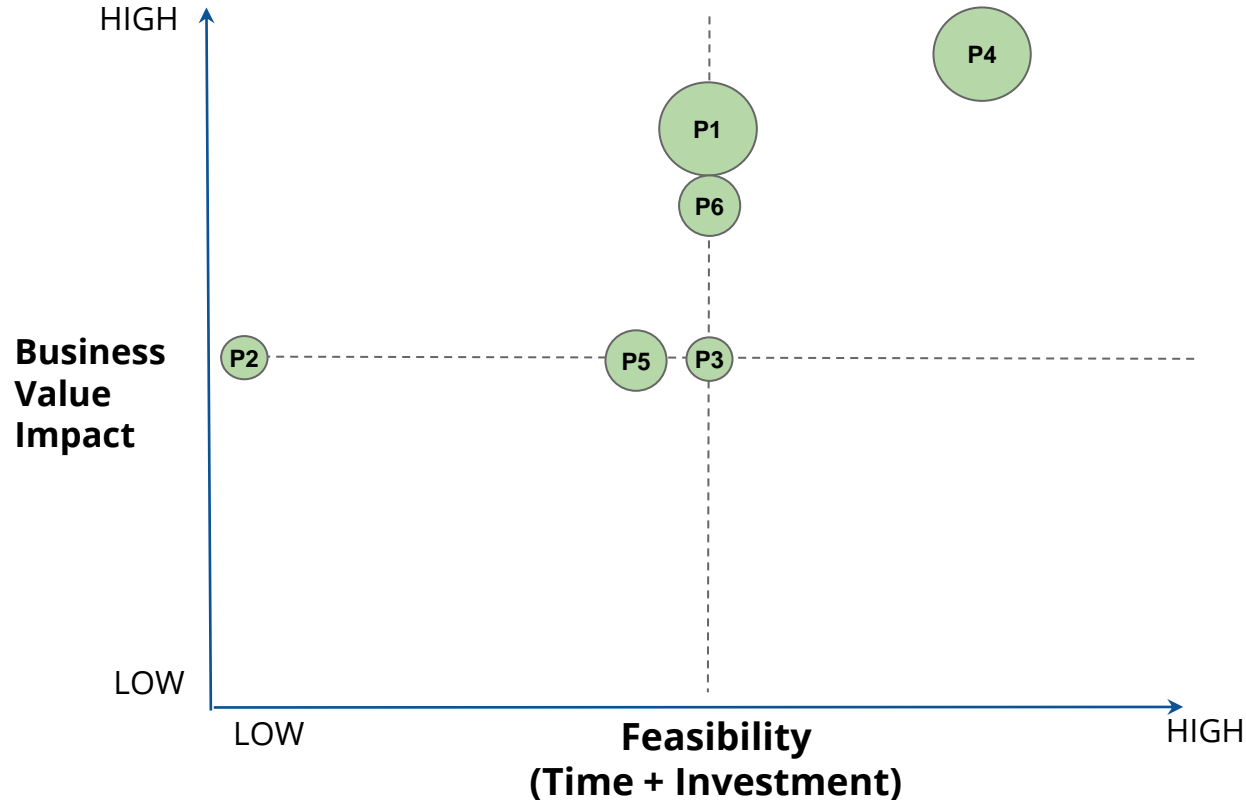


**Step 2, Part 2:** Complete the “Data Science Opportunity Matrix” below by modeling each of the six projects in terms of feasibility (time & investment), business value impact, and likelihood of value capture



**Project 1:** Potential restaurant and customer Identification

**Project 2:** Digital assistant

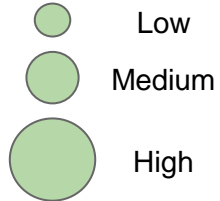
**Project 3:** Growth Prediction for the company

**Project 4:** Restaurant industry insights and statistics

**Project 5:** Supply chain optimization

**Project 6:** Eligibility score for financial programs

**Likelihood of Value Capture**



# Eligibility score for financial programs

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Data Scientist Leader

28/01/2023

# Executive Summary

## Purpose of 100-day plan

- Identifying data science opportunities
- Opportunities into roadmap
- Data and Data Architecture strategy
- Machine learning strategy

## Approach

- Iterative approach
- Getting user feedback often

## Results

- Human Capital Strategy
- Data and Machine Learning infrastructure
- Data-Driven Culture Strategy
- Opportunities Roadmap

# Scope of Work for First 100 Days

- Build out of data science team.
- Project 4: Restaurant industry insights and statistics.
- Project 1: Potential restaurant and customer Identification.
- Establishment of data-driven culture.

