

Blaise 5 – In Production

R. Suresh, Emily Caron, Lilia Filippenko,
Joe Nofziger, Gil Rodriguez and Mai Wickelgren

RTI International
FedCASIC 2019



Outline

- Key Features and Requirements
- Look and Feel
- Look, Feel and Touch
- Blaise Server
- Windows and Web Versions
- Android App Version
- WebInterview in GovCloud
- ACASI on Tablets
- App on MS Surface
- Web with Photo Uploads
- Next Steps
- Conclusion

2:43 100%

<https://blaise5.rti.org/toba>

RTI INTERNATIONAL RTI Test Survey English

The next set of questions asks for your opinion on cigarette use and other tobacco products.

Smoking cigarettes is... (pick one)

Bad 1 2 3 4 5 6 7 8 9 Good

Smoking cigarettes is... (pick one)

Unenjoyable 1 2 3 4 5 6 7 8 9 Enjoyable

Smoking cigarettes is...

Harmful 1 2 3 4 5 6 7 8 9 Not Harmful

< Back Next >

Key Features and Requirements

- Questionnaire Features
- Compatible with Blaise 4 source code
- Program once, deploy in all modes/devices
- Good user experience
- Easy deployment
- Cloud support
- Calling external applications
- ACASI and CARI
- GPS and other sensors
- Audit trail
- Integrate with RTI's CMSs

	Radio	Image	Grid	Slider	Length y R.O.
Desktop Browser	✓	✓	✓	✗	✓
Mobile Browser	✓	✓	✓	✓	✓
Apps Portrait	✓	✓	✗	✗	✓
Apps Landscape	✓	✓	✓	✓	✓

How sure are you that, if you really wanted to, you could say no to smokeless tobacco if...

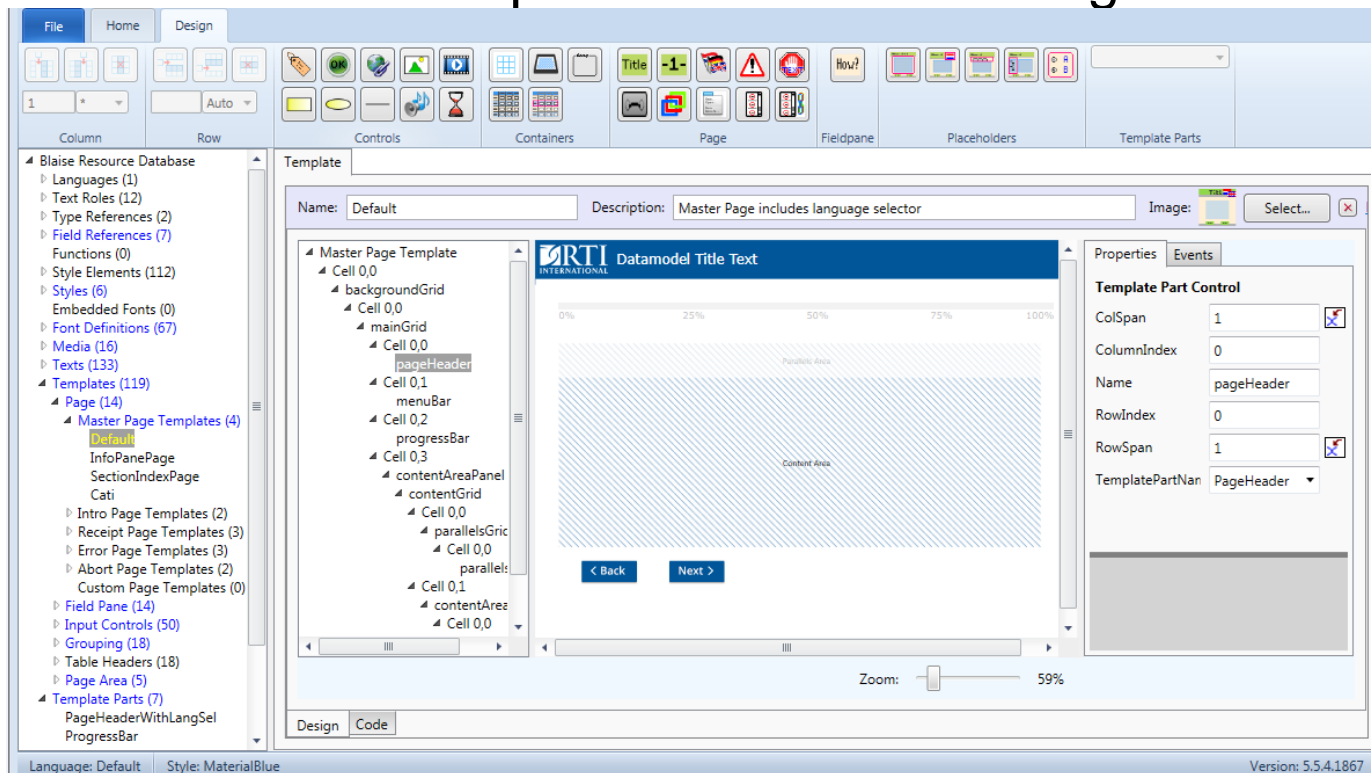
A very close friend offers it?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A family member offers it?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
You are at a party where most people are using it?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Someone you know offers it?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

