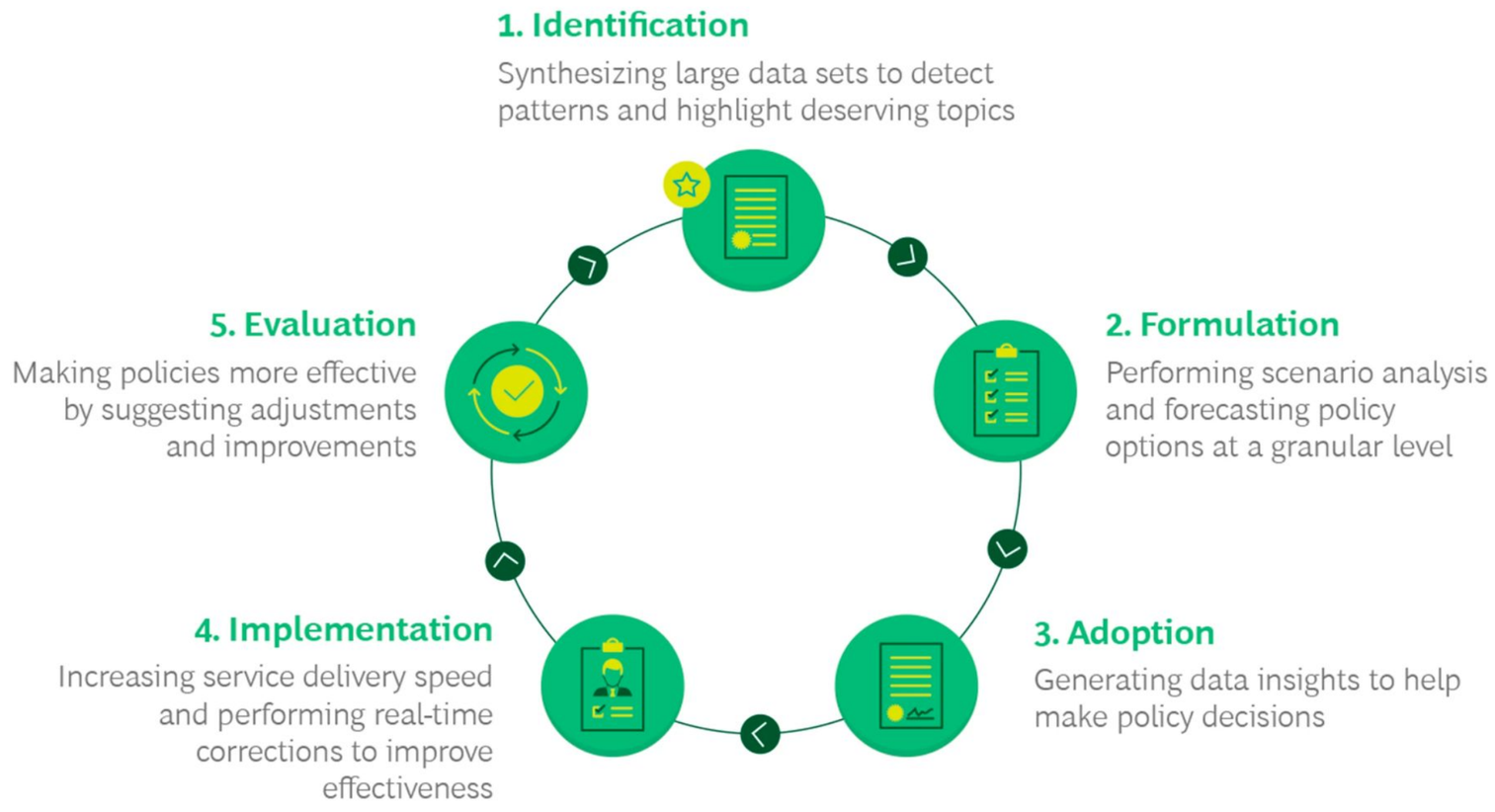
AI Science for policy

AI will not replace policy makers but it can enable a comprehensive, faster and more rigorous approach in the short run

