

**Sustainable and Inclusive Trade (SIAT) Symposium:
*Women in Trade for Sustainable Development***

**Innovating Past Data Collection Obstacles for East
Africa's Women Cross-Border Traders:
Evidence from Sauti East Africa**

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Sauti East Africa

Sauti.

Contents

- Introduction
- Motivation and Objective
- Proposed Approach/Methodology
- Data Source and Data
- Empirical Findings/Results
- Policy Implications
- Future Directions and Conclusion

Introduction

- Collecting data that reliably maps the behaviour hidden populations has typically proven to be a challenging exercise
 - Exemplified in the case of women cross-border
 - Transnationally mobile
 - Informal
 - Small-scale
 - Socially marginalized
 - Previous studies of CBT trade have described these sampling issues:
 - Language Barriers between enumerators and surveyers; Suspicion of survey objectives; Bad weather; High volume of traffic; Customs office location not near border crossing
 - “Vehicles were the dominant carriers of traded goods at these border posts and posed a major recording challenge”

Introduction

Our Motivation

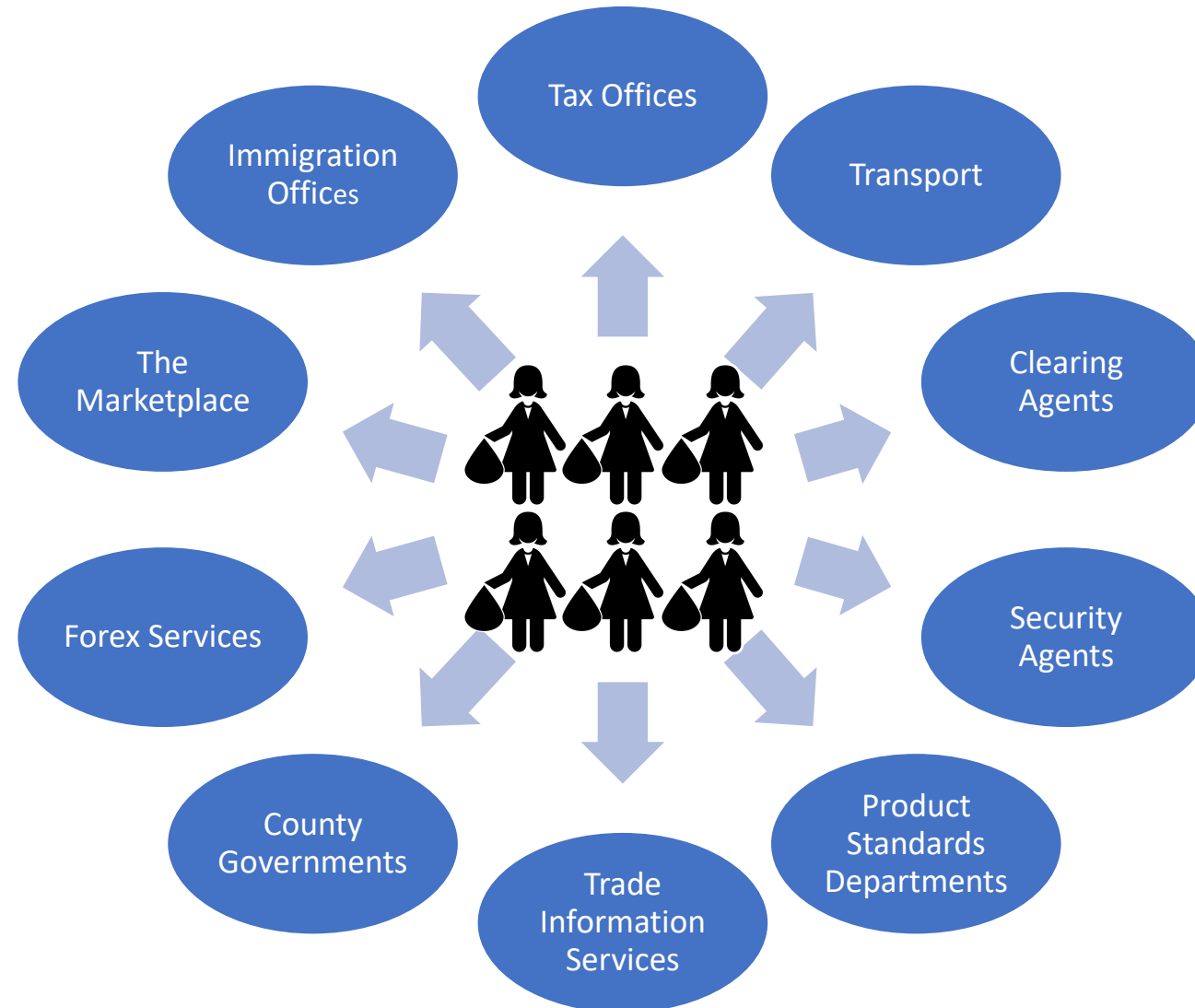
- Without reliable discovery research to guide solution-design, project programmers are effectively “going in blind”
 - increases the risks of wasted resources and/or limits project impact.

