



The Sentient Enterprise: The Future of Analytics and Business Decision Making

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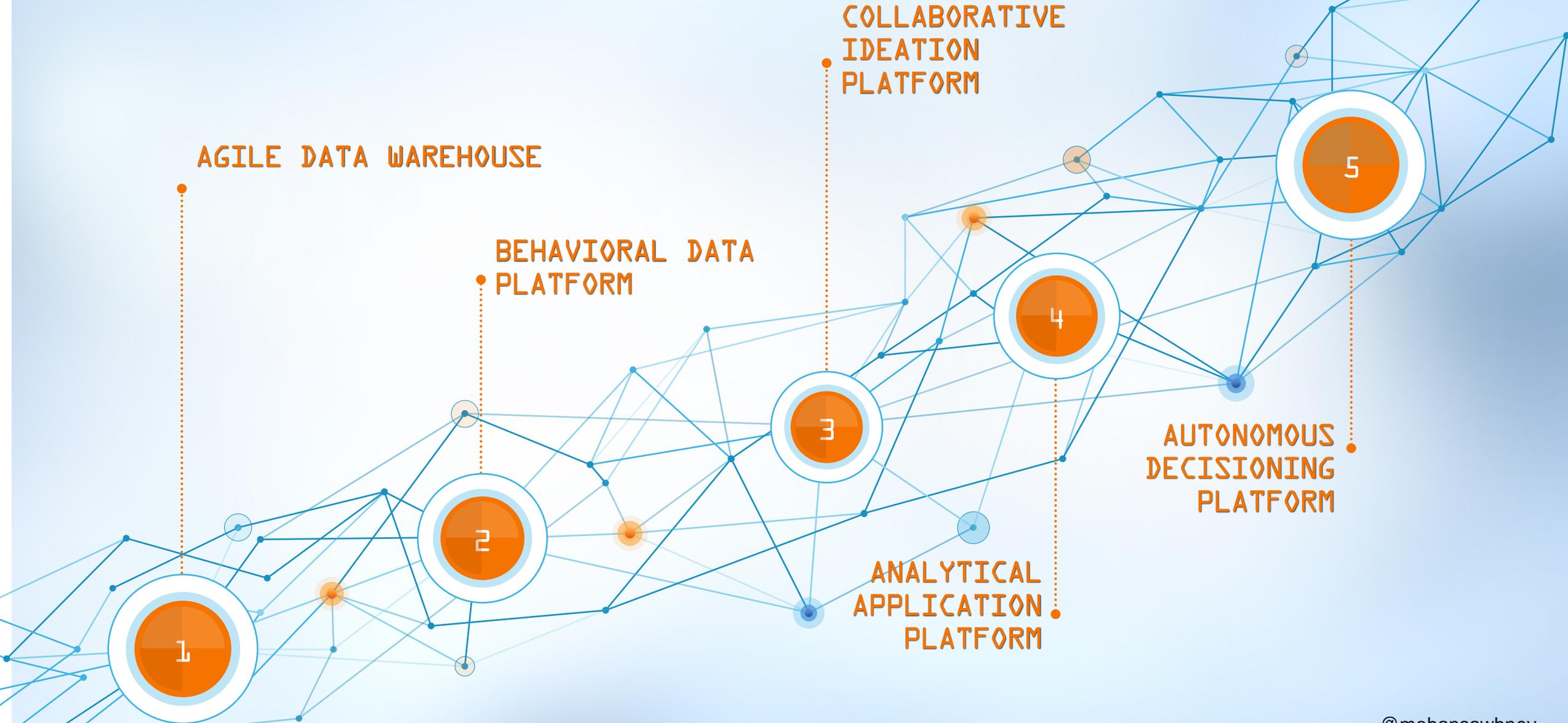


TOWARDS THE SENTIENT ENTERPRISE



A COMPANY AS A SINGLE ORGANISM

FIVE STAGES



DEFINITION OF A PLATFORM

A platform does not refer to hardware but rather a capability that is inclusive of people, process, and technology to achieve agility.

FIVE STAGES

AGILE DATA PLATFORM

The agile data platform moves traditional central DW structures to a balanced decentralized framework built for agility.

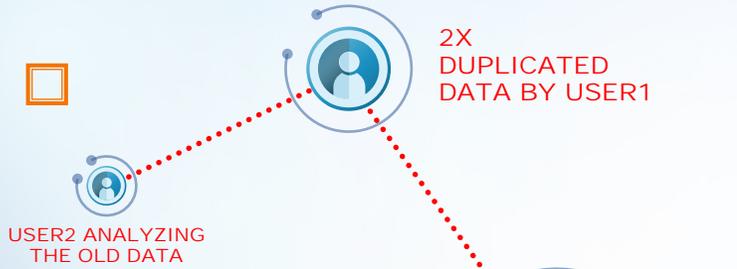


AGILITY

RETAIN DATA AT SCALE

Loosen roadblocks, democratize data,
breakdown silos and analyze data
at massive scale