AI Has a Role at Every Step of Policymaking



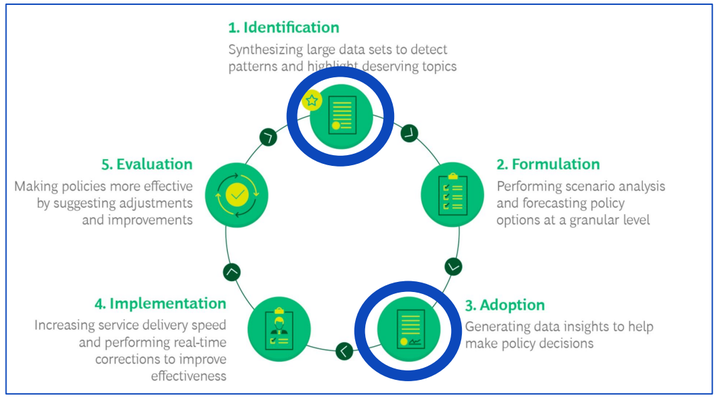
Sources: Interviews and BCG experience.

SOURCE: "AI Brings Science to the Art of Policymaking" Boston Consulting Group, Blog post april 05, 2021

From IIIA: AI-based policies

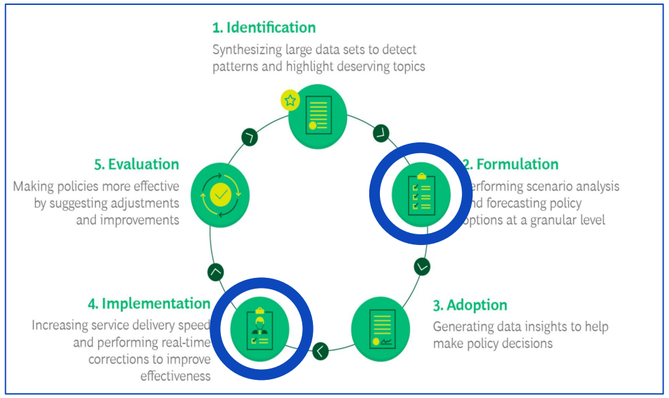
Highly-parallel Optimisation and Swarm computing

- Based on collective intelligence models
- Powerful simulation environments
- For large scale scenarios
- Multi-objective decision making



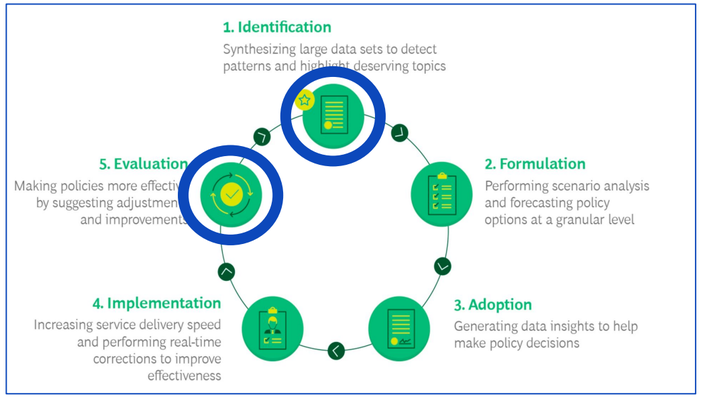
Diversity-aware Team formation

- Based on organizational psychology
- Explore billions of combinations
- To form and recommend teams
- Multiple criteria: gender, skill balance

