

Segment & Conquer

Uncovering High-Value Multi-Dwelling Units for Strategic Customer Acquisition

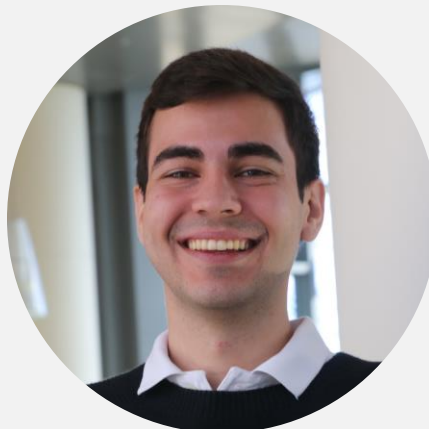
Advisors: Anna Damico & Seth Monahan (Comcast), Prof. Swati Gupta (MIT)



Atharva Navaratne

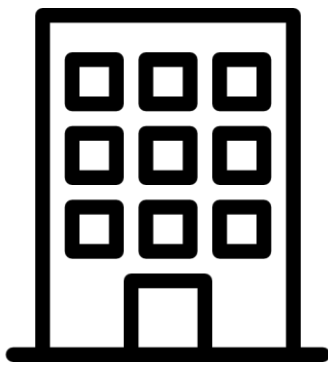


Andrés Camarillo



Overview

What are Multi-Dwelling Units (MDUs)?



Residential Buildings
with 2+ units



Residents Buy **Wi-Fi**
from Comcast

The Unexplored Market

5x

More **MDUs** than what has
already been explored *in years*

How should salespeople **prioritize**?

General Idea

Identify High-Value MDUs
In Comcast's active clients



Find Lookalikes
In the **unexplored market**



If an MDU has been **valuable in the past**, a similar
undiscovered MDU will likely be **valuable too**

Modeling Approach

Lookalike Modeling

Finding MDU segments that are meaningful and differentiated in building customer lifetime value

Augment Data

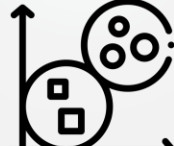
With 3rd-party sources for **active MDUs** and **unexplored MDUs**



- Size
- Education
- Income
- Etc.

K-means Clusters

Segment **active MDUs**, using
building CLV as one of 15 features



Statistically significant difference in
building CLV between clusters

Lookalike Classifier

Random forest on **active MDUs**
to predict clusters **without using**
building CLV



