

Creating Knowledge Graphs via a Symbiosis of Data Science and Data Engineering

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reonomy

About Me (Maureen)



- 5 years in the startup space
- > 10 years running cosmological simulations





An aerial photograph of a dense urban skyline, likely New York City, featuring numerous skyscrapers with illuminated windows and a prominent circular structure in the lower right. The image has a teal and blue color grade.

How do humans interact with these physical structures?

Work/Rent

Own

Build or Fix

Manage or Maintain

Component of a larger picture



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What information is necessary to support human interactions?

Property/Structure

Property History

People

Company



Property Intelligence

How has information been stored in commercial real estate?



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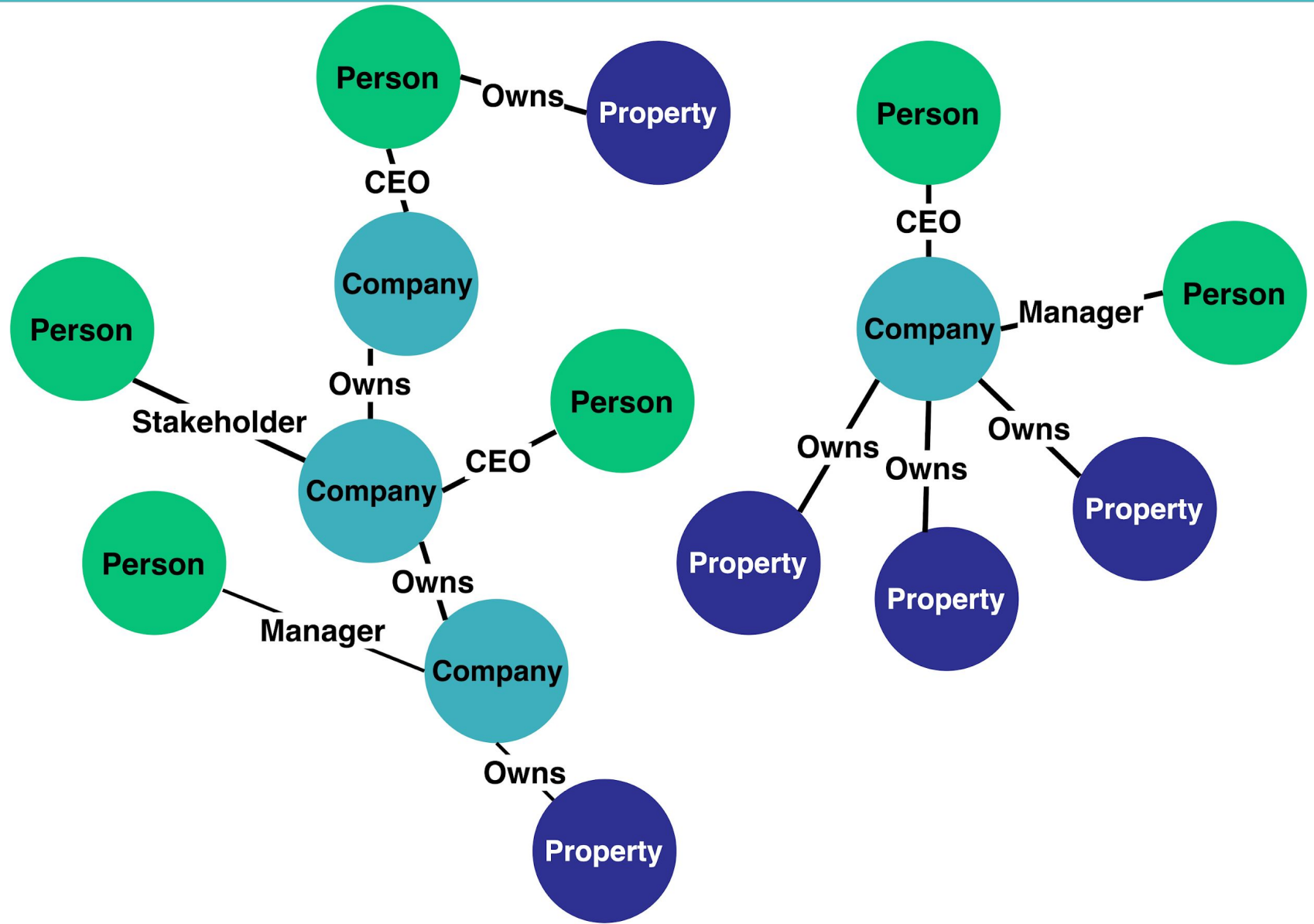
Company