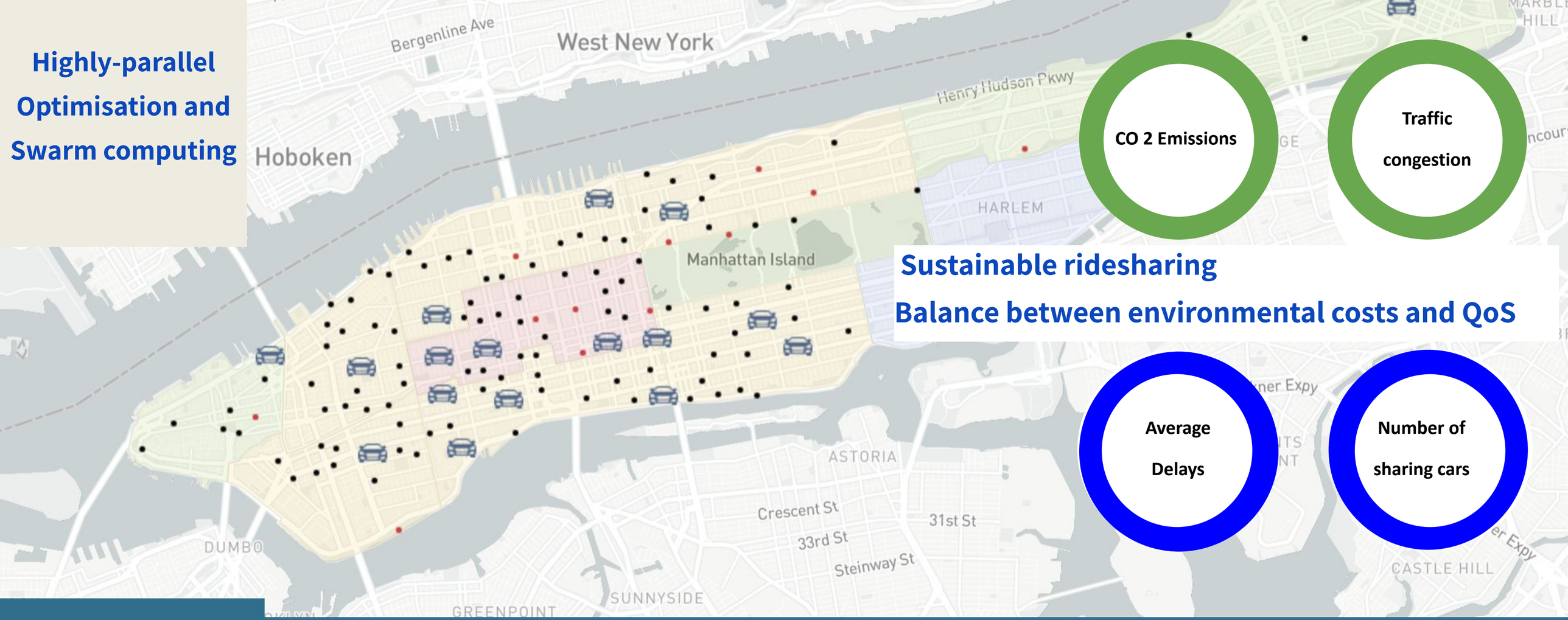


Causal Machine Learning and NLP

- Gather unstructured media data
- Monitor and summarize information
- Make inferences on data
- Models the evolution of opinions



Highly-parallel Optimisation and Swarm computing



Sustainable ridesharing

Balance between environmental costs and QoS

Planning sustainable urban mobility

Identification: Integrates large amount of New York ‘s city traffic data and detect its behavioral patterns
Adoption: The simulation tool helps to evaluate different ridesharing scenarios and adopt decision for implementing them

Diversity-aware

Team formation

Project-based learning policy improves education, innovation and co-existence

Learning social interactions

Formulation: Put young people into well balanced teams, in terms of skills, personalities to investigate if it improves teamwork

Implementation: We integrate the results in a tool, Eduteams, that delivers project based-learning strategies at the classrooms