85%

Distance-weighted precision and recall

Assignment

Assign cluster labels to
unexplored MDUs

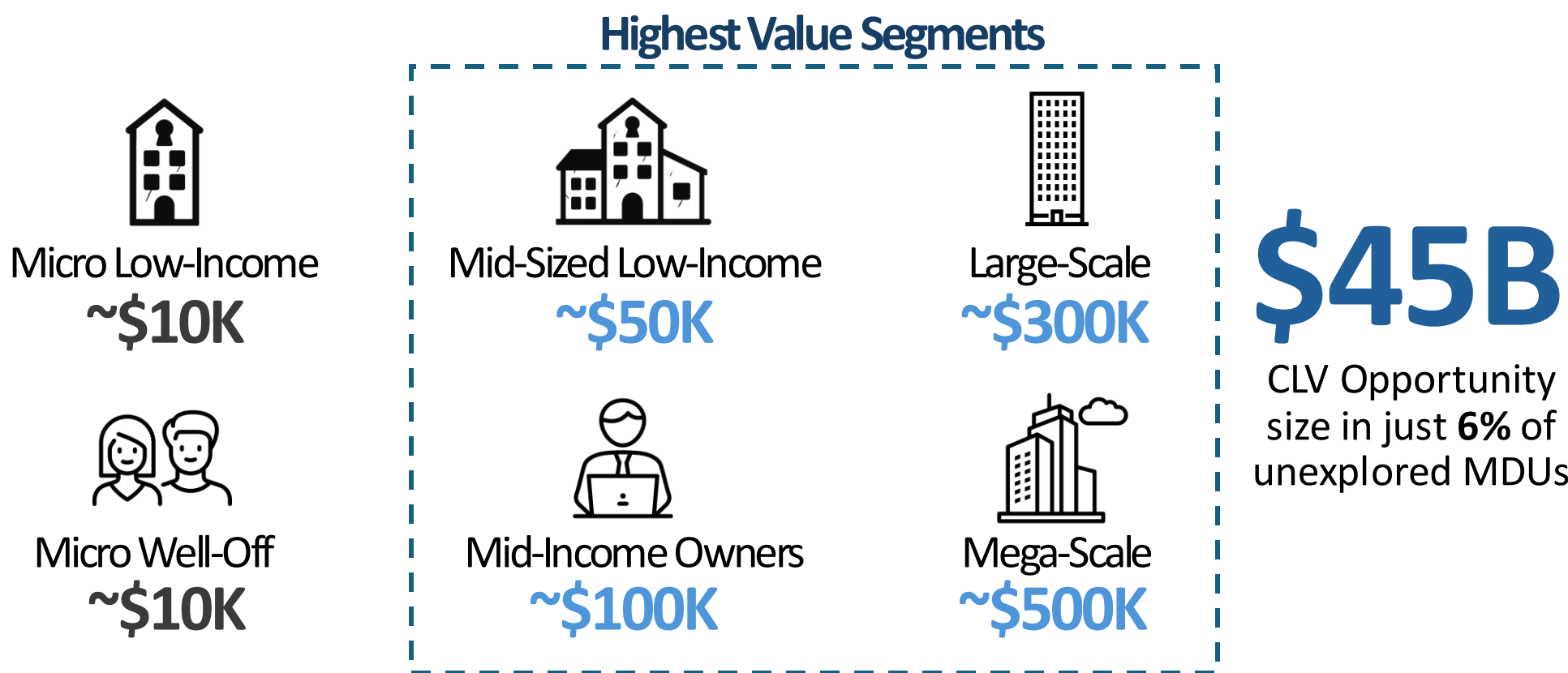


Impact

1

Identified High-Value MDU Segments

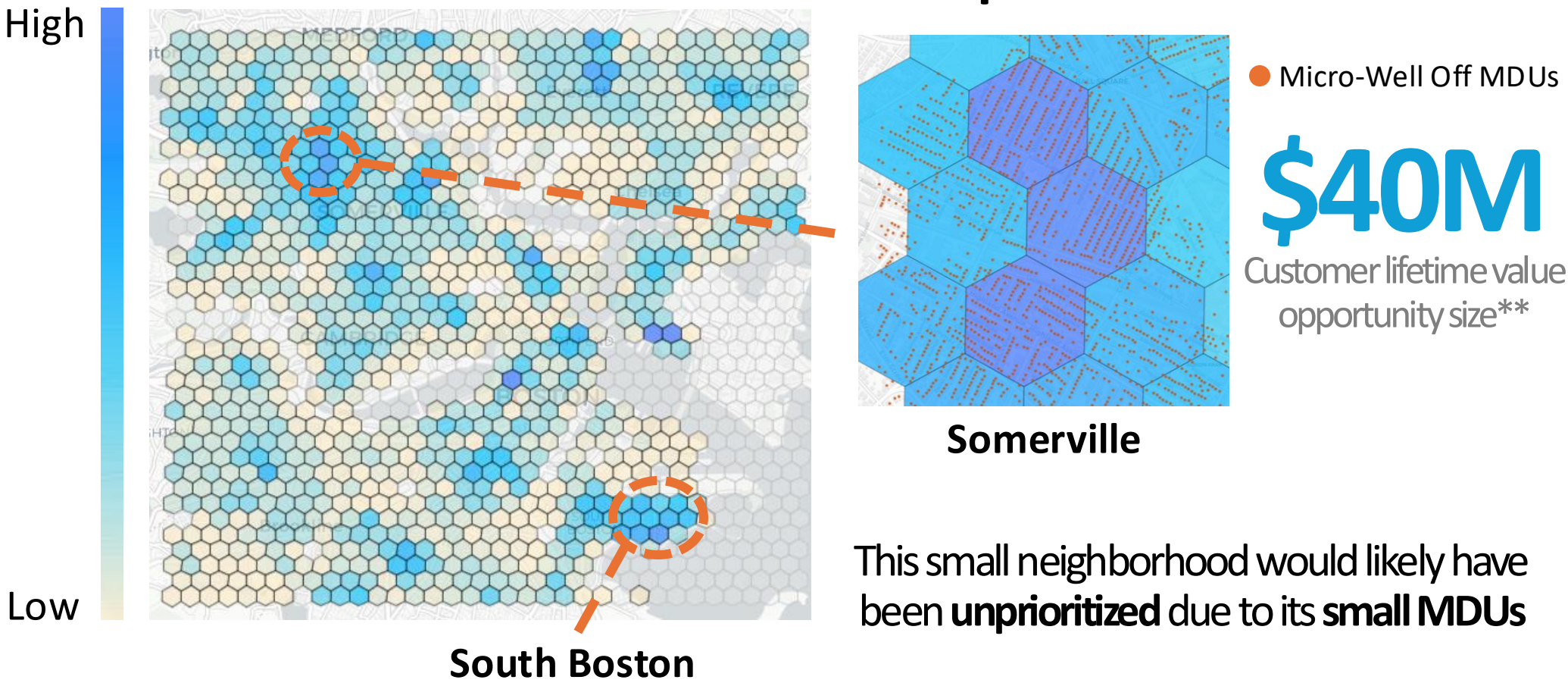
That are Differentiated in Building Customer Lifetime Value*