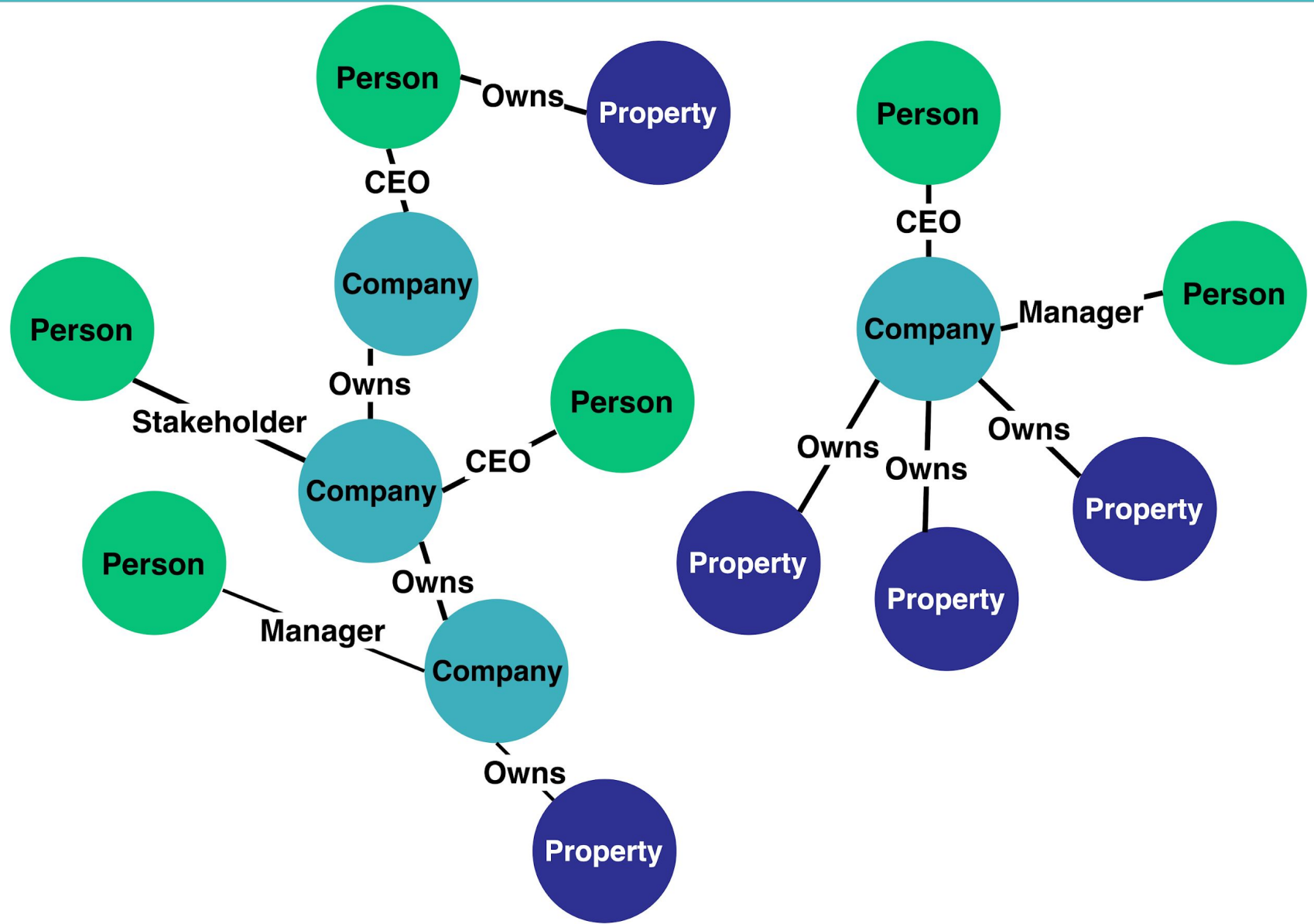
Property Intelligence

Structures that can support Property Intelligence

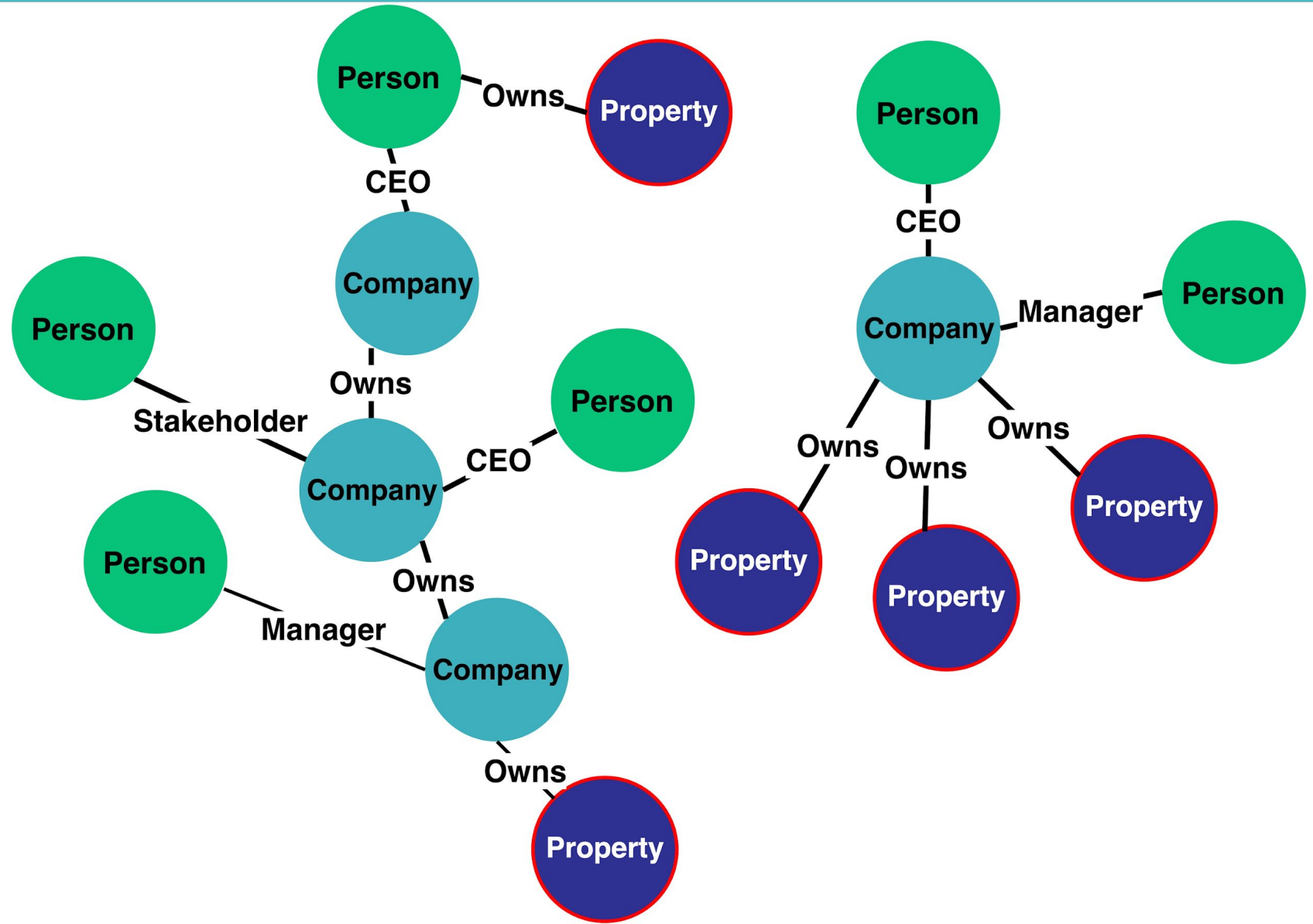
