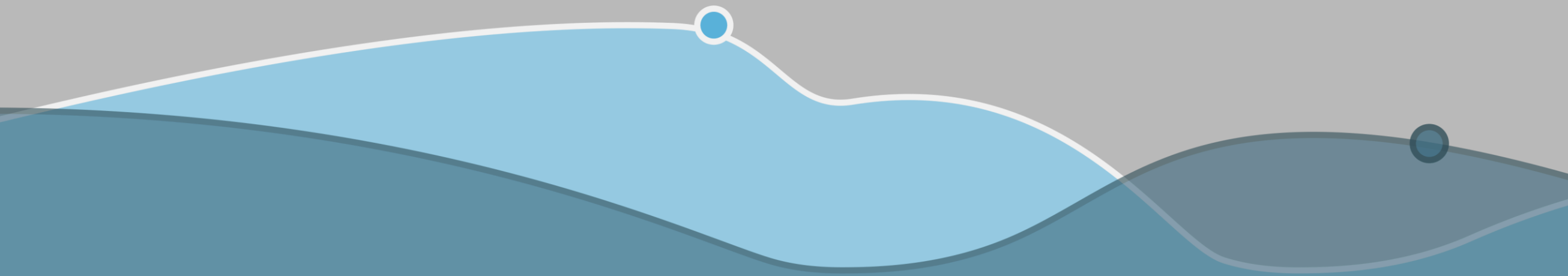




Cortana Analytics Workshop

Sept 10 – 11, 2015 • MSCC



Ensuring Customer Success with Advanced Analytics

Dylan Dias,
CEO, Neal Analytics

David Brown,
Solution Sales Director, Neal Analytics





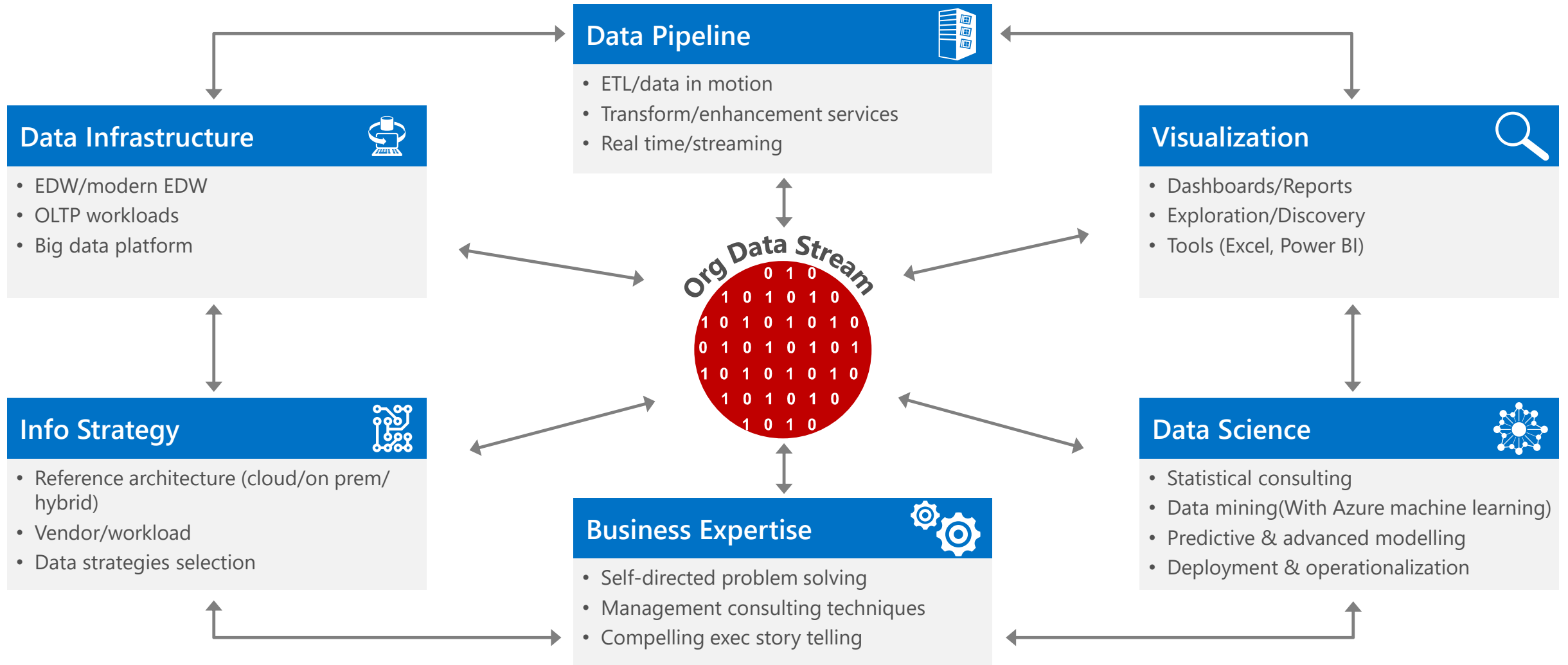
Ensuring Customer Success with Advanced Analytics

