

Using paradata to manage and monitor multi-mode surveys

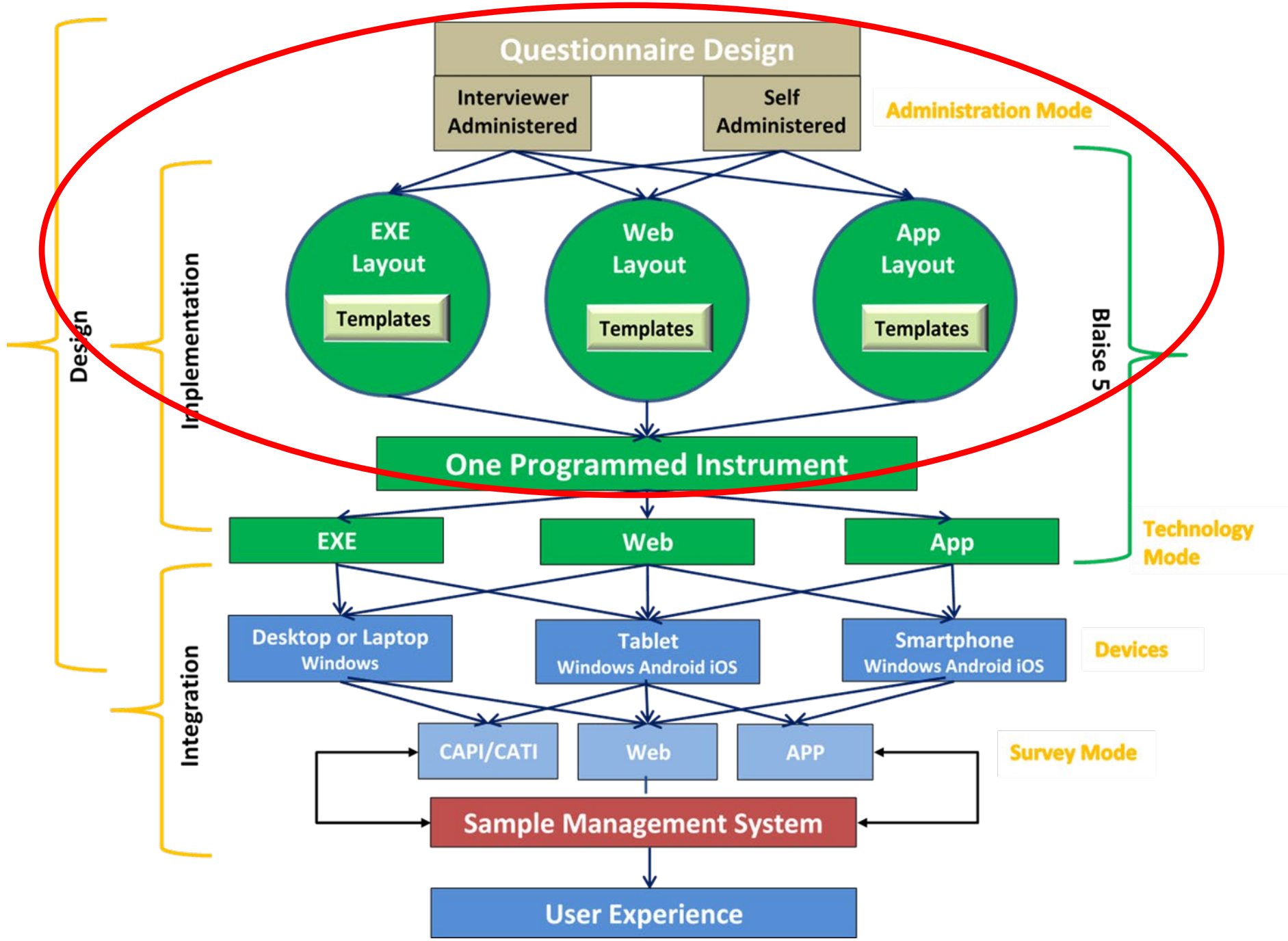
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What Do We Mean by Mode?