2

Mapped High-Value Unexplored Areas

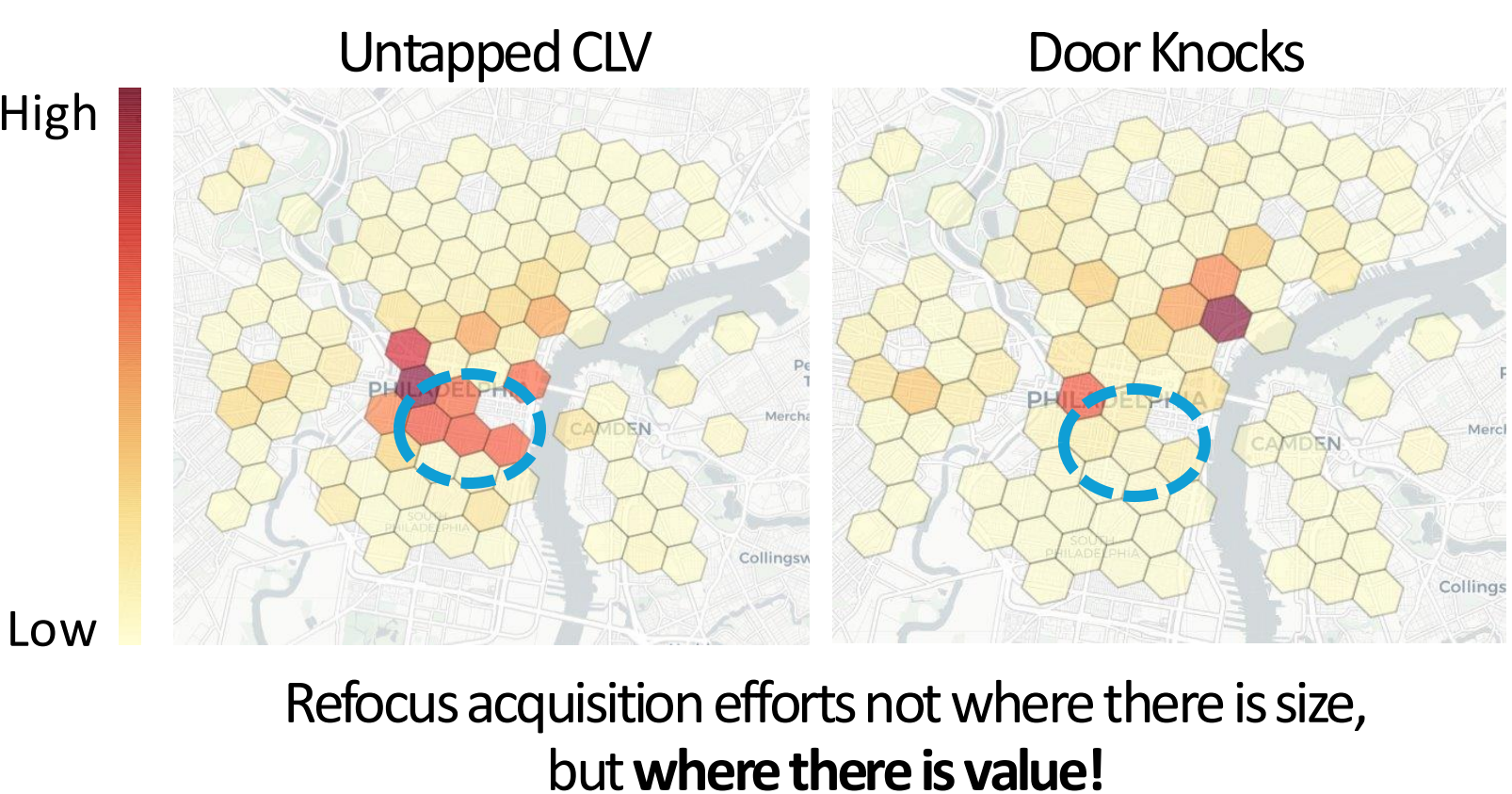
Estimated CLV in Boston's Unexplored Market



