

# Fast Sub-ML Usecase Development using Feature Stores

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# Scribble Data

- ▶ CORE TEAM :
- Systems
  - Data Science
  - Business

▶ FOCUS : **Sub-ML Use Cases**

▶ PHILOSOPHY :  
**Trust, Value, Speed**

▶ CUSTOMERS :

US	Fintech
EU	EdTech
AFRICA	Ecommerce
INDIA	CPG
	Retail



TORONTO

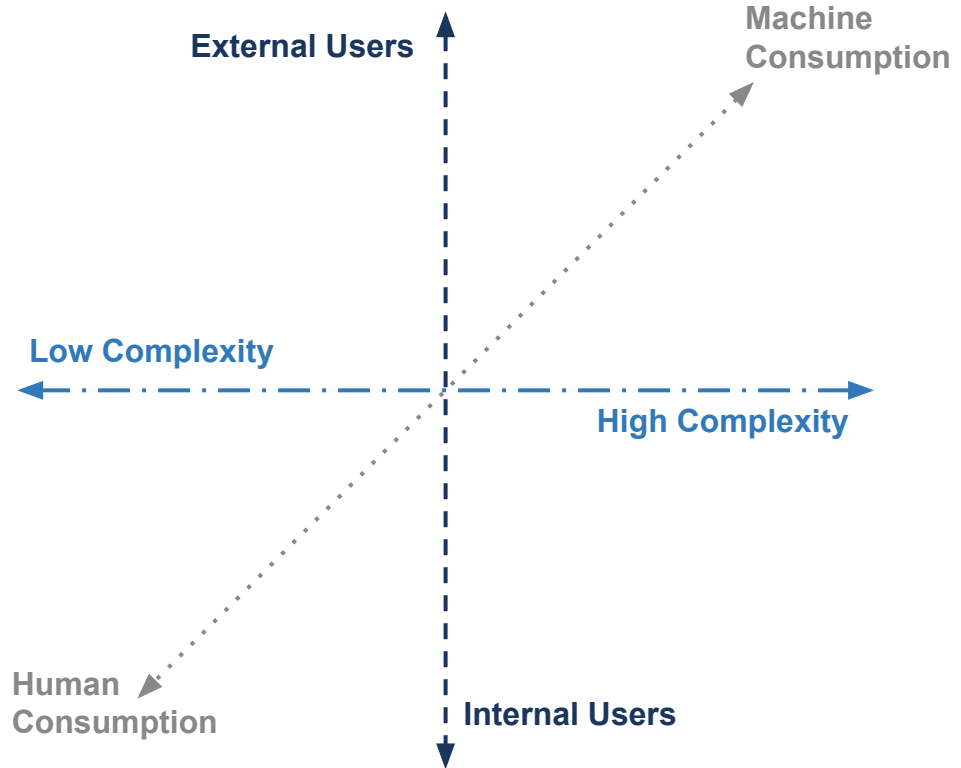


BANGALORE



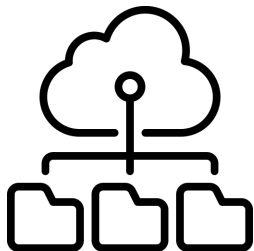
# The changing face of ML

- Machine learning is **no longer one-size-fits-all**
- Problems space and solution approaches are **evolving**

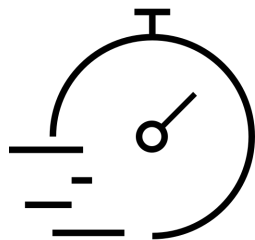


# The changing face of ML

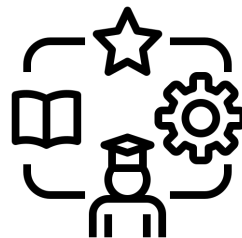
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Large Data Sizes



