

Improving refugee integration through data-driven geographic assignment

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Agenda

1. Introduction
2. The GeoMatch Algorithm
3. Implementation Case Study
4. First Learnings

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Immigration Policy Lab

Designing solutions for an integrated world

- We **evaluate and design** policies surrounding the integration of immigrants, refugees, and asylum seekers worldwide
- We **work in partnership** with governments and immigrant service providers to implement evidence-based policies and conduct rigorous evaluations
- An interdisciplinary team of researchers, data scientists and program managers at **ETH Zurich** and **Stanford University**



Context

Key questions in refugee and immigrant integration



What kind of policies are the most effective and cost-efficient in **facilitating successful integration** into host countries' economies and societies?

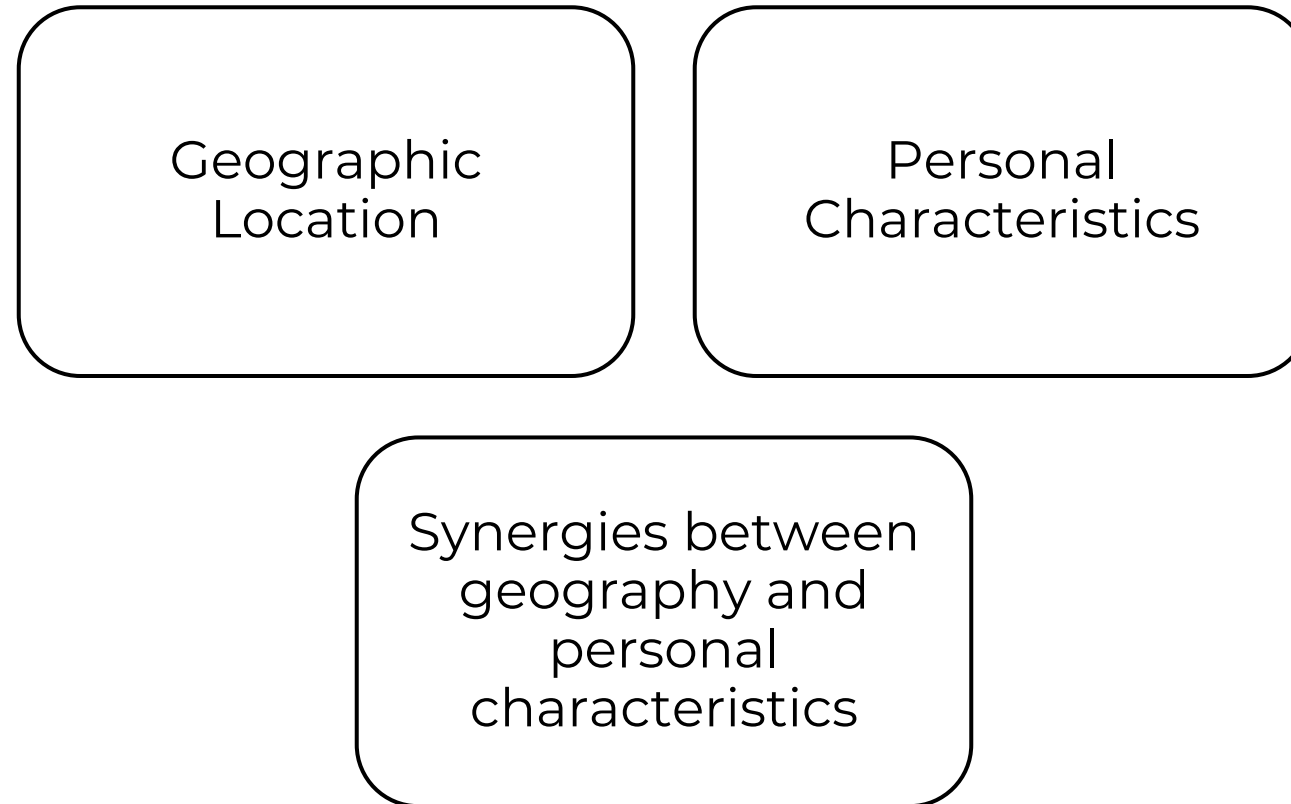


Data-driven tools have the potential to **deepen our understanding** about drivers of migrant integration outcomes and **serve as input for personalized policies**

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Factors that Shape Economic Self-Sufficiency