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Cortana Analytics Workshop

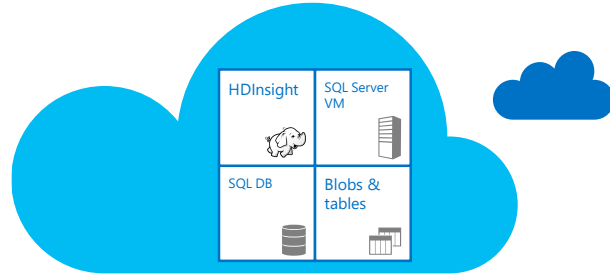
Neal Analytics Services

Creating the fabric of an enlightened organization





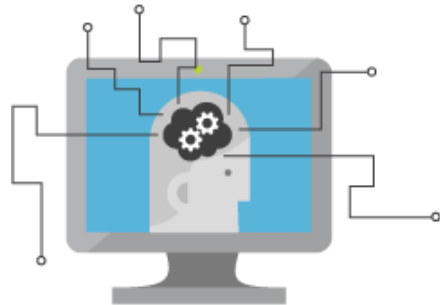
Cloud Platform/
Big Data



Data Science/
Predictive Analytics



Machine Learning/
Analytics



Data Engineering/
Big Data



Visualization



Industry
Experience



Outline

Meet the
customer



Analytics Maturity
Assessment



Key Use Cases



Engage
Correctly



Challenges



Engagement
Methodology



Solve the
Problem



Approach



Skillsets & Roles



Create a
Roadmap



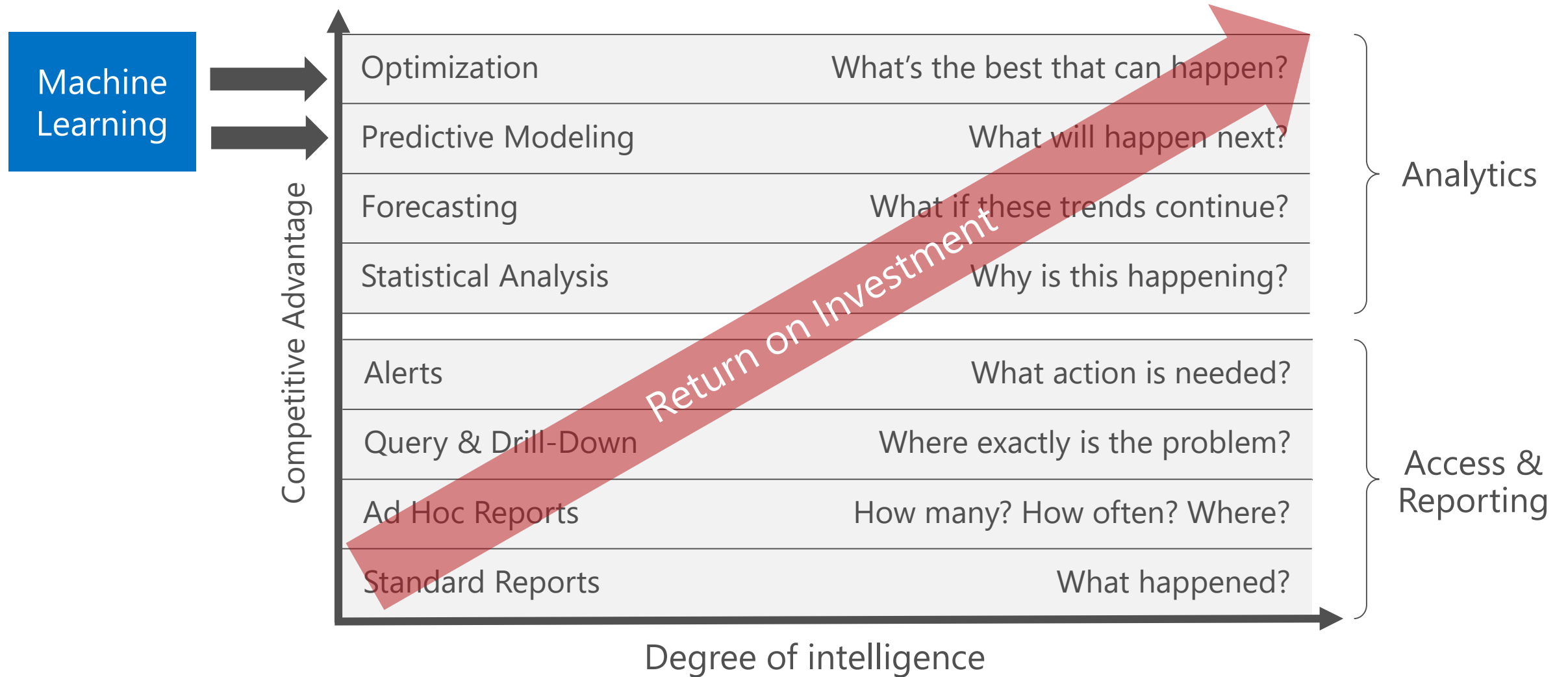
Scenario Planning
Scorecard



Demo



Typical Customer's Analytics Maturity Curve



Recognize the Customer Situation / Type

I'm drowning. Help!



- What has been attempted previously?
- What unfilled promises from previous efforts?

Let's build together!











- What needs to be built within versus outsourced?
- What is a core competence?
- What is the long-term program aspiration?

Solutions, pronto!



- What kinds of pre-packaged solutions?
- Are there ready insights from our data?

Industry Use Cases of Machine Learning

| | | | |
|---|--|--|--|