Causal Machine Learning and NLP

Opinions-aware decision making

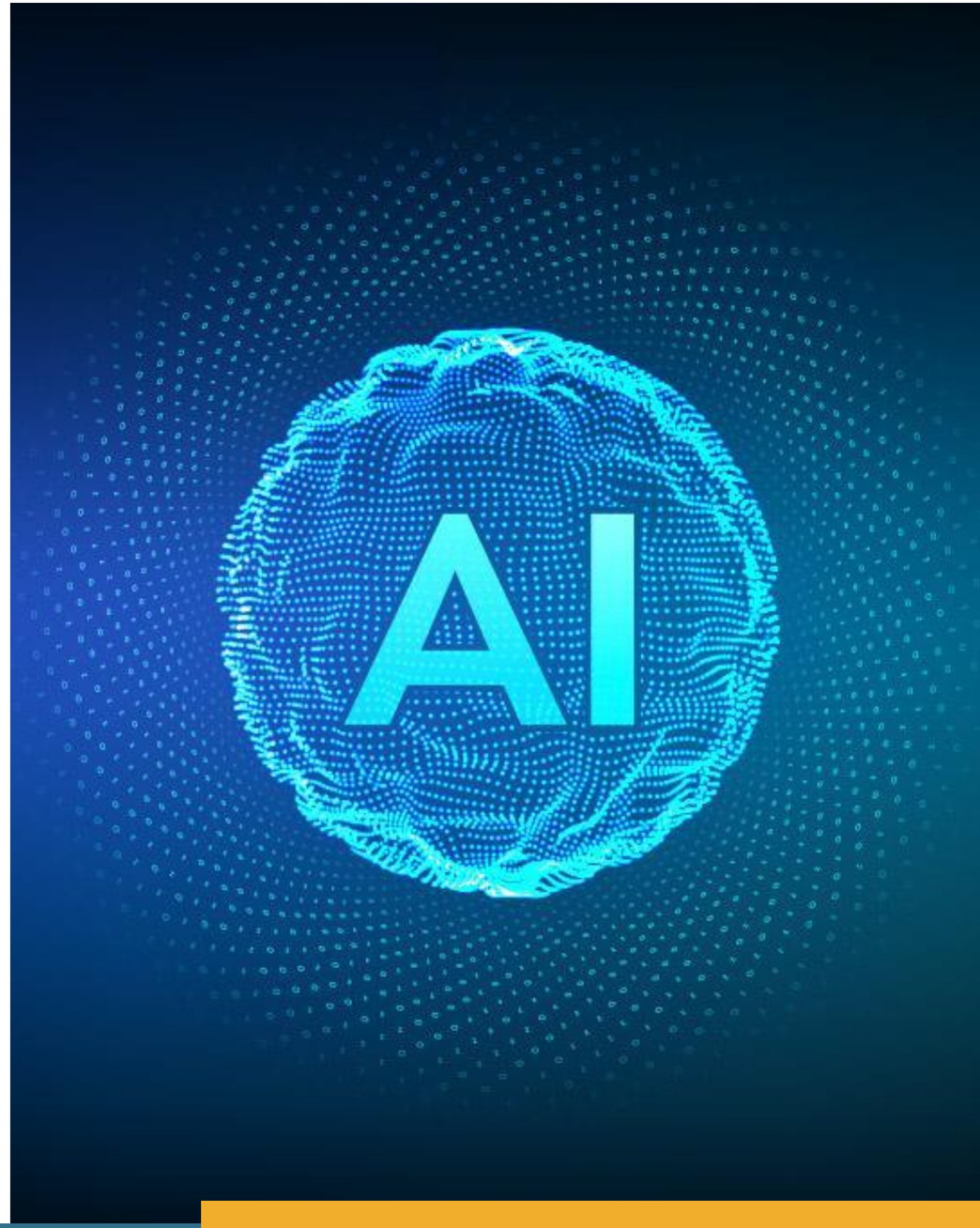
citibeats

Social Sensing

Identification: Synthetize large amount of data in social media, blogs, forums and detect collective opinions: crisis, riots, etc
Evaluation: Once a public policy is implemented, AI speeds up the assessment of the policy directly from the public opinion

Conclusion

- **AI is powerful tool** for policymaking
- Policy makers must provide **ethics-compliance requirements** to AI researchers
- **Investment is needed** to transform AI research into tools
- **Building trust on AI** to take full advantage of its positive effects on policy and governance