< Back

Next >

Look and Feel

- RTI default template started with the template provided and adjusted colors, fonts, etc.
 - Can customize every detail displayed on the screen
 - Can customize based on screen size and/or device
 - Beware! One can spend a lot of time doing this!






Look, Feel and Touch

- Experimented with touch screen version
 - Respondent can select the image or the checkbox
 - Respondents tried to swipe up/down and shrink with fingers
 - Virtual keyboard took more space than expected

Please look at the names and pictures of the lightbulbs shown below. Please note that some forms of these light bulbs may look different from the pictures, but you should include any form that you have used.

Which type of lightbulbs do you currently have in your home?

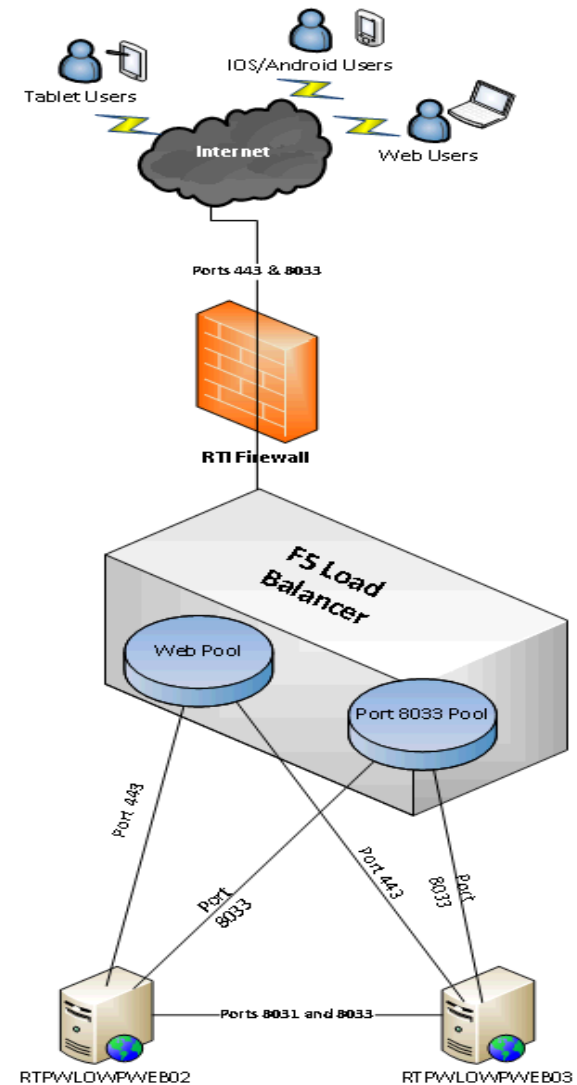
Select all that apply.