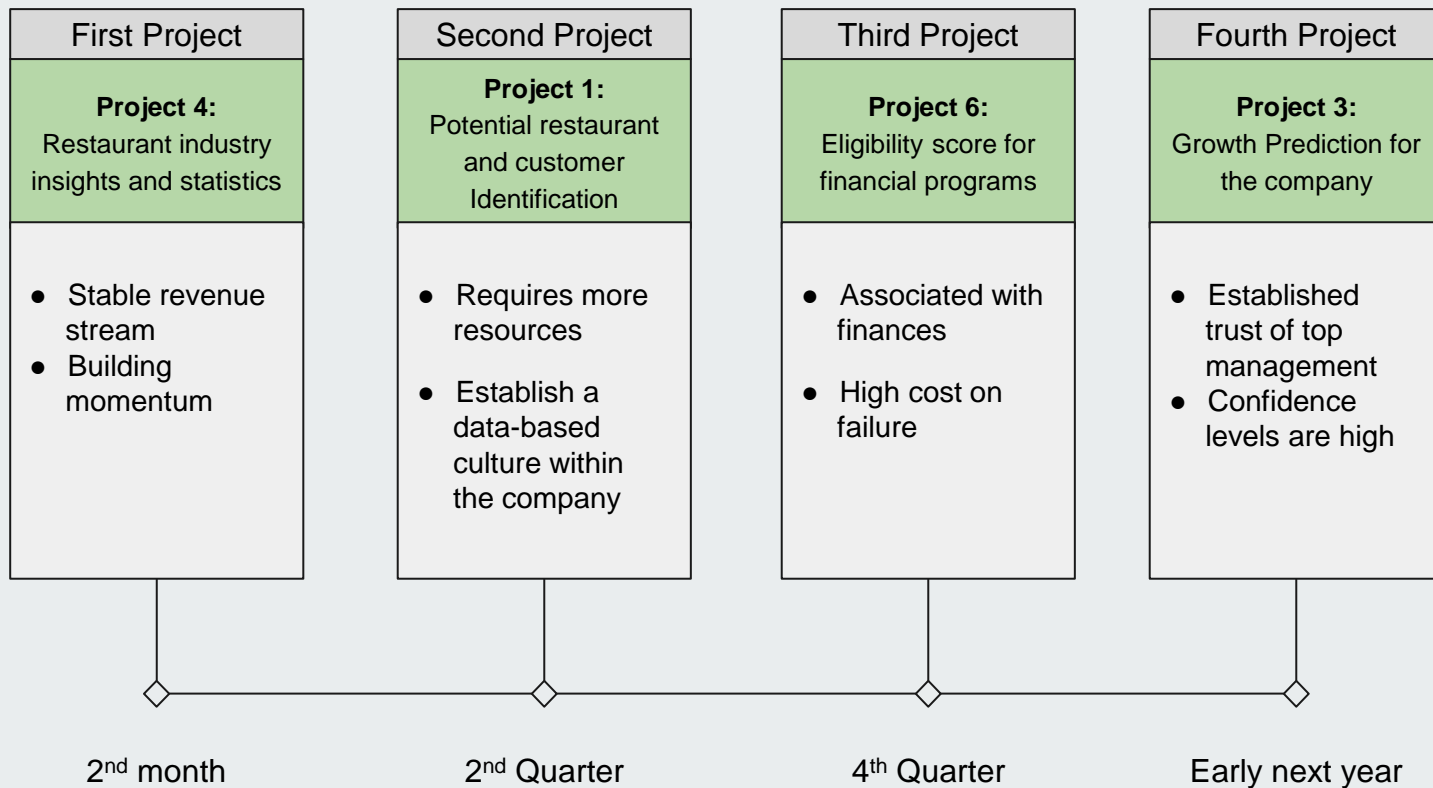
# Candidate Data Science Projects

	Functional Area	Project Description
<b>Project 1:</b> <b>Potential restaurant and customer Identification</b>	marketing	Automatic generation of marketing leads.
<b>Project 2:</b> <b>Digital assistant</b>	product	Creation of new future growth opportunities for the company through new products into different sectors.
<b>Project 3:</b> <b>Growth Prediction for the company</b>	finance	Prediction of the company's growth based on current trajectories.
<b>Project 4:</b> <b>Restaurant industry insights and statistics</b>	product	Prediction of the what the market is like now and what is it likely to look like in the future.
<b>Project 5:</b> <b>Supply chain optimization</b>	supply chain	Prediction of inventory needs based on supply and demand.
<b>Project 6:</b> <b>Eligibility score for financial programs</b>	finance	Eligibility evaluation of a costumer to apply for a financial programs.

**Step 2, Part 3:** Complete the “Data Science Road Map” below with the first four data science projects chosen for implementation.

<u>Order</u>	<u>Project</u>	<u>Order Justification</u>
1	<b>Project 4:</b> Restaurant industry insights and statistics	This will be an easy first project that will provide a stable revenue stream that will allow us to carry over our momentum to the next project.
2	<b>Project 1:</b> Potential restaurant and customer Identification	This project requires more resources but will allow us to establish a data-based culture within the company after the success of the project.
3	<b>Project 6:</b> Eligibility score for financial programs	This project be placed third since it is directly associated with finances, which has a high cost on failure.
4	<b>Project 3:</b> Growth Prediction for the company	This project will be great after the trust of top management has been established and confidence levels are high.

