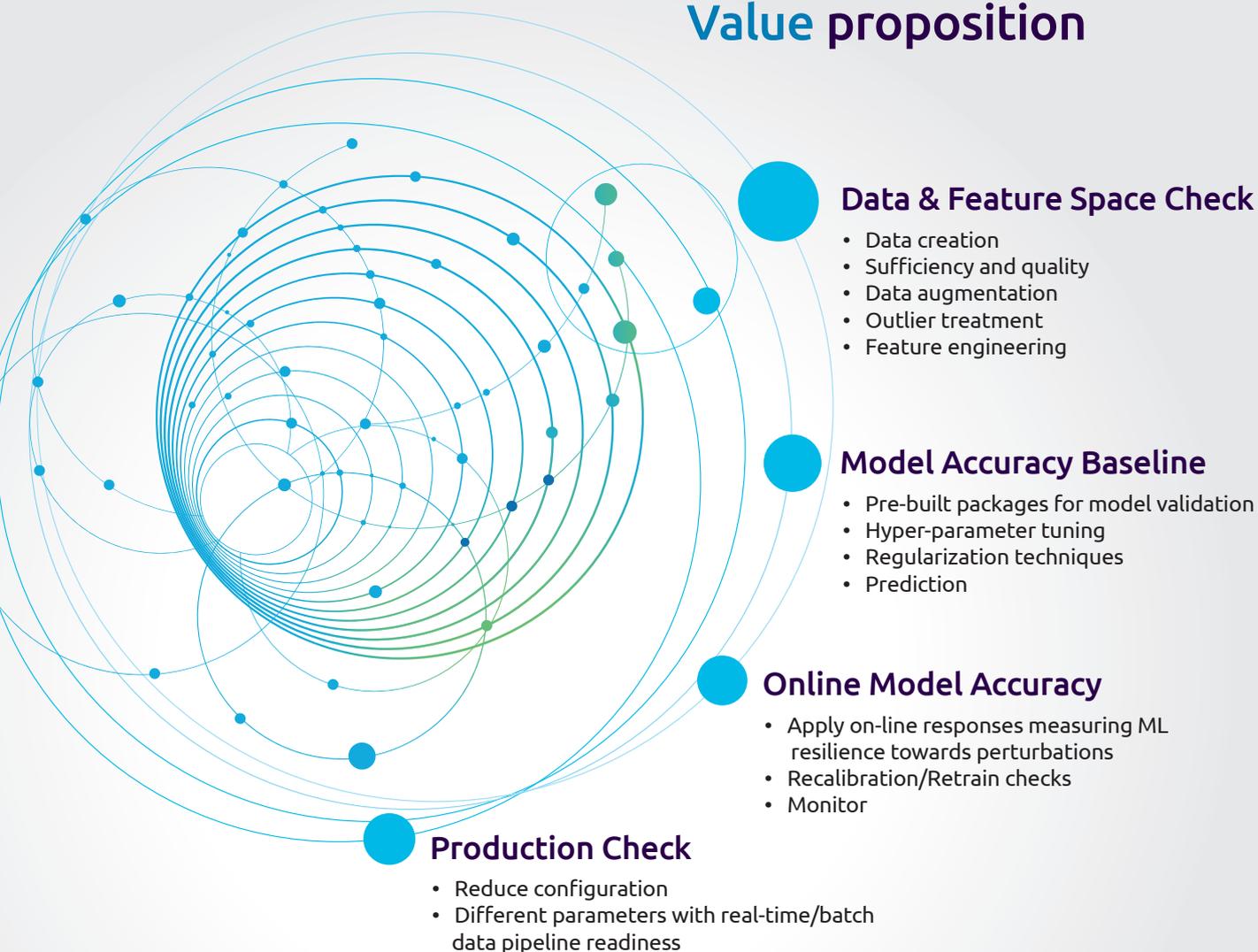


# AI Glass Box

# Are you getting the most out of your Machine Learning model?

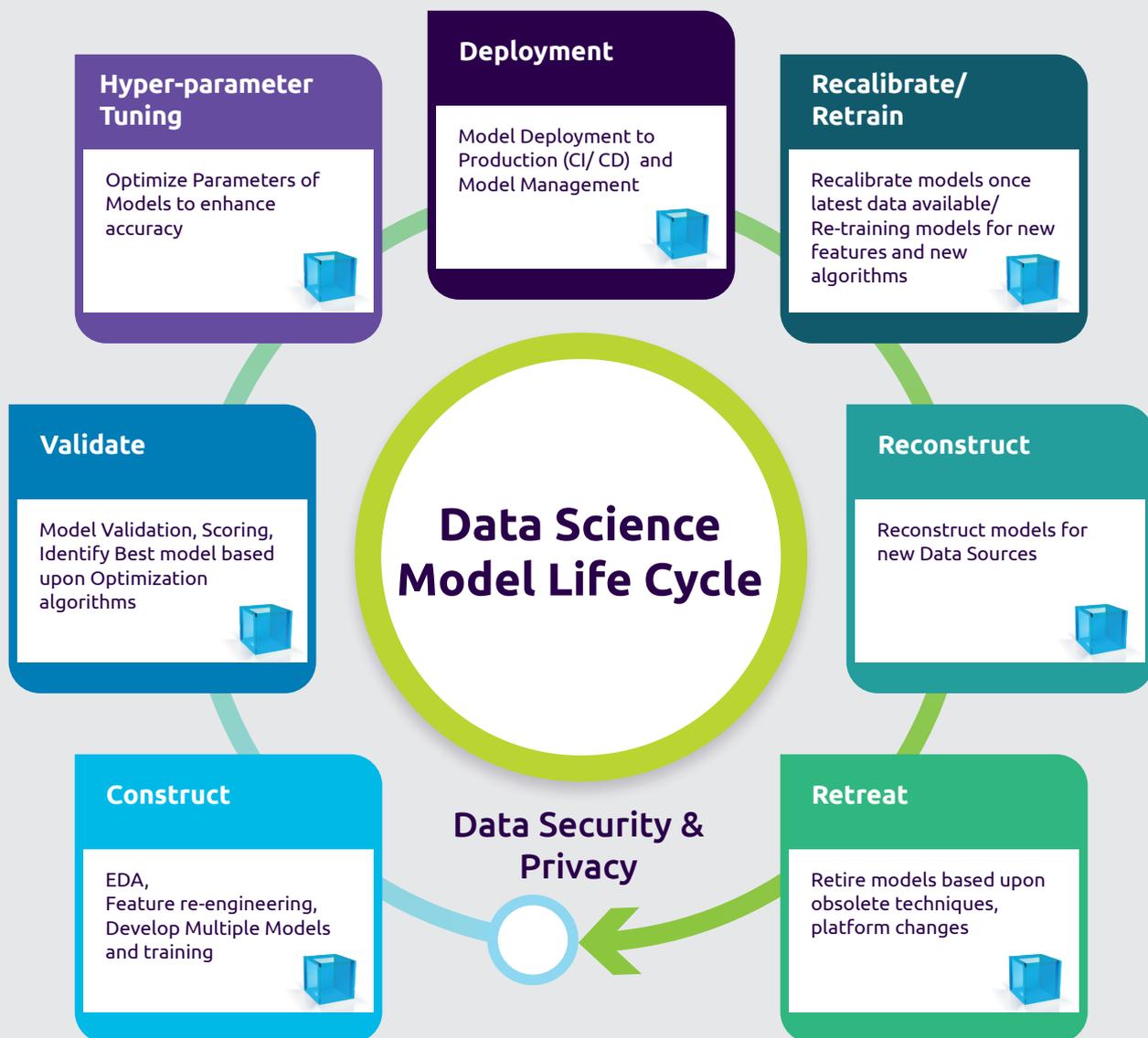
Nowadays companies, especially financial institutions, prefer solutions that last long. What they don't realize that the shelf-life of a typical AI model is low. It needs regular refinement and replacement to remain relevant to the use-case. In usual ML deployments, ensuring model robustness that can handle any exceptions is an often-neglected attribute. Banks end up following a problem-focussed approach that makes the process tedious, error prone and requires continuous re-work to align with domain requirements.

## Value proposition



# Checkpoint-based framework

Capgemini's AI Glass Box prescribes a checkpoint-based framework across the data science lifecycle. Through checkpoints such as Data Exploration (checks for missing values in data and numerical/categorical attributes of the dataset) and Model Monitoring (checks for consistency in column types), business users can spend significantly less time on technical aspects and focus instead on business solutions.



Banks rely on quick implementation for PoC before going for a wider deployment. With AI Glass Box, implementation time can be reduced by up to 10x due to pre-build veracity framework. From being able to fit into existing workflow and ML models to using a platform-agnostic Python approach, AI Glass Box offers a comprehensive framework for data science project validation.



# See the data under the hood with Glass Box

Data scientists often end up spending 60% of their time cleaning and unifying dirty data before they can apply any analytics or machine learning [1]. With an automated validation of test data, the modelling performance can be improved significantly.