Our Objective

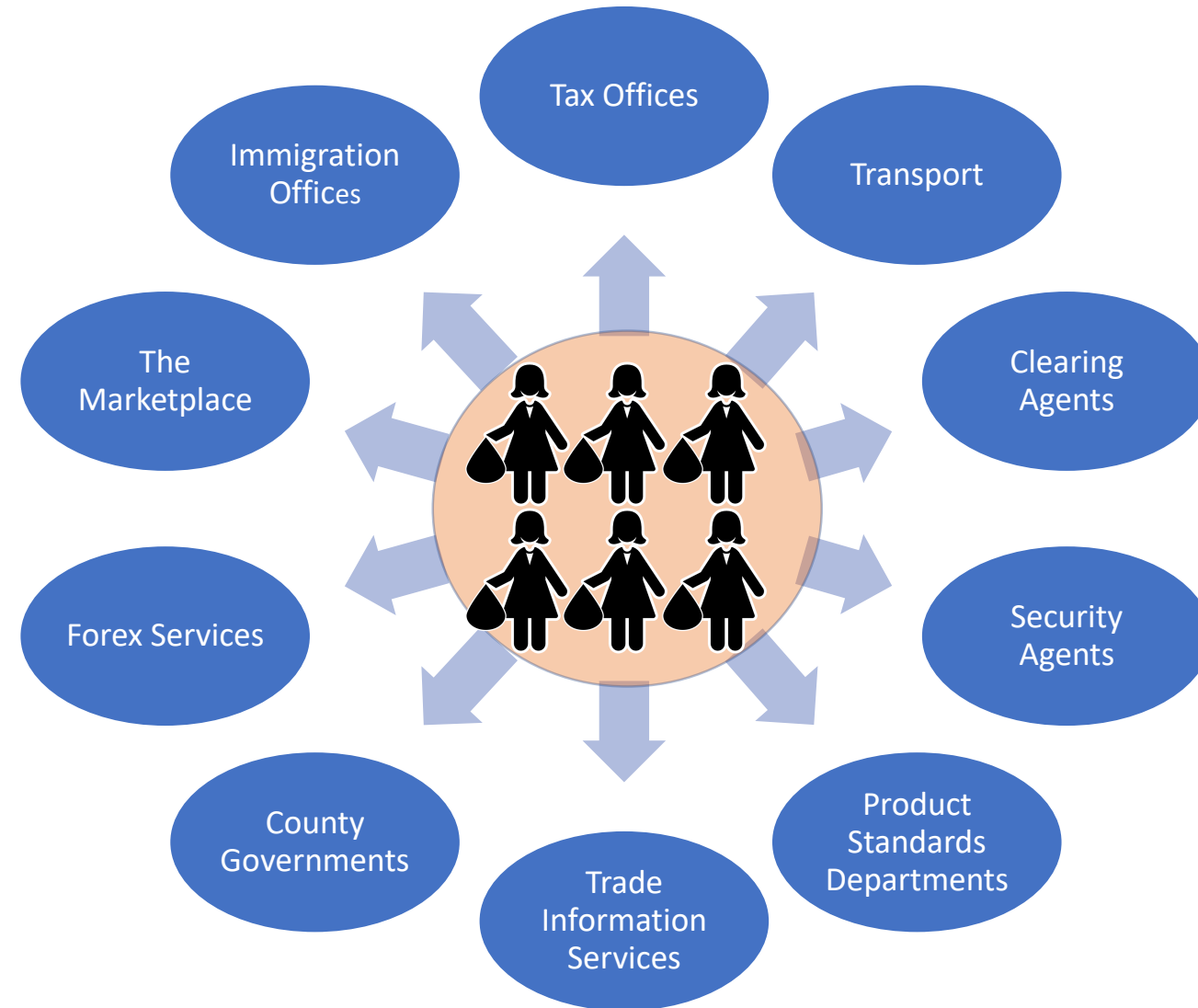
- To highlight an indirect sampling approach, which we believe is more appropriate and accurate for project programming purposes compared to direct sampling.
 - We test this approach with a case study identifying women cross-border trader’s business practices between Uganda and Kenya.

Identifying women cross-border trader's business practices between Uganda and Kenya.

