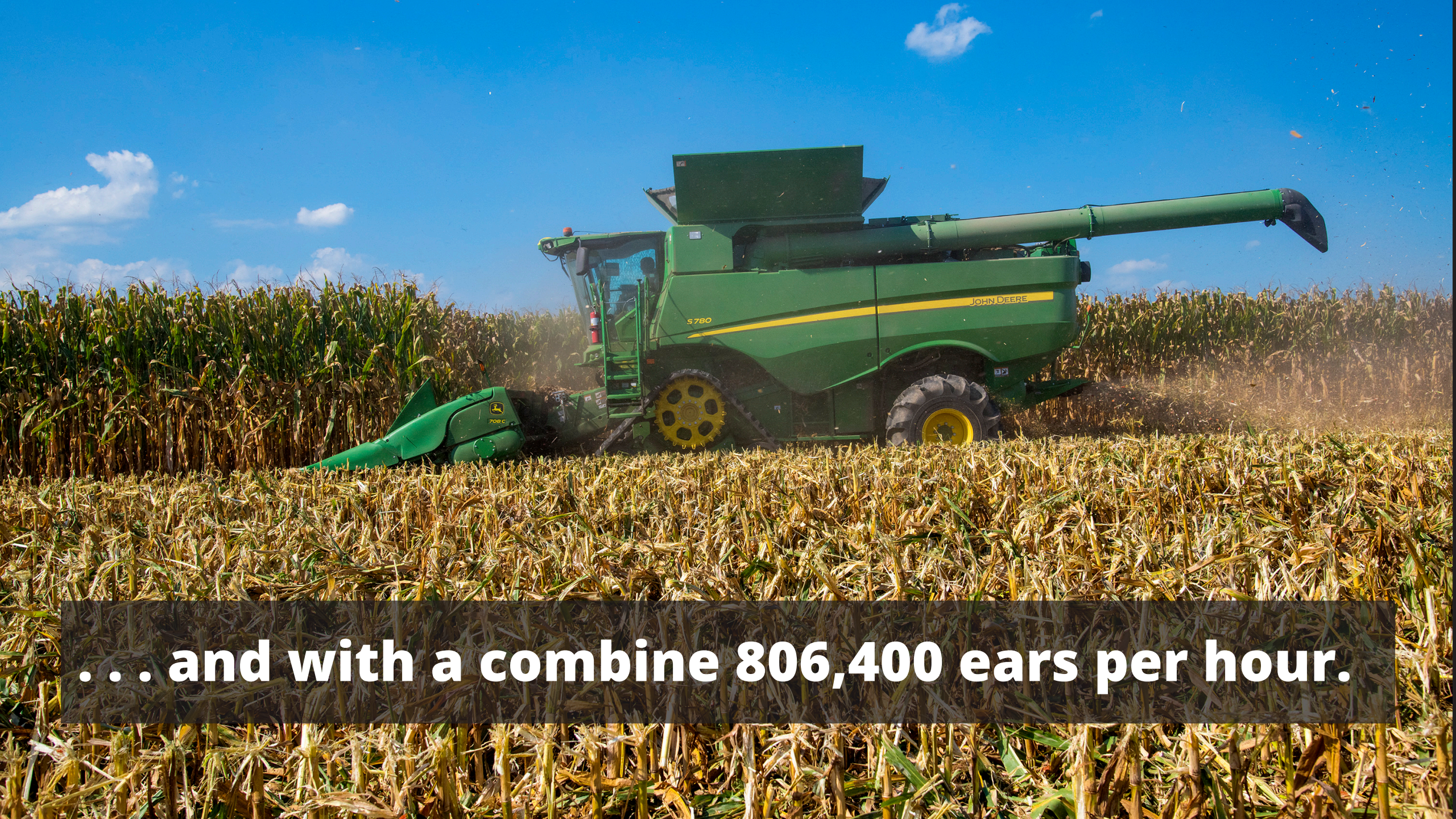


Essential foundations of AI Decisioning platforms

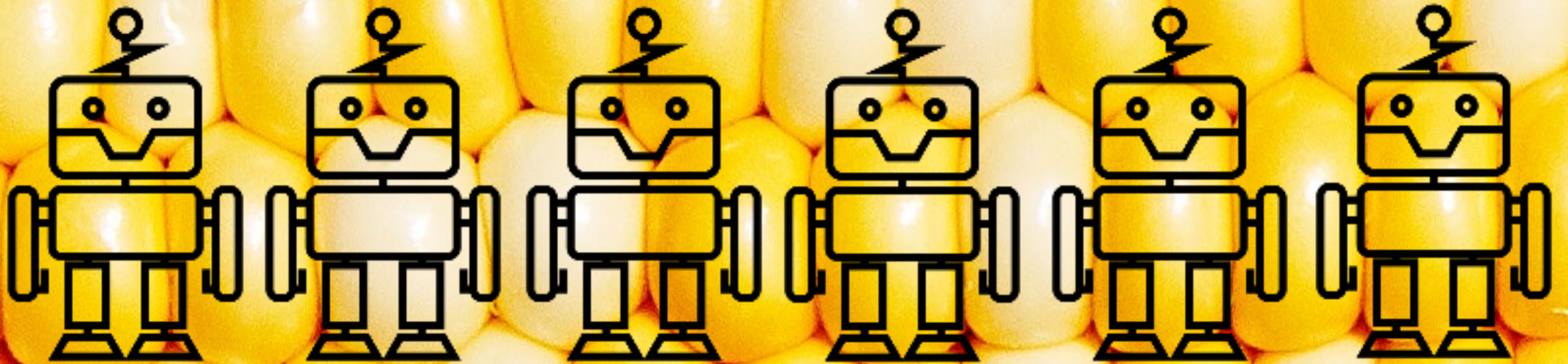
1. Keep human experts in control
2. Can combine a broad number of decision intelligence technologies
3. Support rapid learning loops
4. Have industry-specific solution accelerators



A champion farmer can pick 480 ears of corn per hour.



... and with a combine 806,400 ears per hour.



**AI Decisioning Platforms are the
combines of enterprise decisions.**

7

Platform

Differentiators

1 Data

Security

110010011011

Transactions

0100110011

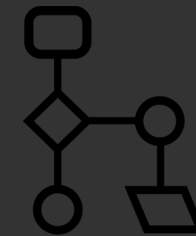
Historical

01001001

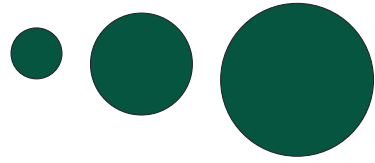
Customer data

0100

Connect to data sources needed by decision logic.



Feature (signal) management catalog.