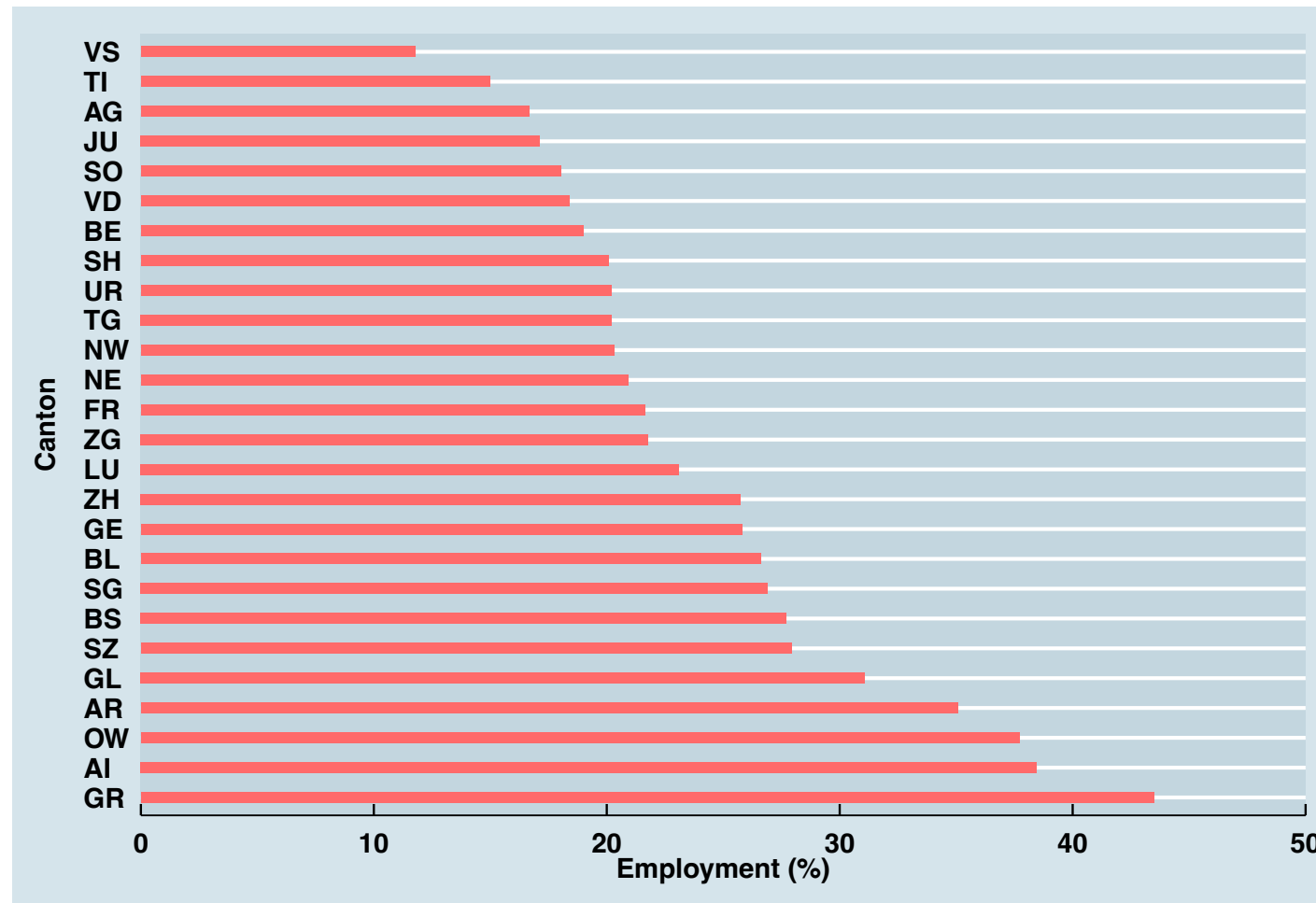
Geographic Location

Personal Characteristics

Synergies between geography and personal characteristics

Refugee Employment by Location

Swiss data