Incandescent	CFL	LED
		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I don't have any of these types of lightbulbs in my home

Blaise Server

- Web surveys
 - Everything is automatic
 - Each survey gets its own subsite
- Mobile Device Surveys
 - Uses port 8033 (HTTPS)
- Server Firewall
 - Open ports 443 and 8033
 - Port 8031 for intra-server park communication
- Lessons Learned
 - Need support from infrastructure staff



Windows and Web Versions

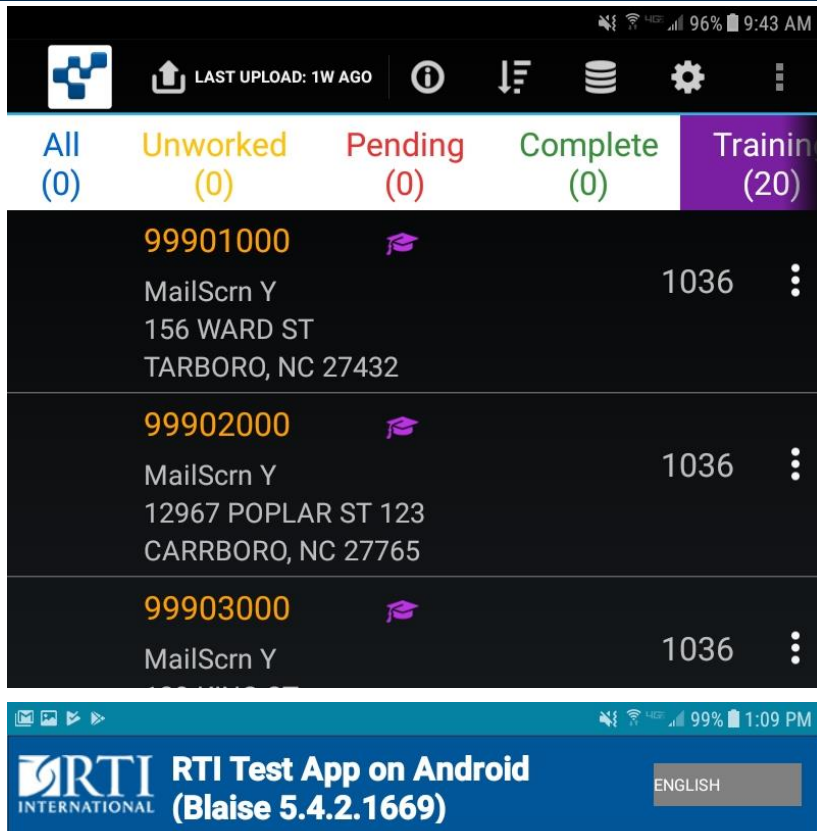
23. Select the area(s) in which you needed, requested, and/or received guidance or training and technical assistance (T/TA) during the past Federal fiscal year. (Select all that apply.)
• Federal fiscal year goes from October 1 through September 30 of the following year.

Training/technical assistance (T/TA) areas					
	Needed T/TA in this area	Requested T/TA in this area	Received T/TA in this area	Number of hours T/TA received in the past year	
23a. Needs and resource assessment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	24.00	
23b. Strategic plan development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Enter a number from 0.00 to 1000.00.	
23d. Building relationships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Enter a number from 0.00 to 1000.00.	
23e. Intervention selection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Enter a number from 0.00 to 1000.00.	
23g. Intervention implementation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Enter a number from 0.00 to 1000.00.	
23h. Intervention adaptation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Enter a number from 0.00 to 1000.00.	
23m. Other (Describe)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Enter a number from 0.00 to 1000.00.	something else
23n. Other (Describe)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Enter a number from 0.00 to 1000.00.	

< Back Next >

- Windows Version
 - Adapted to RTI’s IFMS
 - Used API to launch RTI’s Text-to-Speech
- Web Version
 - Used production version in GovCloud

Android App Version



- Adapted to RTI's Android CMS
- Used APIs to
 - Install instruments
 - Download cases
 - Launch interview
 - Upload data back to RTI

The next questions are about smokeless tobacco, such as dip, chewing tobacco, snuff, or snus. Common brands include Copenhagen, Grizzly, Skoal, Camel Snus, Kodiak, and Longhorn.

Have you ever used smokeless tobacco even just a small amount?