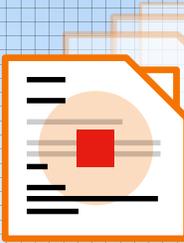
EMPTY
SANDBOX



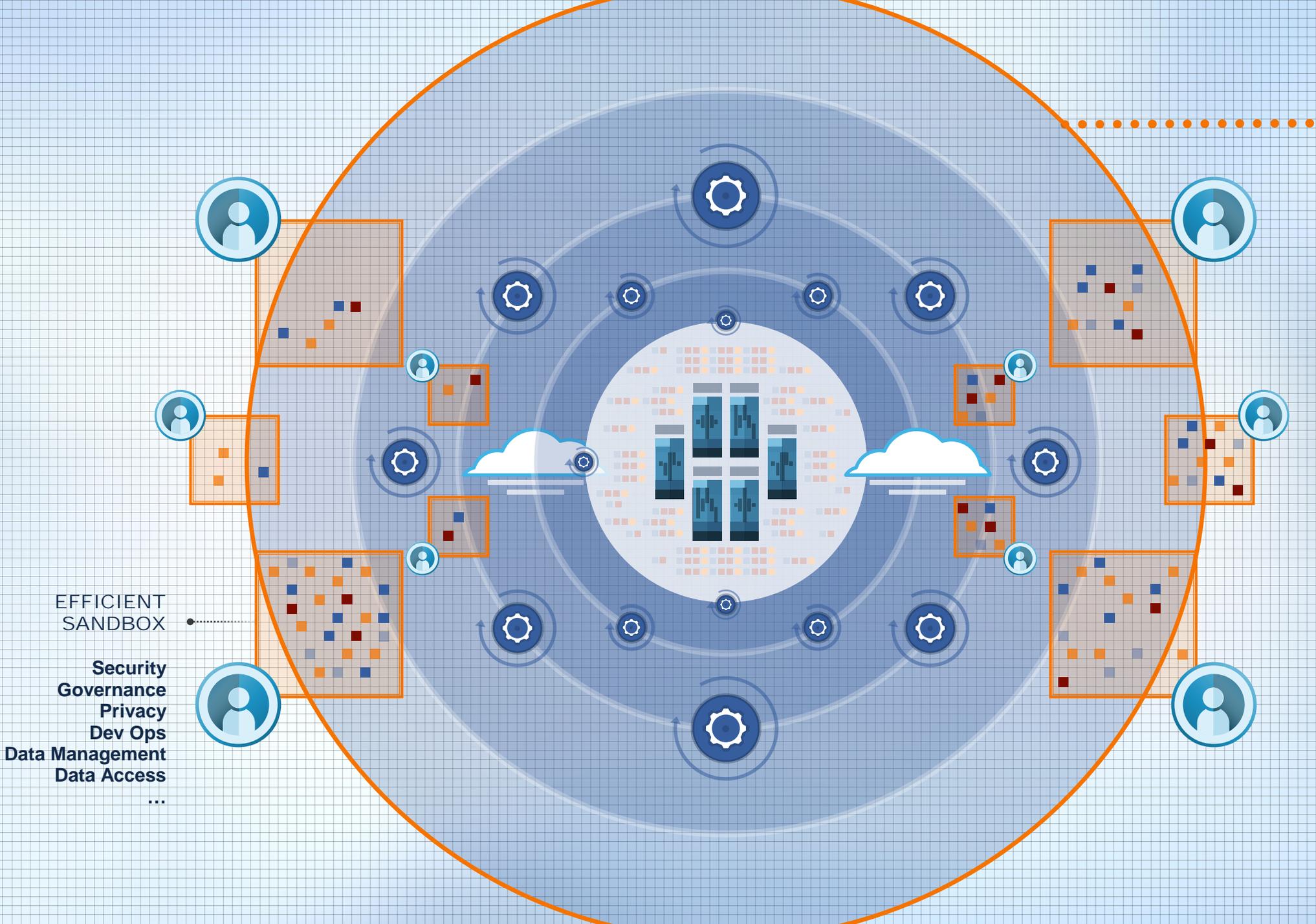
DATA DUPLICATED
IN DATA SILO

ORIGINAL
DATA



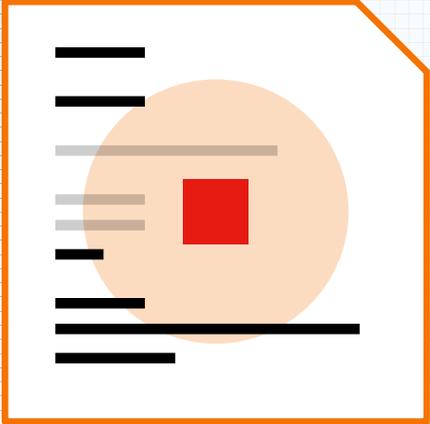
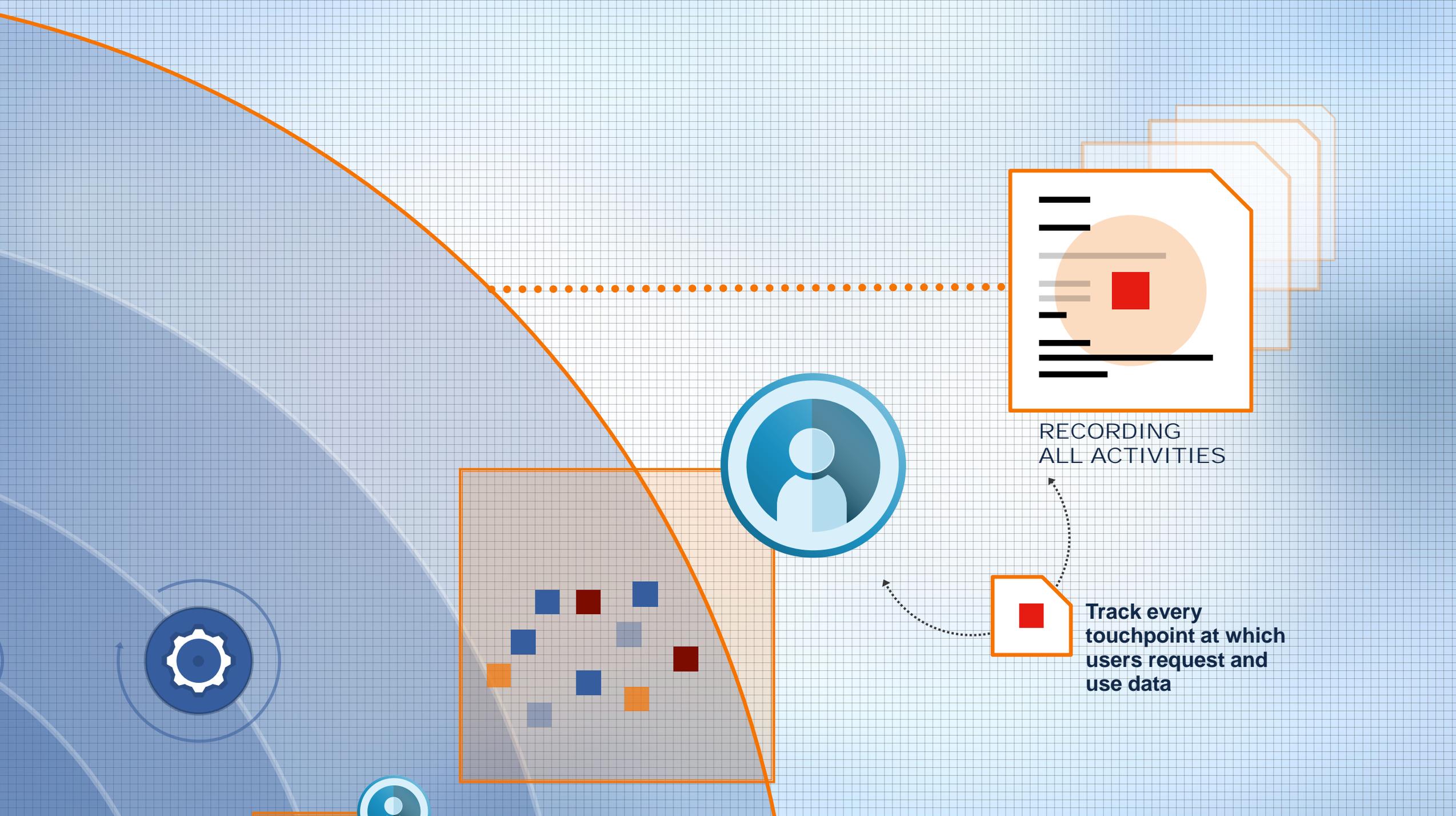


RECORDING
ALL ACTIVITY



EFFICIENT
SANDBOX

- Security
- Governance
- Privacy
- Dev Ops
- Data Management
- Data Access
- ...

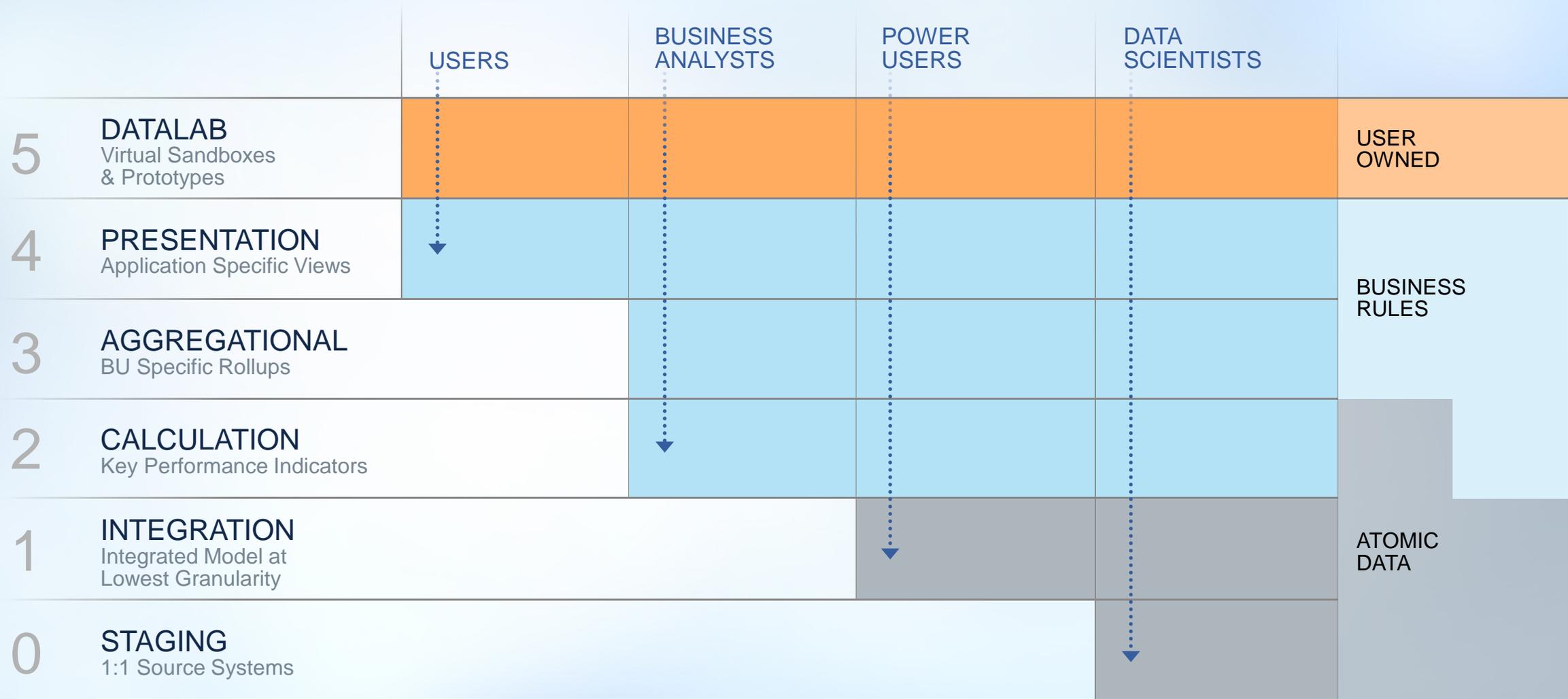


RECORDING
ALL ACTIVITIES



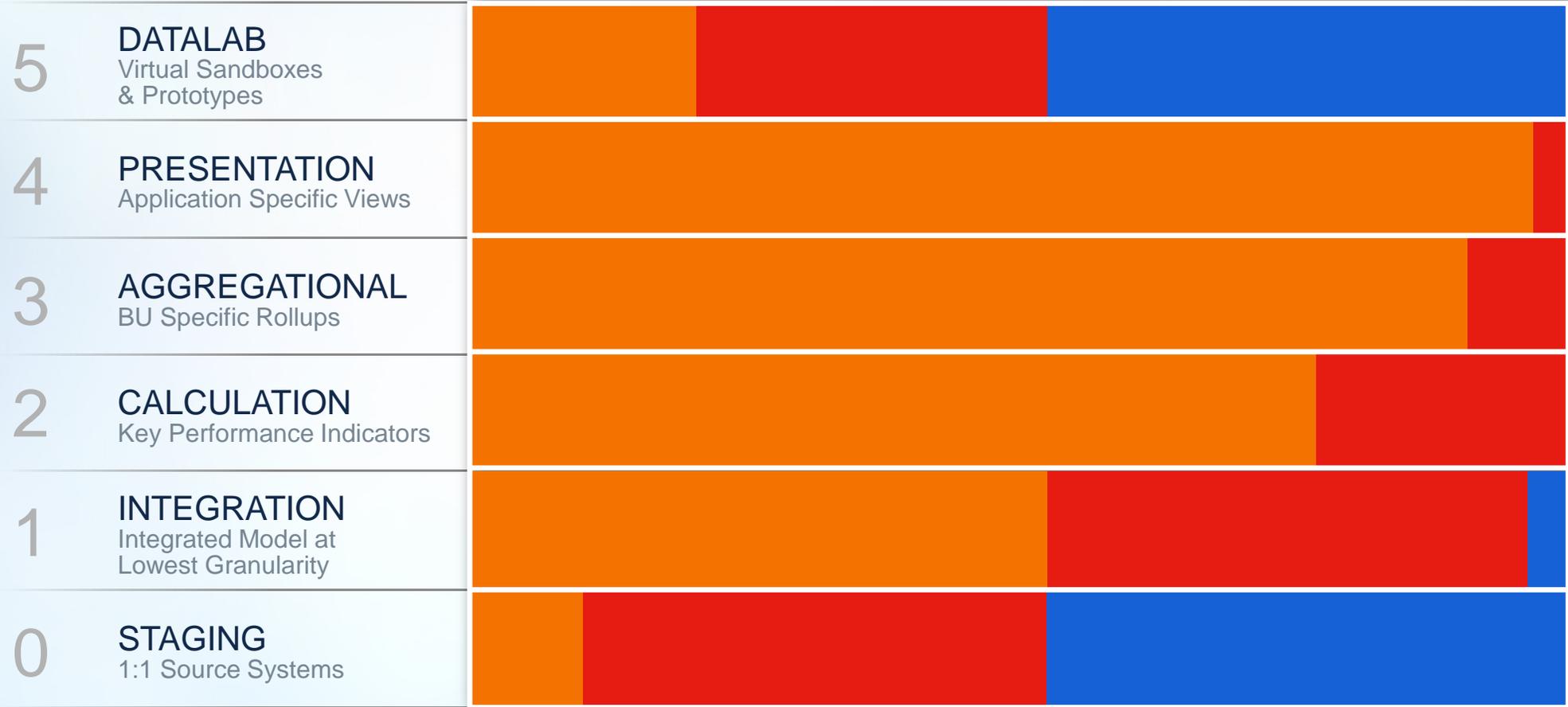
Track every
touchpoint at which
users request and
use data