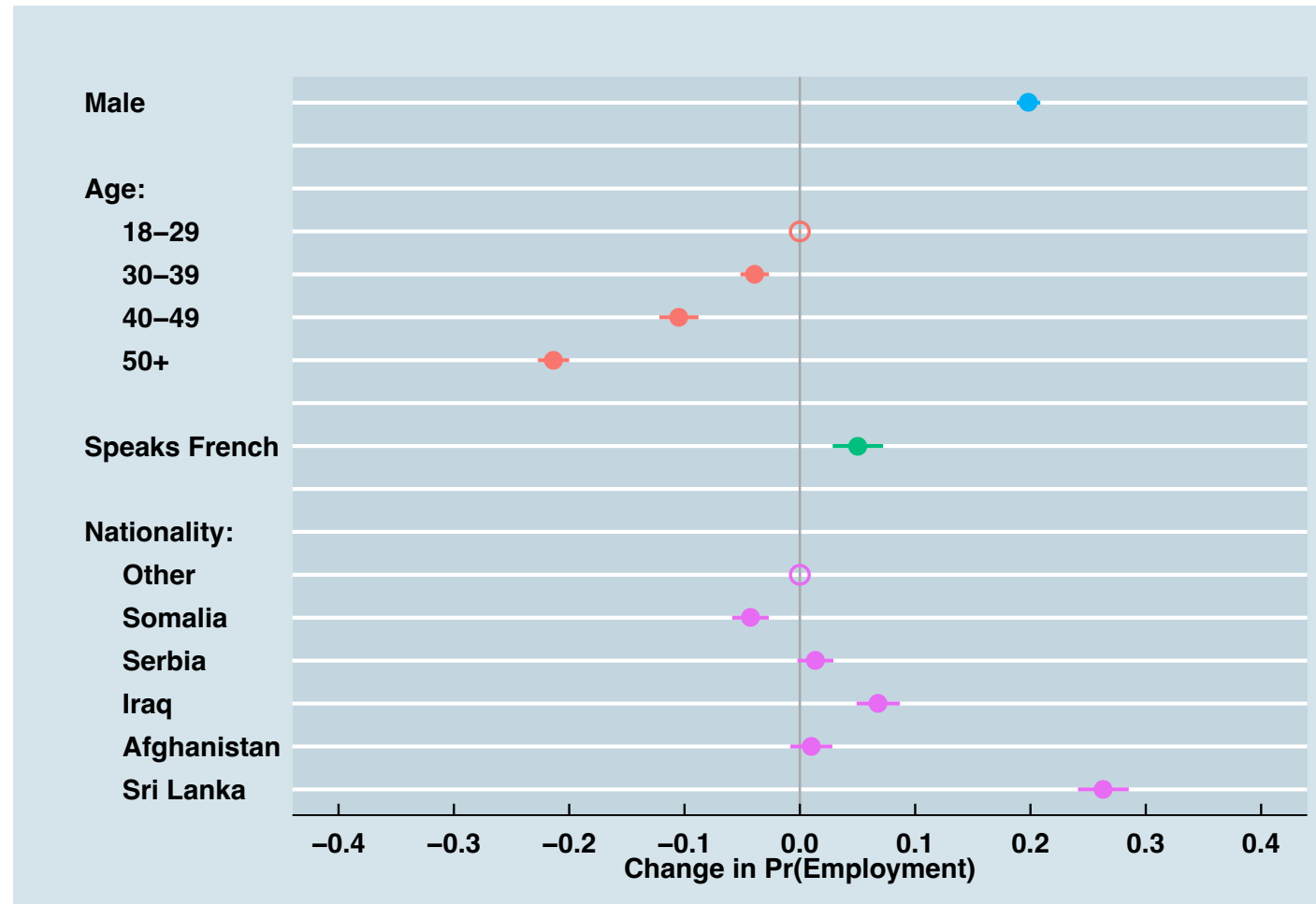
Geographic Location

Personal Characteristics

Synergies between geography and personal characteristics

Individual Predictors of Refugee Employment

