

Use Paradata for improving questionnaire design and data collection process

Gina-Qian Cheung

(Consultant for CBS - Statistics Netherlands)

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Paradata includes:

- Interviewer (experience, training grades, historical performance)
- Sample segments (PSU, Stratum, observations)
- Address (probability of selection, observations, # contacts, status)
- Screener contacts (call #, interviewer, time, date, informant behavior, outcome)
- Household (composition, informant behavior, sample respondent characteristics)
- Main interview contacts (call #, interviewer, time, date, informant behavior, outcome)

Focus on: Audit Trails (keystrokes, timings, functions, consistency checks, suspensions)

- Sample management system (log and timing of actions)
- GPS (Global Positioning System)
- Digital recordings
- Collection of various anthropometric data using digital devices

Using Audit Trail Data Examples

- Total survey time, question-by-question timing
- Mode switch, language switch
- Browser types/device types
- The last question answered
- Key questions' values

Consistency checks (Hard/Soft) demo

- Questions answered/not-answered

Online Help /Remarks demo

Example1: Consistency Checks

- Hard Checks – Show Messages; the inconsistency must be resolved to be continuing for the interview
- Soft Checks – Show Messages; warning signal messages appear, but there is a “suppress” choice to ignore the warning.

Counting the hard/soft check messages may indicate potential questionnaire design issues, such as question sequencing/logical flow; Question format and response options: Evaluate the appropriateness of the question formats (e.g., multiple-choice, open-ended) and the available response ranges.

Example 2: Online Help and Remarks

- Online Help is a building-in function that helps the respondents to understand the questionnaire precisely.
- The remark function allows the interviewer to recode critical information associated with the respondent's answer.

We can evaluate the types of questions that prompt participants to click on the online help option and analyze the specific areas or question types where participants encounter difficulties or confusion. The Remarks and the number of online help clicks would help identify patterns or particular questions that need attention.

Short BlaiseTools Demo

Parsed Audit Trail data for a case

Select InstrumentId: {7c1e95f-3cf6-4c32-b053-1f786a6bac4a} Select SampleId: 11 Parse

Parsed Field Level Parsed Session Level Parsed Case Level Raw Audit Data Log

Time Stamp	Content
05/25/2023 15:40:43.6120000	<StartSessionEvent Width="960" Height="490" Device="WindowsDesktop" Language="EN" Platform="Windows" UserName="Qianyang" />
05/25/2023 15:40:43.6160000	<UpdatePageEvent LayoutSetName="Interviewing1" ParallelName="PRIMARY" PageIndex="1" />
05/25/2023 15:40:43.6190000	<EnterFieldEvent FieldName="CaseID" AnswerStatus="Empty" />
05/25/2023 15:40:58.8540000	<KeyboardEvent KeyStrokes="11" />
05/25/2023 15:41:01.6560000	<LeaveFieldEvent FieldName="CaseID" Value="11" AnswerStatus="Response" />
05/25/2023 15:41:01.6560000	<ActionEvent Action="NextPage()" ControlID="ab" EventName="OnClick" />
05/25/2023 15:41:03.2370000	<UpdatePageEvent LayoutSetName="Interviewing1" PageIndex="1" />
05/25/2023 15:41:03.2370000	<EnterFieldEvent FieldName="Intro" AnswerStatus="Empty" />
05/25/2023 15:41:03.3020000	<CategoryEvent IsSelected="false" Code="1" />
05/25/2023 15:41:11.9760000	<ToggleVisibilityEvent ControlName="ya_1f" />
05/25/2023 15:41:15.6180000	<CategoryEvent IsSelected="true" Code="1" />
05/25/2023 15:41:17.5770000	<LeaveFieldEvent FieldName="Intro" Value="1" AnswerStatus="Response" />
05/25/2023 15:41:17.5770000	<ActionEvent Action="NextPage()" ControlID="ab" EventName="OnClick" />
05/25/2023 15:41:17.7760000	<UpdatePageEvent LayoutSetName="Interviewing1" PageIndex="1" />
05/25/2023 15:41:17.7760000	<EnterFieldEvent FieldName="AloneOrInGroup" AnswerStatus="Empty" />
05/25/2023 15:41:17.8530000	<CategoryEvent IsSelected="false" Code="1" />
05/25/2023 15:41:21.1560000	<CategoryEvent IsSelected="true" Code="2" />
05/25/2023 15:41:22.9180000	<ToggleVisibilityEvent ControlName="ya_2f" />
05/25/2023 15:41:23.9260000	<EnterFieldPropertyEvent Name="Remark" />
05/25/2023 15:41:25.6870000	<KeyboardEvent KeyStrokes="sam[BACK][BACK][BACK]only with my m[BACK]Mom" />
05/25/2023 15:41:37.0420000	<LeaveFieldPropertyEvent Name="Remark" Value="only with my Mom" />
05/25/2023 15:41:37.0420000	<LeaveFieldEvent FieldName="AloneOrInGroup" Value="2" AnswerStatus="Response" />
05/25/2023 15:41:37.0470000	<ActionEvent Action="GotoField('Intro')" />
05/25/2023 15:41:37.0530000	<EnterFieldEvent FieldName="Intro" Value="1" AnswerStatus="Response" />