| Financial Services <ul style="list-style-type: none">• New account risk screens• Fraud prevention• Trading risk• Maximize deposit spread• Insurance underwriting• Accelerate loan processing  | Retail <ul style="list-style-type: none">• 360° view of the customer• Analyze brand sentiment• Localized, personalized promotions• Website optimization• Optimal store layout  | Telecom <ul style="list-style-type: none">• Call detail records (CDRs)• Infrastructure investment• Next product to buy (NPTB)• Real-time bandwidth allocation• New product development  | Manufacturing <ul style="list-style-type: none">• Supplier consolidation• Supply chain and logistics• Assembly line quality assurance• Proactive maintenance• Crowd source quality assurance  |
| Healthcare <ul style="list-style-type: none">• Genomic data for medical trials• Monitor patient vitals• Reduce re-admittance rates• Store medical research data• Recruit cohorts for pharmaceutical trials  | Utilities & Energy <ul style="list-style-type: none">• Smart meter stream analysis• Slow oil well decline curves• Optimize lease bidding• Compliance reporting• Proactive equipment repair• Seismic image processing  | Public Sector <ul style="list-style-type: none">• Analyze public sentiment• Protect critical networks• Prevent fraud and waste• Crowd source reporting for repairs to infrastructure• Fulfill open records requests  | Goods and Manufacturing <ul style="list-style-type: none">• Consumer Goods & Identify hidden revenue opportunities• See and predict changes in supply or demand Market price volatility and production planning Promotional demand Suggested product engines  |

