

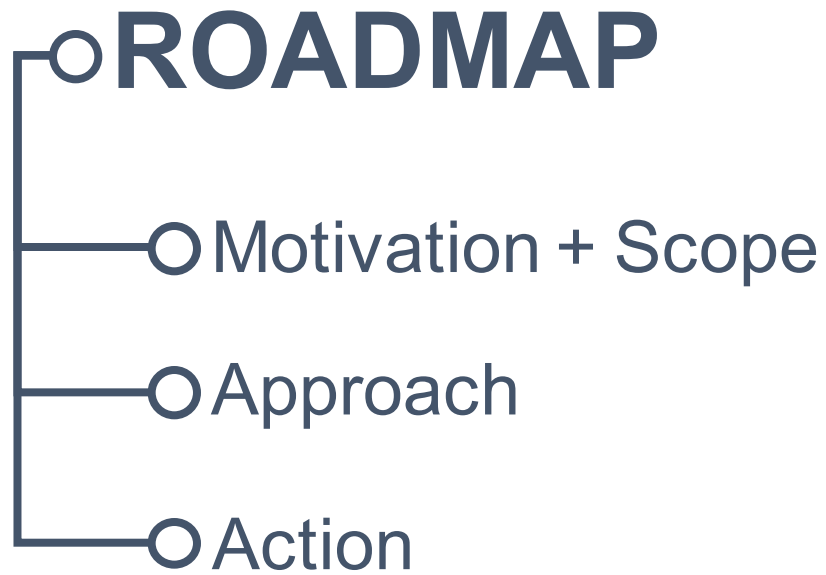
New Exporters Project: Predictive Modeling Methods for Expanding Global Markets

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Motivation + Scope

Motivation

- **Reach** export-ready businesses
- **Express** institutional knowledge of export-readiness in terms of available data and statistical methods
- **Tailor** export assistance services through modern business methods



Scope

- **Develop** new measures of convertibility and export-readiness by combining internal administrative data and commercial data
- **Characterize** segments of engagement and service to inform strategic efforts
- **Combine** statistical results with qualitative findings (field interviews) to provide recommendations for priority outreach
- **Drive** data-driven experimentation for client acquisition

Approach

Convertibility Index

Methods + Design

- Logistic Regression, 10-fold CV

Feature Selection

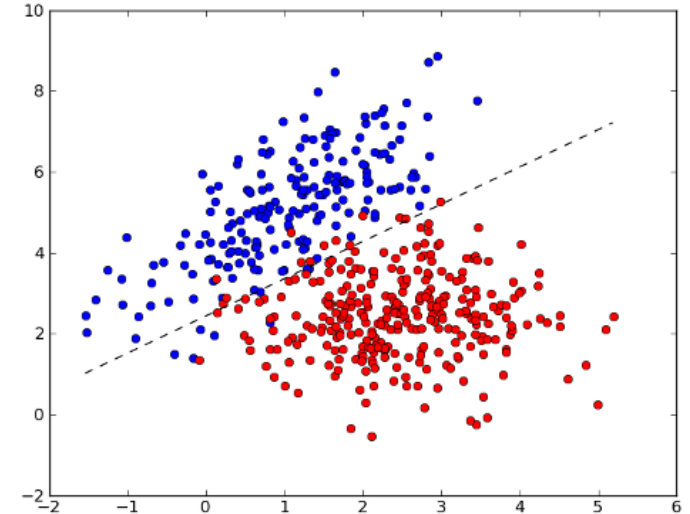
- **6 of 90+**: Importer status, location, sales, employees, industry, etc.

Precision

- Correctly identifies exporters **88%** of the time.

Recall

- Accurately predicts non-exporters **94%** of the time.



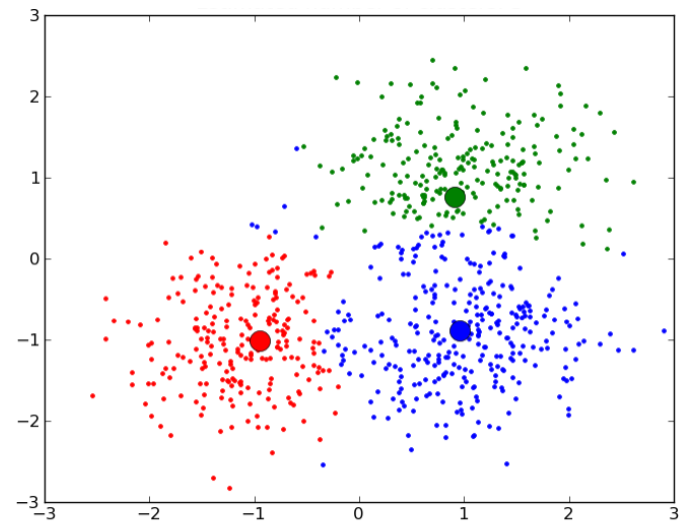
Customer + Service Segmentation

Principal Component Analysis

- Binarizes features to improve separability
- Reduces dimensionality to facilitate clustering

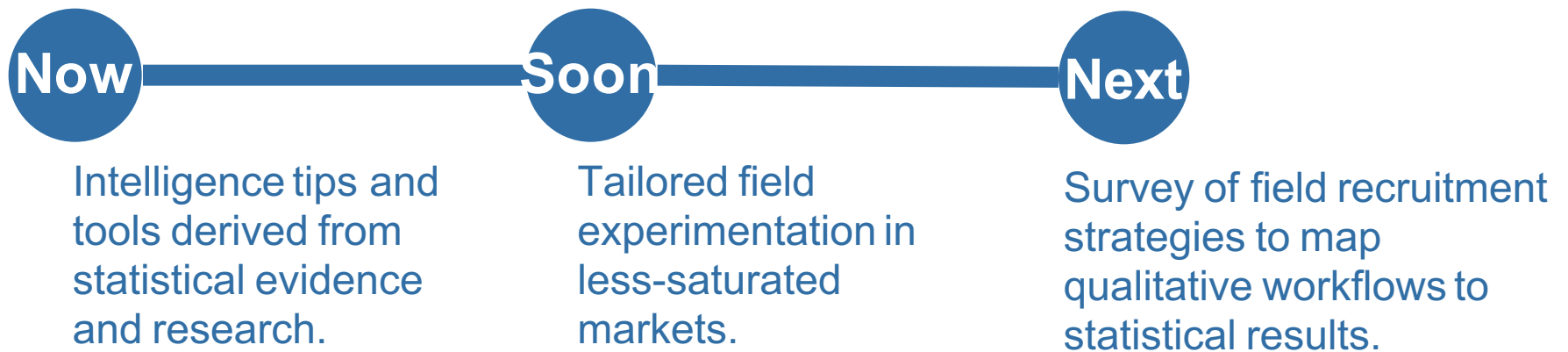
Model: K-Means Clustering

- Determines natural company profiles and customer segments.
- Clusters on company characteristics as well as service usage patterns.



Action

Research For Action





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