- Administration Modes
 - Interviewer
 - Self
- Technology Modes
 - Paper
 - Computer
 - .EXE
 - Web
 - App
- Device Modes
 - Desktop/laptop
 - Tablet
 - Smartphone
- Survey Modes
 - PAPI
 - CAPI
 - CATI
 - Web
 - Mobile Web
 - Text
 - ACASI
 - SAQ
- Other Data Collection Modes
 - Biomarkers
 - Physical measures
 - Cognitive tests
 - Wearables (e.g., Fitbit)



Four areas by using the paradata

- Multi-mode questionnaire design difference, especially between self-administered and interviewer-administrated methods
- Multi-mode questionnaire data quality, interview interruptions, modes switch, etc.
- Special functions needed for different data modes, such as text reminders, call reminders, and email follow-ups
- How to build a real-time production dashboard for managing multi-mode surveys and identity issues

Self-administered vs. Interviewer-administrated methods

1. Design difference with one instrument
 - Wording, instructions, skip logic, etc.
2. Survey launch method, for example
 - Respondent clicks the email invitation URL
 - Respondent clicks the text reminder URL
 - CATI interviewer surveys with Respondent
3. Device used for filling in the survey
 - Cell phone device being used by the respondents
 - Desktop computer used by the CATI interviewers

Timestamps

Hours:Minutes:Seconds:Thousands of a second

Case ID in Blaise database

```
"1/17/2012 9:00:06:304 AM", "Enter Form:1", "Key:3975053020 " ← Sample ID
"1/17/2012 9:00:06:304 AM", "Metafile name:C:\blproj\HRS2012\work\HRS12.bmi"
"1/17/2012 9:00:06:304 AM", "Metafile timestamp:Friday, January 06, 2012 1:08:04 PM"
"1/17/2012 9:00:06:304 AM", "WinUserName:14554015" ← Interviewer ID
"1/17/2012 9:00:06:304 AM", "DictionaryVersionInfo:0.0.0.0"
...
"1/17/2012 9:00:12:702 AM", "Enter Field:SecA.StartInterview.A007TRAlive_A", "Status:Normal", "Value:"
"1/17/2012 9:00:13:965 AM", "(KEY:)1[ENTR]" ← Time of first keystroke
"1/17/2012 9:00:14:276 AM", "Action:Store Field Data", "Field:SecA.StartInterview.A007TRAlive_A"
"1/17/2012 9:00:14:328 AM", "Leave Field:SecA.StartInterview.A007TRAlive_A", "Cause:Next Field",
  "Status:Normal", "Value:1"
...
"1/17/2012 9:02:51:681 AM", "Enter Field:SecJ.WORKSTATUS.J005MCurrEmpStatus[1]", "Status:Normal", "Value:"
"1/17/2012 9:02:55:971 AM", "(KEY:)15[BACK][BACK]5[ENTR]"
"1/17/2012 9:03:03:209 AM", "Action:Store Field Data", "Field:SecJ.WORKSTATUS.J005MCurrEmpStatus[1]"
"1/17/2012 9:03:03:256 AM", "Leave Field:SecJ.WORKSTATUS.J005MCurrEmpStatus[1]", "Cause:Next
  Field", "Status:Normal", "Value:5"
...
"1/17/2012 9:13:24:923 AM", "Enter Field:IWComplete", "Status:Normal", "Value:"
"1/17/2012 9:13:28:480 AM", "(KEY:)1[ENTR]"
"1/17/2012 9:13:29:650 AM", "Action:Store Field Data", "Field:IWComplete"
"1/17/2012 9:13:29:728 AM", "Leave Field:IWComplete", "Cause:Next Field", "Status:Normal", "Value:1"
"1/17/2012 9:13:30:056 AM", "Leave Field:IWComplete", "Cause:Exit", "Status:Normal", "Value:1"
"1/17/2012 9:13:30:056 AM", "Leave Form:1", "Key:3975053020 "
```