Challenges and Opportunities

Decision Makers are drowning in data



- Managers are challenged to see through all of the rapidly growing volumes of data in order to understand what's really happening
- Opportunities are missed or never even realized
- Too many vendors/tools/platforms to choose from
- Economic considerations – grow profits or cut costs

Machine Learning and Predictive Analytics



- Closer relationship with customers by understanding behaviour
- Targeted advertising and promotions
- Balance inventory with demand
- Charge exactly the price that customers are willing to pay at that moment
- Determine the best, most profitable use of marketing investments

Typical Sources of Dissatisfaction

Mismatched Expectations



- Too much, too quick
- Incorrect funding levels
- Misaligned semantics

Incorrect Team/Capabilities



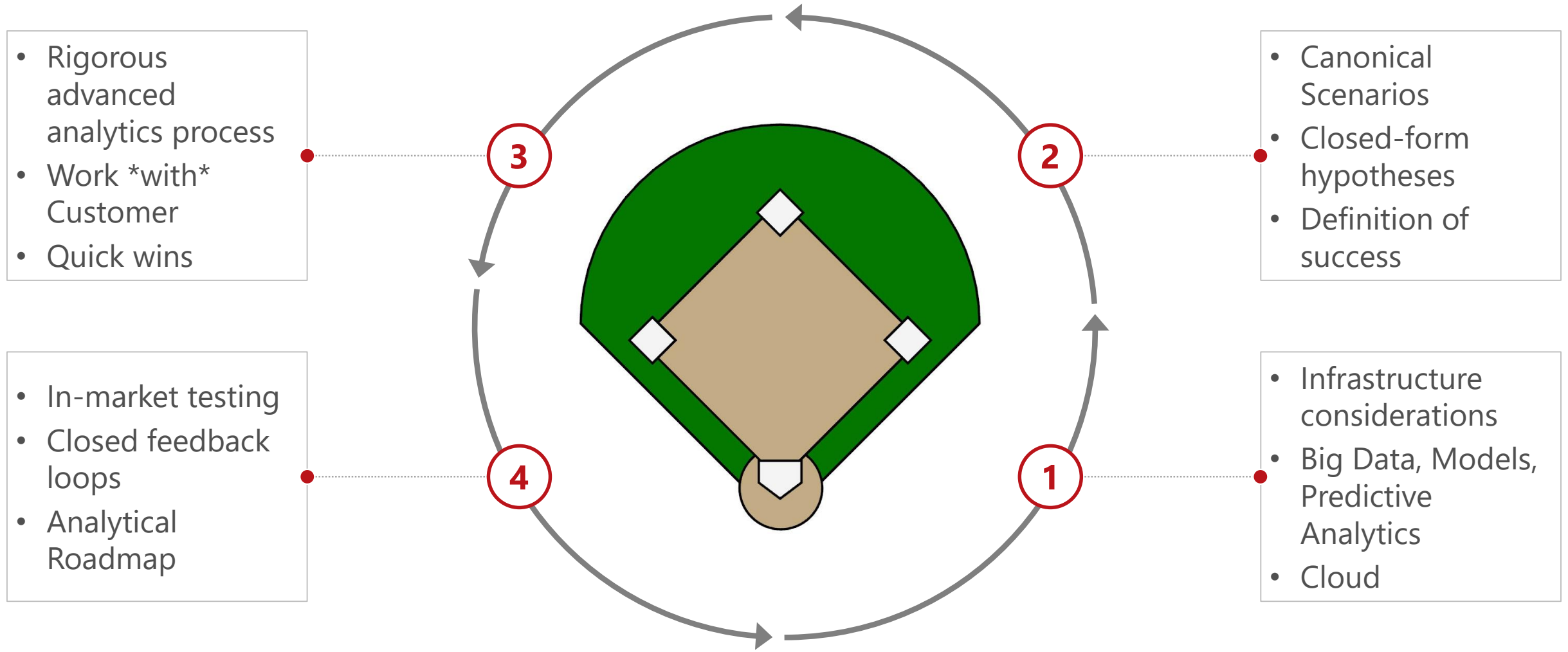
- Beware the 'schmexpert'
- Mismatched capabilities
- Complex coordination across workstreams