Property/Structure
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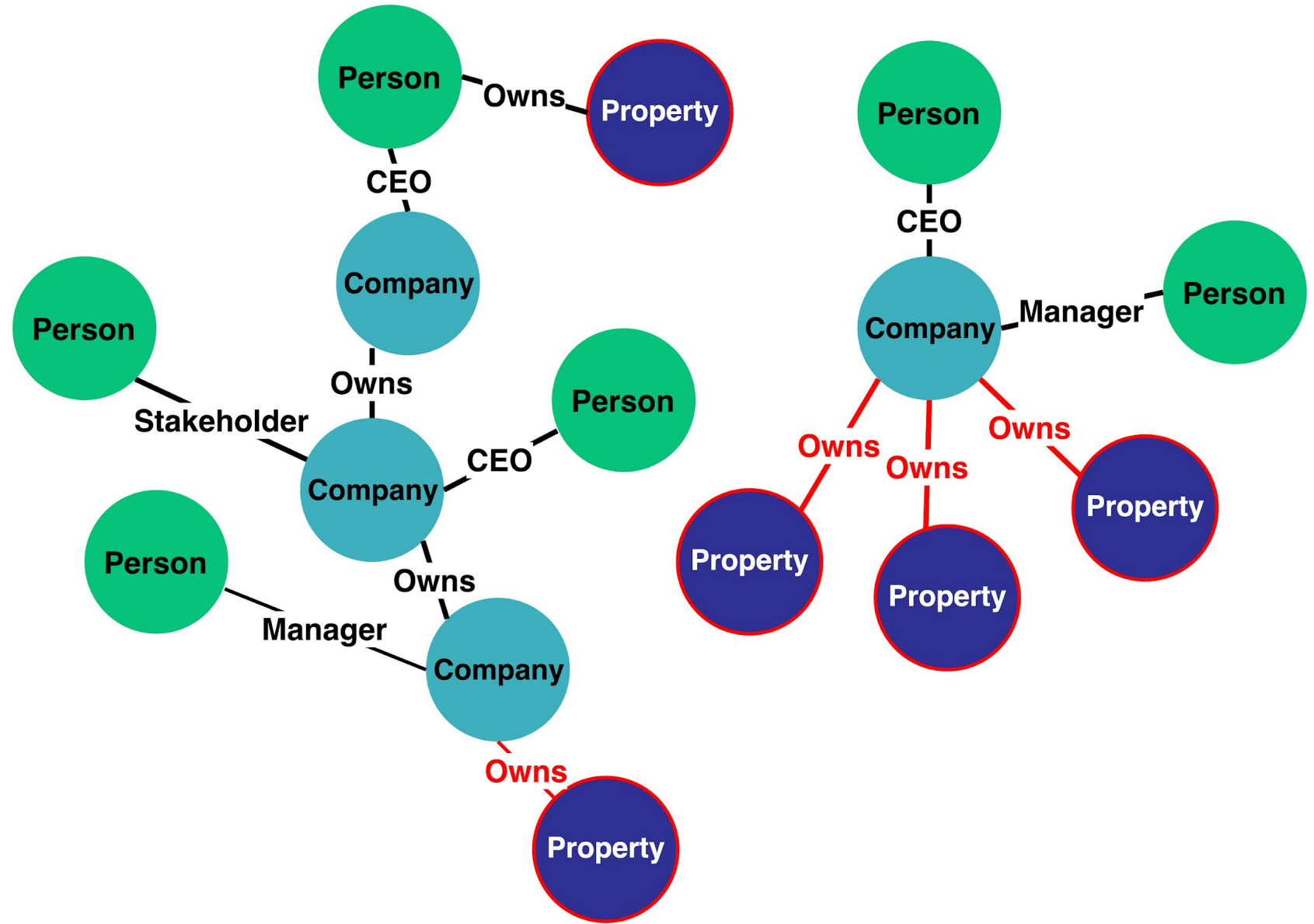
Which pieces have **ML**?