Web Interview in GovCloud

- First production project for RTI
- Four web surveys over six months
- Used Blaise version 5.2.5
- Two web servers in our client's AWS GovCloud, backed by SQL Server
- Fairly light load at ~500 total respondents



ACASI on Touchscreen Devices

- Uses RTI's Text-to-Speech software
 - WPF application written in C# runs the instrument
 - Uses Blaise API to access question text/response category text for the active question, applies tweaked pronunciations where required and initiates asynchronous audio.
 - Audio can be replayed as necessary

How old were you the first time you were arrested or taken into custody for any offense?

Don't Know

Refuse

◀ Back Next ▶

🔊 📱

⏪ ⏩

1	2	3
4	5	6
7	8	9
Enter	0	✖

ACASI on Touchscreen Devices (Cont...)

- Touch screen features

- Automatic pop-up onscreen keypad for questions requiring numeric responses (through event handlers)
- Pop-up calendar for questions that contain reference dates
- Select the image or the checkbox in response options
- Selectable buttons for replaying audio, displaying calendars, or displaying question help

A number of questions will ask about the past 12 months, that is since this date last year. According to the calendar **March 15, 2018** was 12 months ago. That will be your 12-month reference date and can be found in **red** on the calendar. Today's date can be found in **green**.

Navigation buttons: Back, Next, Play, Calendar icon.

Reference Calendar:

March 2018							April 2018							May 2018						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	1	2	3	4	5	6	7							
4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12
11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19
18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26
25	26	27	28	29	30	31	29	30						27	28	29	30	31		

June 2018							July 2018							August 2018							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
				1	2		1	2	3	4	5	6	7					1	2	3	4
3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11	
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18	
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25	
24	25	26	27	28	29	30	29	30	31					26	27	28	29	30	31		

September 2018							October 2018							November 2018						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S

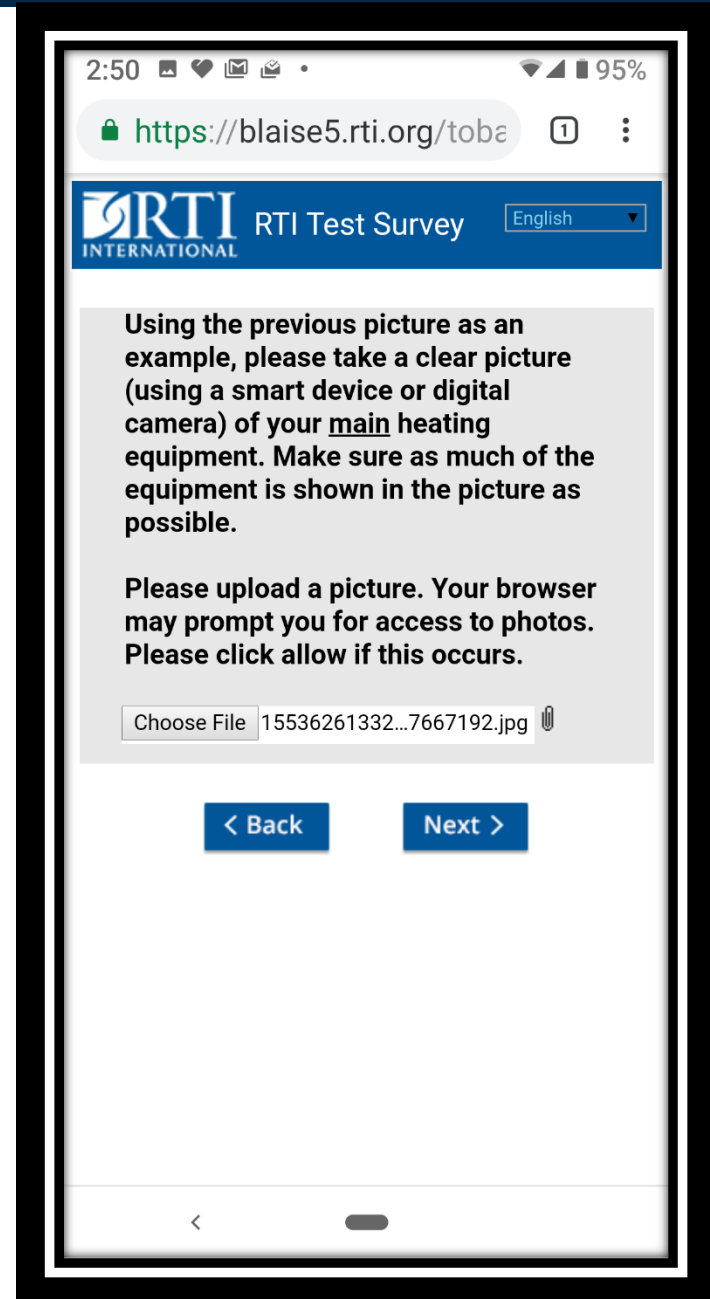
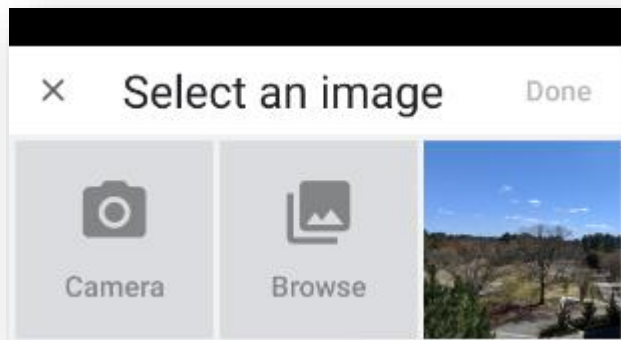
App on MS Surface Tablets