The Typical Approach

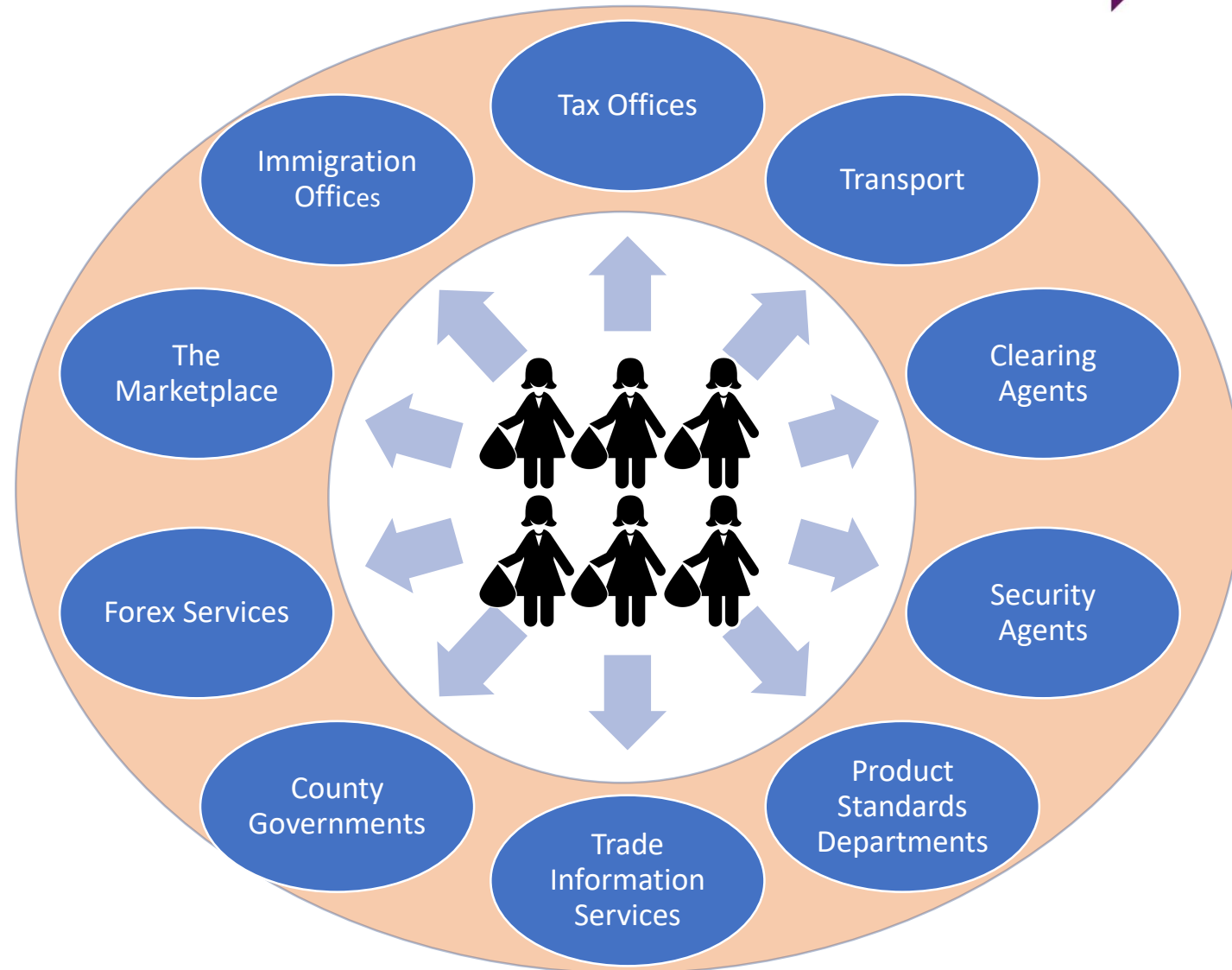


The typical CBT sampling approach



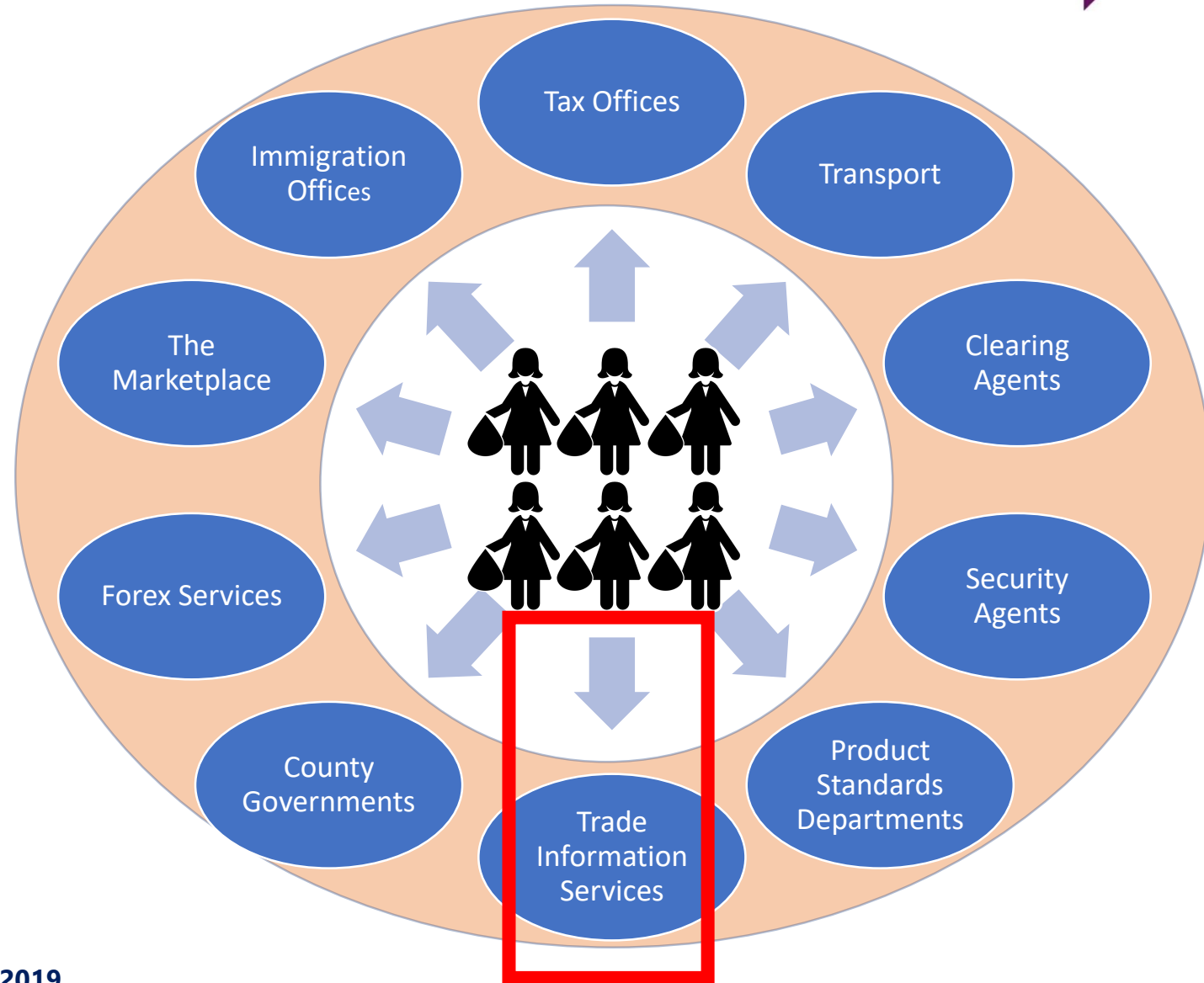
Identifying women cross-border trader's business practices between Uganda and Kenya.

Identifying women cross-border trader's business practices between Uganda and Kenya.



An indirect approach focusing on interactions

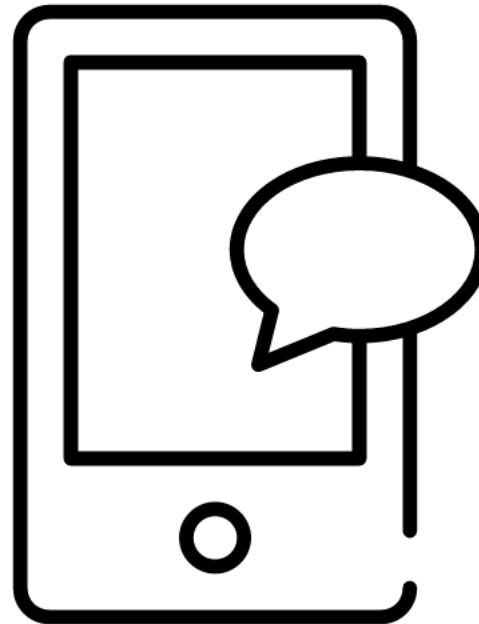
Identifying women cross-border trader's business practices between Uganda and Kenya.