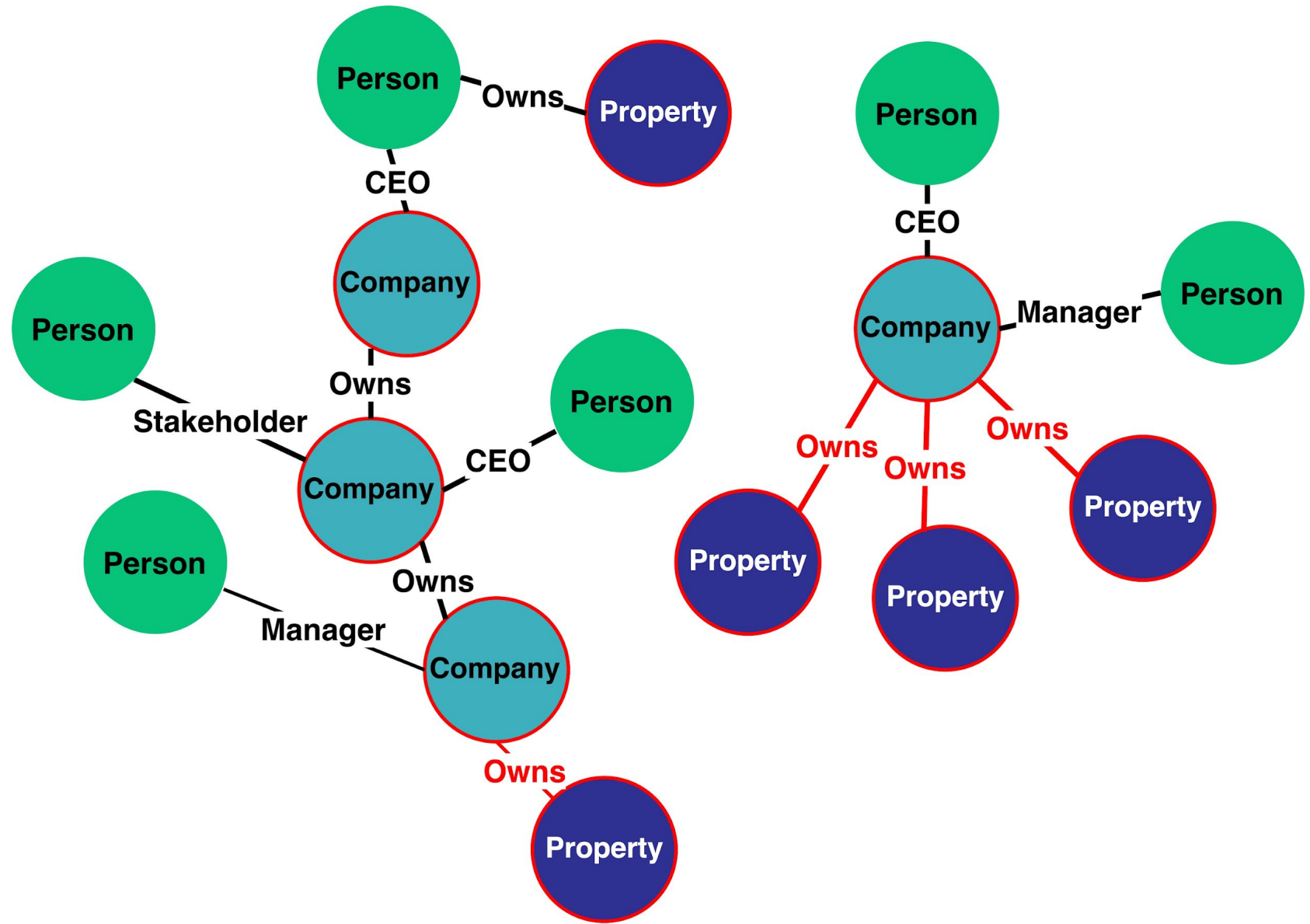
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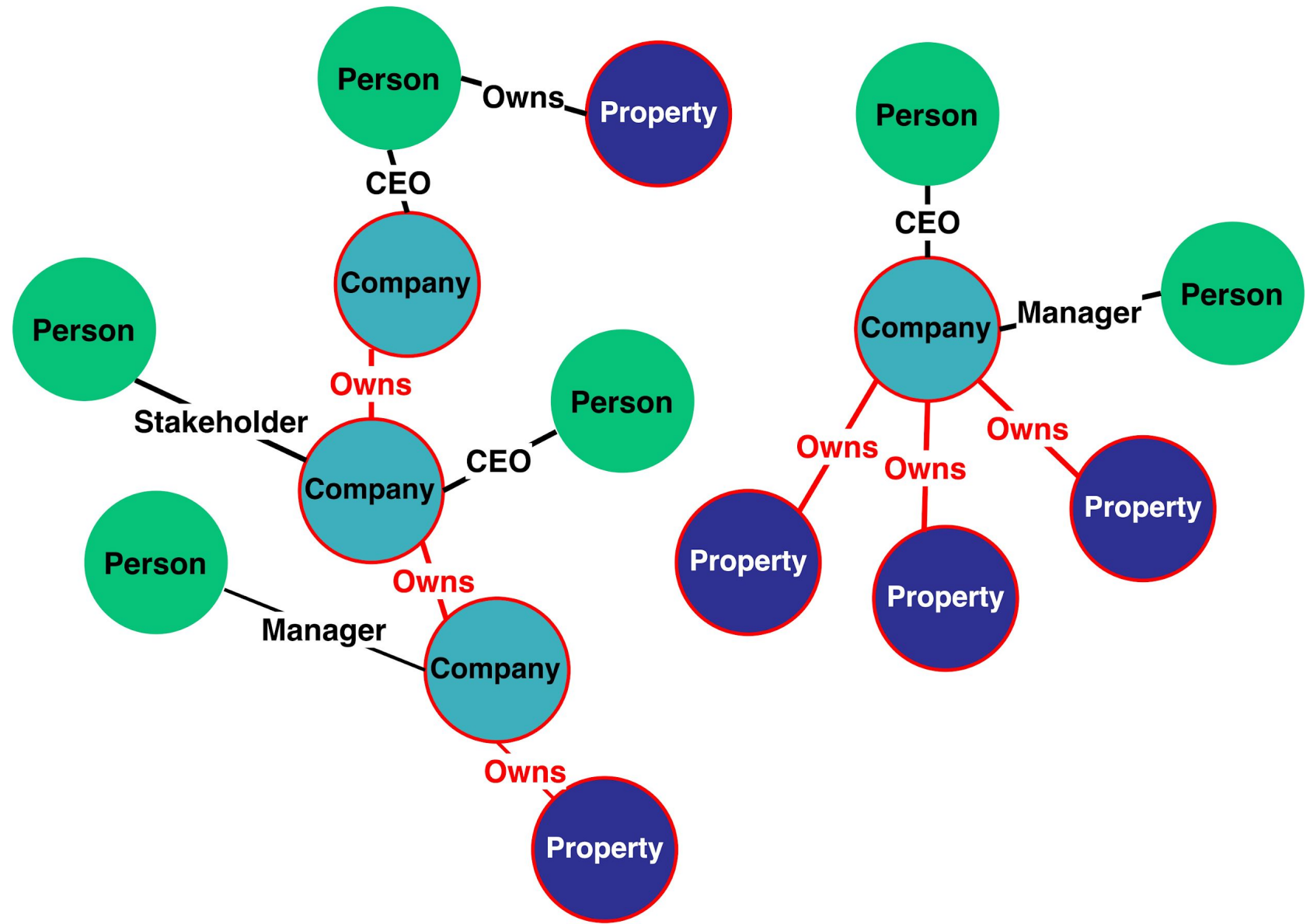
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