**Algorithms get all
the press, but it's
data that leads to
success.**

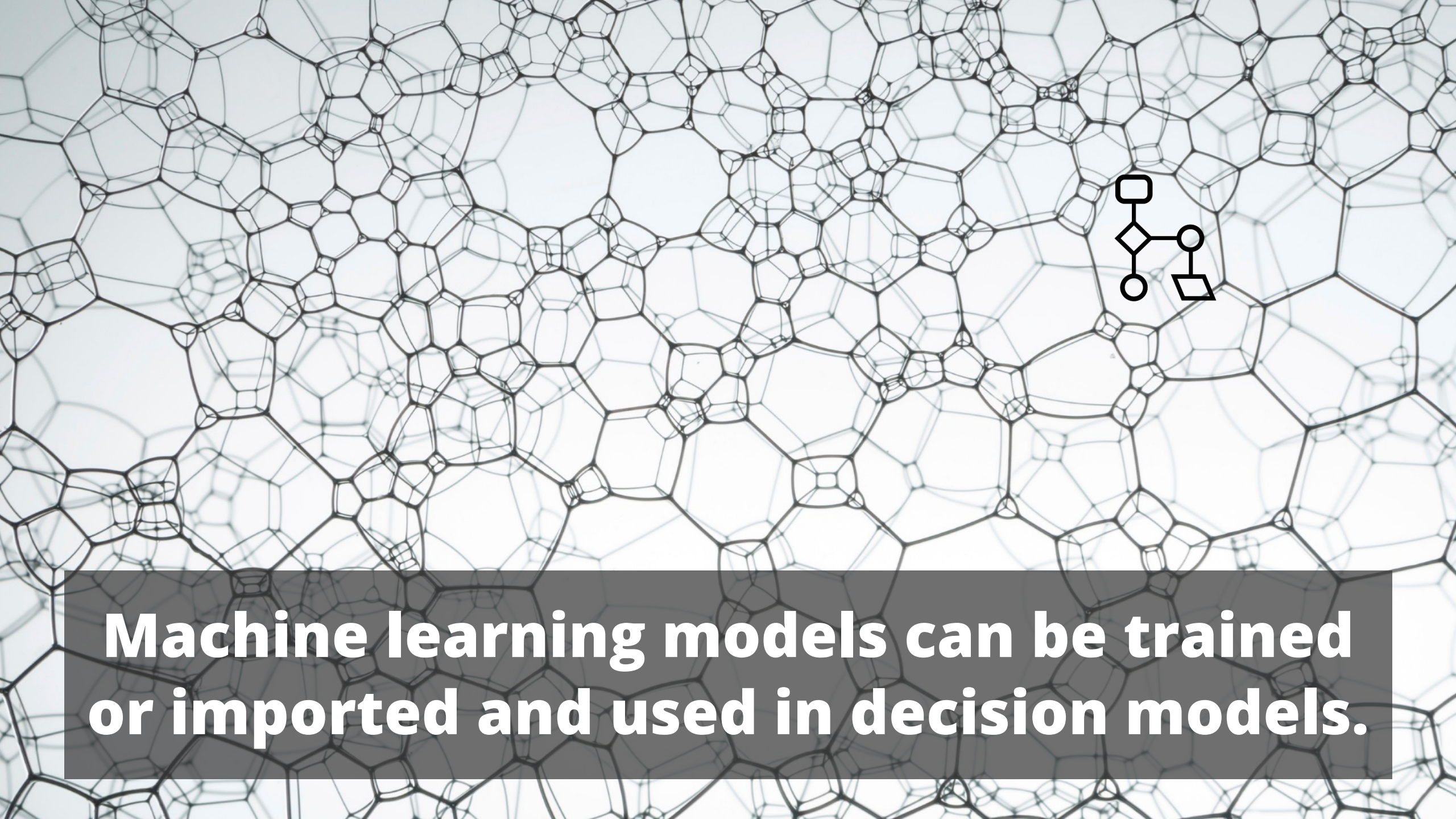
2 Intelligence




Statistical and queryable analytics.



Constraint-based optimization

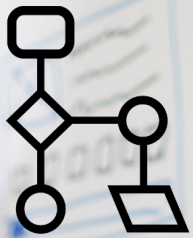
The background of the image is a detailed, grayscale microscopic view of plant cells, showing a complex network of cell walls forming various polygonal shapes. In the upper right quadrant, there is a small, stylized diagram of a neural network. This diagram consists of several interconnected nodes: a square at the top, a diamond in the middle, and two circles below it. Lines connect these nodes to each other and to a trapezoidal shape on the right, representing a simplified neural network structure.

Machine learning models can be trained or imported and used in decision models.

A woman with long dark hair, wearing a black top and a silver watch, is sitting at a desk in a home office. She has her hands clasped under her chin and is looking directly at the camera. The background shows a desk with a computer monitor, a lamp, and a window. Overlaid on the image is semi-transparent code in a monospace font. At the bottom, there is a dark grey rectangular box containing white text.