Improper Transition



- Insufficient design for hand-off (POC to Prod, between teams)
- Stopping at the model / analytics (instead of landing the business go-do's)

Make it real! Go all the way!!



Customer Engagement Process

The game-changing opportunities made possible by Azure Machine Learning are creating immense interest among companies of all sizes and across all industries. As the barriers of entry and costs of admission are eliminated by the advantages of cloud computing, specifically Microsoft Azure, there are many organizations beginning to look for ways to leverage the power of machine learning and predictive analytics to address a variety of business challenges and opportunities.

Challenges

- Marrying machine learning to business value can be difficult
- Business stakeholders may not understand how machine learning can help them
- Lack of experience and in-house skills can lead to uncertainty and confusion as to how and where to start?

NEAL Approach

Identify Scenarios

- Meet with business stakeholders to understand challenges
- Customer-led or NEAL assisted

Prioritize

- Assess business value vs. feasibility
- Prioritize and select scenarios

Production

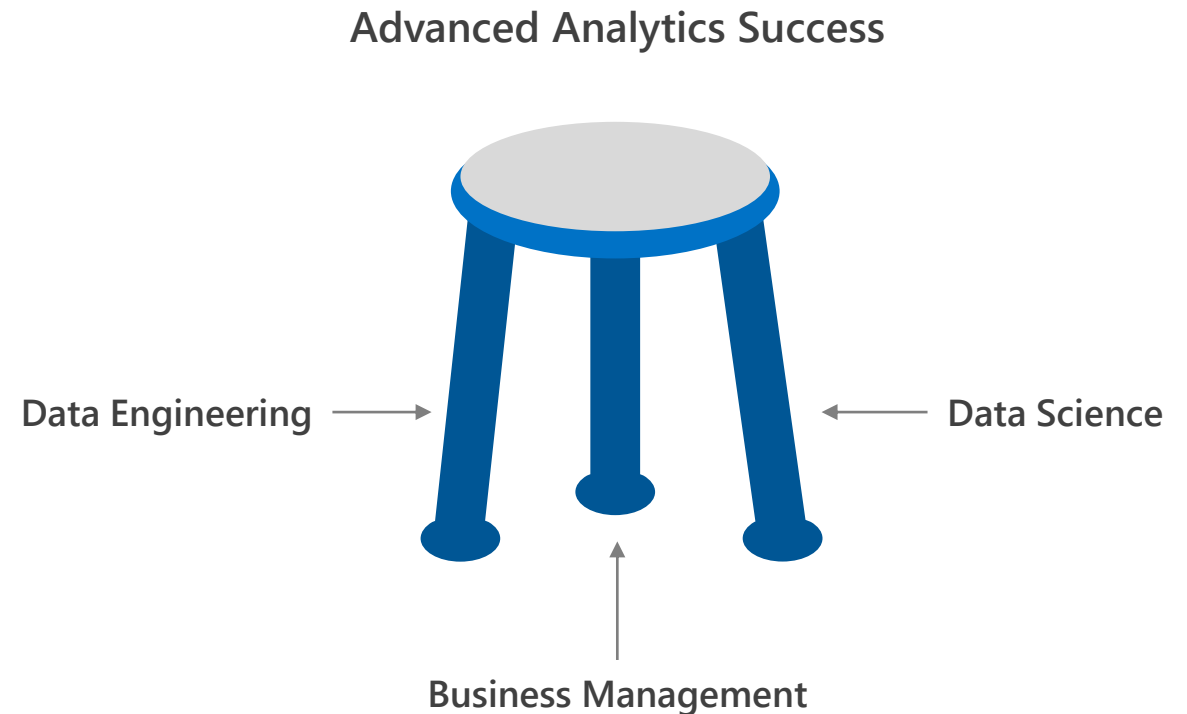
- Build & deploy complete model
- Operationalize