Start IW
Audit trail file
information

Question

Question
with changed
answer

Complete IW

Using Audit Trail Data Examples

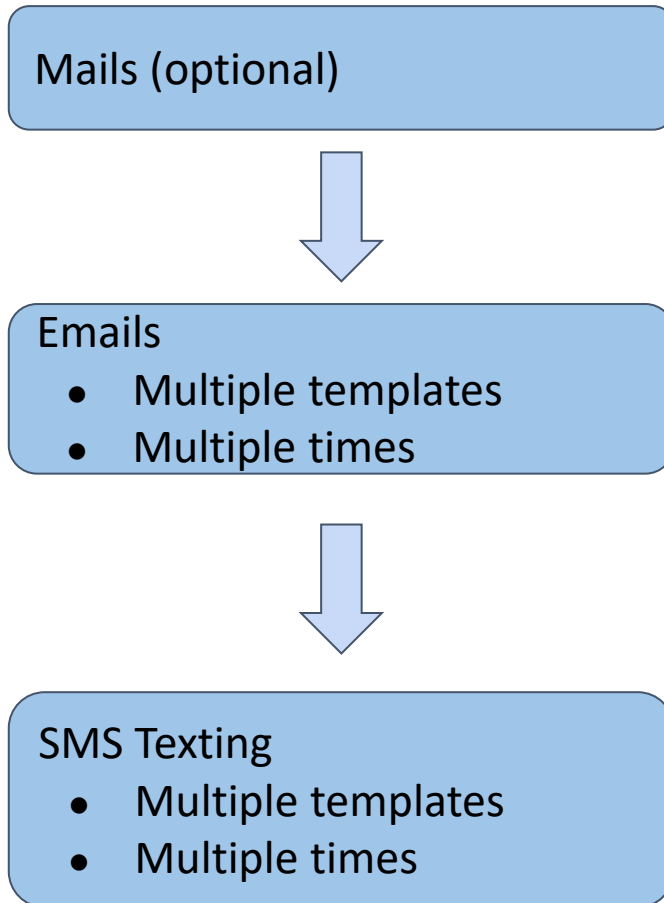
- Total survey time, question-by-question timing
- Mode switch, language switch
- Browser types/device types
- Questions answered/not-answered
- The last question answered
- Key questions' values
- Survey Portal information

Multi-mode survey protocols

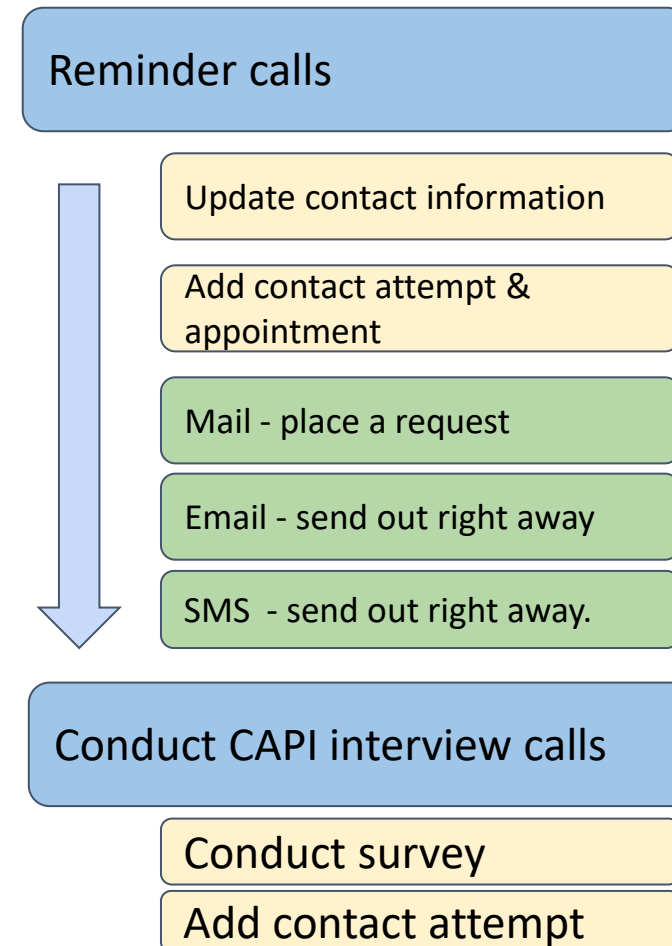
- Most time starting with self-administered mode
 - Email invitation, Email reminder(s), text reminder(s)
 - Reminder calls by the interviewers
- Switch to the interviewer-administered mode
 - self-administered mode still open or closed
 - Resume the cases which has been in-completed Self-administrated mode

Reminder tasks

Automated Batches



On demand/interviewer involved



Production Reports

- Live production reports by modes
- Report the outcome/status (completed, break-off, appointments with the CATI interviewers, etc.
- Snapshot the critical variables in the survey to identify issues
- QC reports are automatically delivered to managers via emails
- Paradata reporting of Blaise audit data
- Reporting of Blaise Authentication Portal Logging Attempt
- Reporting Interviewer Call Window reporting

Reporting - Generic and Project-Specific

- Project Protocol Reports, Audit Trail data Reports

Statistics of devices from audit trail (including devices from sessions of all web cases, updated ev