Sauti's Information Platform as a Data Source for CBT interactions



USSD Code
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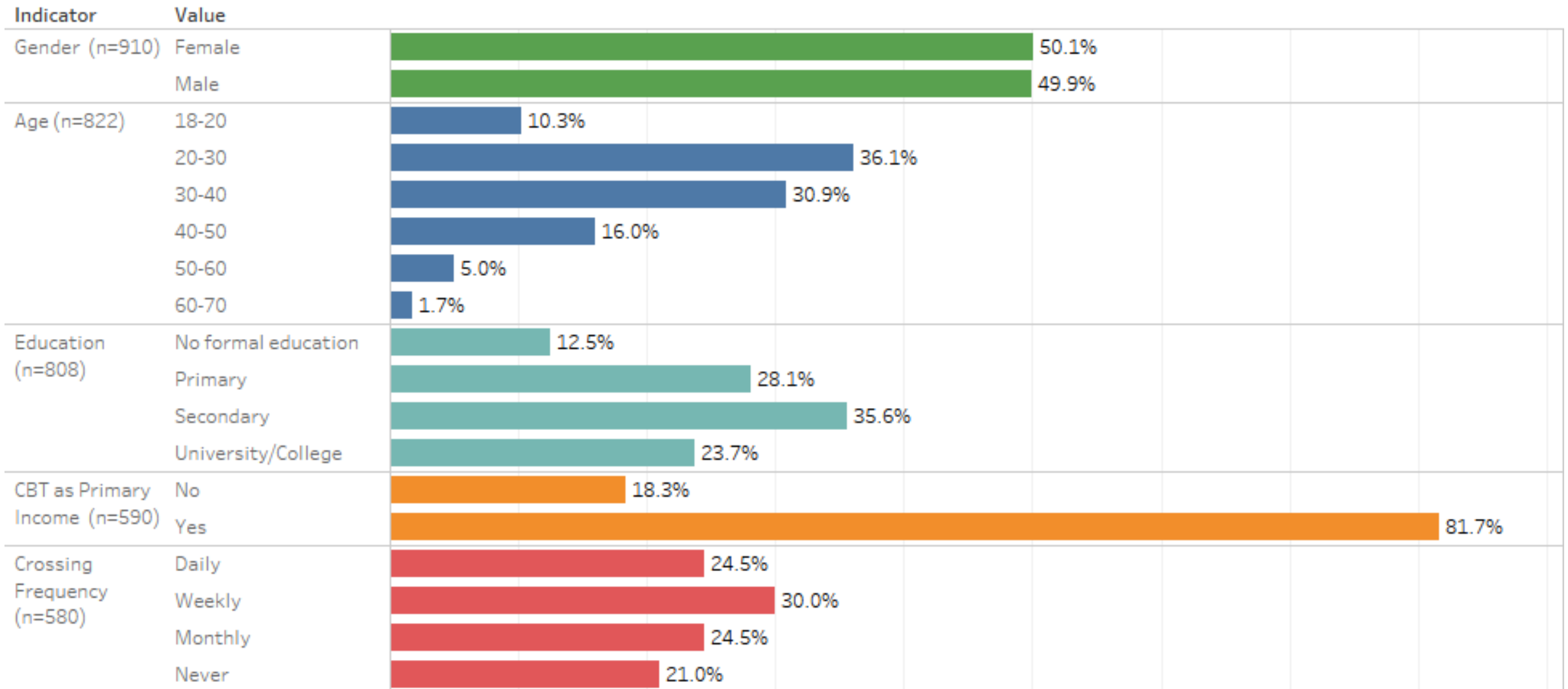
- **Market Prices**
- **Forex Rates**
- **Border Taxes**
- **Border Procedures**
- **Border Agencies**
- **Report Experience**

Sauti's Information Platform as a Data Source for CBT interactions

- Sauti is mostly operational between Uganda and Kenya, but is also available in Rwanda.
- Free to access for traders
- Established in 2016
- 9241 users to date (KE: 3538 - UG: 4769 - RW: 883)
- 27,470 information requests

Sauti's Information Platform as a Data Source for CBT interactions

<u>Behavioural Data</u>		<u>Demographic Data</u>	
27,470 information requests		1,434 users	
4,181 Users		KE: 1,204	
KE: 2,780 – UG: 778 – RW: 623		UG: 230	
<u>Information Type</u>	<u>Sample</u>	<u>Dimension</u>	<u>Sample</u>
EAC Market Prices	9,006	Gender	910
Exchange Rates	7,184	Age	822
Border Crossing Procedures	1,773	Education	808
Tax Estimator	1,150	CBT as primary income	590
Report Border Experience	908	Crossing Frequency	580



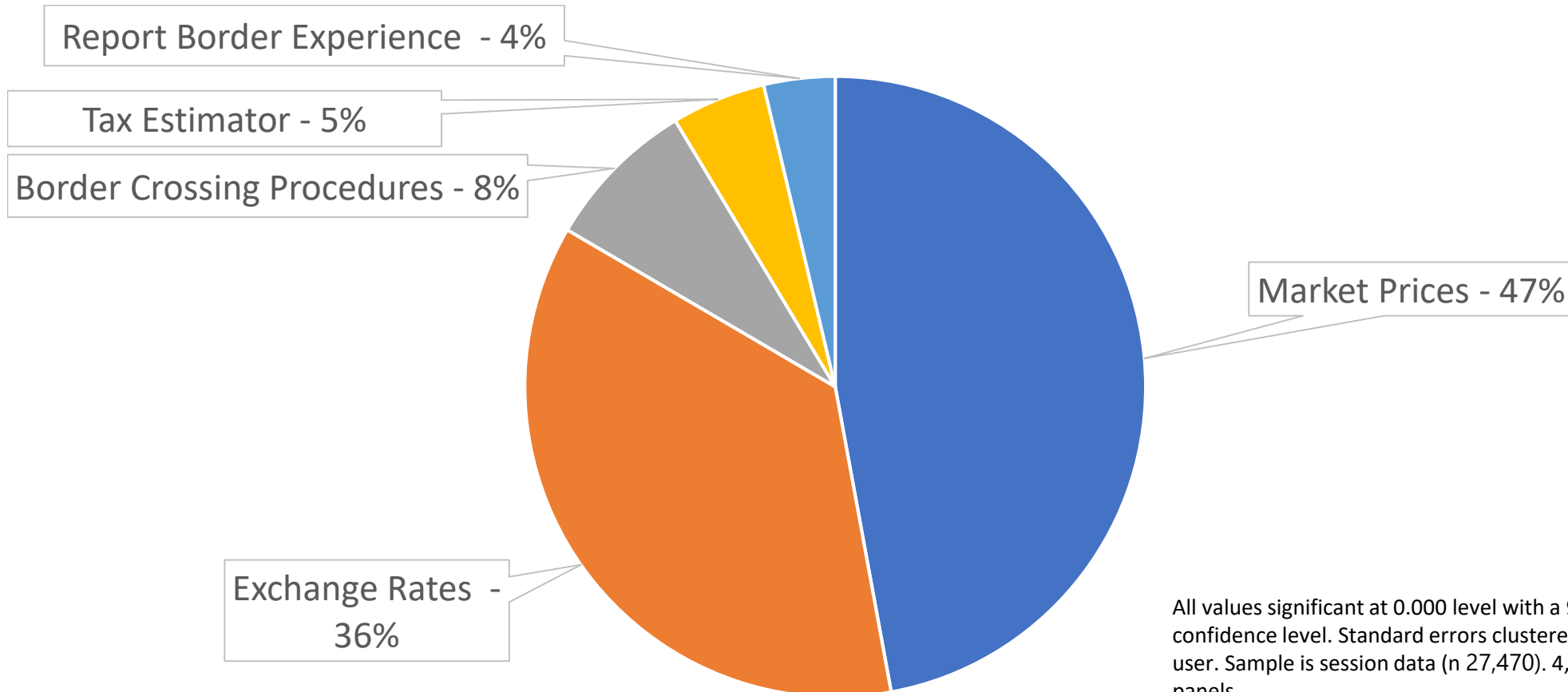
Methodology

Using Sauti's platform data as an indicator of CBT preferences (our exploratory case study), we explore four themes:

1. The relative importance of business information types for CBTs
2. Significant demographic variables for CBT's information seeking behaviour
3. General marketing behaviour of CBTs (marketplaces and products)
4. Gender significance in CBT marketing behaviour for products

(We empirically explore these themes with a mixed logit choice model with a panel setup. Panels are identified by unique users)

Study findings - The relative importance of business information types for CBTs



Study findings - The relative importance of business information types for CBTs, demographic effects

Market Prices

- Crossing Frequency
 - (~20% less likely with every level increase)***
- Education
 - (~16% more likely with every level increase)***
- Age
 - (~5% more likely with every level increase)**
- Female
 - (~10% less likely if female)*

Exchange Rates

- Crossing Frequency
 - (~22% more likely with every level increase)***
- Education
 - (~5% less likely with every level increase)**

Border Taxes

- Education
 - (~35% less likely with every level increase)***

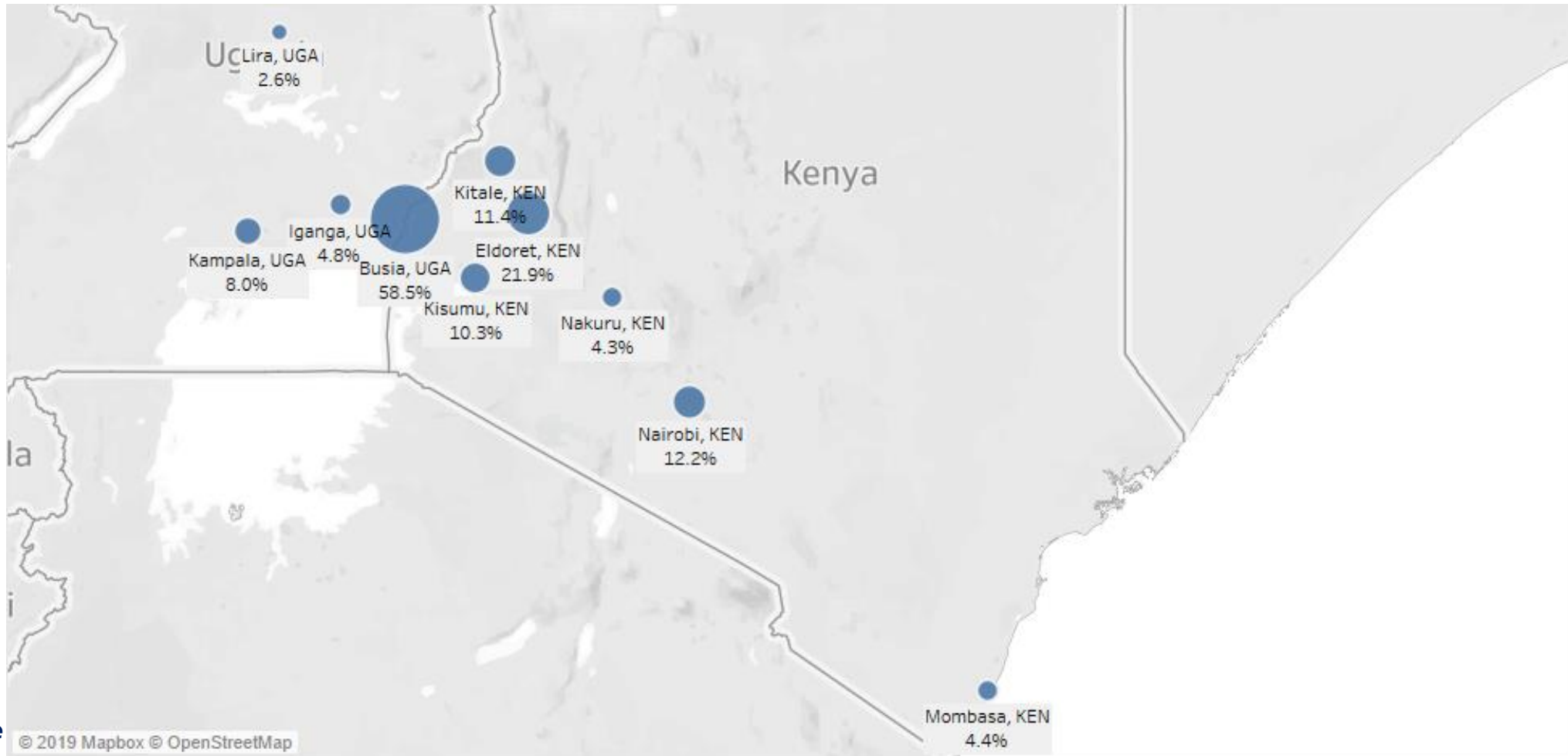
Border Procedures

- Age
 - (~33% less likely with every level increase)***

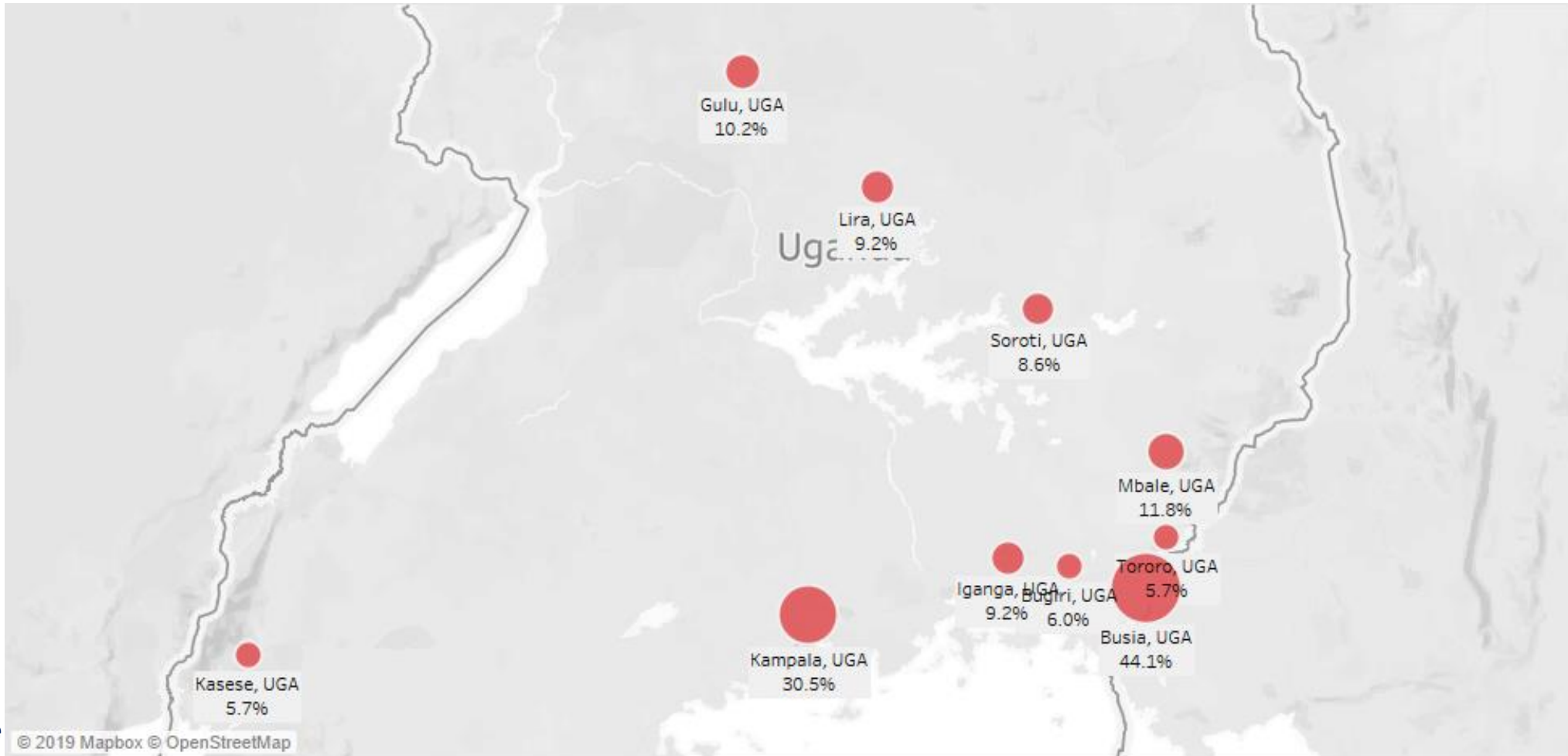
Report Border Experience

- Education
 - (~34% less likely with every level increase)***
- Age
 - (~21% more likely with every level increase)*
- Female
 - (~44% more likely if female)*

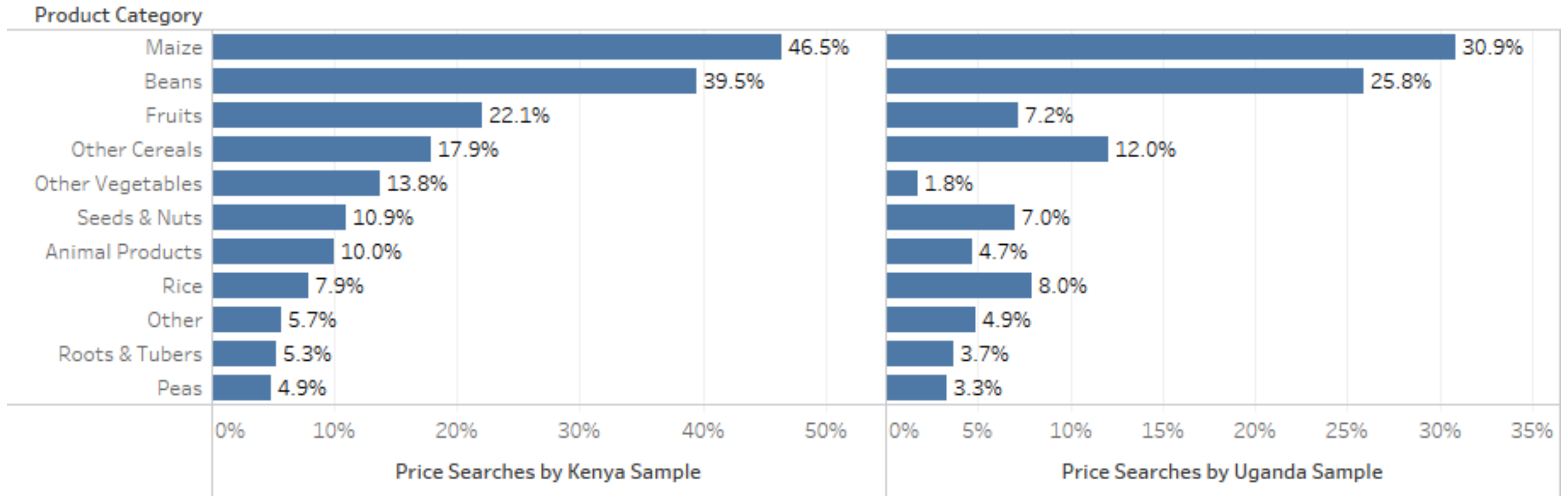
Study findings - General marketing behaviour of CBTs (Kenyan Users - 6796 Searches, 1490 Users)



Study findings - General marketing behaviour of CBTs (Ugandan Users - 2280 Searches, 578 Users)



