Topics

Objective: Review predictive analytics opportunities for the District using future data and systems
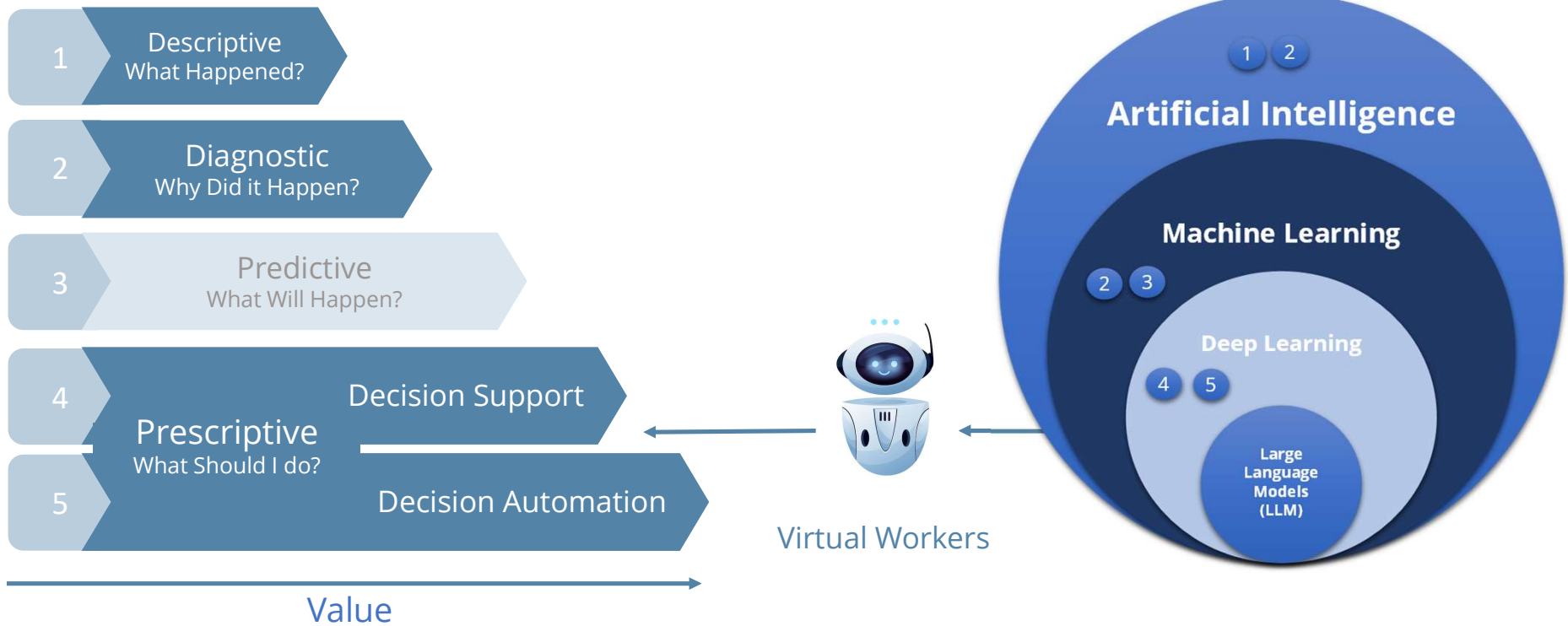
Data | Analytics Subject Areas and Variables

Opportunities | Predictive Analytics Roundtable

Systems | Analytics Architecture

Appendix | Experiments 101

Data, Decisions and Actions

1	Descriptive	What Happened?
2	Diagnostic	Why Did it Happen?
3	Predictive	What Will Happen?
4	Decision Support	
	Prescriptive	What Should I do?
5	Decision Automation	

Value

Virtual Workers

Artificial Intelligence
1 2

Machine Learning
2 3

Deep Learning
4 5

Large
Language
Models
(LLM)

Predictive Analytics

In Production

1. Psychometric Scoring of Transcripts
2. Course Taking Pattern Classification
3. Negative Outcome Risk Probability
4. School Climate Forecasting
5. Shock Event Prediction
6. Post Secondary Readiness
7. Dual Enrollment Readiness
8. Major Readiness
9. Student expected performance and gains on state assessments

Future

1. Scheduling Assistant
2. Teacher - Student Match Prediction
3. Impact of absences and discipline referrals on graduation rates
4. Absences at year-end, both at the district level & school (Cumulative as well)
5. Career pathway readiness

Predictive | Post-Secondary Readiness

CFEED's research has found students who **complete three to five core accelerated courses** (AICE, AP, Honors, IB, etc.) with roughly a B average **are post-secondary ready**.

Expected	**Probable**	**Approaching**	**Beginning**
Ready with Check-in	Ready with Support	Significant Support	Not Ready Coach Up
21%	**42%**	**67%**	**81%**
VC Attrition Rate	VC Attrition Rate	VC Attrition Rate	VC Attrition Rate

Microsoft Platform Capabilities

Red Zone
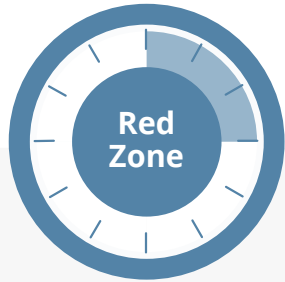
- ✓ Visualizations & CoPilots

PowerBi

Mid Field
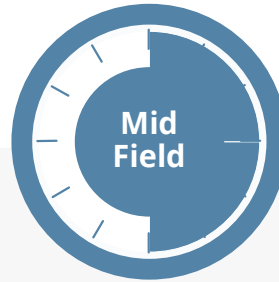
- ✓ Data Lake, Data Pipelines
- ✓ AI & Streaming Analytics

Fabric

Whole Field
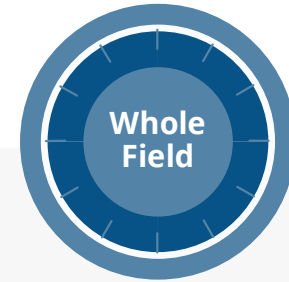
- ✓ Full Services Platform
- ✓ Enterprise Scale
- ✓ Best Cost to Value Ratio

Azure

MCG Midtown Consulting group™

Experiments

Simple experiments often gain the most momentum & value.
e. g. Post Secondary Readiness

Discussion