How can Visa help small-medium businesses across the US thrive?

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Problem Statement

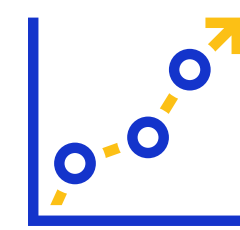**Small-medium businesses (SMBs) are key part of the US economy:**

99% of US businesses, **40%** of US economy

However, SMBs are a **fundamentally overlooked and underserved segment**, because:

- Strong heterogeneity makes discussions about the SMB landscape heavily convoluted
- Policymakers have no way of judging opportunities for investment

Key questions

Using **Visa transactional data** and **US census demographic data**, we want to investigate:

Where in the US is the most potential for increasing SMB revenue growth?
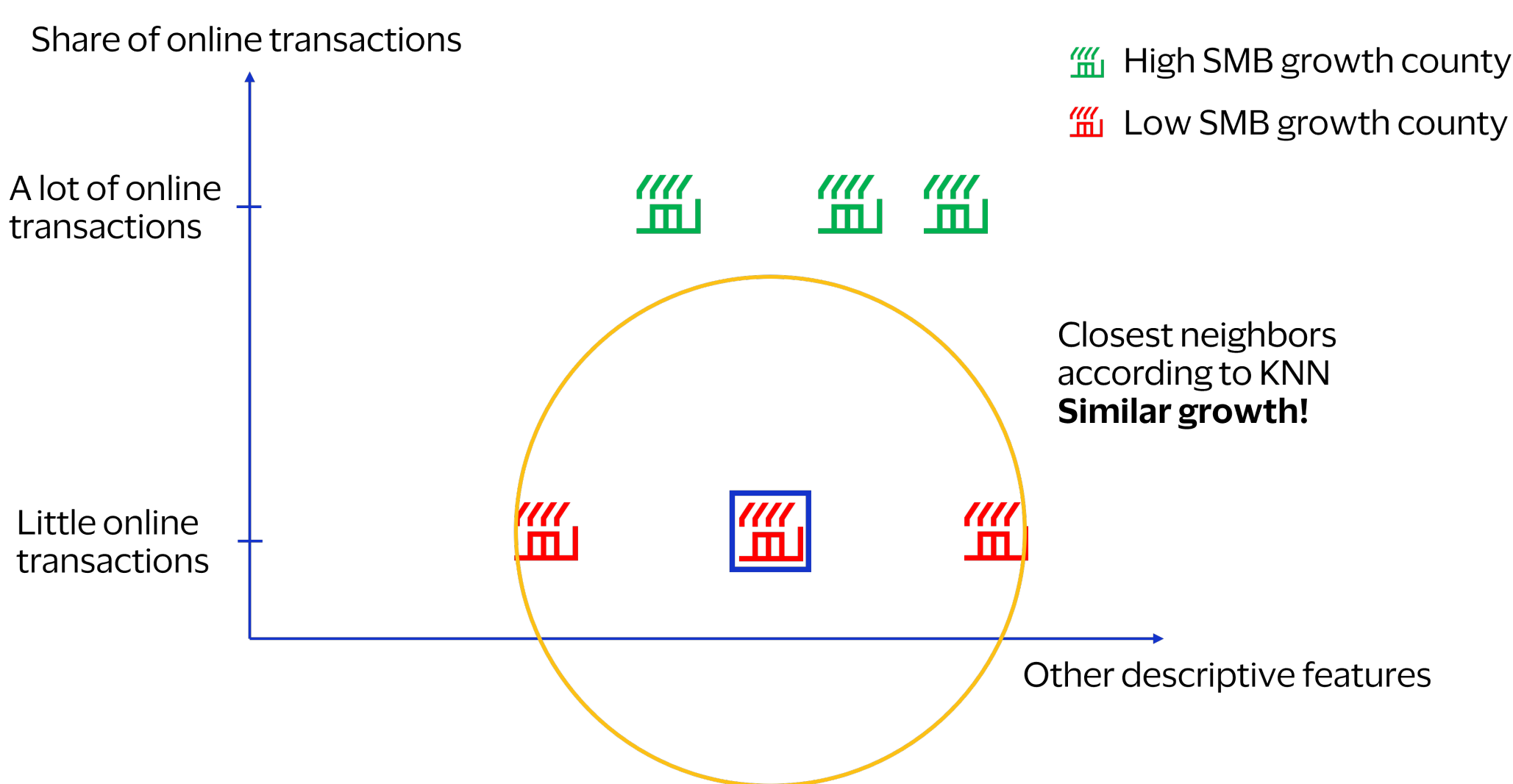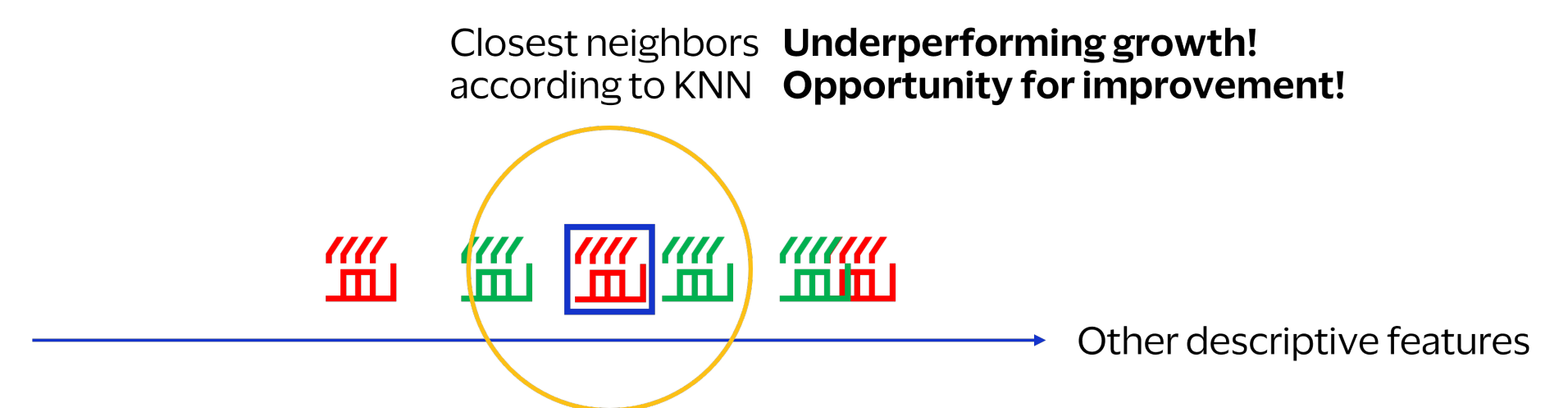
How can Visa help unlock that growth?