High Performance



High Skill Talent



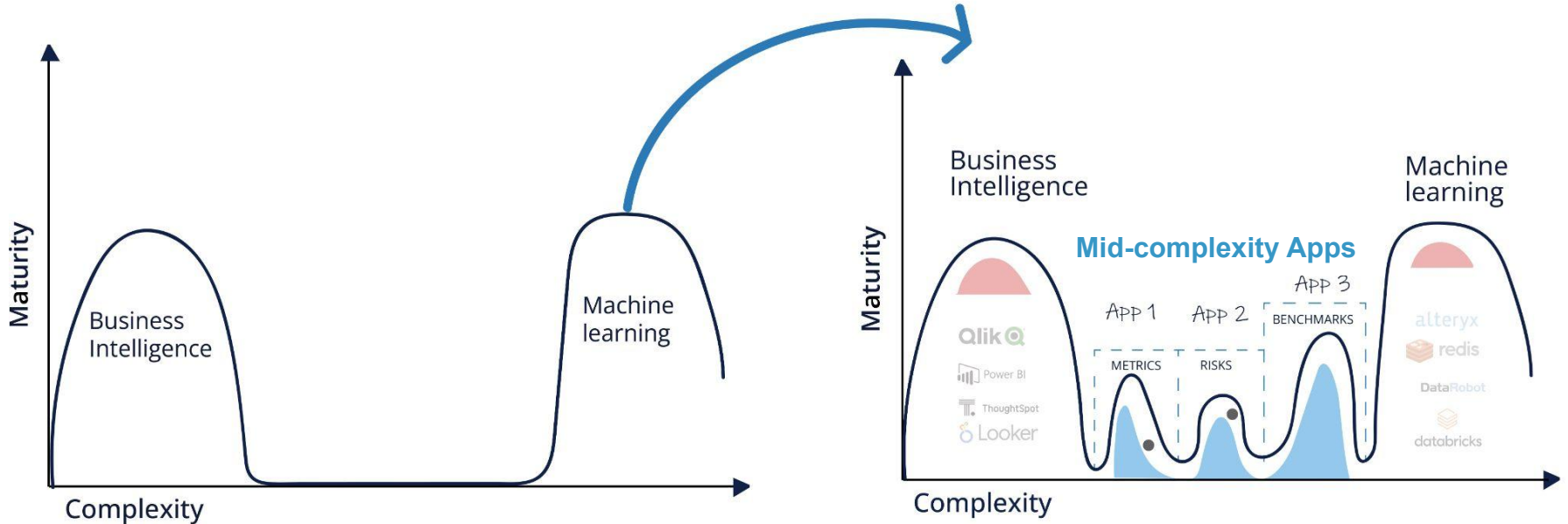
Probabilistic

Traditional **assumptions for ML** solutions **not always true** anymore

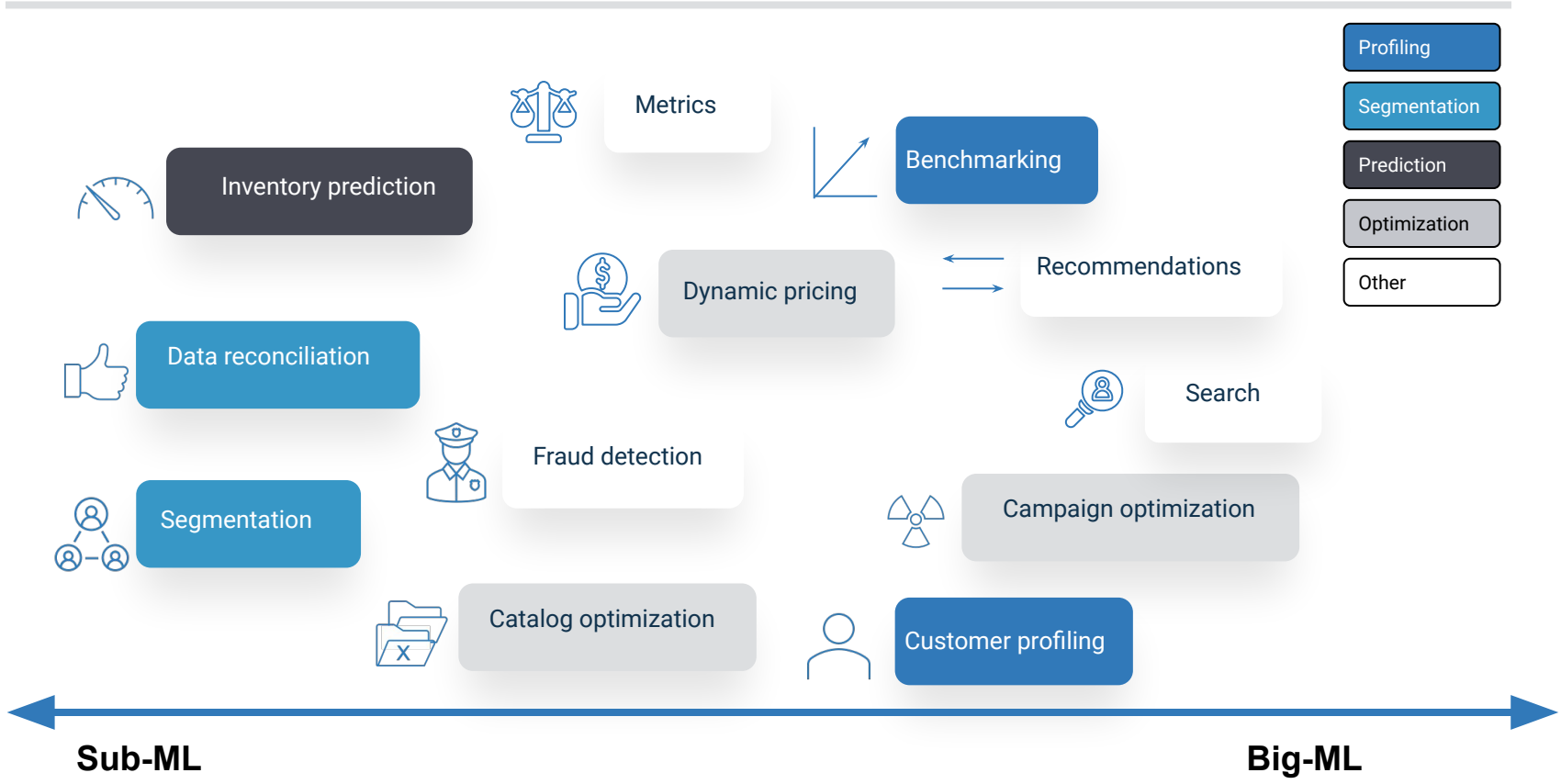
# The case for sub-ML

Old World

New World



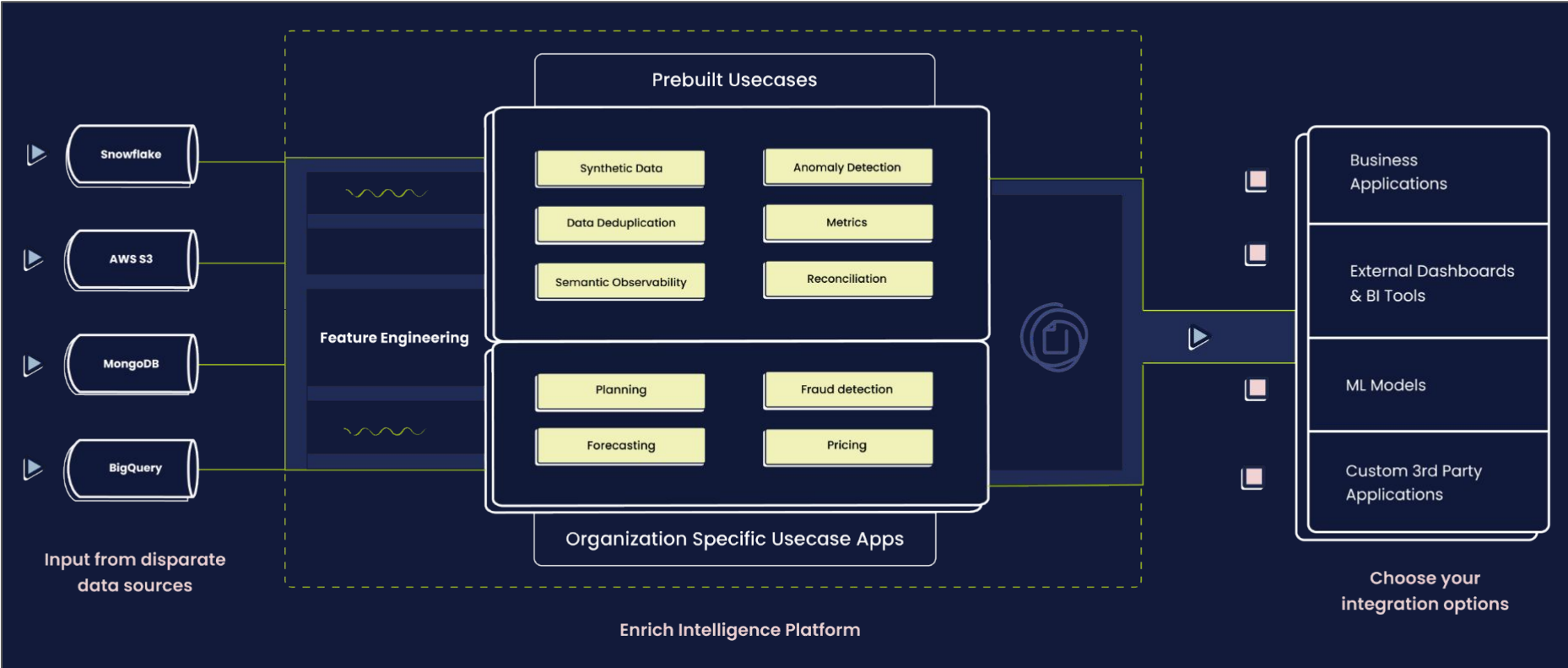
# Spectrum of use cases



# Sub-ML problem space characteristics

	Big-ML	Sub-ML
<b>Problems</b>	<b>Few</b> <b>High Clarity</b> Performance sensitive predictions	<b>Many</b> <b>Changing Requirements</b> Prediction & Decision Support
<b>Delivery</b>	<b>Modularized</b>	<b>Full Stack</b>
<b>Timelines</b>	<b>Months</b>	<b>Days to Weeks</b>
<b>Users</b>	DS/MLE, <b>Fulltime</b> Efficiency/Scalability	BA/DS, <b>Limited Bandwidth</b> Tacit Knowledge Management
<b>Complexity</b>	DL/ML at Scale, Batch+Real-time	ML-Lite, Typically batch <b>(Rules+Simple ML Models)</b>
<b>Data Accuracy</b>	Probabilistic guarantees	High accuracy
<b>Consumption</b>	API/DB	<b>Data Apps</b> , Workflows, API

# Feature app stores





# Benefits of sub-ML feature app stores

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- Streamlining of use case development
- Less coordination needed
- Reduced integration costs due to full stack approach
- Embedding tacit knowledge

# The future

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- Sub-ML is here to stay
  - Economics of data solutions is changing
  - Expected time-to-solution is shrinking
- Sub-ML will be the gateway drug
  - Low cost per use case
- Long tail will grow fast
  - Lower risk of experimentation
  - Success will spur more use cases

# Thank You