Thank you

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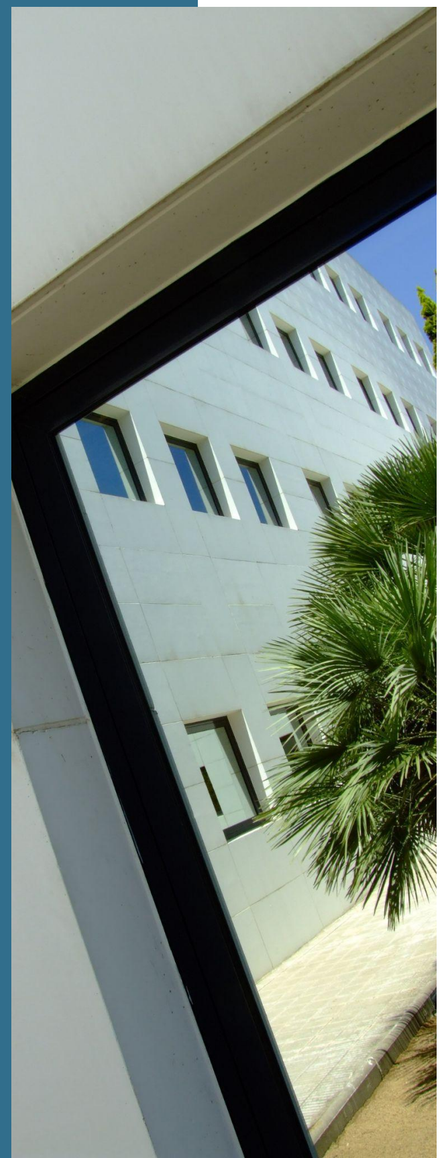

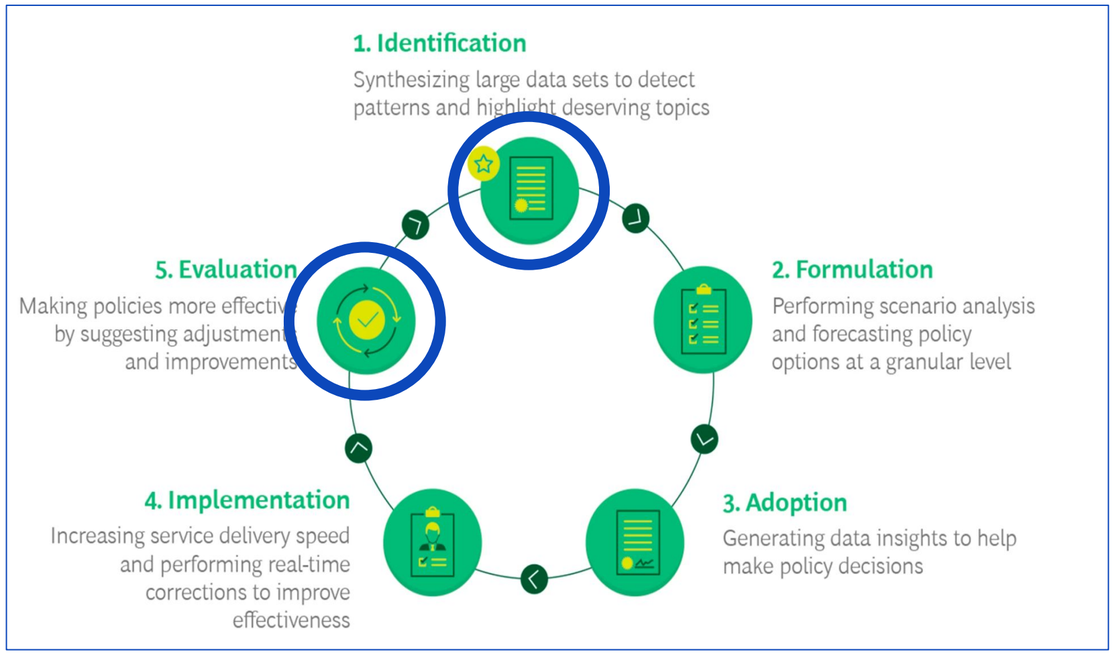
1. Identification
Synthesizing large data sets to detect patterns and highlight deserving topics
2. Formulation
Performing scenario analysis and forecasting policy options at a granular level
3. Adoption
Generating data insights to help make policy decisions
4. Implementation
Increasing service delivery speed and performing real-time corrections to improve effectiveness
5. Evaluation
Making policies more effectiv
by suggesting adjustment
and improvements