Our Approach to Advanced Analytics Success

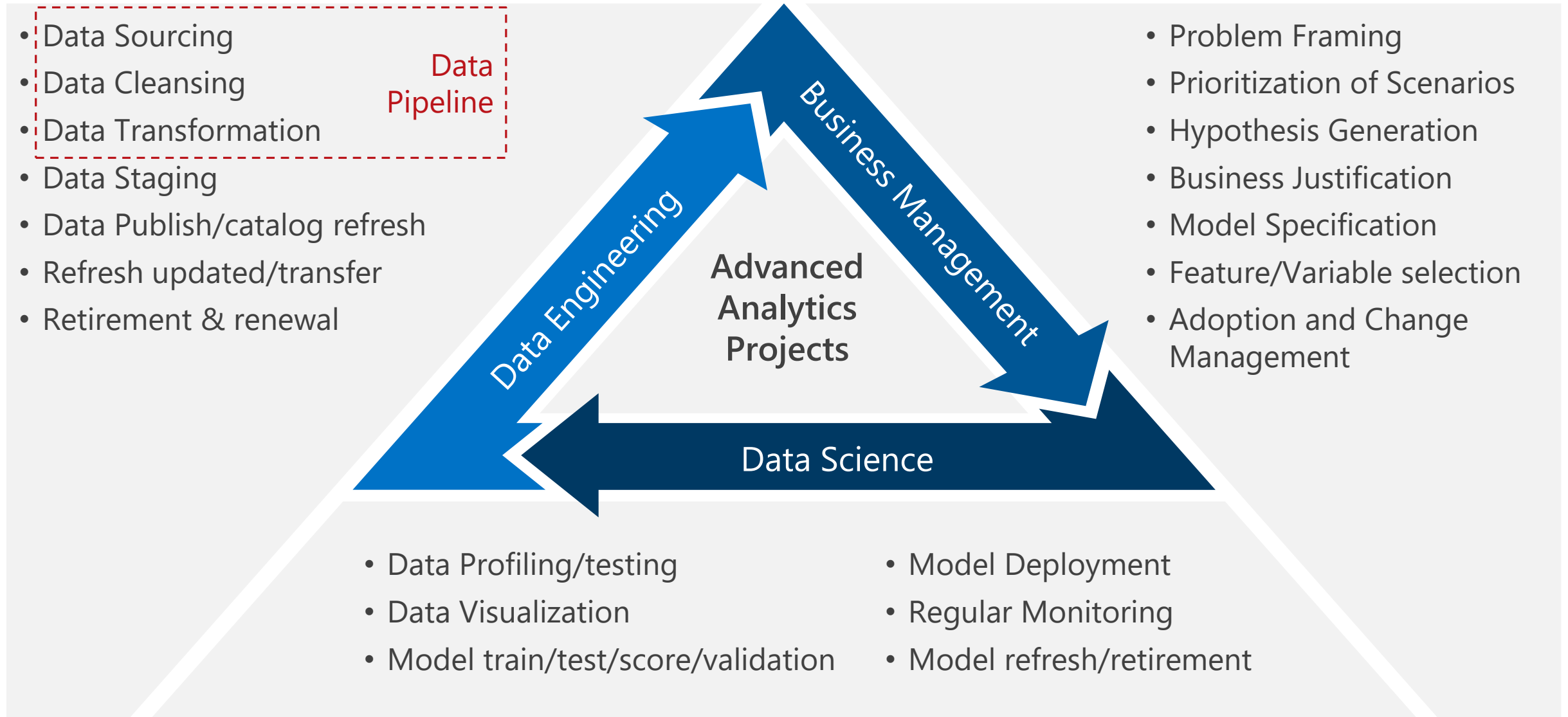
Considerations

- Business Management is the key skill to keep the endeavor laser-focused and aligned with business outcomes/value
- Change Management and dealing with Organizational inertia are critical
- Data Science is domain-aware and brings analytical robustness (Subject Matter Expertise)