LAYERED DATA ARCHITECTURE



LAYERED DATA ARCHITECTURE

● TIGHTLY COUPLED ● LOOSELY COUPLED ● NON - COUPLED





CHALLENGES



SILOED IT



OUTDATED
ANALYTICS



+200
DATA MARTS



OUTCOMES



One agile data environment

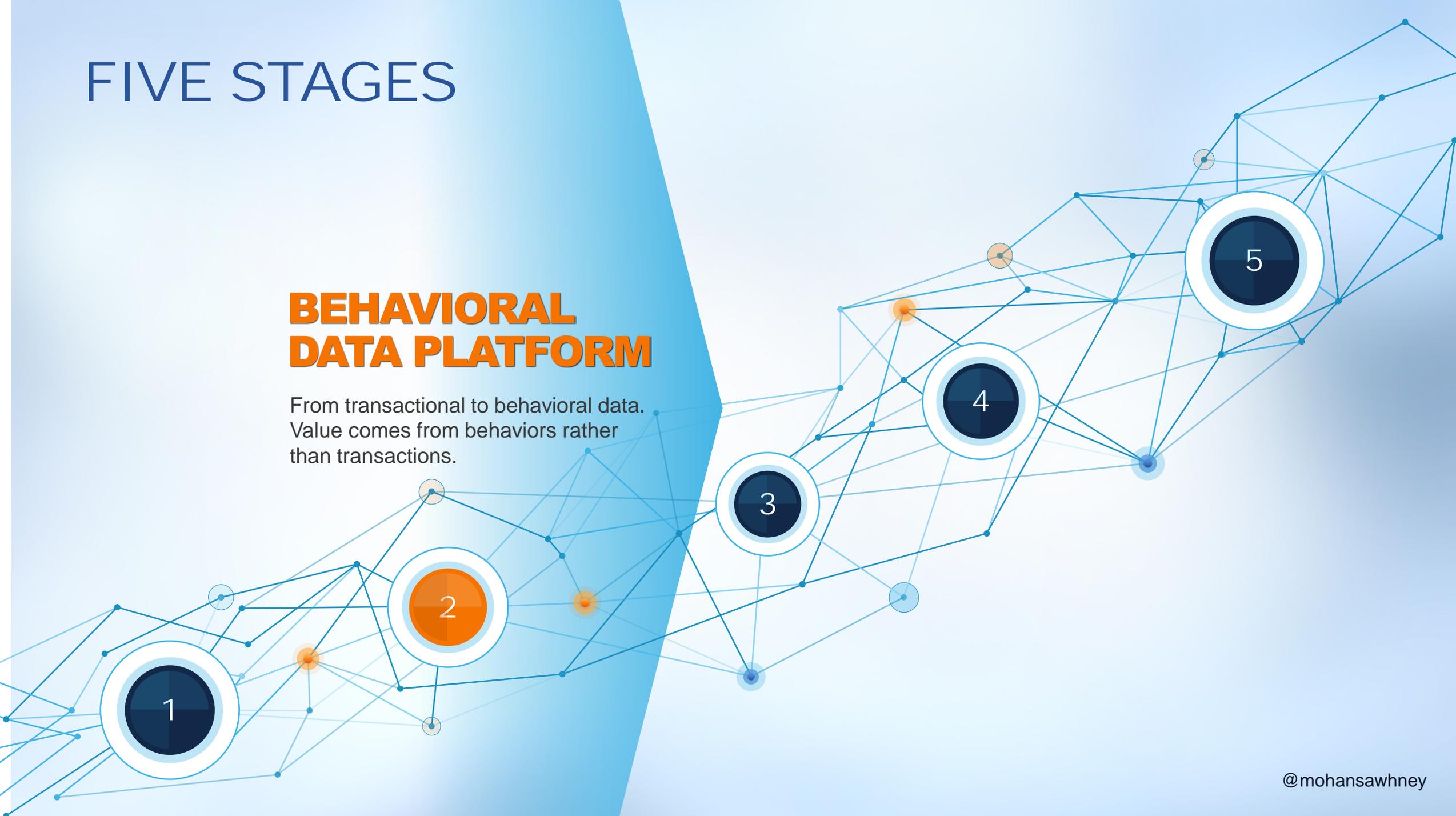
Improved decision-making

New data-centric culture

FIVE STAGES

BEHAVIORAL DATA PLATFORM

From transactional to behavioral data.
Value comes from behaviors rather
than transactions.



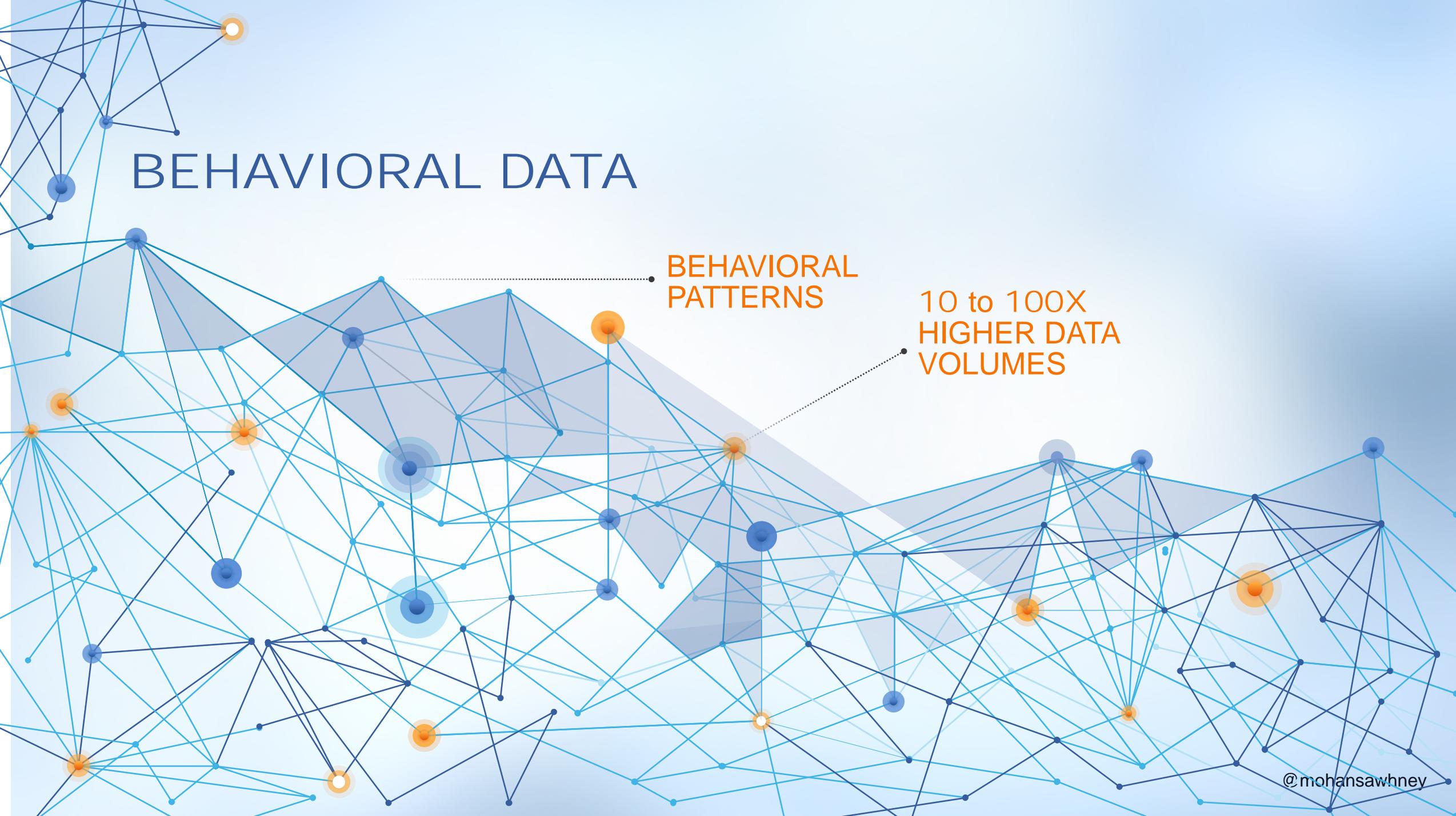
BEHAVIOR

UNDERSTAND AND INTERACTIONS

Use patterns and context in human and machine behavior to predict performance and inform new strategies.