Consistency Checks counts

Key Indicators From Parsed Audit Trail Data

Please parse all the cases if needed. C:\DepCAPIDemo3\PostprocessApps\BlaiseTool\output\parsedData.db currently has 4 case[s] in total.

Fields with errors(check, signal, route, range...)
 Fields with Remark
 Help text opened (QbyQ selected)

Fields with language switch
 Breakoff fields (last question of each session)

Retrieve fields

Export results to csv

of records: 4

	InstrumentId	SampleId	FieldName	ErrorKind	ErrorName	ErrorMessage	EnterTS
▶	053-1f786a6bac4a}	1	NrOfPersons	Check	check_1_		5/25/2023 2:51 ...
	{7c1e95f-3cf6-4...	1	NrOfPersons	Signal	check_2_		5/25/2023 2:51 ...
	{7c1e95f-3cf6-4...	1	NamePerson.Per...	Signal	NamePerson.Per...		5/25/2023 2:52 ...
	{7c1e95f-3cf6-4...	11	NrOfPersons	Check	check_1_		5/25/2023 3:41 ...
*							

Online Help counts

Key Indicators From Parsed Audit Trail Data

Please parse all the cases if needed. C:\DepCAPIDemo3\PostprocessApps\BlaiseTool\output\parsedData.db currently has 4 case[s] in total.

Fields with errors(check, signal, route, range...)

Fields with language switch

Fields with Remark

Breakoff fields (last question of each session)

Help text opened (QbyQ selected)

Retrieve fields

Export results to csv

of records: 3

	InstrumentId	SampleId	FieldName	SelectedQbyQ	EnterTS
▶	053-1f786a6bac4a}	1	Intro	1	5/25/2023 2:51 ...
	{7c1e95f-3cf6-4c32-b053-1f...	10	Intro	1	5/25/2023 3:36 ...
	{7c1e95f-3cf6-4c32-b053-1f...	11	Intro	1	5/25/2023 3:41 ...
•					

Remarks

Key Indicators From Parsed Audit Trail Data

Please parse all the cases if needed. C:\DepCAPIDemo3\PostprocessApps\BlaiseTool\output\parsedData.db currently has 4 case[s] in total.

Fields with errors(check, signal, route, range...)

Fields with language switch

Retrieve fields

Fields with Remark

Breakoff fields (last question of each session)

Export results to csv

Help text opened (QbyQ selected)

of records: 3

	InstrumentId	SampleId	FieldName	Remark	EnterTS
▶	053-1f786a6bac4a}	1	AloneOrInGroup	This is a remark example	5/25/2023 2:51 ...
	{7fc1e95f-3cf6-4...	10	AloneOrInGroup	with a gravel agency group	5/25/2023 3:37 ...
	{7fc1e95f-3cf6-4...	11	AloneOrInGroup	only with my Mom	5/25/2023 3:41 ...
*					

Conclusion

- Paradata is a powerful tool that can be used to improve questionnaire design and quality control in the survey life cycle.
- We can use Paradata to ensure that the data collected is accurate and valuable by monitoring response rates, tracking completion times, identifying question skips, analyzing interviewer behavior, and testing and iterating the questionnaire design.
- We can also use Paradata to improve the effectiveness of the questionnaires and produce high-quality data that can be used to inform decision-making and policy development.

Thank You!