Human decision logic in the form of rules, policies, knowledge, and process.

3 No-code



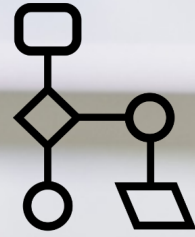
USABILITY

VISUAL DESIGN

INTERDESIGN

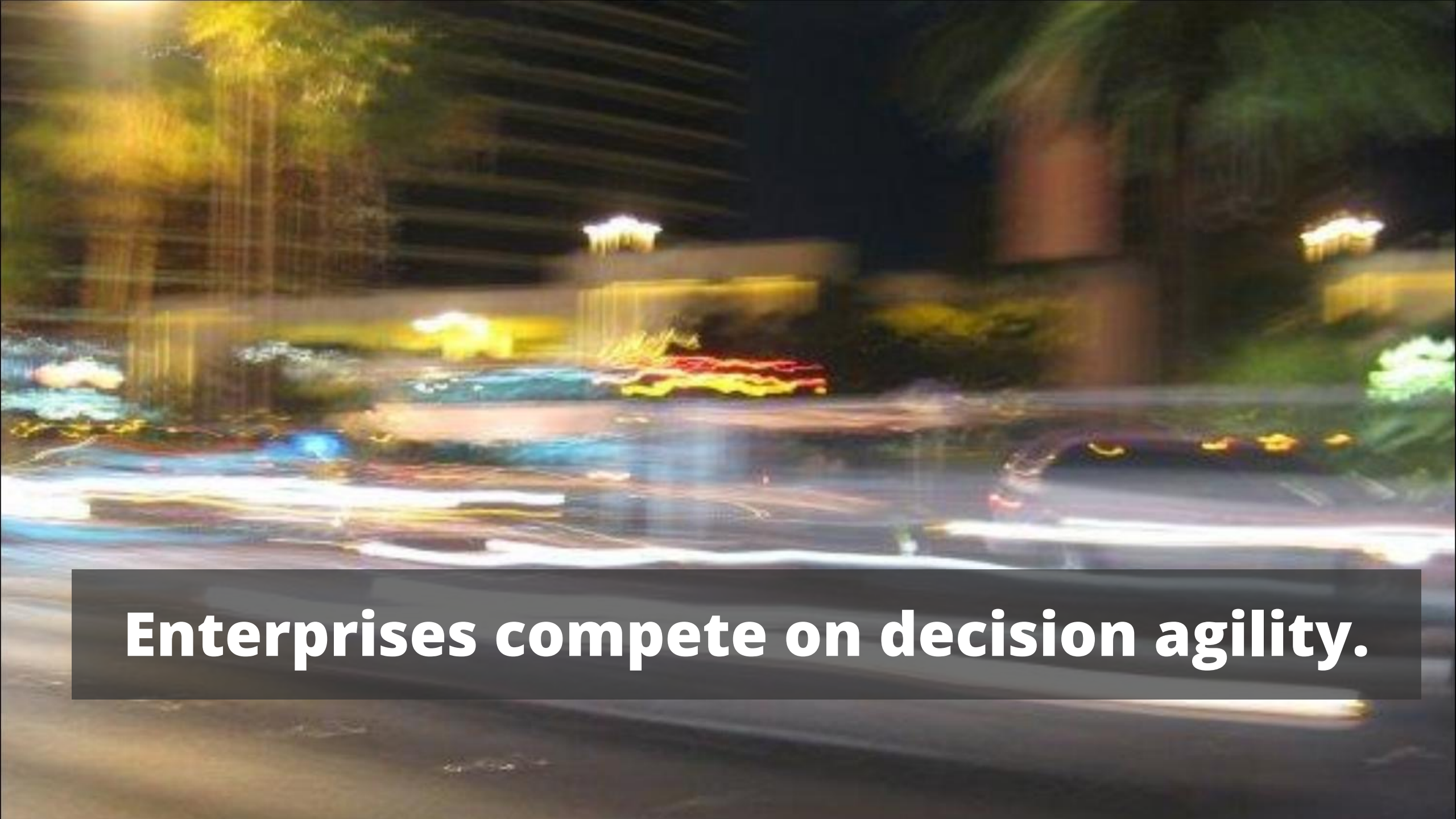
SYSTEM PERFORMANCE

Decision logic design tools designed for business experts (versus software experts).



**Productivity tools for data engineers,
data scientists, and developers.**

4 Orchestration



Enterprises compete on decision agility.

The image shows three people in silhouette, standing in a modern office or conference room. They are positioned in front of a large window with a grid pattern, through which bright light is streaming. The person on the left is a man with glasses, gesturing with his hand. The person in the middle is a woman with her hair in a braid. The person on the right is a man. They appear to be in a collaborative discussion.

**Orchestration tools to enable quick people,
process, and technology composability.**

5 Trust



Explainability to understand the range of decision outcomes.



Business simulation to test strategic hypothesis.

6 Governance



Governance to deploy, monitor AI decisions in production.

7 Scalability