The algorithms used are domain-independent so companies can deal with scarcity of domain experts. With dashboards showcasing data quality, trust factor at every phase of modelling is maintained.

## Meet the checkpoints



### 1. Data Exploration

Explores the dataset and elucidates attributes' characteristics



### 2. Feature Engineering

Checks and recommends the appropriate feature engineering methods



### 3. Classifiers & Metrics

Evaluates the trained model, captured the model parameters and metrics



### 4. Hyper-parameter Tuning

Expands model parameters and develops a challenger model



### 5. Model Monitoring Check

Checks data changes, detects data/concepts drifts and recommends model recalibration/retrain



## About Capgemini

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## For more details contact:

### **Shagrithaya, Padmashree**

Vice President - AI, Data Science & Analytics  
<https://www.linkedin.com/in/padmashreesh>  
[padmashree.shagrithaya@capgemini.com](mailto:padmashree.shagrithaya@capgemini.com)

### **Balasubramanyam, Chandrasekhar**

Vice President - AI, Data Science & Analytics  
[chandrasekhar.balasubramanyam@capgemini.com](mailto:chandrasekhar.balasubramanyam@capgemini.com)

### **Kautish, Jatinder**

Director - AI, Data Science & Analytics  
<https://www.linkedin.com/in/jkautish/>  
[jatinder.kautish@capgemini.com](mailto:jatinder.kautish@capgemini.com)

### **Dhali, Ashish**

Senior Manager – Data Science  
<https://www.linkedin.com/in/ashish-d-b6832a5/>  
[ashish.dhali@capgemini.com](mailto:ashish.dhali@capgemini.com)



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