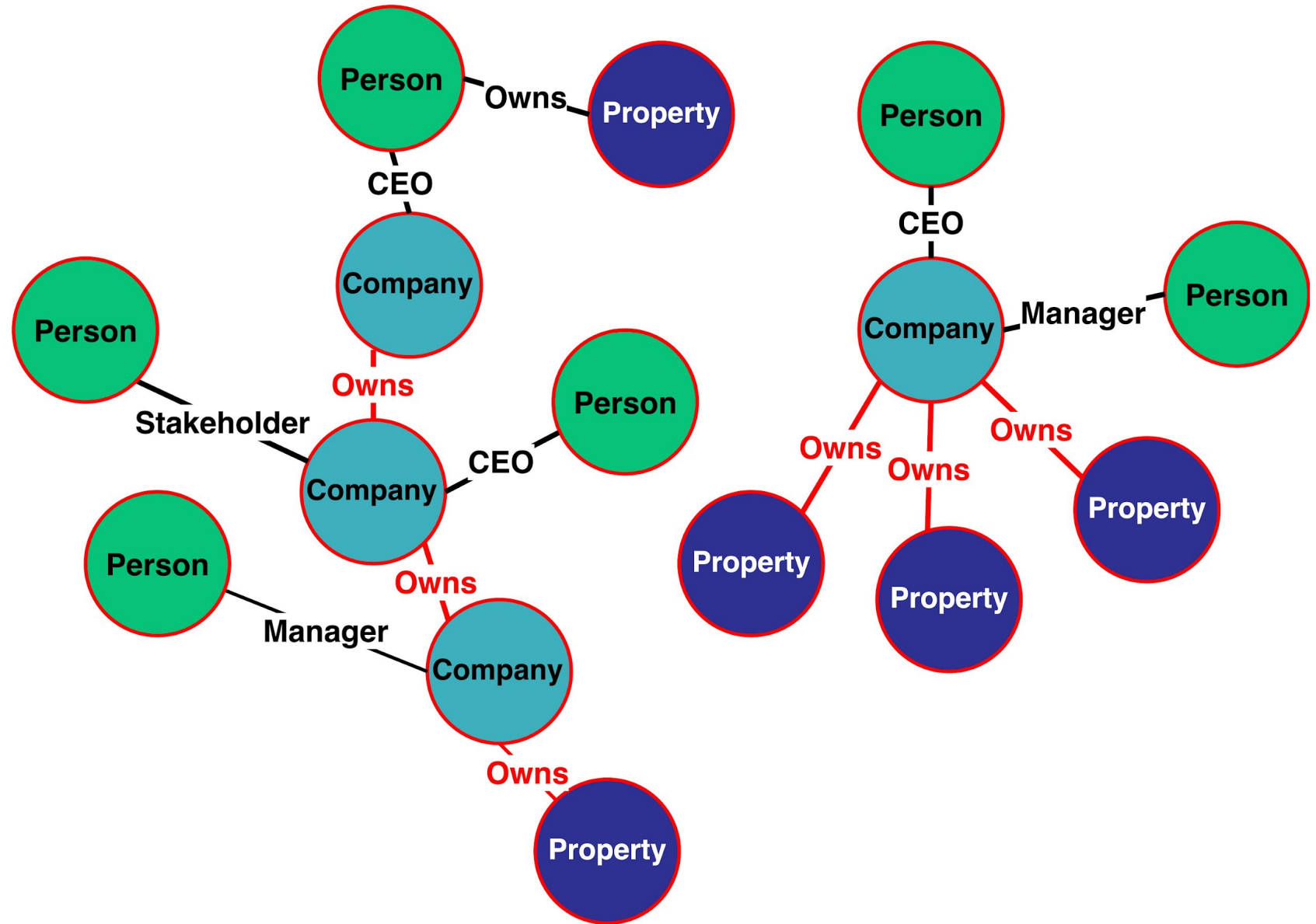
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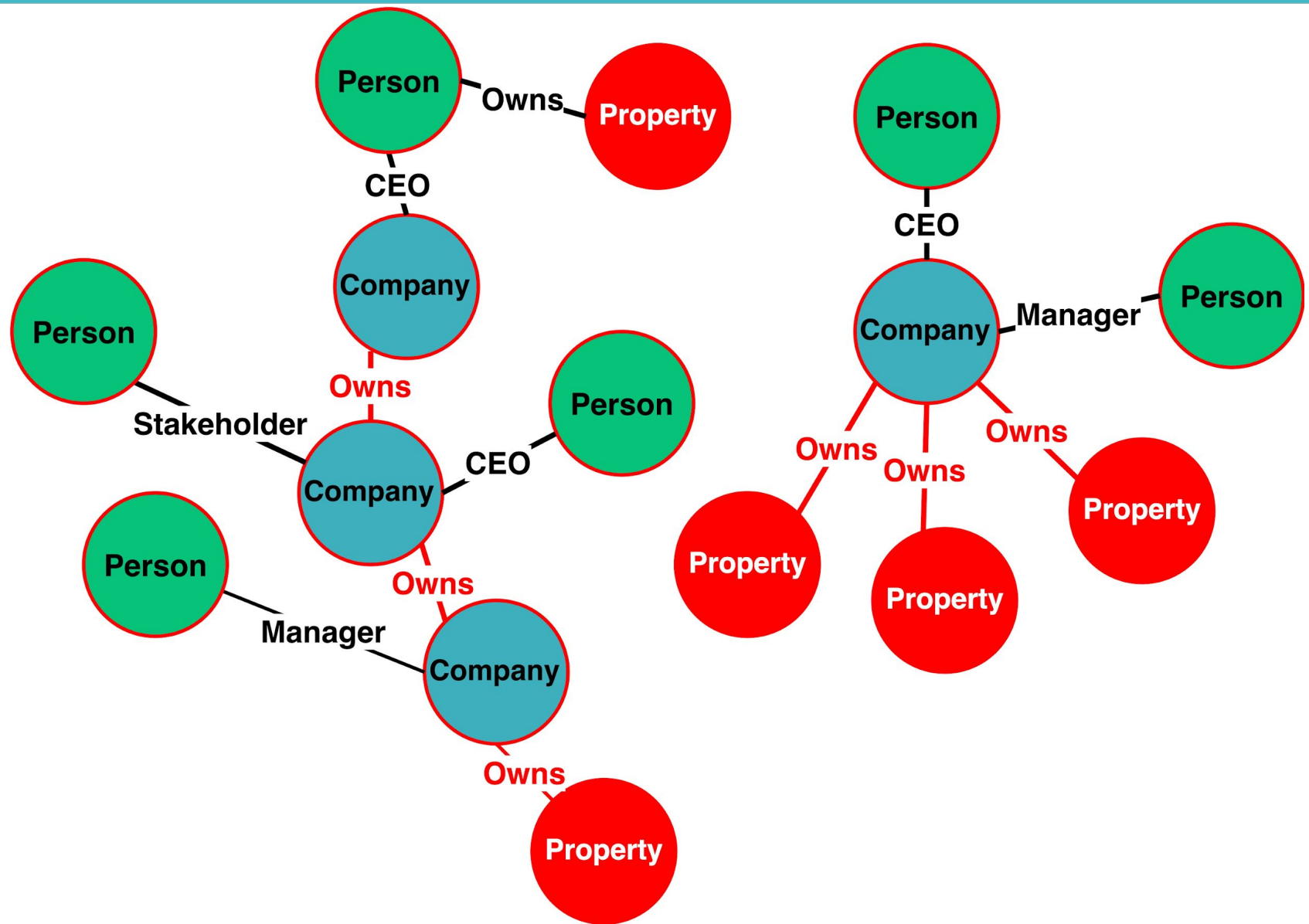
Which pieces have **ML**?