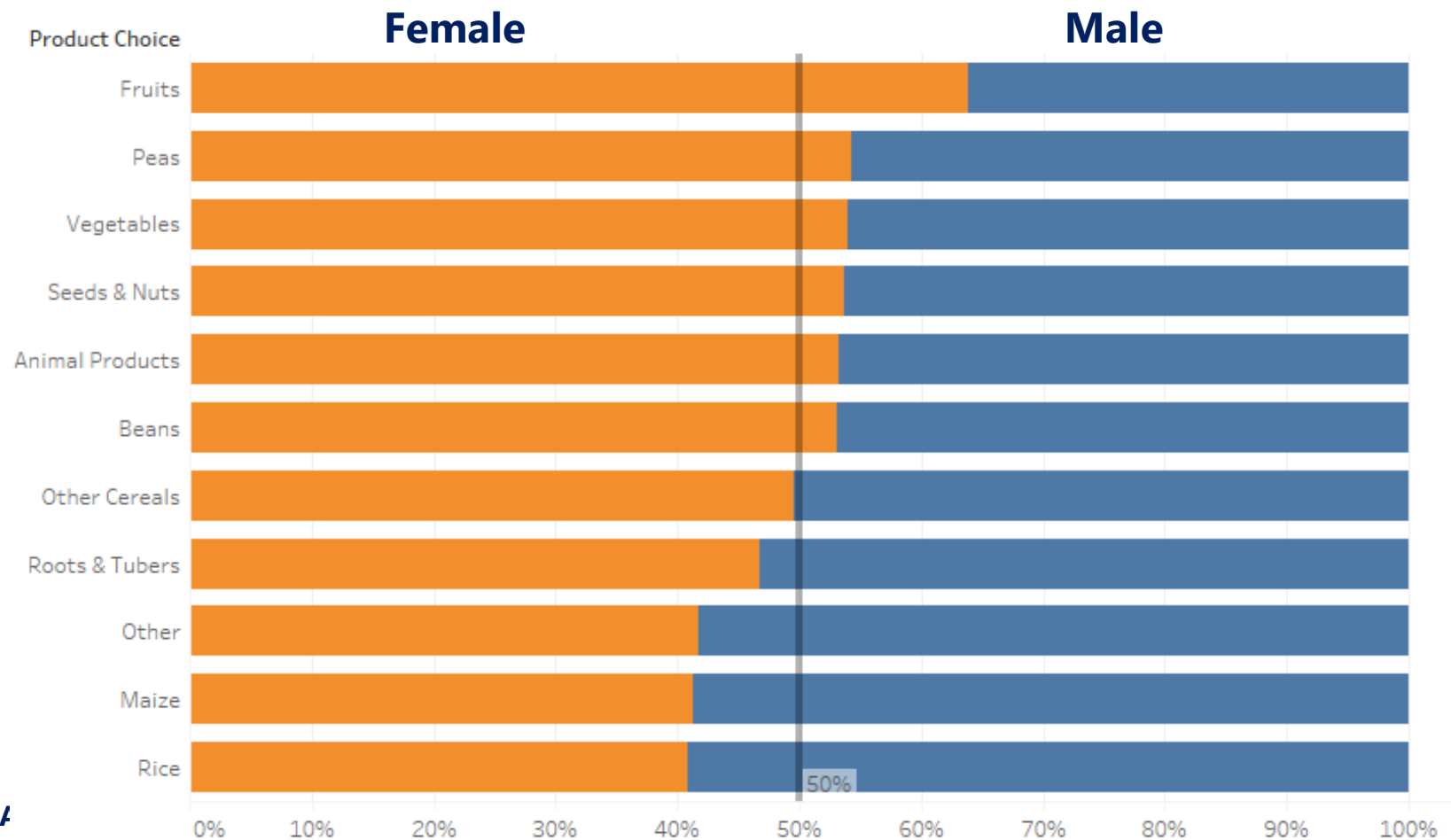
Study findings - General marketing behaviour of CBTs



(KE – 5210 Searches, 1301 Users)

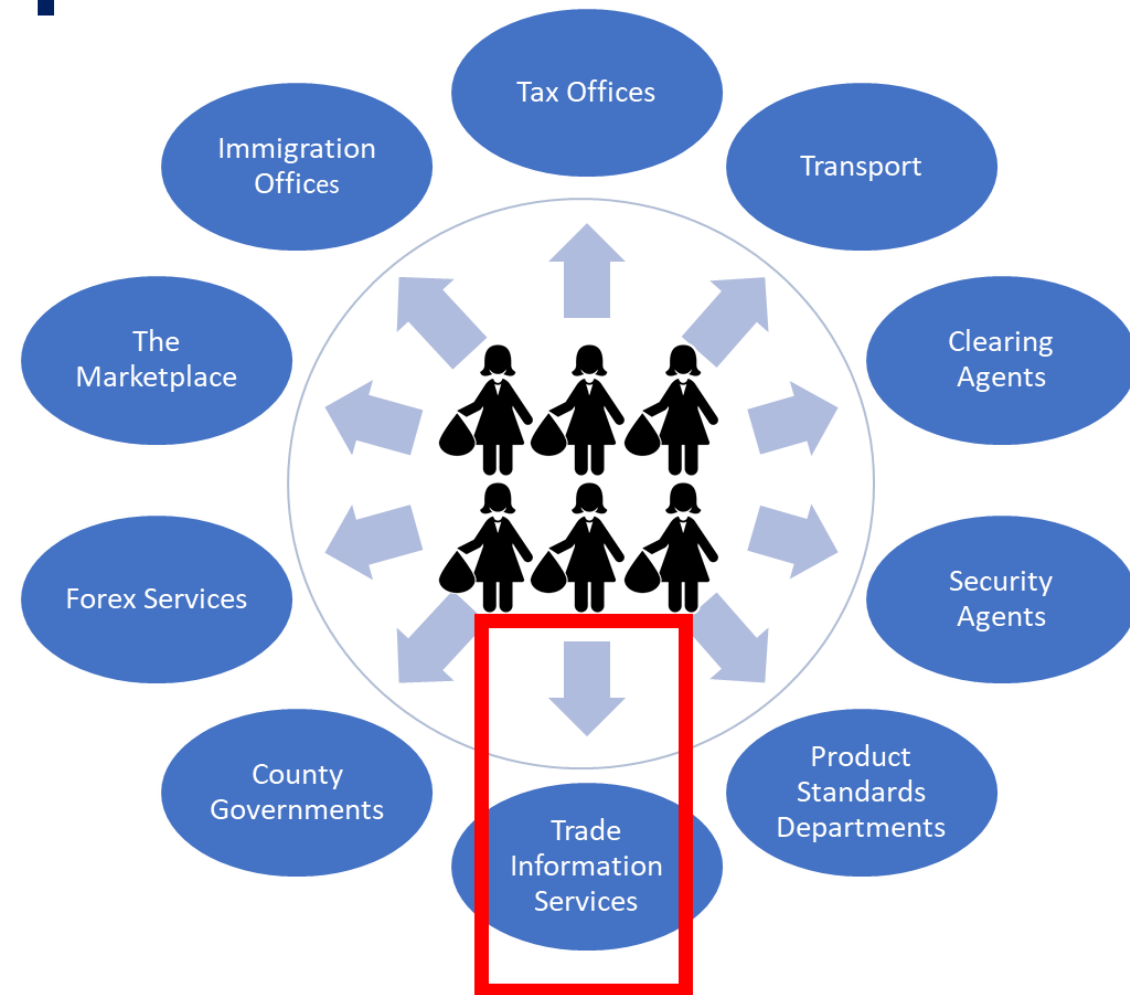
(UG - 1913 Searches, 515 Users)