TRANSACTIONAL DATA



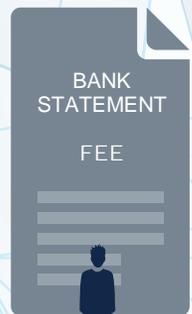


BEHAVIORAL DATA

BEHAVIORAL
PATTERNS

10 to 100X
HIGHER DATA
VOLUMES

CUSTOMER BEHAVIOR



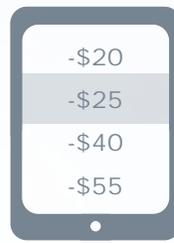
Customer is charged a fee



Customer contacts the call center



Customer searches the web for bank policies



Account transactions declined



Customer interacts with the bank in person

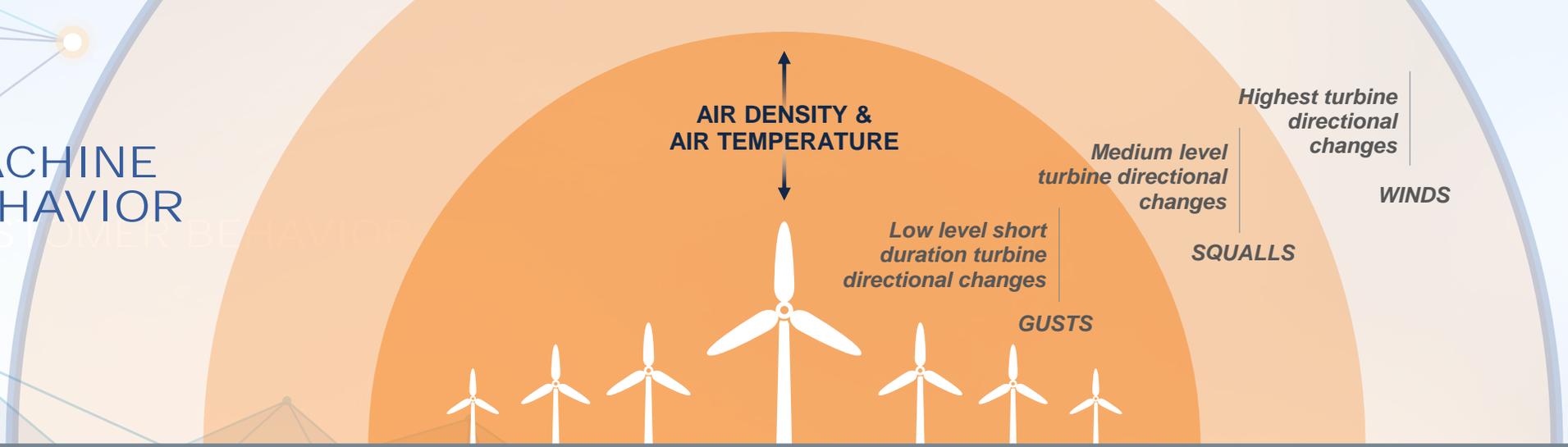


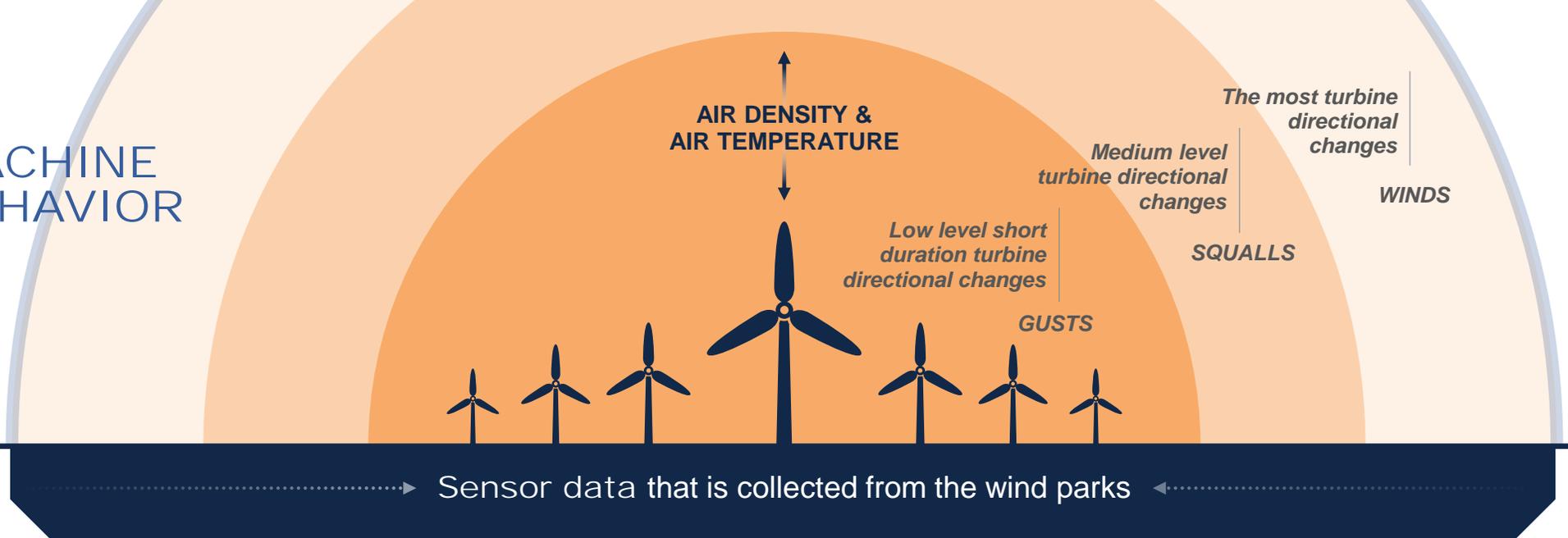
Customer cancels his account and leaves the bank



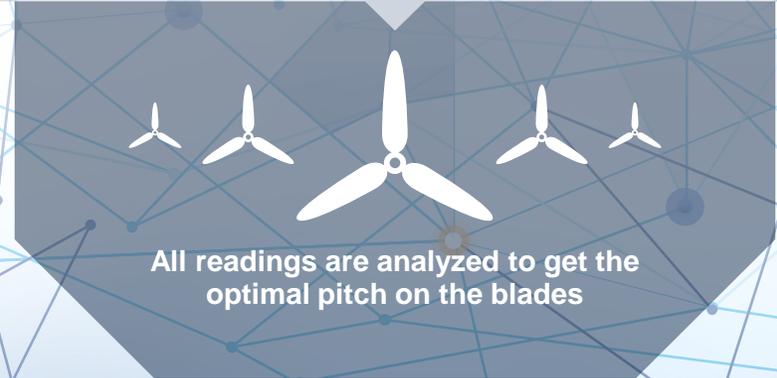
MACHINE BEHAVIOR

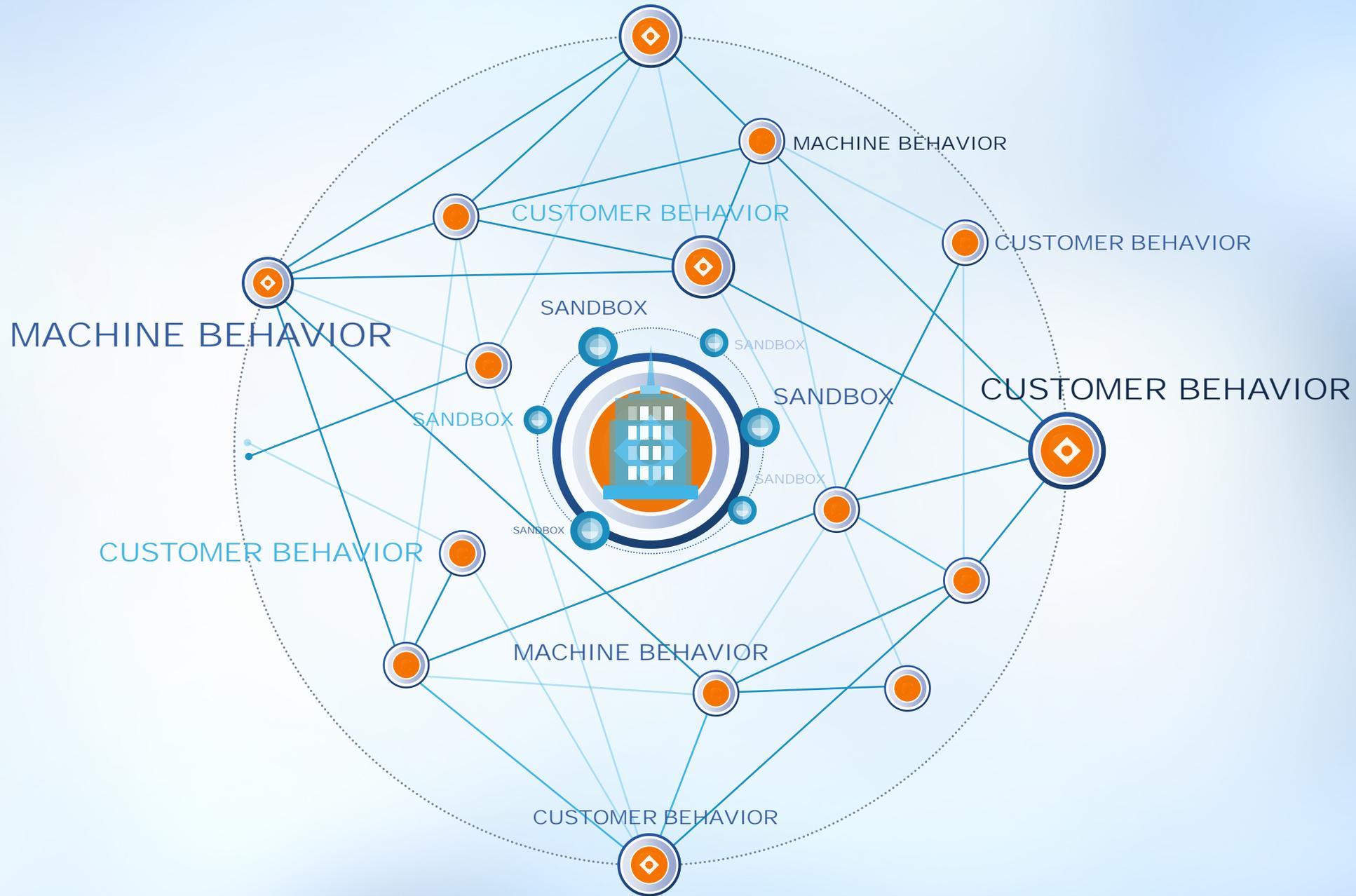
CUSTOMER BEHAVIOR





-  **Wind power capacity**
-  **Wind speed at hubs**
-  **Gearbox readings**
-  **Hydraulic measurements**
-  **Turbine brakes quality**







CHALLENGES



STAY
RELEVANT



UNDERSTAND
BEHAVIOR



PROTECT
REVENUE EROSION



verizon[✓]

OUTCOMES



Predictive modeling
for customer churn

Data-driven
pricing campaigns

Avoided millions
in loss

FIVE STAGES

COLLABORATIVE IDEATION PLATFORM

LinkedIn for analytics. From centralized metadata to crowd-sourced collaboration. Social interactions connect the data within the enterprise.