Swiss data



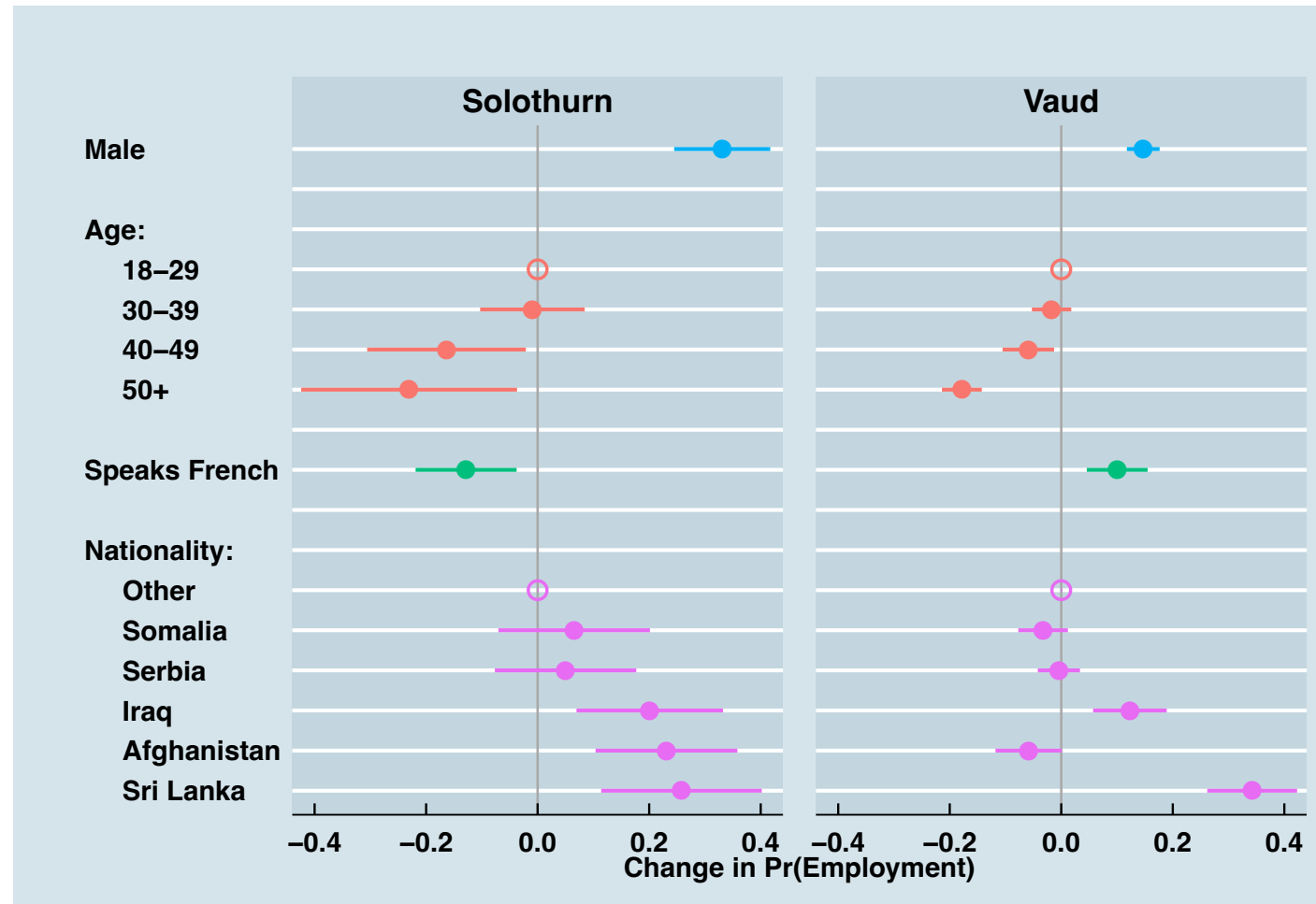
Geographic Location

Personal Characteristics

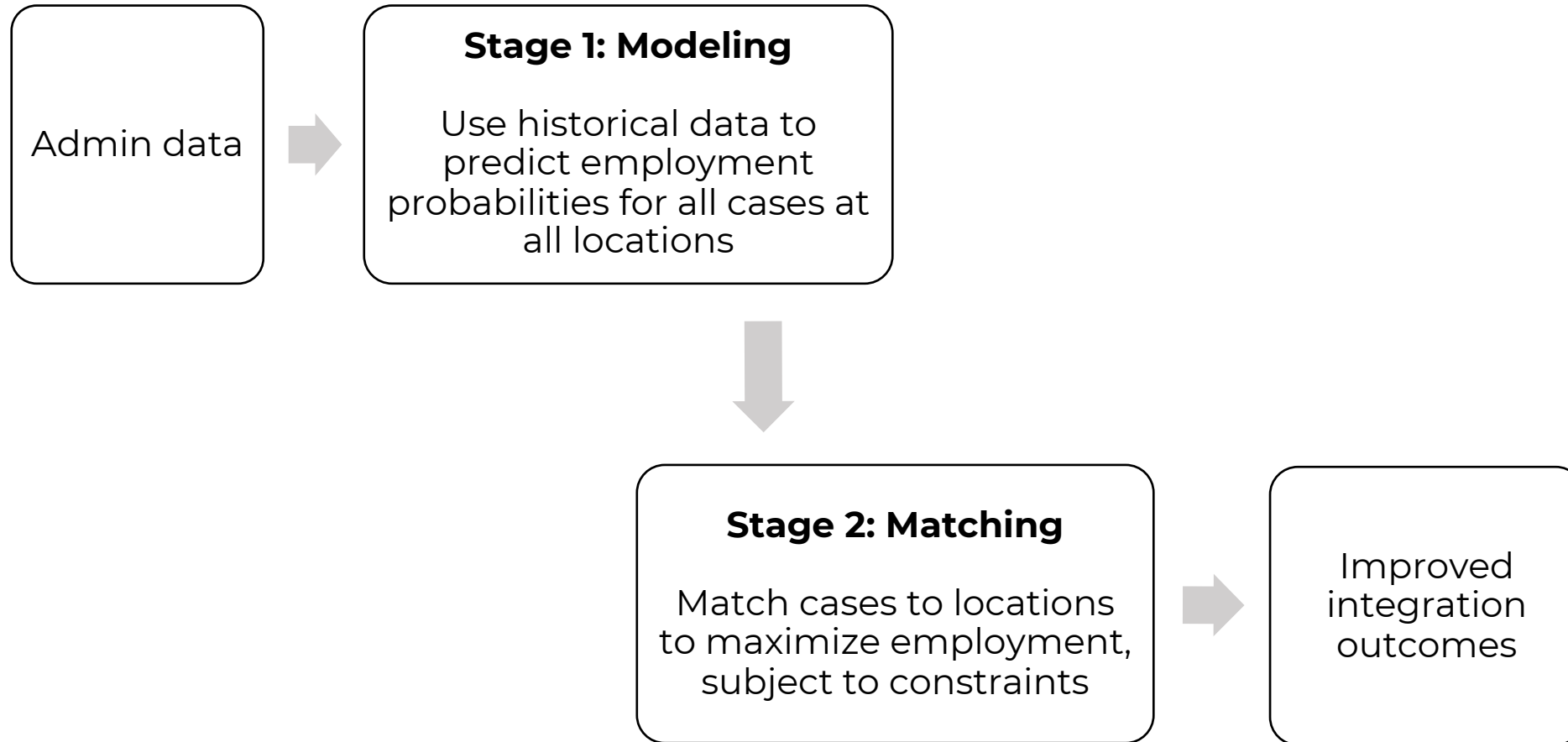
Synergies between Individual Predictors and Locations