**Step 2, Part 3:** Complete the “Data Science Road Map” below with the first four data science projects chosen for implementation.

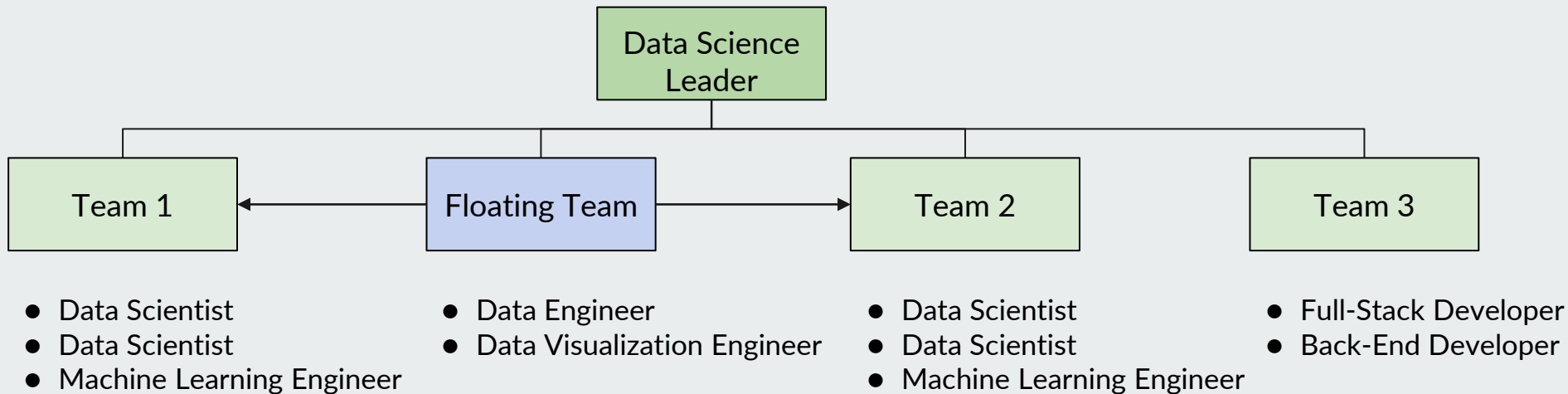


# Our Highest-Priority Data Science Projects

Order		Direct Alignment with Strategic Goals?	Cost	Complexity of Implementation	Certainty of Value Capture	Magnitude of Benefit
		1=Low; 5=High	1=High; 5=Low	1=High; 5=Low	1=Low; 5=High	1=Small; 5=Large
First	Project 4: Restaurant industry insights and statistics	5	4	4	5	5
Second	Project 1: Potential restaurant and customer Identification	5	3	3	4	4



# Initial Structure of the Data Science Team



# I have identified six strategies for promoting a data-driven culture in our business

## Strategies for promoting a data-driven culture

Strategy 1: Ensure that top management is on-board for a data-driven culture.

Strategy 2: Ensuring that everyone has basic data-access.

Strategy 3: Starting the habit of explaining analytical choices.

Strategy 4: Quantifying uncertainty.

Strategy 5: Choosing metrics with care.

Strategy 6: Encourage data scientists to innovate and start initiatives.

# Technical Infrastructure Needed to Support the Data Science Organization

Data Requirements	What data should be included in the Data Strategy?	<ul style="list-style-type: none"><li>- Single data warehouse</li><li>- ETL from cloud-based data stores</li><li>- Relational data store</li></ul>
Data Governance	Data Availability	<ul style="list-style-type: none"><li>- Data available to all employees</li><li>- Announcement of new dataset integrations</li><li>- Allow dataset requests for unavailable datasets</li></ul>
	Usability	<ul style="list-style-type: none"><li>- A dictionary of the available data</li><li>- Tags for easier searchability</li><li>- A meta store alongside the data store</li></ul>
	Integrity	<ul style="list-style-type: none"><li>- Regular check-ups on datasets</li><li>- Reporting of issues by consumers of data</li><li>- Data quality scores</li><li>- Tracing of data</li><li>- Regular scheduled back-ups of data</li></ul>
	Security	<ul style="list-style-type: none"><li>- Training of employees</li><li>- Firewalls</li><li>- Encryption of data while moving</li><li>- Masking of user information</li></ul>

# Technical Infrastructure Needed to Support the Data Science Organization

Technology	Data Architecture Components	<ul style="list-style-type: none"><li>- A data store that is the single source of truth</li><li>- Access through SQL queries or BI applications</li><li>- Access through APIs that expose information of the data store</li></ul>
Skills and Capacity	Data literacy skills and organizational capacity	<ul style="list-style-type: none"><li>- Just in time training</li><li>- Publishing data updates to the whole company</li><li>- Rewarding successful data-driven projects</li><li>- Promote data exploration and experiments that use the available data</li></ul>
Support for Machine Learning	Machine learning architecture	<ul style="list-style-type: none"><li>- POC on local</li><li>- Transition to cloud</li><li>- API endpoints for access to ML models</li></ul>
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