INNOVATE AND WORK TOGETHER

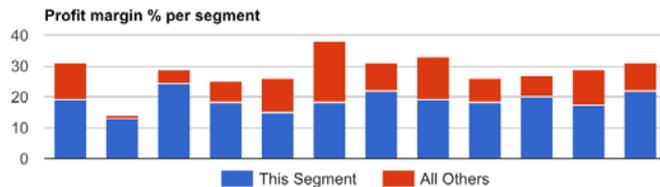
Foster an analytics environment where many different people can collaborate on data and share ideas

Who are my best customers?

We've compiled the most relevant answers to your query

Possible answer: Companies with 10-20k employees, founded after 2003

Profit Margin
31.2 %
from sales in this segment



[VIEW & EDIT QUERY](#)

Similar searches to this search

- Who are my loyal customers?
John J. searched at 9:31 AM
- Who are my profitable customers?
Mary S. searched Tuesday
- What are the customer segments?
Barry O. searched Monday

[→ MORE](#)

Related Questions & Answers conversations similar to your search

- Where does customer data live?
Milly P. asked at 8:24 AM
- What defines "best" customer?
Mary M. asked yesterday
- How do you calculate CSI?
Oliver R. asked last week

[→ MORE](#)

Related Data App Engines app engines powering your query

- Segmentation Engine **382 MB** Memory
ran at 6:05 AM
- CRM Data Sync **256 MB**

Related Streaming Data Sources data feeding this query

- software.ecommerce.com **21.2 K** Records
updated just now
- iPhone App **2.5 M**



Intelligent Answers

Who are my best customers?

We've compiled the most relevant answers to your query

Edit Query

```

SELECT customer| x ,pagerank,review,out_polarity,normalized_sentiment
FROM (S
(ON cdr customer_name PARTITION BY callingnumber
ON cust PARTITION BY customerid
ON (sel ust_table) AS "TotalNodesNum" DIMENSION
STARTNO customer_id ENDNODE('callednumber') DAMPFACOR('0.85')
MAXITER customer_address ( '1E-8'))x,
)y
WHERE x
ORDER B
customer_zip
customer_state

```

RUN QUERY FIND SIMILAR

Similar searches to this search

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Related Data App Engines app engines powering your query

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Related Streaming Data Sources data feeding this query

 software.ecommerce.com 21.2 K

Query Suggestions



Questions & Answers

Pinned Questions



Where does customer data live?

The idea is to create an app that the marketers can use by extending the customer influencer index model that calculates customers influence based on relations



What is the definition of "best" customer?

There are many ways to calculate "best" customers. Calculations can be based on total spend over lifetime, purchases within the last 3 months, frequency of shopping, products purchases or a number of different methods.

All Questions

Search



Where does customer data live?

The idea is to create an app that the marketers can use by extending the customer influencer index model that calculates customers influence based on relations

by Milly P. on 8:24 AM

29 views 3 answers



What is the definition of "best" customer?

There are many ways to calculate "best" customers. Calculations can be based on total spend over lifetime, purchases within the last 3 months, frequency of shopping, products purchases or a number of different methods.

by Mary M. on yesterday at 2:31 PM

15 views 2 answers



How do you calculate CSI?

CSI refers to customer satisfaction index that measures the customer sentiment with our products and services. Customers who are satisfied are likely to spend 2.6 times more than customers who are not. Our customer satisfaction index is calculated based on a number of sources

by Oliver R. on Thurs at 9:42 AM

42 views 5 answers

→ MORE



Collaboration

Storytelling

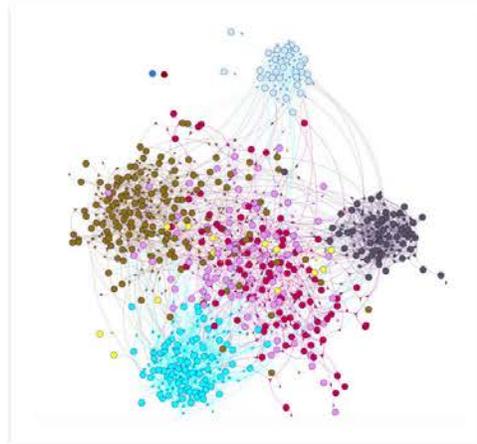


Where does customer data live?

by Bella T. today at 8:24 AM

29 views 3 answers

The idea is to create an app that the marketers can use by extending the customer influencer index model that calculates customers influence based on relations identified across multiple channels. I created a customer network based on information from twitter, facebook, linked in, transactions, and households. This model uses page rank to assign score to each node identified by the customer id. Visual output based on a sigma graph and the code is below:



```
SELECT customerid,pagerank,review,out_polarity,normalized_sentiment
FROM (SELECT*
      (ON cdr_table AS "Edges" PARTITION BY callingnumber
      ON cust_table AS "Nodes" PARTITION BY customerid
      ON (select count(*) from cust_table) AS "TotalNodesNum" DIMENSION
      STARTNODE('callingnumber') ENDNODE('callednumber') DAMPFACOR('0.85')
      MAXITERNUM('25') THRESHOLD('1E-8'))x,
      )y
WHERE x.node=y.customerid
ORDER BY pagerank desc;
```

As you can see, we can identify clusters known as communities and influencers within various communities. I'm building an app that allows end users to select parameters such as product of interest and run the app. Program logic will build a customer network, identify influencers, but I want to overlay this with customer sentiment models based on a specific product. Also the final output will include customers, ID, preferred channel and contact information.

← ANSWER



+1



Correct Answer

by Marky M. today at 8:42 AM

14 upvotes

FIVE STAGES



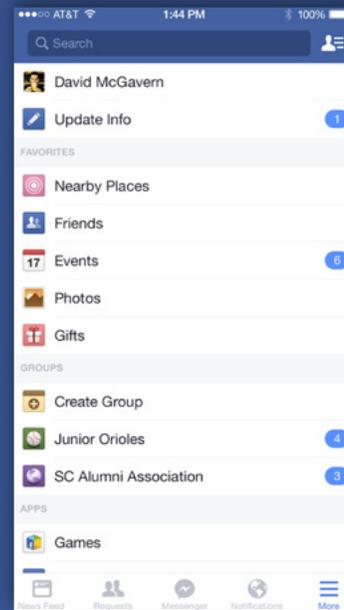
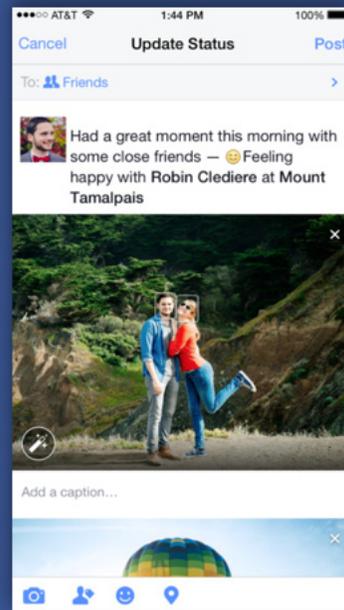
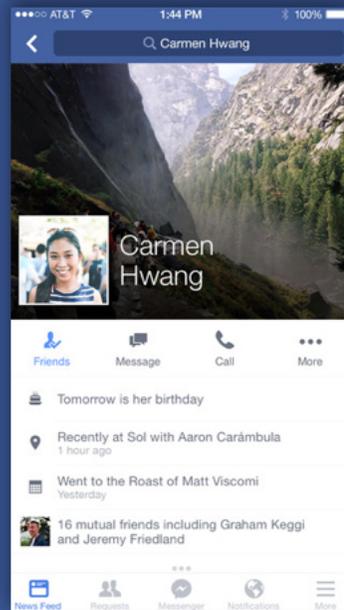
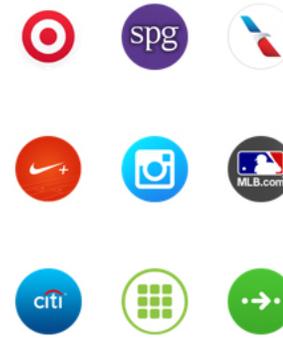
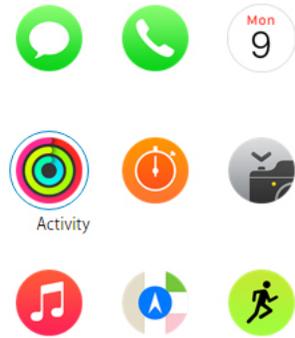
ANALYTICAL APPLICATION PLATFORM

Analytical apps. From static applications and ETL to agile self-service apps. From extraction of data to enterprise listening.

INSIGHT

TURN INTO ACTION

Bring the app-style economy into the enterprise and give everyone access to analytics they can use right away – at scale.



