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Visualizing Survey Flow and Improving Data Collection Through Paradata

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Motivation

- Shift from Computer-Assisted Telephone Interviewing (CATI) to Computer-Assisted Web Interviewing (CAWI)
- Better understanding of the respondents and their user journey in the questionnaire
- Identifying weakness within the questionary
- Utilizing paradata

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Identifying questionary weaknesess

- Time consuming
- Resource intensive for both parties, respondent and tester
- Often low number of respondents
- Fitting the findings within the TSE model often with low sample of respondents.
- Using paradata and visualizing the user journey as supplementary information.

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Paradata

- The transition from CATI to CAWI gives us the opportunity to use paradata
  - Electronic traces keystrokes with information such as timestamp and placement within the questionary
- Larger sample of respondents
- Complete timeline from start to completion
- Identifying larger trends
- Often complicated information without context.

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Visualizing user journey

- Needs to visualize the flow through the questionary
- Tackles complexity
- Shows quantity
- Sankey Diagram
  - flow of energy
  - Distribution and movement of resources or energy
  - Helping viewers identify inefficiencies, bottlenecks, or areas for optimization

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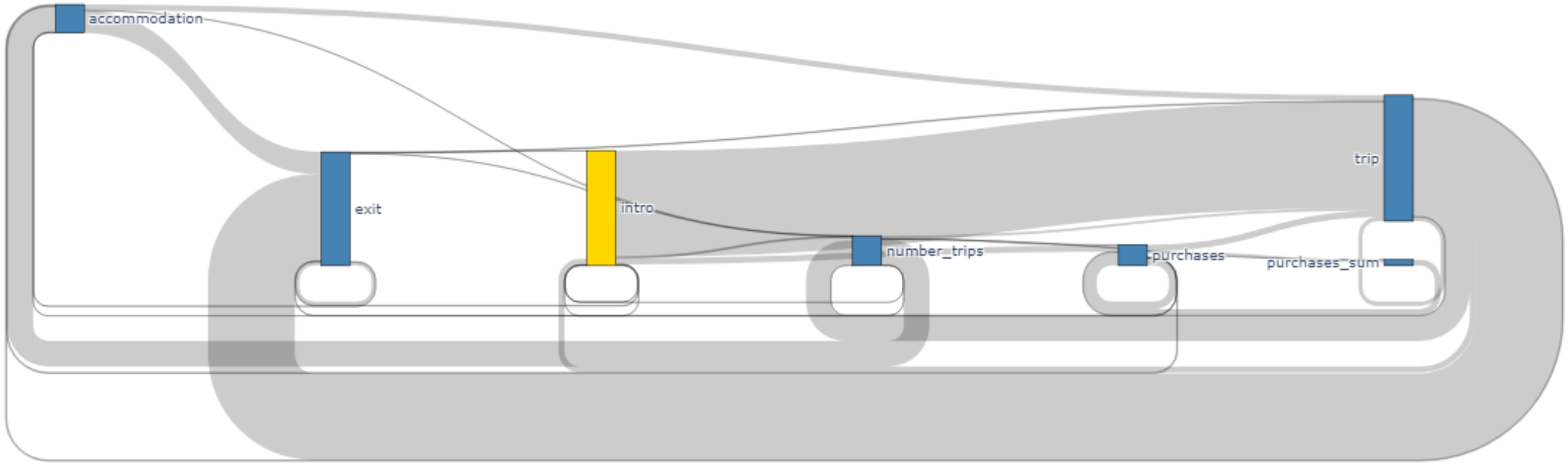
SSBs Cross-border shopping survey



SSBs Cross-border shopping survey

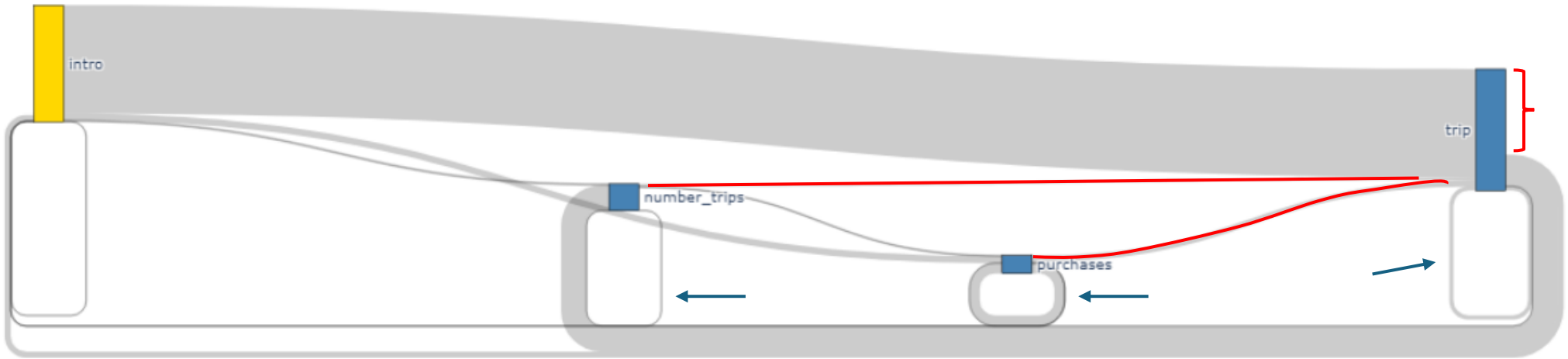


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Table 1: Number of answer changes

	Number of changes	Percentage
Day trips Abroad	482	33,7%
Other questions in the survey	950	66,3%
Sum	**1 432**	**100,0%**

Tabel 2: number of value changes

	Number of observations	Prosent
Reduced value (-1)	294	61,0%
Increased value (1)	188	39,0%
Sum	**482**	**100,0%**

- 33,7 % of all changes where question regarding number of day trips
- 61% of changes regarding day trips abroad where a lower number
- 39% of changes regarding day trips abroad where a higher number
-

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Takeaways and further development

- Paradata contains rich information during questionary development
- Sankey Diagram is a powerful visualisation-tool for overview and flow
- User journey too complex for visualisation

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