- Works closely with Data Engineering to iterate ideas for steady progress
- Data Engineering prepares two-way data pipeline to enable development and consumption of decision insights

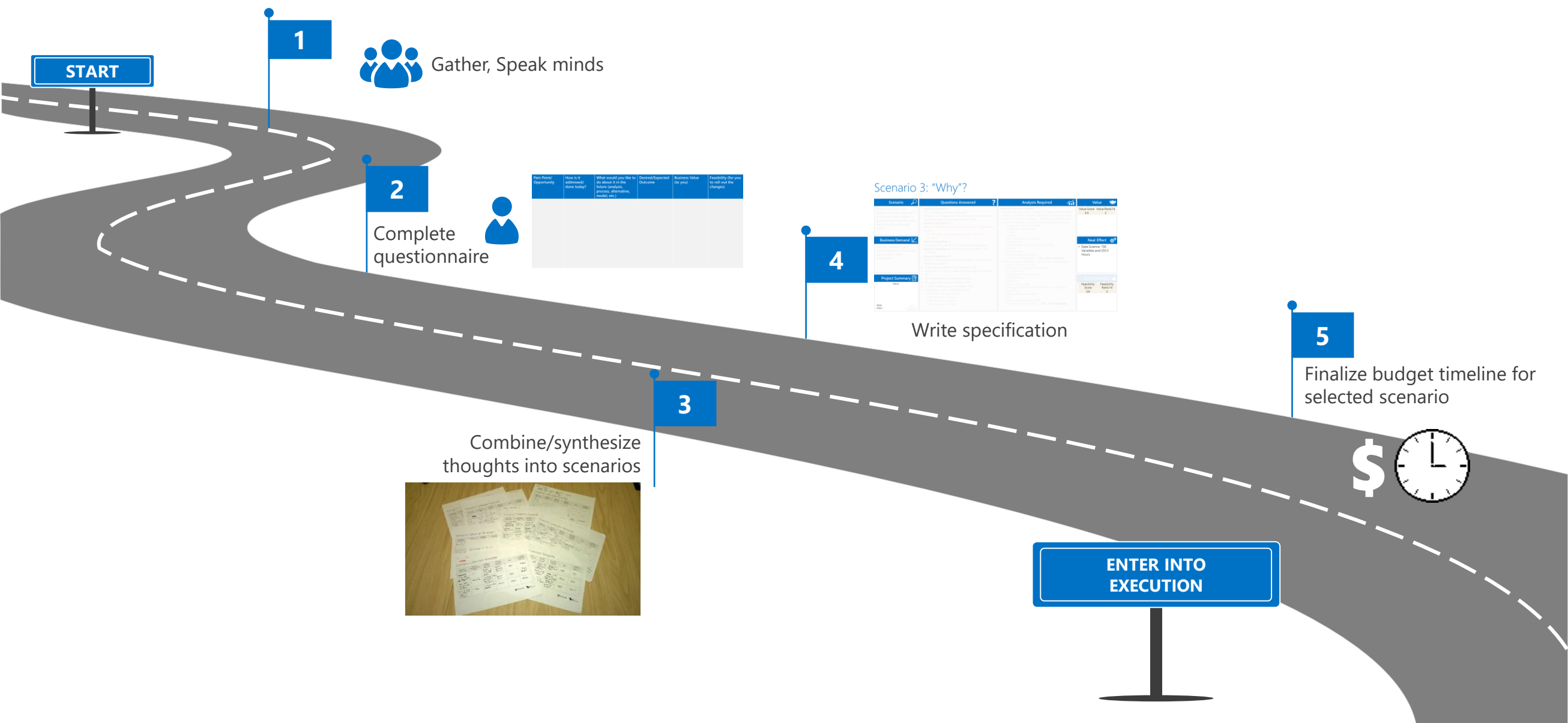
Advanced Analytics Success:
A fine balance of three skill groups