STRESS FREE IT

**ZERO COST
DEPLOYMENT**

EASY ACCESS

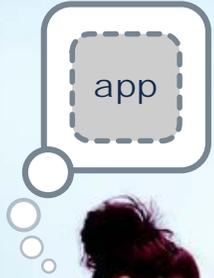
**SIMPLE
DEVELOPMENT
PROCESS**

DEVOPS

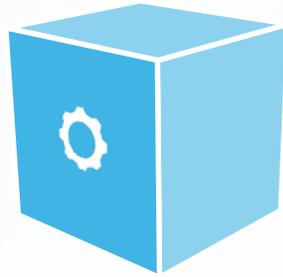
ANALYTICAL APPS



APP IDEA
FROM A NON-EXPERT



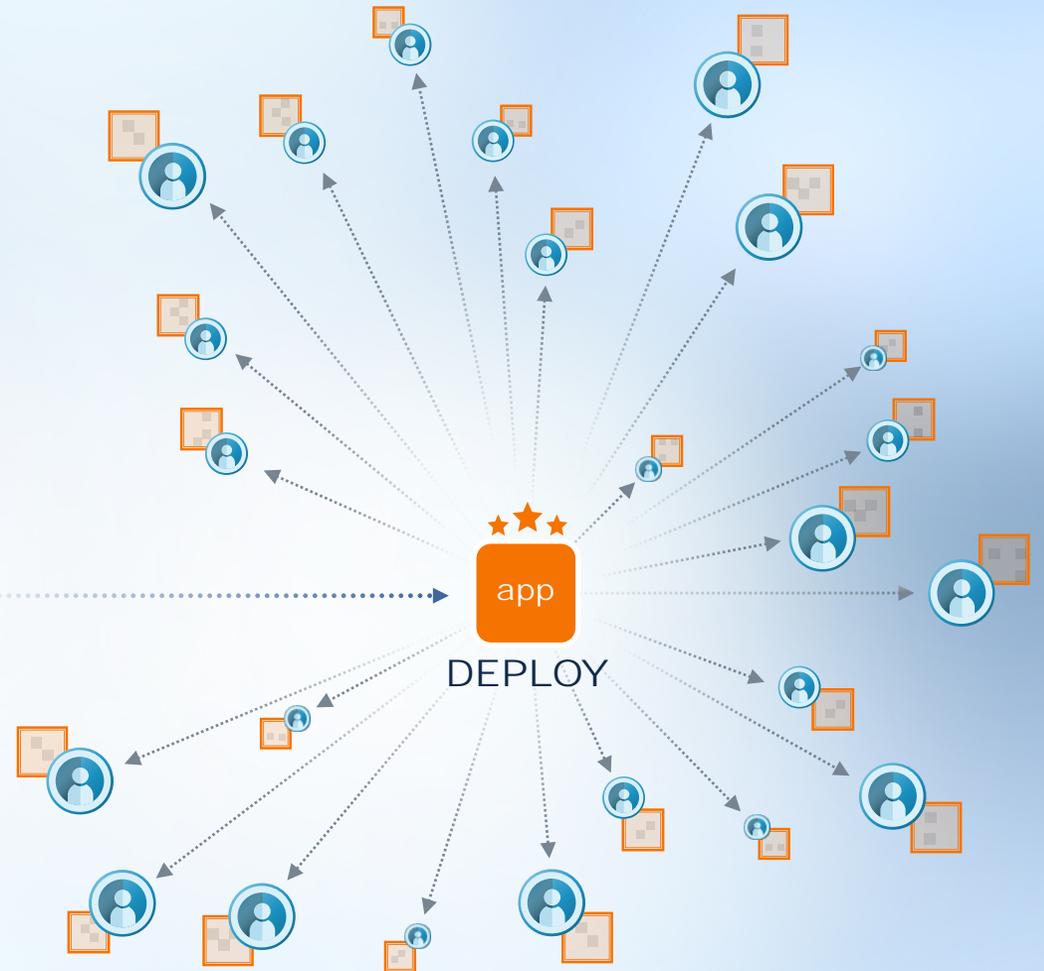
APP
FRAMEWORK



APP



DEPLOY



HOUR 1

HOUR 2

HOUR 3

HOUR 4

HOUR 5

HOUR 6

HOUR 7

HOUR 8

HOUR 9

HOUR 10

My Apps

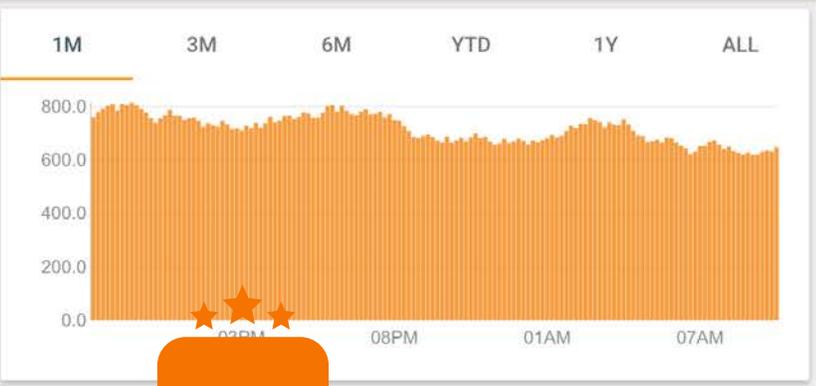


Search

	NAME	OWNER	LAST MODIFIED	
	Workload Analytics	ip384738	3/9/15 11:36 AM	⋮
	Segmentation Engine	kl186023	2/25/15 11:41 AM	⋮
	Transaction Process	kl186023	2/25/15 11:41 AM	⋮
	Category Sales	ip384738	2/25/15 11:43 AM	⋮
	Geographical Sales	rh394824	2/25/15 11:42 AM	⋮
	Business Health	kl186023	2/25/15 11:43 AM	⋮
	Daily Financials	kl186023	3/5/15 2:21 PM	⋮
	Inventory Processing	kl186023	2/25/15 11:43 AM	⋮
	Employee iPhone App	ak395783	2/25/15 11:41 AM	⋮

Segmentation Engine

Customer segmentation engine that runs every hour on sales.



Resources



URLs

- apps.corp.teradata.com/seg-engine UI DNS
- apps.corp.teradata.com/seg-engine/api/v1 RESTful API DNS

Info

My apps
Location

App Platform

FIVE STAGES



AUTONOMOUS DECISIONING PLATFORM

Predictive technologies and algorithms. Decision making with the help of automated algorithms.