Study findings - General marketing behaviour of CBTs, by gender



Policy & Research Implications

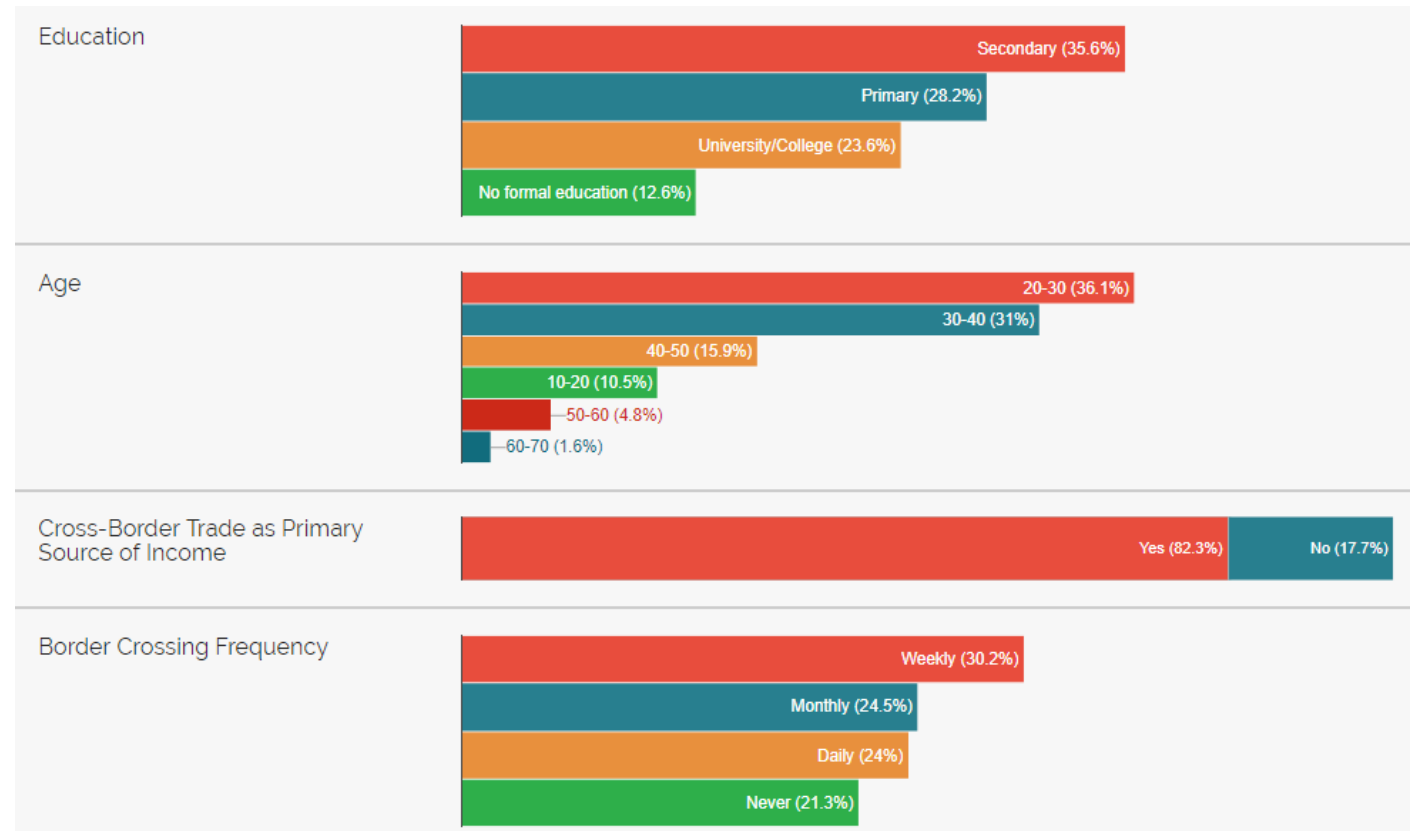
- Our method has indirectly yielded meaningful, granulated data for CBT behaviour – without direct sampling
 - More appropriate method for insights on service delivery
 - Larger sample sizes
 - Ideal for cross-validation with qualitative studies



Moving Forward and Future Direction

- Disseminate and publish data
- Extend our approach to more cases with more data
- Blend our data with other sources and related projects
 - We are keen to partner with other service providers to share and expand our data

www.sautiafrica.org



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Sauti.

Sauti Platform in Kenya

***384*35#**

Sauti Platform in Uganda

***270*35#**

Sauti Platform in Rwanda

***801*35#**

(Annex) Study findings - The relative importance of business information types for CBTs, demographic effects

Table 5 – Predicted Marginal Effects of Variables on Each Choice Outcome

	Market Prices (dy/dx)	Exchange Rates (dy/dx)	Border Crossing Procedures (dy/dx)	Tax Estimator (dy/dx)	Report Border Experience (dy/dx)
Crossing Frequency	-0.092 (-14.18)***	0.092 (13.69)***	-0.001 (-0.19)	-0.002 (-0.65)	0.002 (1.05)
CBT as Primary Income	0.026 (1.2)	-0.040 (-1.76)	0.001 (0.06)	0.004 (0.37)	0.009 (1.12)
Female	-0.033 (-2.46)*	0.005 (0.39)	0.011 (1.5)	0.008 (1.33)	0.009 (1.97)*
Age	0.017 (2.58)**	-0.003 (-0.49)	-0.021 (-5.55)***	0.003 (0.88)	0.004 (2.04)*
Education	0.055 (6.81)***	-0.026 (-3.17)**	-0.006 (-1.46)	-0.014 (-4.18)***	-0.009 (-3.4)***
<i>All Predicted Margins'</i>					
<i>Model Statistics</i>					
Observations	27,470				
Wald chi2(20)	316.86				
Log likelihood	-6135.7616				
Prob > chi2	0.0000				

Note: * p<0.05, ** p<0.01, ***p<0.001. z statistics in parentheses.



Thank you!