How can Visa make the discussion about SMBs more approachable?

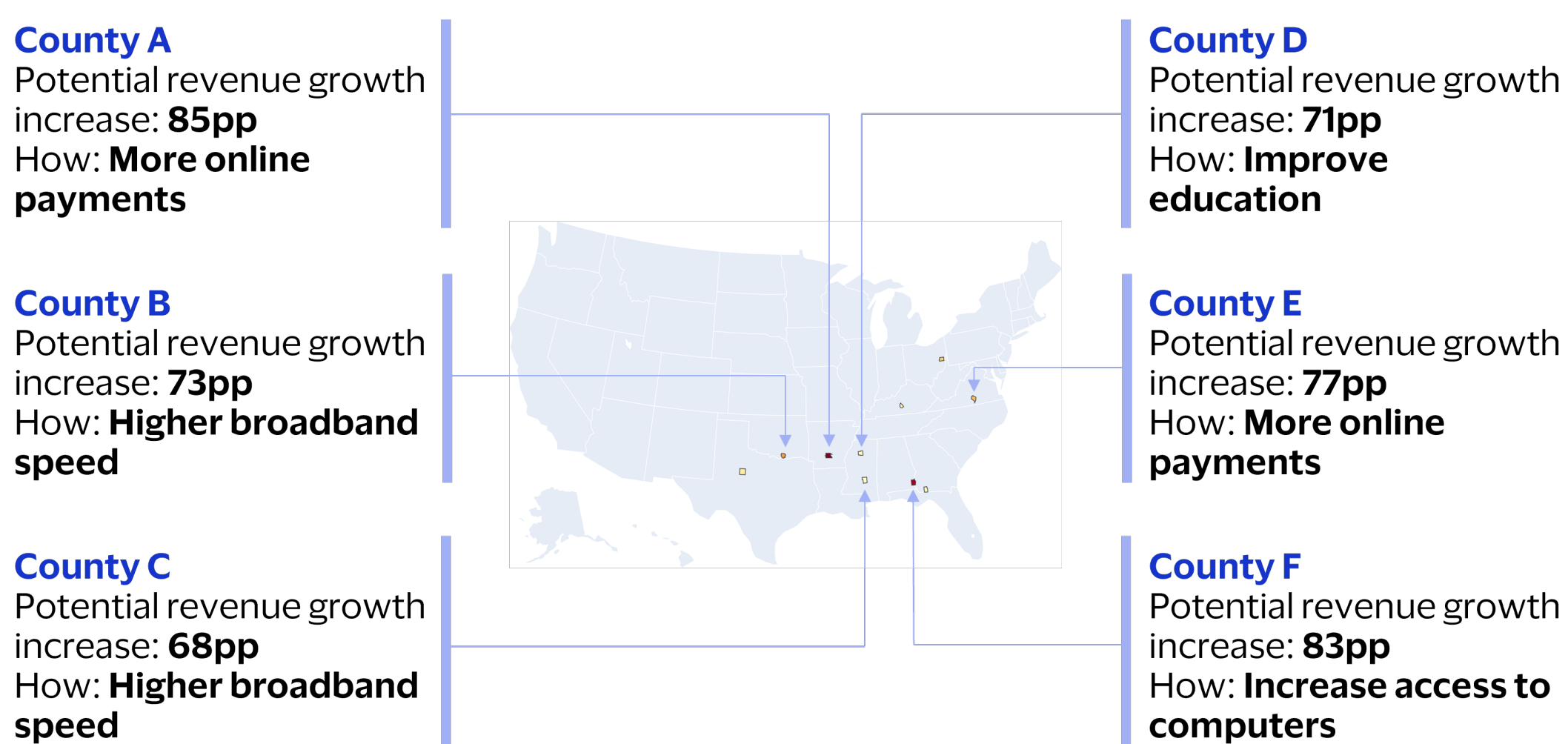## K-Nearest Neighbor model for US county features provides targeted insights

Share of online transactions

A lot of online transactions

Little online transactions

Other descriptive features

🏭 High SMB growth county
🏭 Low SMB growth county

Closest neighbors according to KNN **Similar growth!**

If we remove the share of online transactions feature:

🏭 High SMB growth county
🏭 Low SMB growth county

Closest neighbors according to KNN **Underperforming growth! Opportunity for improvement!**

Other descriptive features

Why?
County is most similar to high performers, except for one feature
→ **Making this feature similar could improve county performance**

Where and how to unlock SMB growth

County A
Potential revenue growth increase: 85pp
How: **More online payments**

County B
Potential revenue growth increase: 73pp
How: **Higher broadband speed**

County C
Potential revenue growth increase: 68pp
How: **Higher broadband speed**

County D
Potential revenue growth increase: 71pp
How: **Improve education**

County E
Potential revenue growth increase: 77pp
How: **More online payments**

County F
Potential revenue growth increase: 83pp
How: **Increase access to computers**

A metric for assessing SMB success

SMB Affinity Index

$$\frac{\text{\# SMB Transactions} / \text{\# SMBs}}{\text{\# non} - \text{SMB Transactions} / \text{\# non} - \text{SMBs}}$$

SMB Affinity Index is a proxy for **how likely households in a metro are to spend at an SMB compared to a large business**

Key insights on what drives SMB success

➕ Drivers:
- Walkable areas
- High income
- High education
- Young population
- Tech-savvy

Example: Boston

➖ Detractors:
- Low population density
- Senior population
- Non-diverse population

Example: Detroit

Business Impact for Visa

Our model shows Visa **where and how to improve SMB revenue growth** in the US

SMB revenue growth improvements of **up to 85pp** serve as **targeted opportunities for investment and policy work** with local leaders

SMB Affinity Index gives Visa a **standardized way** to report on SMB success in **publications** and **public policy initiatives on Capitol Hill**