A photograph of a row of classical columns, likely from a government building or museum. The columns are made of light-colored stone and feature fluted shafts. The lighting is bright, creating strong shadows and highlights. A dark, semi-transparent horizontal bar is overlaid across the middle of the image, containing the text "Architecture: Fault tolerant" in white, bold, sans-serif font.

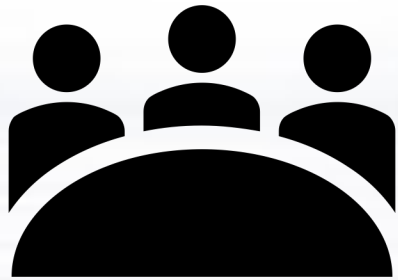
Architecture: Fault tolerant

A close-up photograph of a stream with a US dollar bill floating on the surface. The water is dark and turbulent, with many ripples and small waves. The dollar bill is partially submerged, with its top edge above the water. The background is dark and out of focus, showing more of the stream and some rocks.

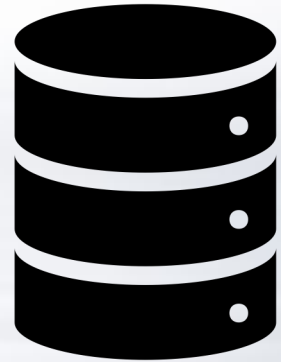
**Architecture: Low-latency,
high-throughput**



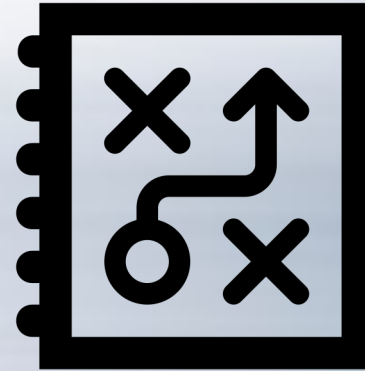
Decisions



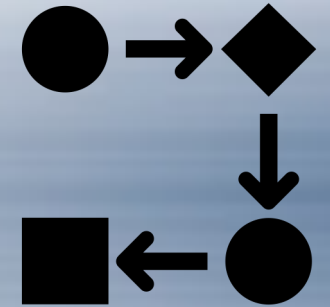
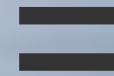
Human experts



Analytics



AI



Decisions

AI decisioning automates the finest decisions.

Forrester Recommendations

1. Focus automation on decisions.

2. Implement a strategic AI decisioning platform.

3. Compete on decisions.

Thank You.

Mike Gualtieri

Vice President, Principal Analyst

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BOLD

AT

WORK