90%

TIME WASTED SIFTING THROUGH DATA



Messy Data



Cleansing and refining sources
identifying signals and patterns



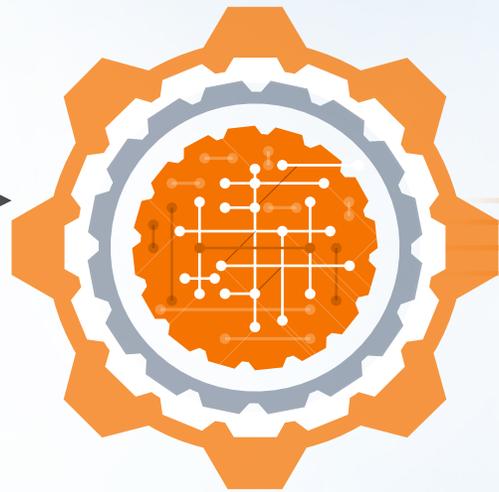
Messy Data

90%
TIME SPENT ON
DECISION MAKING

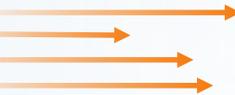


Data
Presented
Simply





ALGORITHMS
-
PATTERN ANALYTICS



DECISION MAKING
BY HUMANS



**AUTOMATED
CARS**



**AUTOMATED
TRADING**

VOLVO

CHALLENGES



ACHIEVING VISION
THROUGH ANALYTICS



CREATING NEXT-GEN
CAR EXPERIENCE



TAP INTO IoT
AND AOT



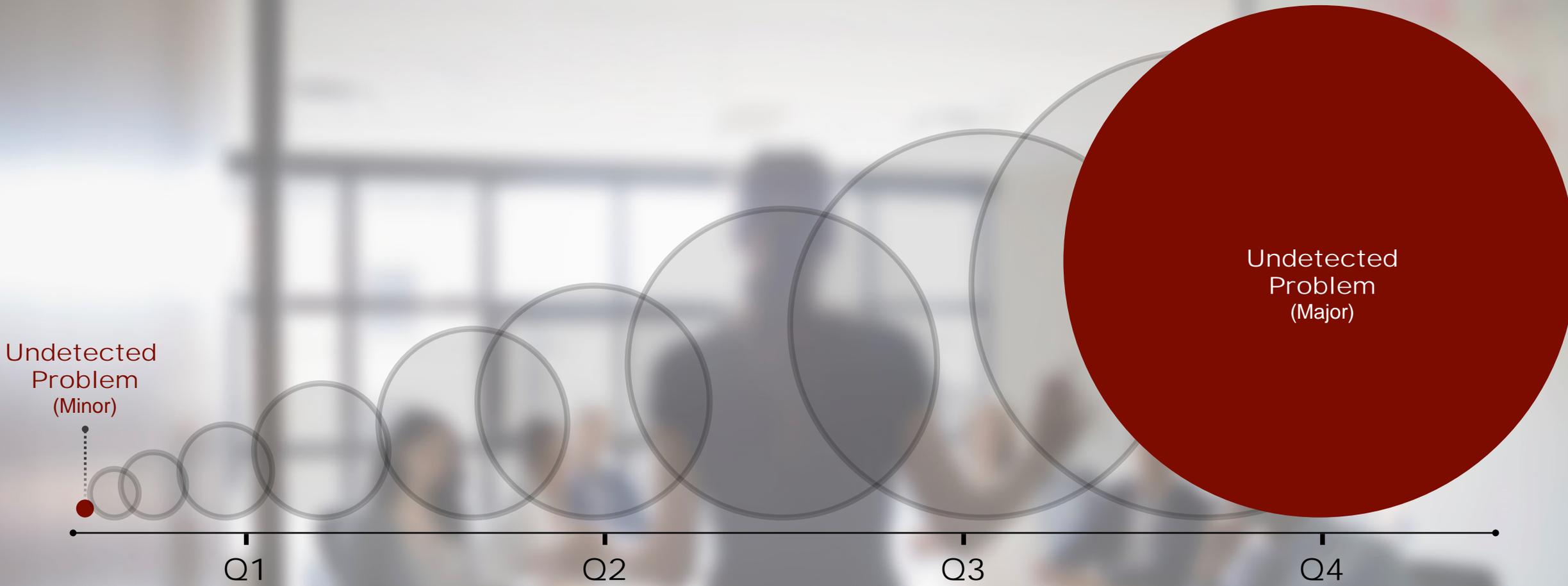
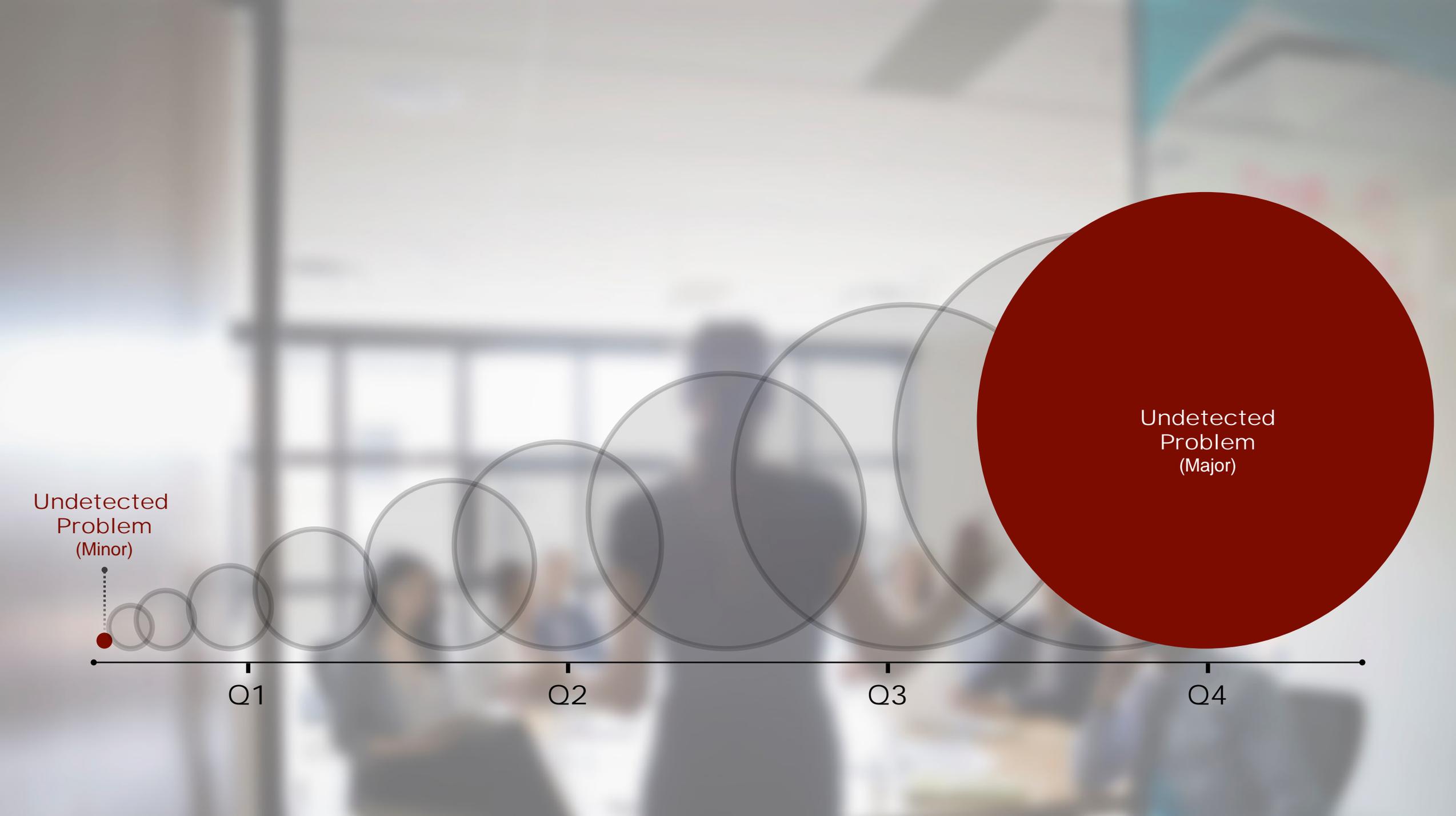
VOLVO

OUTCOMES

AI for
self-driving cars

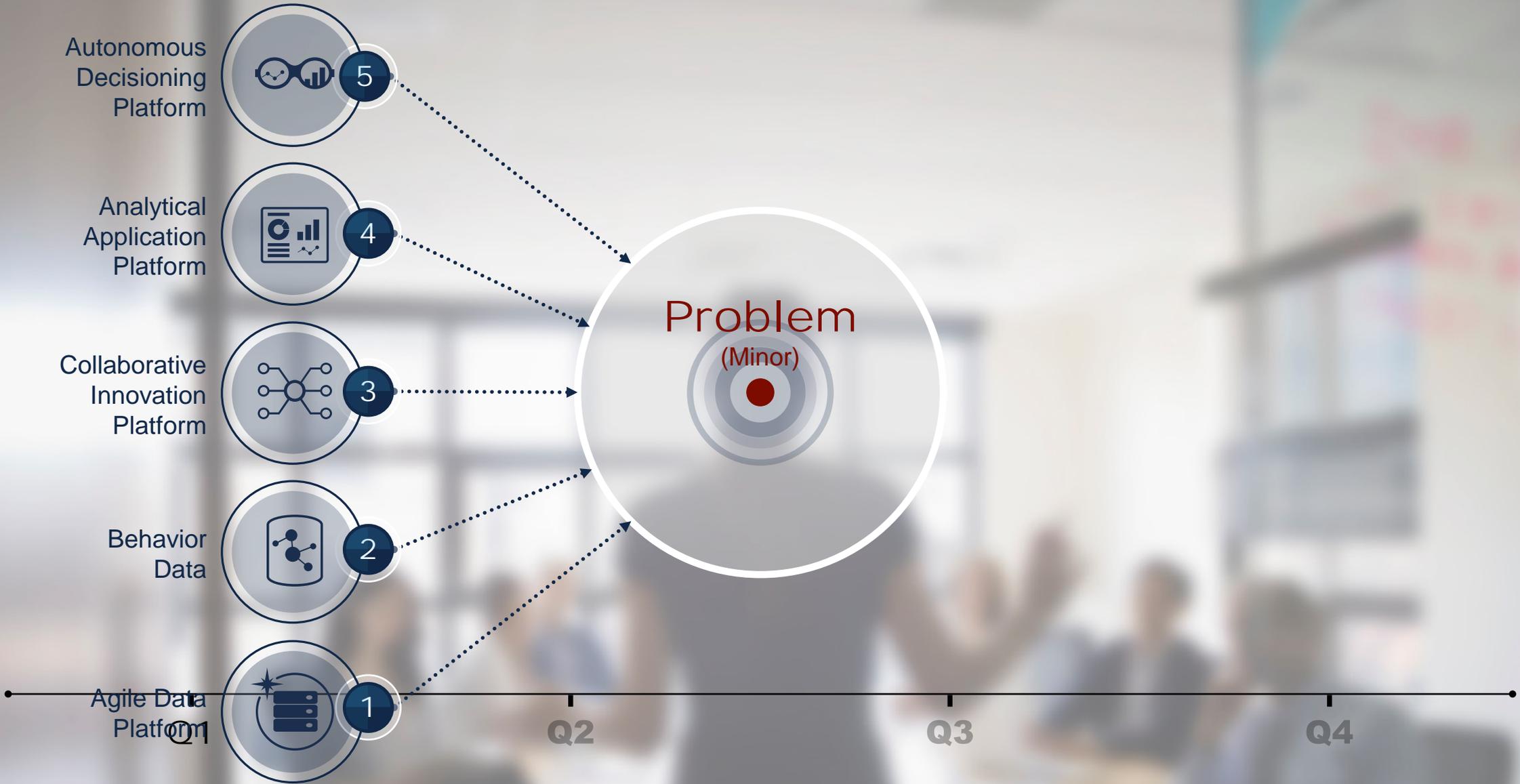
Pioneered safety
innovations

Shift towards
“Transportation-as-a-S”



Problem
Detected
(Solved)





Crisis Averted



REVENUE



SHIFTS OF THE FIVE STAGES

AGILE DATA WAREHOUSE

The Agile Data Warehouse moves traditional central DW structures to a balanced decentralized framework built for agility.

BEHAVIORAL DATA PLATFORM

From Transactional to Behavioral Data. Value comes from behaviors rather than transactions

COLLABORATIVE IDEATION PLATFORM

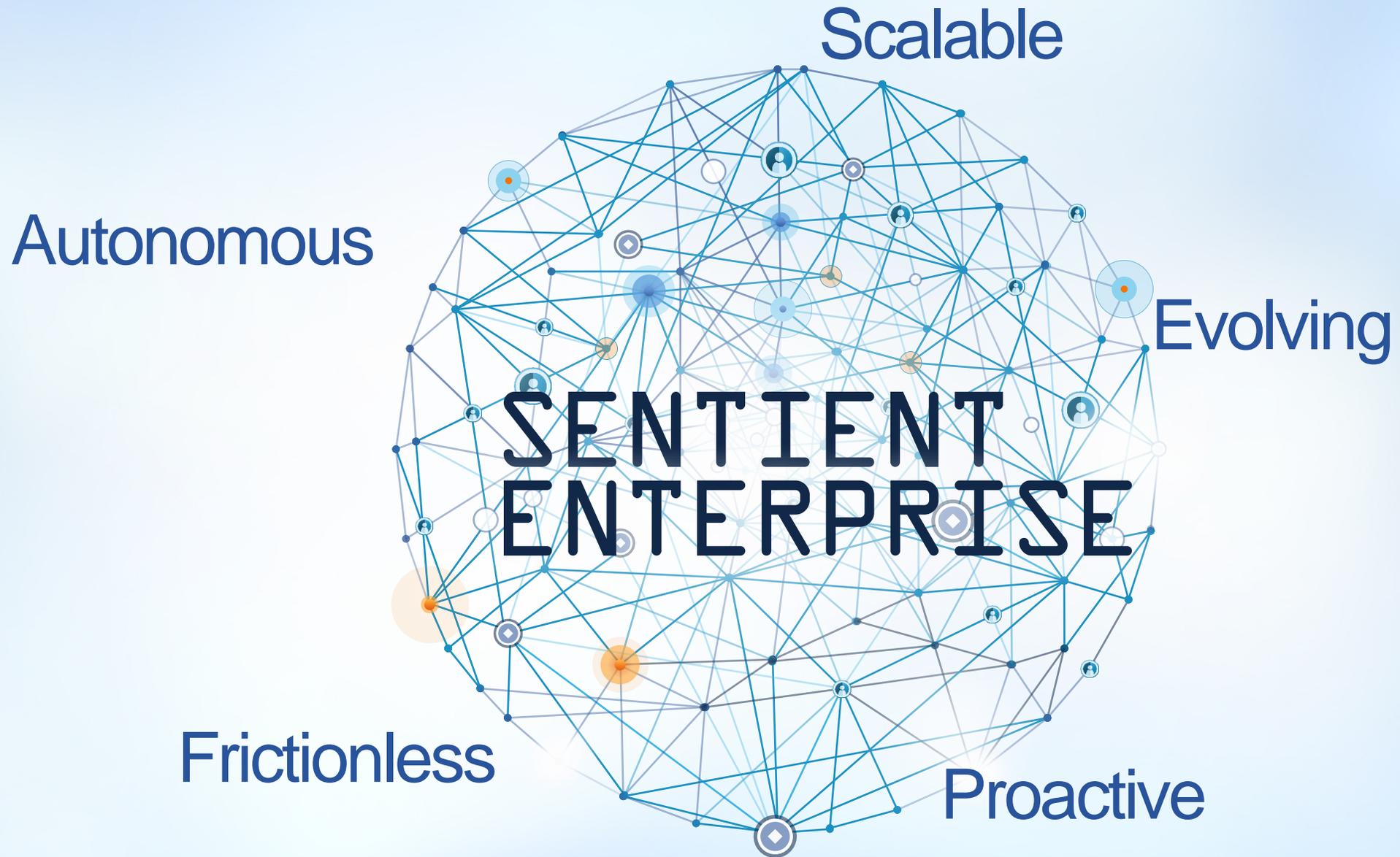
LinkedIn for Analytics. From centralized Meta Data to Crowd Sourced Collaboration. Social interactions connect the data within the enterprise