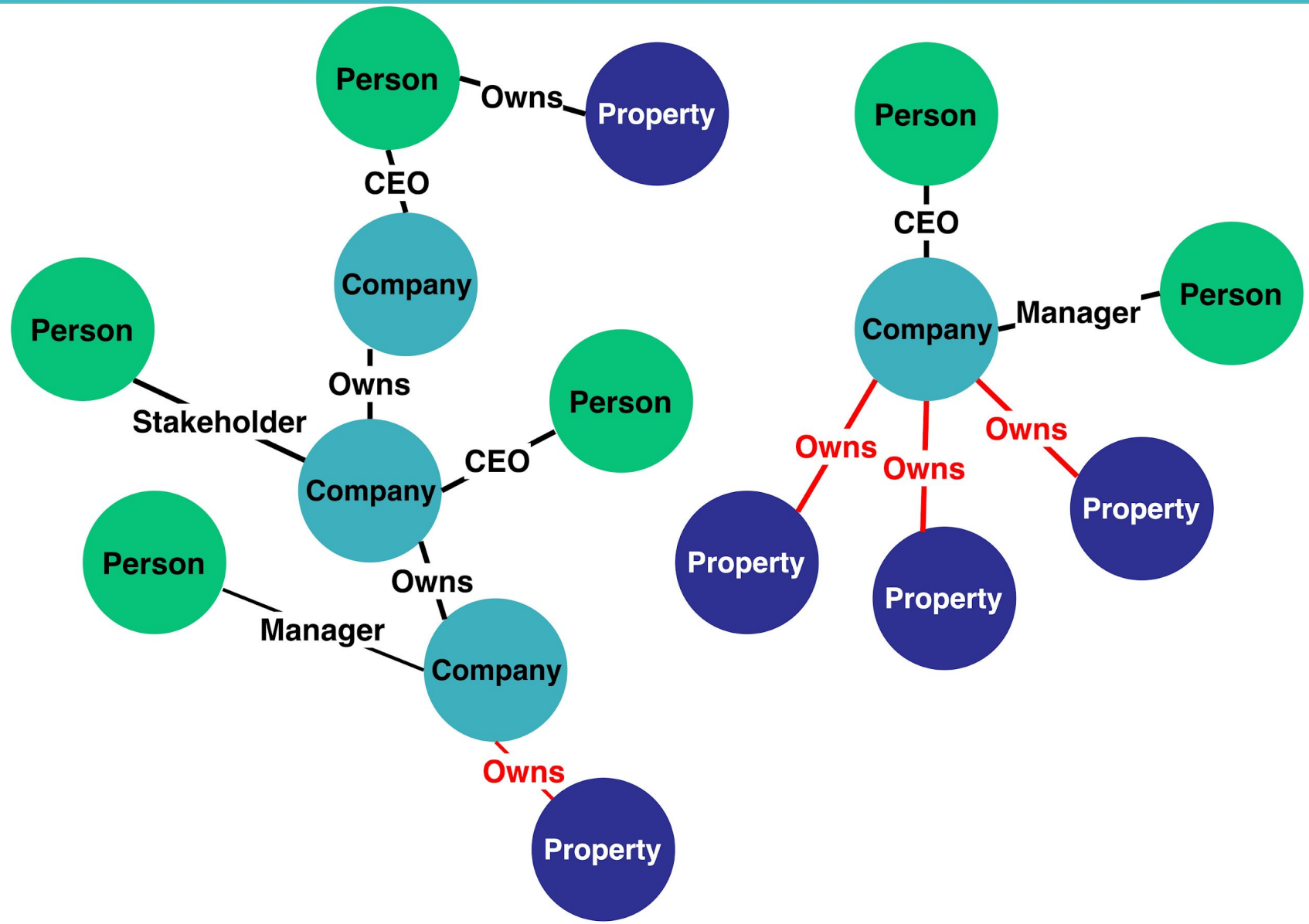
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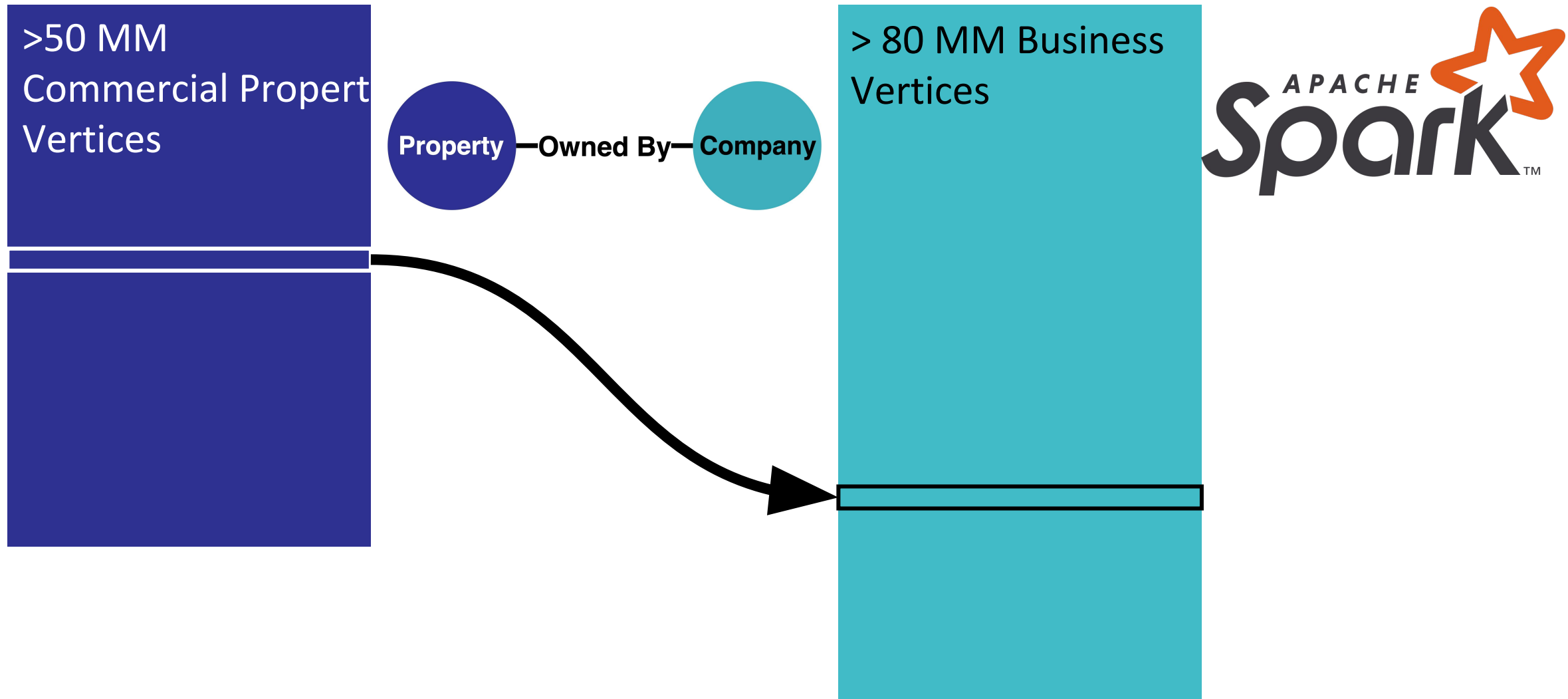
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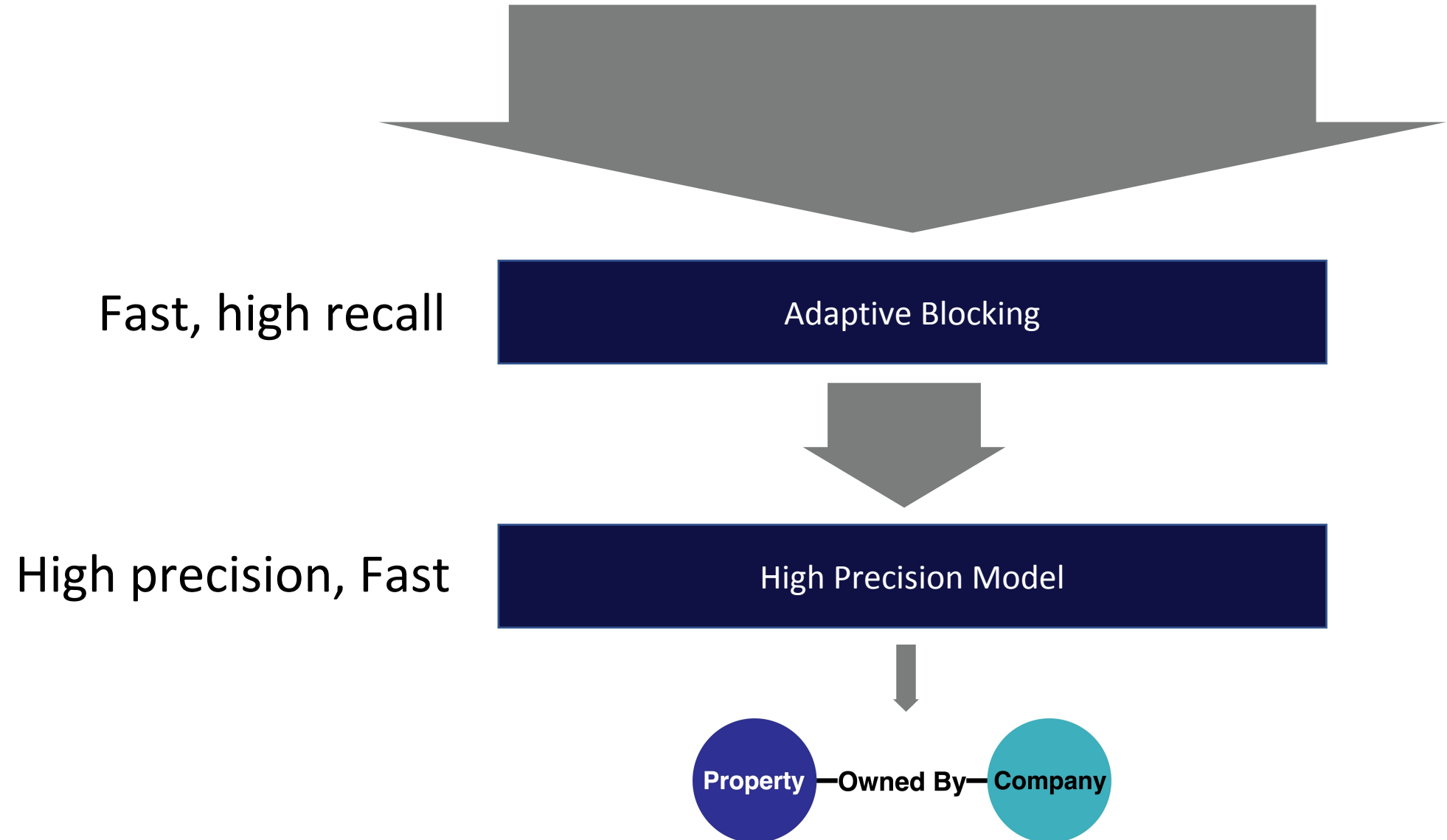
What we'll focus on today