Swiss data

Synergies between geography and personal characteristics

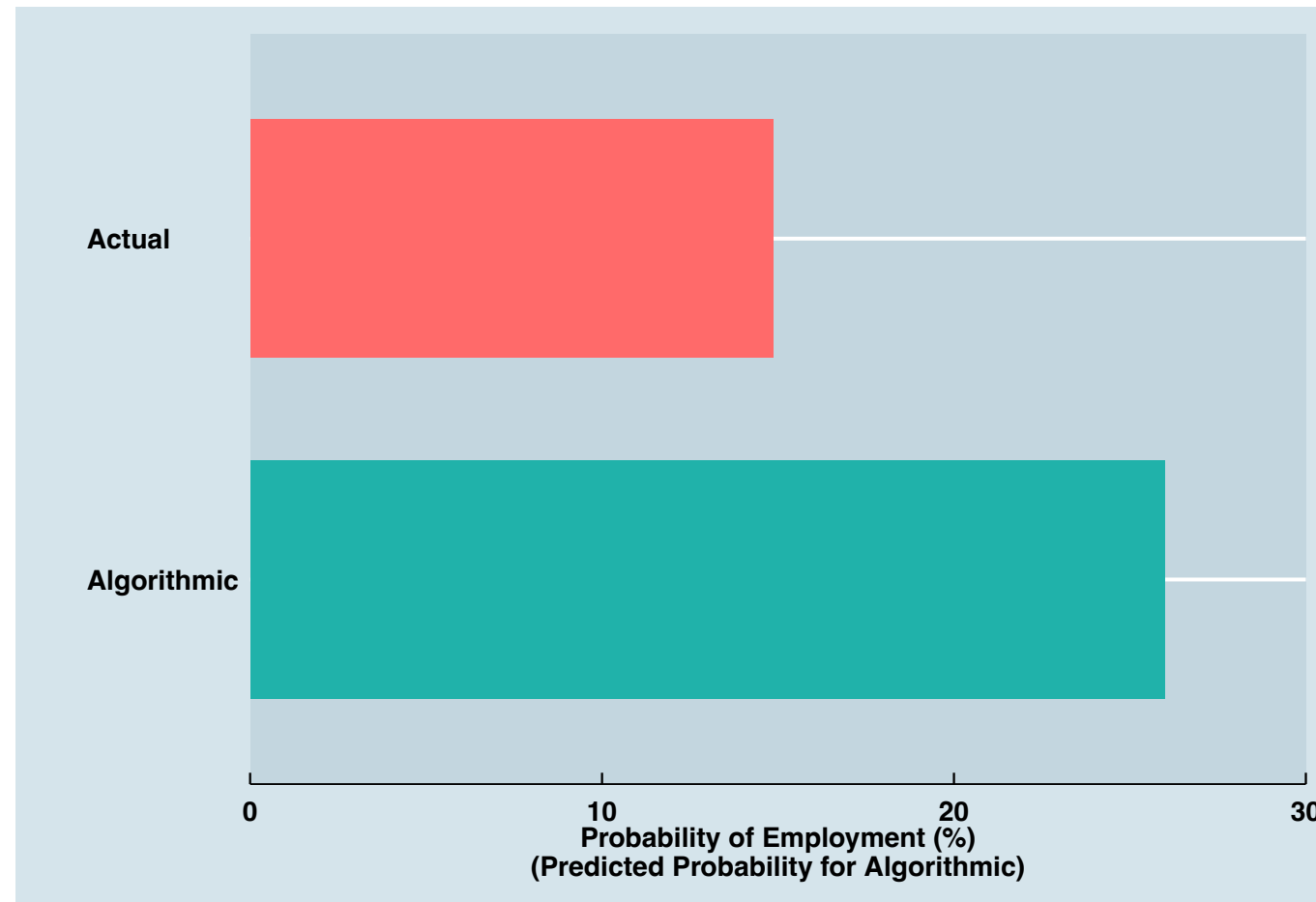


How the GeoMatch Algorithm Works



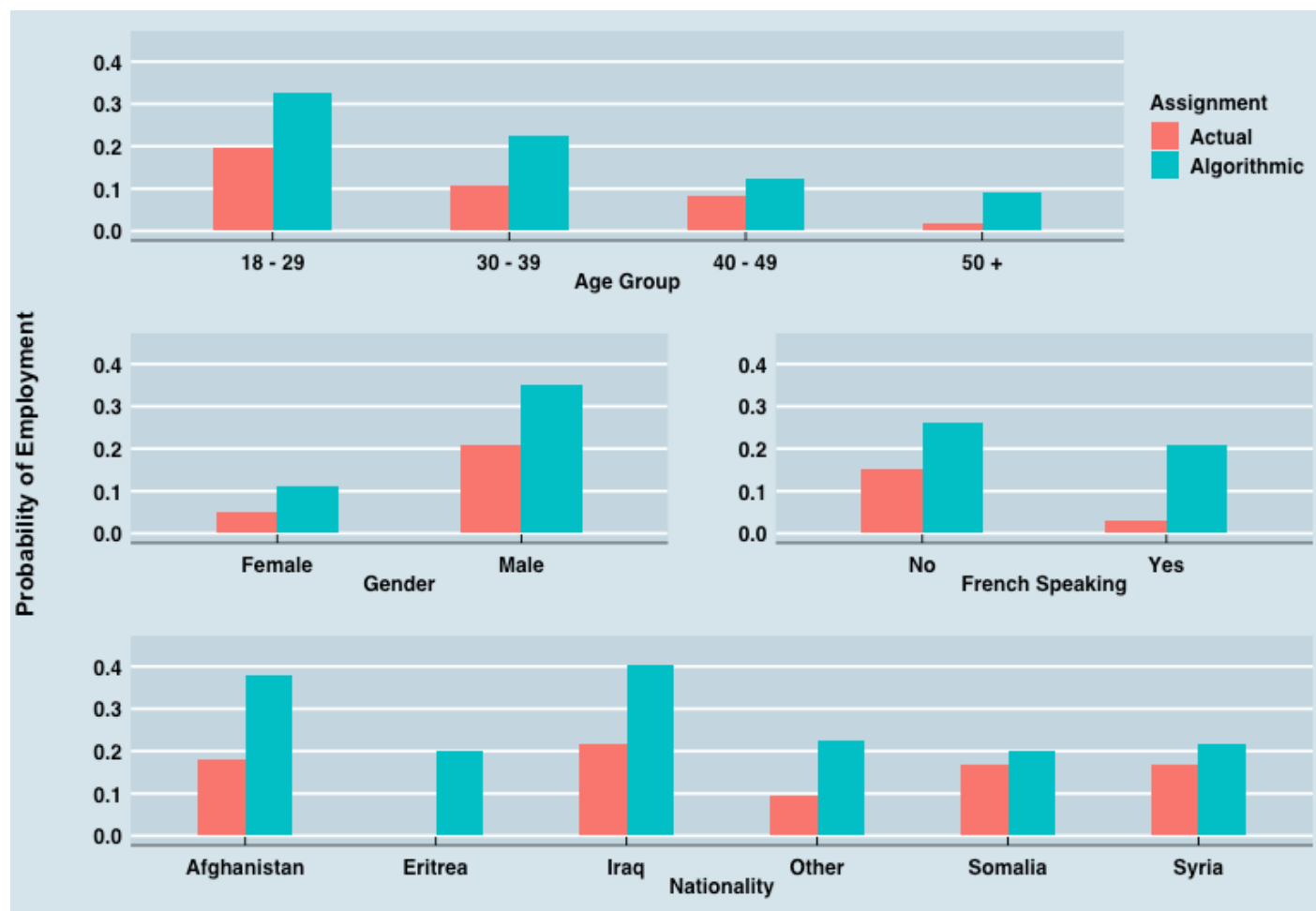
Swiss Back Test Results

The back test demonstrates that the GeoMatch algorithm could boost employment rates by 30-70% depending on constraints



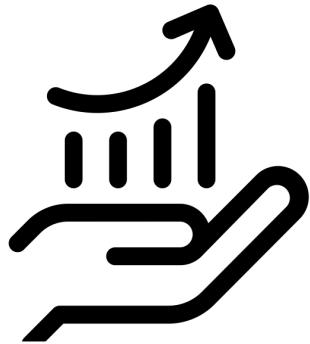
Swiss Back Test Results

The GeoMatch algorithm back test demonstrated potential gains in employment across groups



The GeoMatch Algorithm

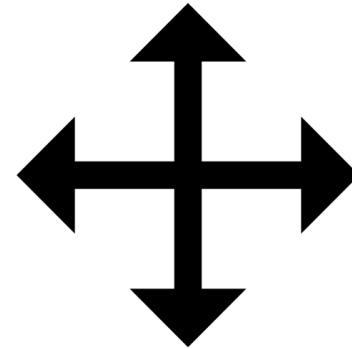
Using insights from data to enhance the allocation process



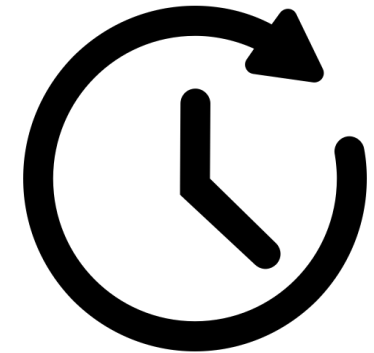
Potential for robust gains in back tests across diverse contexts