- Converting from paper instrument to CAPI
 - Client unfamiliar with any survey software
- Client is very particular about confidentiality
 - Using Manipula to pull data directly without intermediate files was a big plus
- Initial plan: iPads; Now: MS Surface tablets
 - Proof that switching devices is easier
- Preloaded data need to be verified, updated, and new information added
 - All changes are to be tracked



Web Interview with Photo uploads

- Web interview
- Photo upload for specific questions tested on:
 - desktop in different browsers
 - iPad and Amazon Fire tablet
 - smartphones (Pixel and Samsung)
- Lessons Learned –
 - Need additional instruction to users about status of uploaded file



Compared to Blaise 4

- More involvement from IT staff needed
 - Server installs and firewall rules
- Adjustment for programmers as tools have changed
 - IDE is more like Visual Studio now
 - Features are in different places
 - API calls rather than alien routers
- Look and Feel done differently
 - Lot more flexibility for customization
- Logic programming is largely the same
 - Converter does a great job
 - Might need tweaking (empty field check)

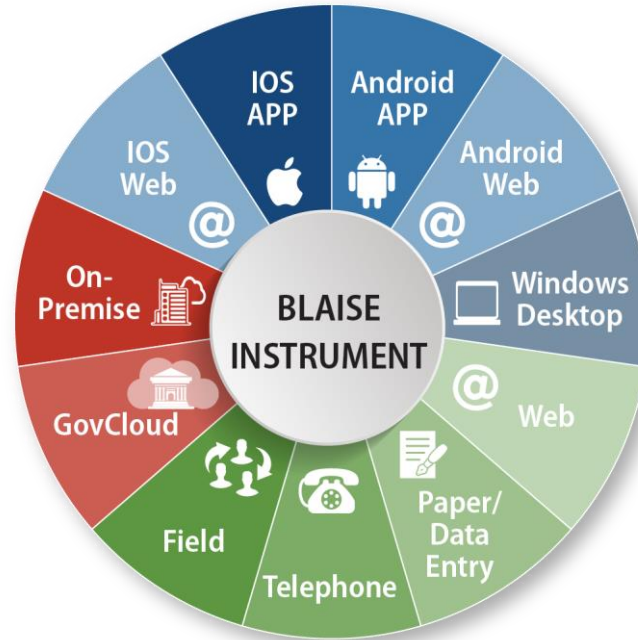


Next Steps

- Rollout Blaise 5 on other production projects
- Test double key verification
- Confirm that instrument changes after production works reliably



Conclusion



Program once and deploy in all modes/devices
Customizable for better User Experience
Feature rich
Powerful logic engine
Hooks for external programs

Thank You

Thank you for listening!

For more information:

R. Suresh

RTI International

919.541.6814

suresh@rti.org

Disclaimer: This presentation is simply to report on our experience using Blaise 5. It should not be construed as an endorsement as RTI International does not endorse any software or product.