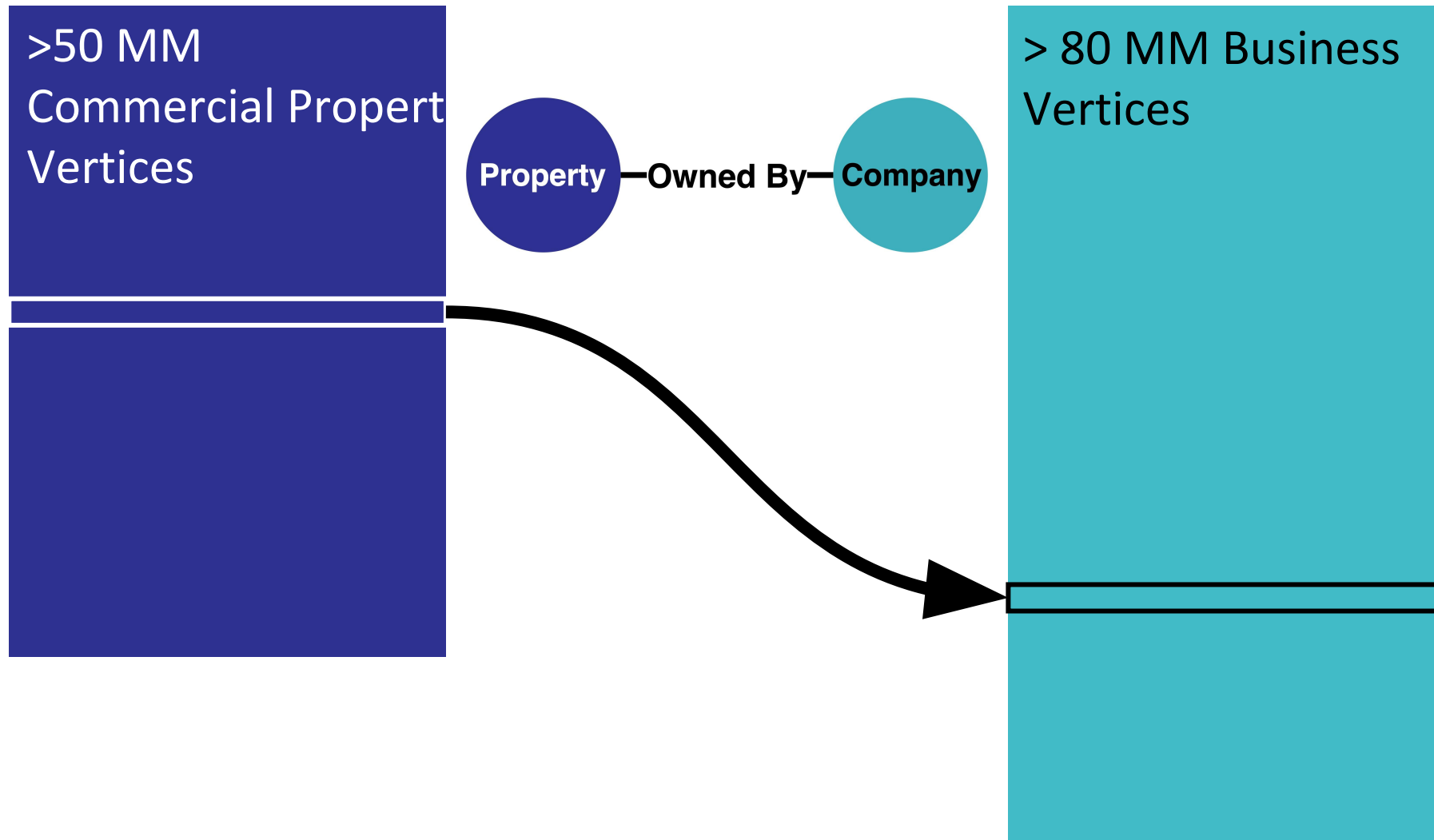
Building Property to Company Edges



Needles in the haystack: miniscule positive classes in high volume data



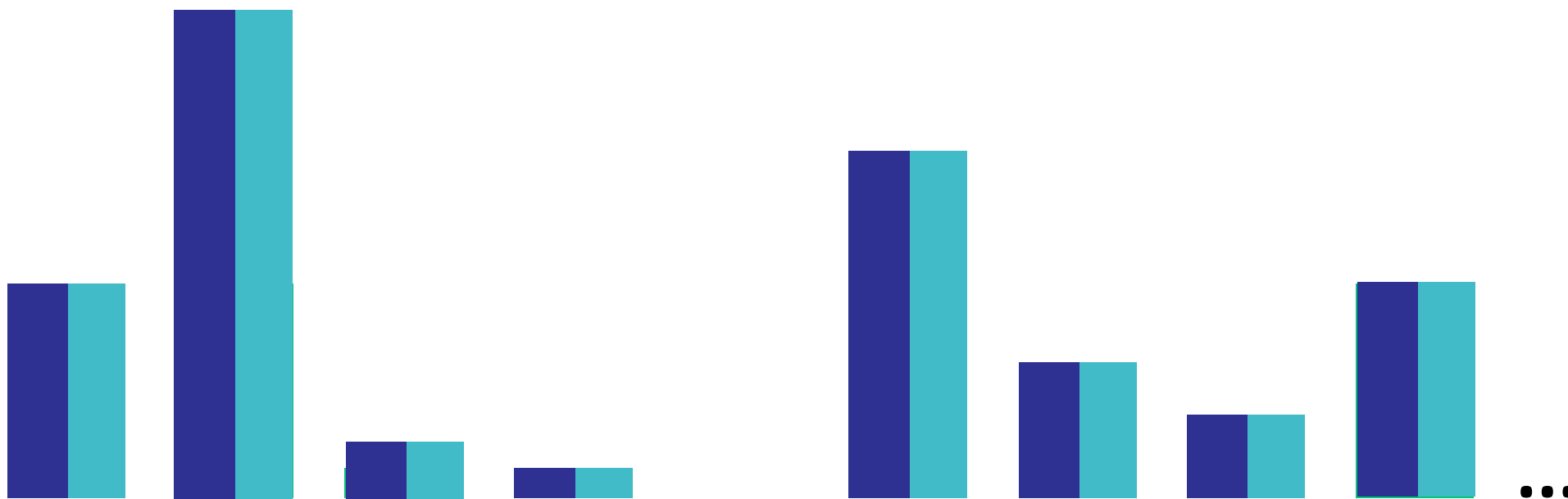
Building Property to Company Edges



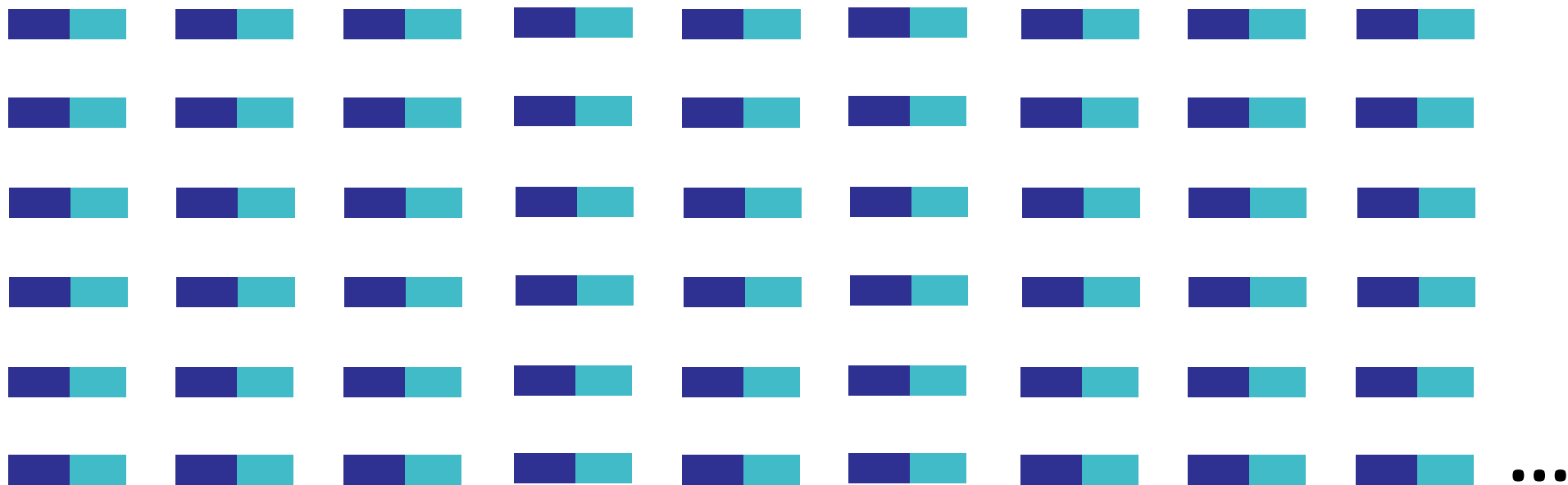
Cluster Behavior: Adaptive Blocking



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Cluster Behavior: Models



Implementation Strategy: Highest Risk First, Always



High Risk

DE: Adaptive Blocking Model

RI

Country