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▼ Case List

- Text Reminder

- Reminder Calls

- Web_CATI

- All Samples

▼ Reports

- Summary

- Blaise Survey Status

- To Submit Cases

- Adt Device Summary

- Adt Web Cases

- Dashboard

- BDBX Snapshot

Web

Release	Release_Type	Current_Release_Sta
1	Prod	Web_CATI
2	Prod	Web_CATI
97	Prod	Web
<		

Email

Release	Release_Type	Current_Release_
1	Prod	Web_CATI
2	Prod	Web_CATI
	Prod	Web
98	Prod	Closed
99	Prod	Closed
<		

Text Reminder

Release	Release_Type	Current_Release_
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LayoutSetName	OSFamily	DeviceFamily	Count
CASI-Large	Windows	Other	337
CAPI-Large	Windows	Other	516
			18
CASI_Small	Android	Samsung SM-G998U1	2
CASI_Small	iOS	iPhone	264
CASI_Small	Windows	Other	5
CASI-Large	Mac OS X	Mac	59
CASI_Small	Android	Samsung SM-G781V	2
CASI_Small	Android	Samsung SM-G960U	4
CASI_Small	Android	KFTRWI	1
CAPI-Large	iOS	iPhone	1

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Report - Web Case Summary

CSV

ession level info.

ie_Min	AdtEndTime	SessionCo...	isComplete	QVisted	QAnsw...	LastQ_Visted	LastQ_Answer
<	<	<	<	<	<	<	<
	2022-03-02T18:51:15.26	1	true	15	13	B13	B13
	2022-03-02T22:28:57.997	1	true	16	14	B13	B13
	2022-03-02T23:27:50.867	2	true	15	11	B13	B13
	2022-03-02T22:45:21.607	1	true	15	10	B13	B13
	2022-03-02T23:48:14.347	1	true	22	20	B13	B13
	2022-03-02T19:37:22.837	1	true	15	12	B13	B13
	2022-03-02T21:54:54.07	1	true	15	13	B13	B13
	2022-03-02T20:09:15.76	3	true	18	14	B13	B13
	2022-03-02T20:49:36.53	1	true	15	13	B13	B13
	2022-03-02T21:15:16.107	1	true	15	13	B13	B13

SQL Server Reporting Services (SSRS) reports

Calls by Date, by Mode, by Release Drill-Down Table

Call Date	Release	Release Status	Total Calls	SampleLine Id	Web Survey Status	Call Result Code	Call Result Text	Call Iwer	Call Time
05/09/2022	1	Web	3						
				260622	Web Open	1402	Answering Machine Message/Email/Text Sent	Lara Bazih	5/9/2022 1:08 PM
				229734	Web Open	4620	By Locator, Contact Person/Other	Julianna Grewe	5/9/2022 1:25 PM
	229734	Web Open	4620	By Locator, Contact Person/Other	Julianna Grewe	5/9/2022 1:18 PM			
	2	Web	12						
	3	Web	23						
05/08/2022	1	Web	3						
	3	Web	20						

Report - Dashboard

#	Report	Report Type
1	Daily Calling Activity	SSRS
2	Calling Progress	SSRS
3	Protocol Task Summary	SSRS
4	Production Summary Report	SSRS
5	Attempts & Contacts by Call Windows	PDF
6	Attempts by Call Windows Per Week	PDF
7	Contact Rates by Call Windows Per Week	PDF
8	Completed Iws by Call Windows	PDF
9	Weekly Production Hours	PDF

CONTACT PCT

ContactDirection (All) 5/9/2022

Row Labels	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Morning - 10:00:00-11:59:00		30.9%	30.5%	25.6%	24.0%	33.3%	66.7%
2-Early Afternoon -12:00:00-13:59:00	28.6%	28.7%	25.4%	26.8%	30.1%	24.0%	29.5%
3-Afternoon -14:00:00-15:59:00	29.8%	26.3%	23.0%	34.6%	31.4%	28.6%	22.2%
4-Late Afternoon-16:00:00-17:59:00	24.8%	28.7%	30.3%	27.0%	28.9%	34.7%	28.1%
5-Evening-18:00:00-09:59:00	21.5%	31.5%	32.0%	33.6%	25.0%	27.9%	60.0%
Grand Total	25.8%	29.4%	28.5%	29.0%	27.4%	30.1%	26.8%

Summary

- Using
 - Blaise Paradata
 - Blaise Survey data
 - Case management tools
- Identify
 - Diffident data collection mode
 - Potential problem with the mode
 - Perform quality control
 - Monitor the progress
 - Improve the efficiency and reduce the cost of multi-mode surveys