Detailed Activities by Skill Group



Scenario Development



Satisfaction Scorecard



Knowledge transfer



Semantics Aligned



On-time, on-budget



Operationalized



Right phasing/stages
(crawl-walk-run)



Value (ROI, ROMI, Revenue
↑, Cost ↓)



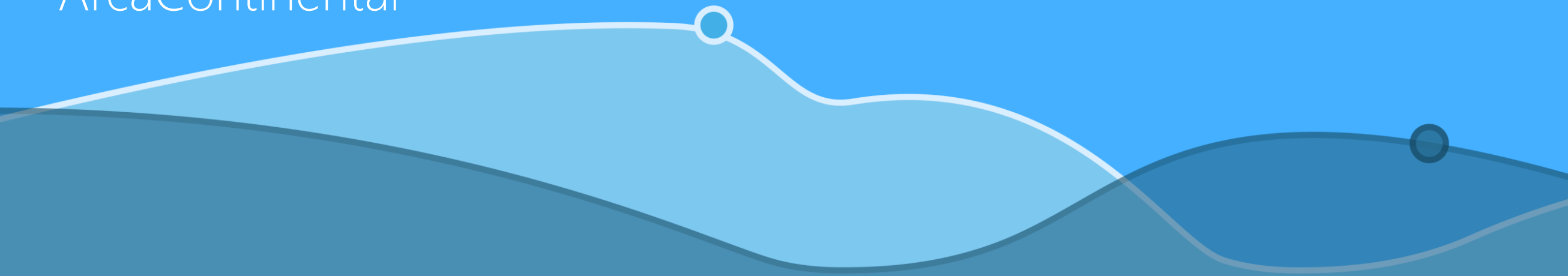
Prioritized Scenarios
(Canonical, Scored)



Roadmap/Program

Demo

Dylan Dias
ArcaContinental



Contact



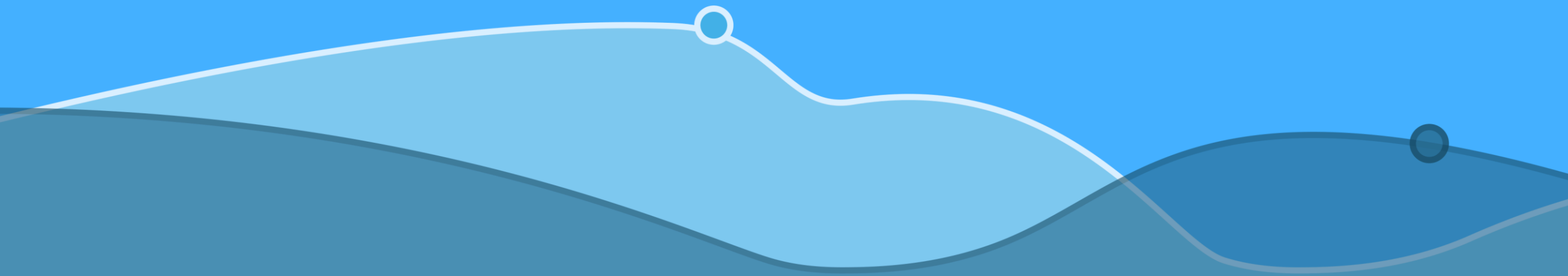
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Questions & Answers



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