Scalable, cost-efficient, and actionable for a large population



Flexible in incorporating preferences and outcome metrics

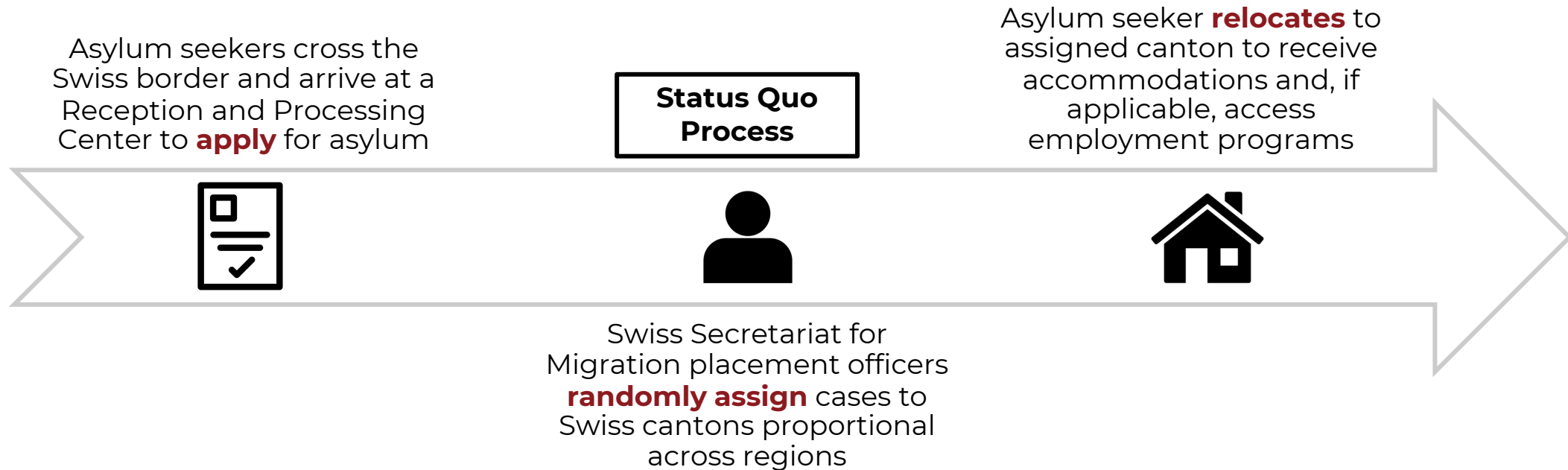


Dynamic over time by adapting to new synergies in the data

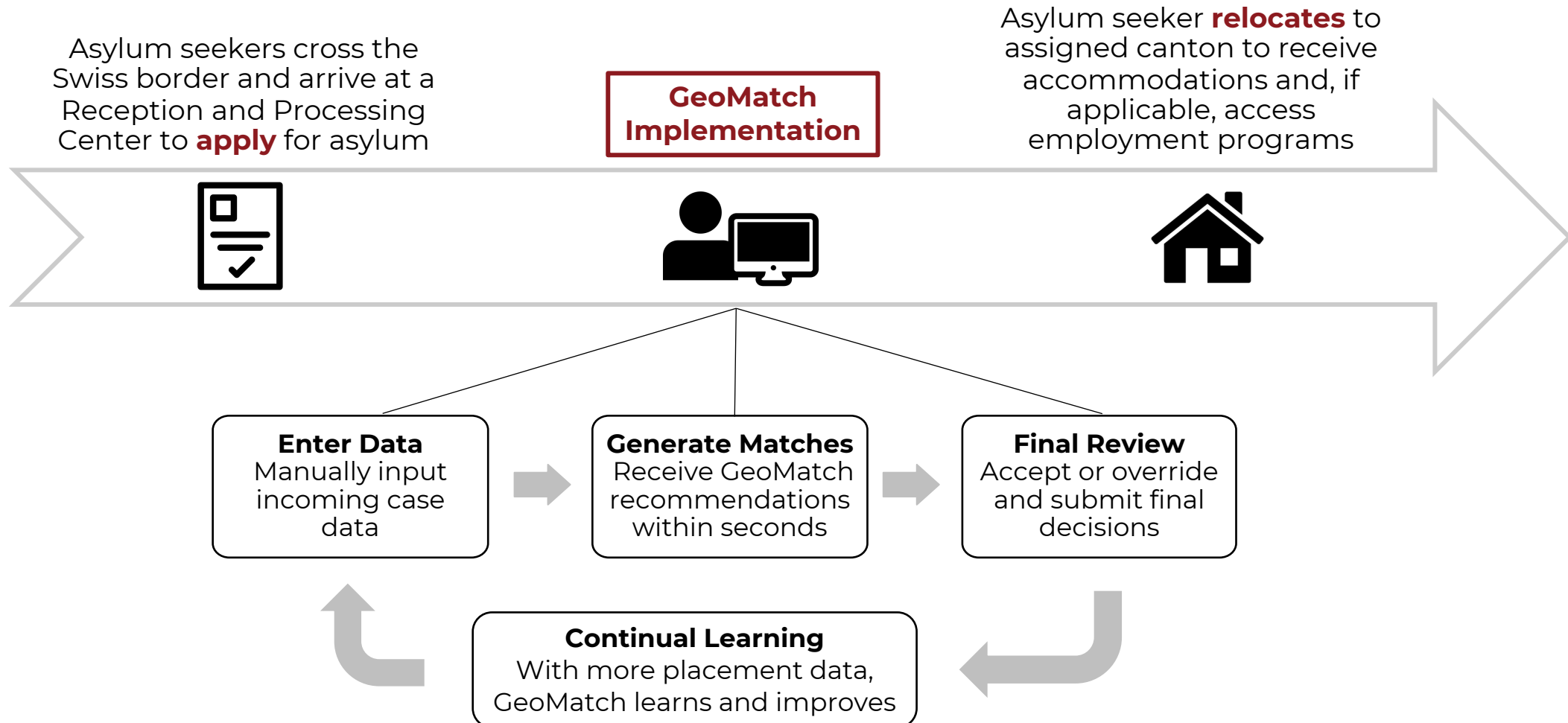
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Phase 2 Case Study: Switzerland



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Phase 2 Case Study: Switzerland

The IPL team and the Swiss Secretariat for Migration co-designed a user-friendly interface to implement the GeoMatch tool