3

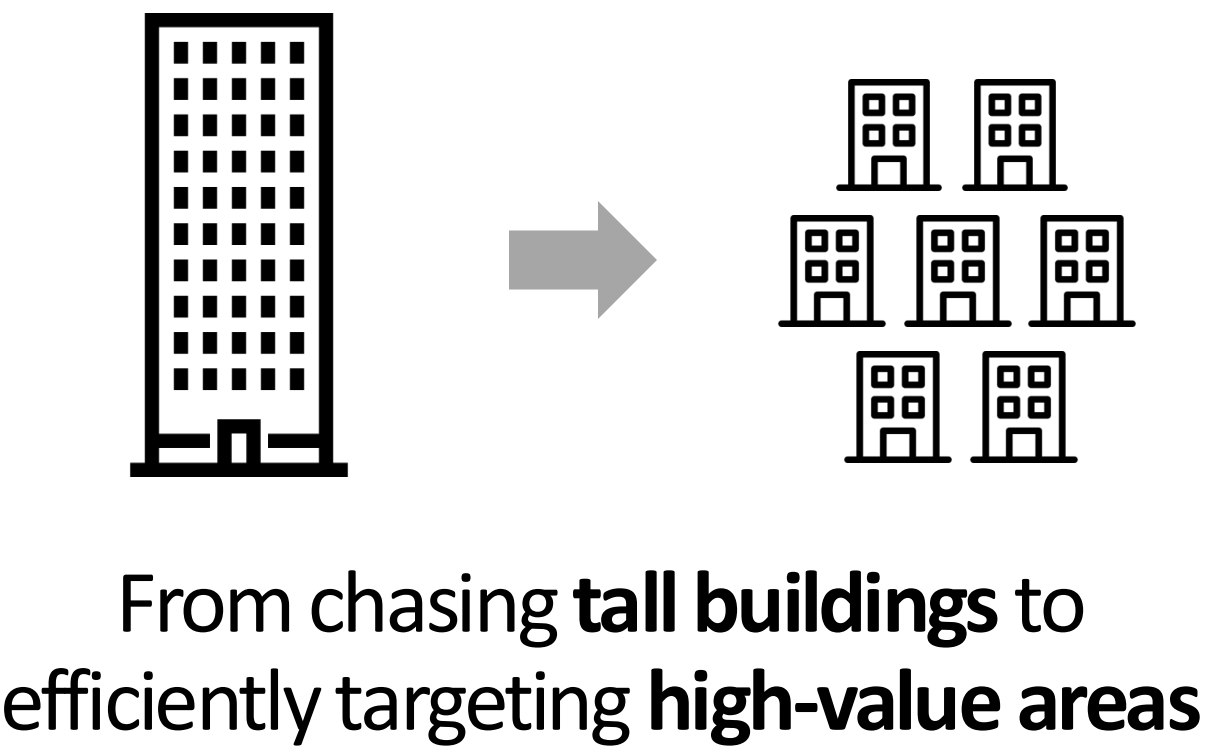
Informed Growth Within Explored MDUs

Undermarketed Areas in Comcast's Philadelphia Footprint



4

Changed the Paradigm



*Segment CLVs are fictional and show relative order of magnitude. True CLVs intentionally hidden. ** Opportunity size is calculated using actual CLVs.