ANALYTICAL APPLICATION PLATFORM

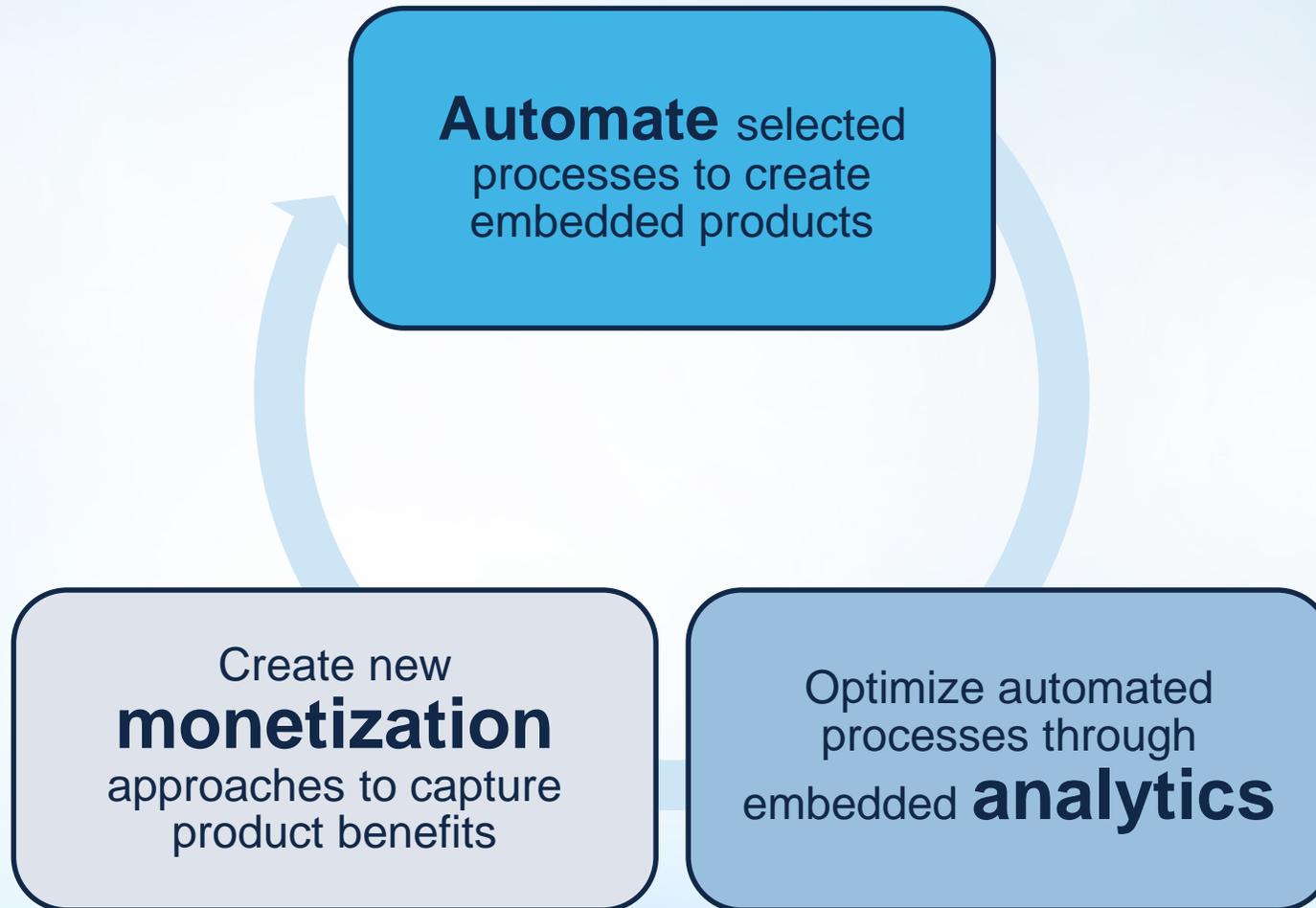
Analytical Apps. From static applications and ETL to agile Self Service Apps. From Extraction of Data to Enterprise Listening.

AUTONOMOUS DECISIONING PLATFORM

Predictive Technologies and Algorithms. From focusing only 10% of time on decision making and 90% of sifting through data to 90% of decision making with the help of automated algorithms



Evolution of Business Operations Management



Embedded Product Management

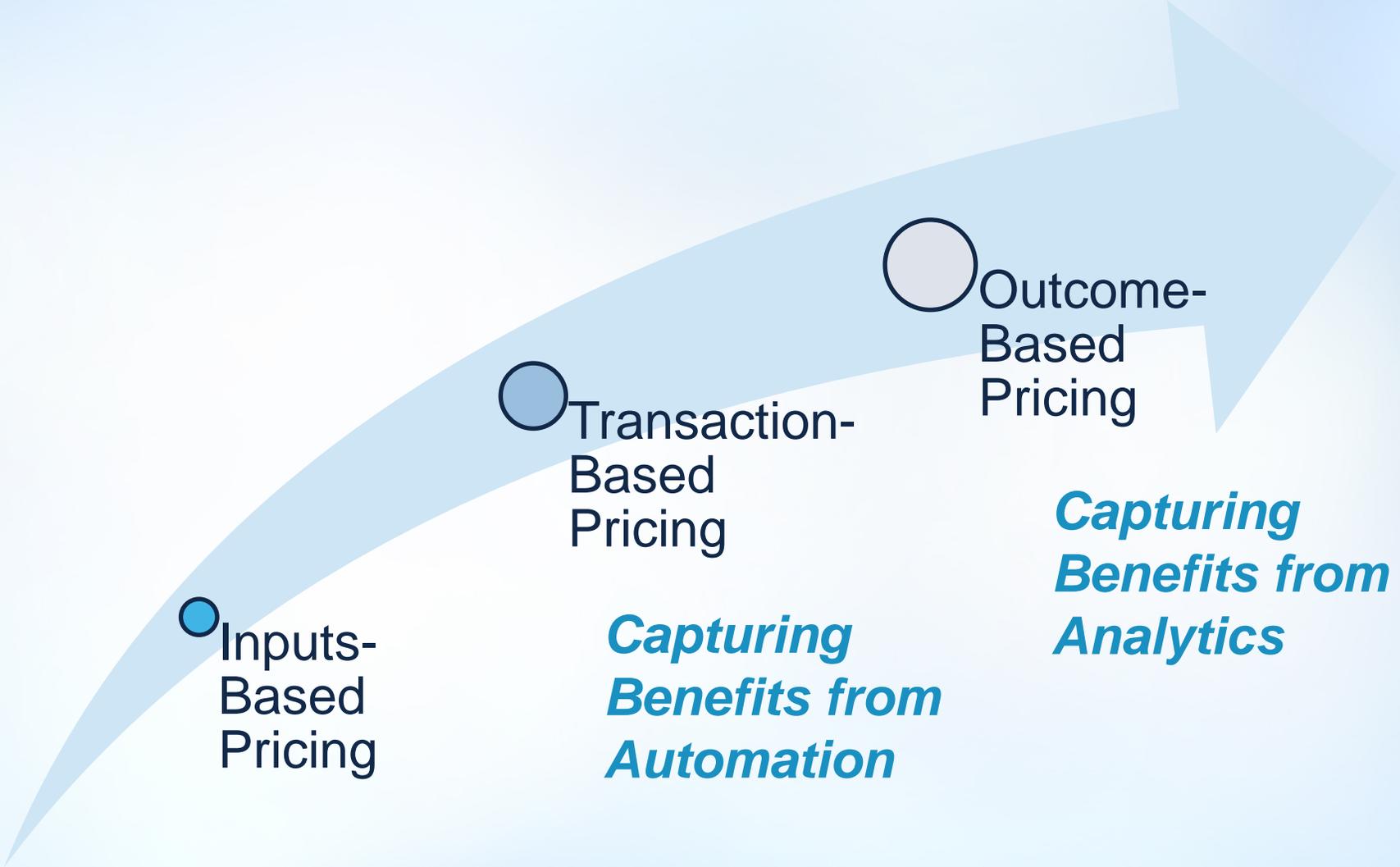


- Identify repeatable patterns across service engagements
- Triage opportunities for automating selected repeatable processes

- Develop a prototype for an embedded product that automates a selected process
- Add analytics and machine learning to the product
- Evolve towards Robotic Process Automation

- Create transaction or outcome-based business models
- Select leading-edge clients to pilot the product and business model
- Scale across client base

Evolving the Business Model



Thank you