The screenshot shows the 'Immigration Policy Lab' web application. The top navigation bar includes 'Welcome, officer (Switzerland)'. A sidebar on the left contains menu items: 'Dashboard', 'Process New Batch', 'Single Match' (highlighted), 'Single Match History', 'Upload Historical Data', and 'Job Status / History'. The main content area is divided into two sections. The upper section, titled 'Suggested Location: Schaffhausen (SH)', features a location pin icon, a dropdown menu with 'Accept' selected, and a green button labeled 'Please confirm then submit here.'. The lower section, titled 'Case information', contains input fields for 'ZEMIS Nr.*' and 'Case Size*' (with '5' entered). Below this is the 'Asylum Seekers*' section, which lists three entries. Each entry has dropdown menus for 'Age*', 'Gender*', and 'Nationality*'. The first entry has Age: 55, Gender: Female, Nationality: Syria. The second entry has Age: 58, Gender: Male, Nationality: Syria, with a red 'Remove' button to its right. The third entry has Age: 24, Gender: Female, Nationality: Syria, with blue 'Add' and red 'Remove' buttons to its right. A blue 'Submit' button is located at the bottom left of the case information section.

Immigration Policy Lab Welcome, officer (Switzerland)

Dashboard
Process New Batch
Single Match
Single Match History
Upload Historical Data
Job Status / History

Suggested Location:
Schaffhausen (SH)

Accept

Please confirm then submit here.

Case information

ZEMIS Nr.*
Case Size*
5

Asylum Seekers*

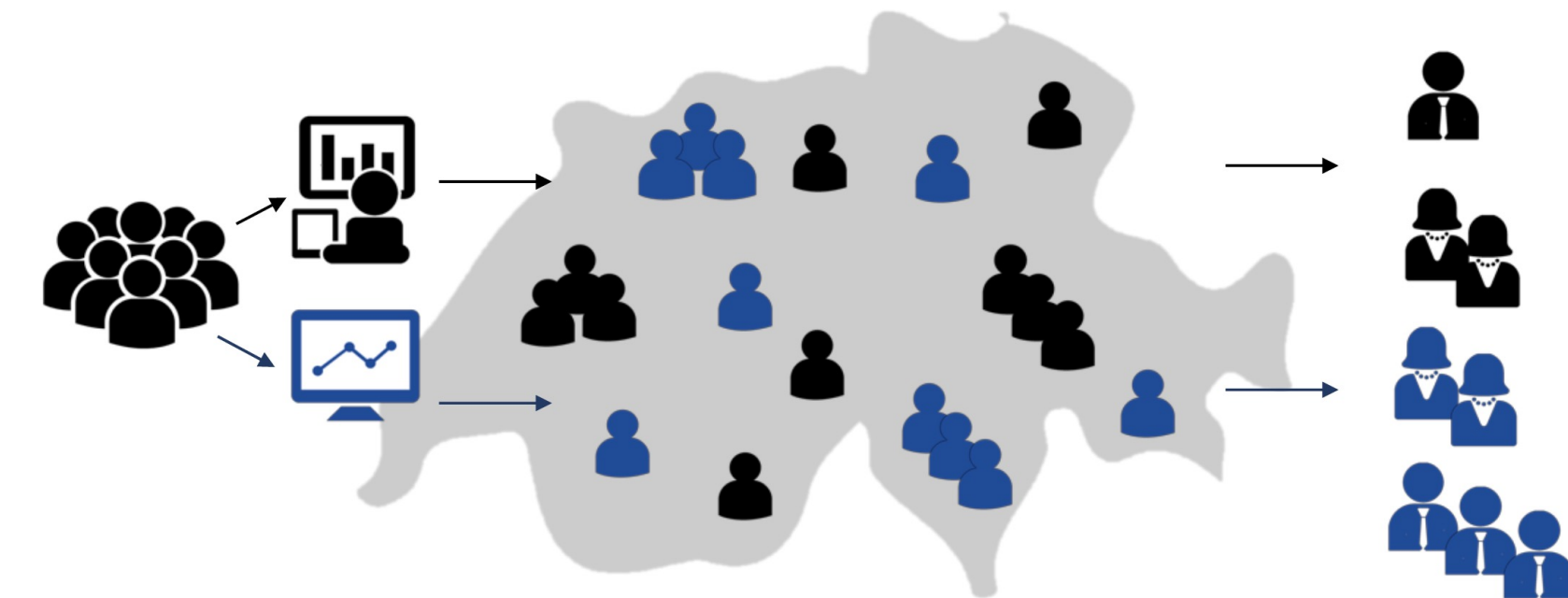
Age*	Gender*	Nationality*	
55	Female	Syria	
Age*	Gender*	Nationality*	Remove
58	Male	Syria	
Age*	Gender*	Nationality*	Add Remove
24	Female	Syria	

Submit

Phase 2 Case Study: Switzerland

Double-blind Randomized Control Trial 2020+:

Algorithmically supported placement versus **random allocation** (status quo)



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GeoMatch: Challenges and Lessons Learned

Insights from our multi-context GeoMatch implementation experience

Emphasize
Co-Design

- Collaborate with partners to design human-centered and customized tools, facilitate seamless implementation, and establish **final decision-making power of users**

Ethical & Responsible AI

- Ensure potential gains in outcomes across groups through careful tests, pilot programs, and **rigorous evaluations** in multiple country contexts before scaling up our work

Regulatory Context

- Comply with and provide input on a dynamically changing policies and regulations including **GDPR Privacy** and **AI Impact Assessments**

Thank you for your attention!

**Questions or feedback?
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