DS: ML Classification Models

Test

RI

Integration: Data Components

DE

Runtime and
Cluster Tuning

DS

Metrics and
DQ Testing

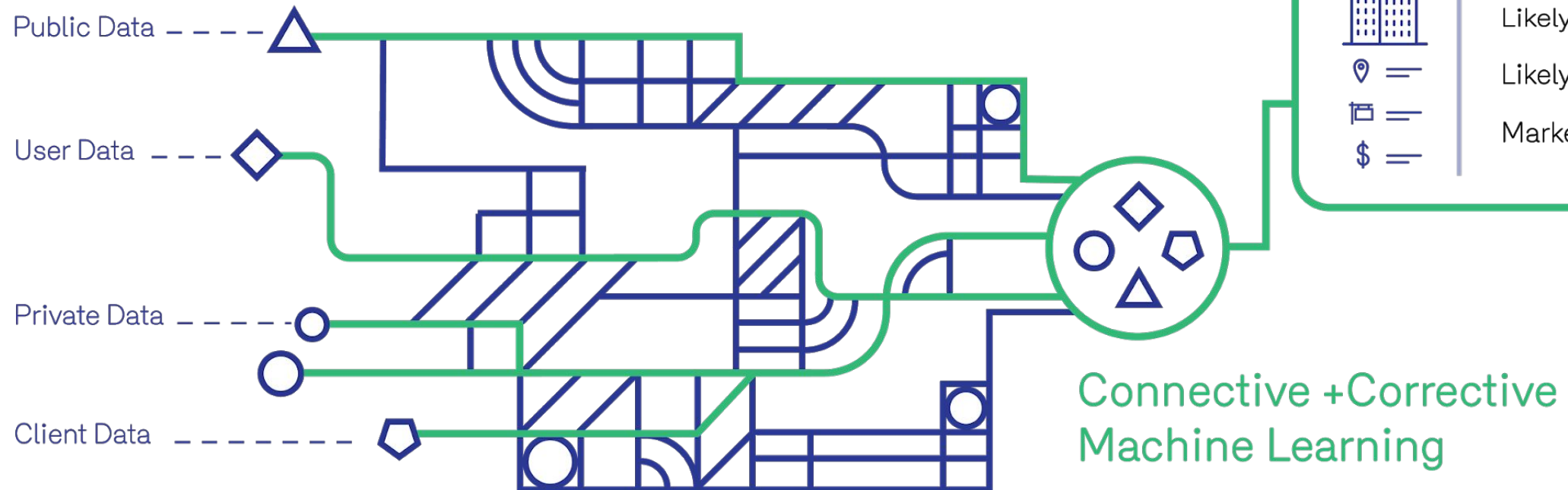
Integration: API

DE + Prod + SE

Dev App

Creation of Property Intelligence ...and more

Data Network



Predictive Analytics



Likely to sell?

Likely to refinance?

Market Trends

Connecting the world
of commercial real estate
to unlock insights and opportunities
for everyone.

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