# Case Study 2

Adding security features in the "More" tab of a home automation app

Project overview

- Business wanted to add security features in the "more" tab of a home automation app for smart switches and dimmers

- The multi-layered flow in the "more tab" was put through a card sorting exercise and based on those results a user flow was proposed. *Team wanted to learn if users can easily and successfully find the newly added features.*

- Research type: **Evaluative**

  - Measure findability of features →*Tree Testing*

| Discovery | Exploratory | Evaluative testing | Validation Testing | Ongoing Listening |
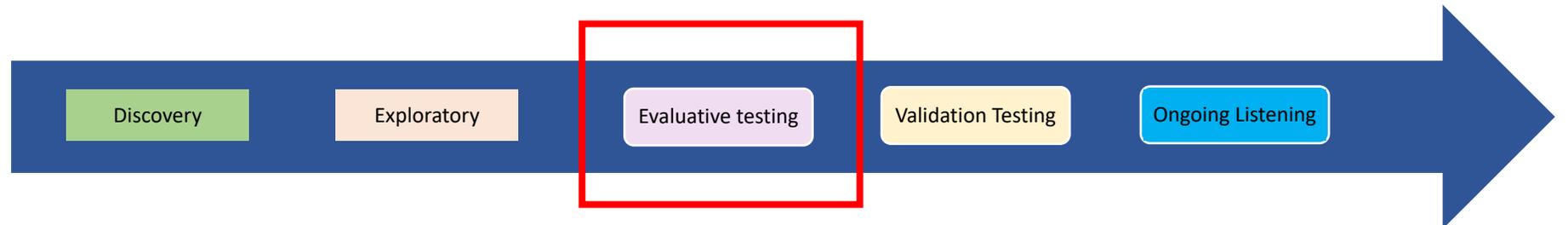
Executive Summary

- UX research worked with UX design to test out a proposed flow of the "more" menu in the wemo app based on insights from a card sorting test.

- 8/13 tasks assigned to users were completed with a high success rate of at least 80% (slide 5).

- 4/13 had mild success but given their nature and/or rare use, it seems relevant to lean towards the proposed flow rather than the alternative paths users took for each (slide 6).

- 1/13 tasks failed which was changing one's password. It's possible this was due to users' disconnect with "Jane Doe"-used to represent an account (slide 7).

Background

- Run a tree test (through optimal workshop) to assess findability of features within the "More" menu of the wemo app

- 68 beta participants completed this test

- 62% were in the US, 7% Italy, 6% Germany

- Time taken on average 2min and 26s

- 13 tasks total randomized with a cap of 10 tasks per user

At a sweep, success rate was high except for 1 task (change password)
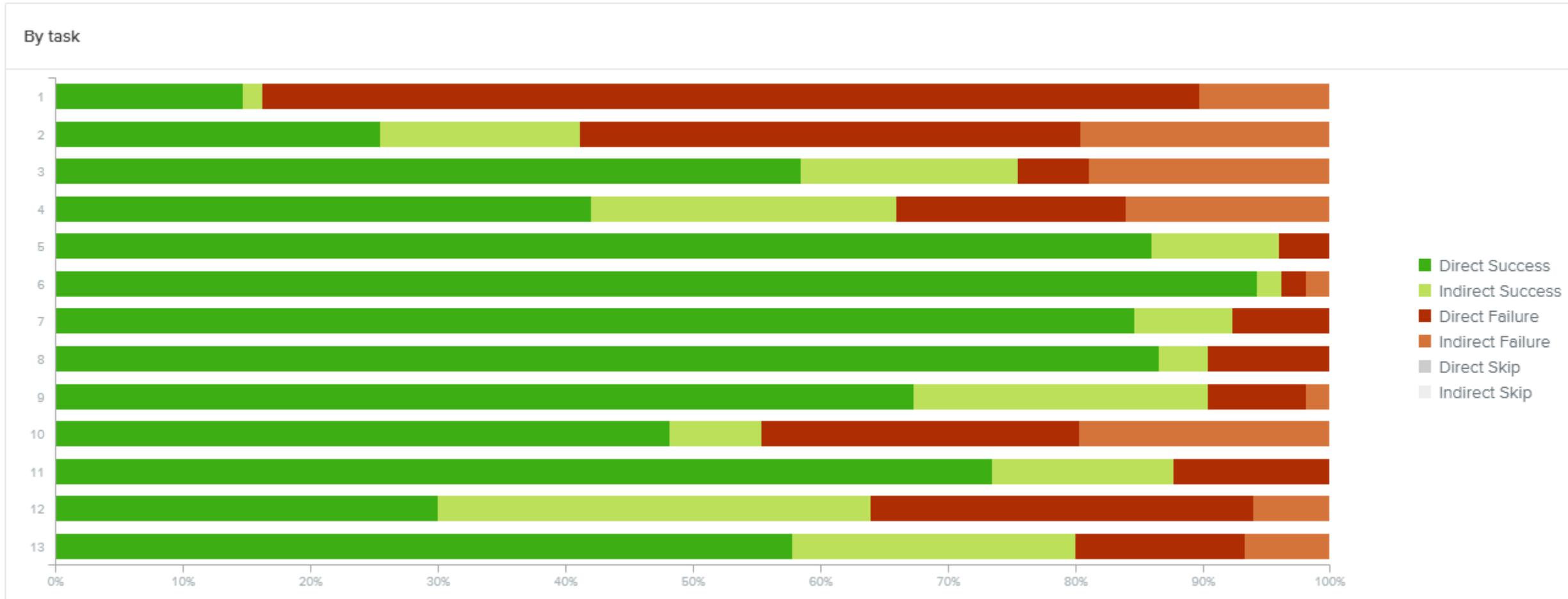
Tasks with *high* success rates

- Updating city name
  - Route: my account→ jane Doe
  - Success rate: 75%
  - Device info is the alternative path
- Get troubleshooting tips:
  - Route: Support/Feedback → Help
  - Success rate: 96%
- Contact support:
  - Route: Support/Feedback →Help
  - Success rate: 96%
- Read company policy:
  - Route: Support/Feedback → Legal
  - Success rate: 92%

- Turn on 2 step:
  - Route: My account → Security settings
  - Success rate: 90%
- Turn on touch ID:
  - Route: My account → Security Settings
  - Success rate: 90%
- Check for updates on your smart plug
  - Route: device info→ firmware updates
  - Success rate: 88%
  - Support/feedback was the alternative path for some
- Identify your app version
  - Route: Device info→ app and hardware info
  - Success rate: 80%
  - Support/Feedback is the alternative path

Tasks with *mild/mid* success

- Opting out of marketing emails
  - Route: My account → Jane Doe
  - Success rate: 41%
  - About 18 went to (support and feedback,)
  - Recommendation: Maybe lean towards account (Jane Doe) anyway since it's not as important of a task.

- Log out
  - Route: My account →   Jane Doe
  - Success rate: 66%
  - Recommendation: With 66% success which isn't high considering that it's the task that is more correlated with an account. Perhaps the way we worded the account is what might have gotten in the way of success here. A portion of users did go to security

- Enable option to remember wifi credentials
  - Route: Device info →   app and hardware info
  - Success rate: 55%
  - A portion of the users wanted to go to my account.
  - Recommendation: Might be ok to leave logic as proposed since the use case is unlikely given that most users will keep the option enabled during setup anyway.

- Add Alexa.
  - Route: My account →   connect to other services
  - Success rate: 64%
  - Some users went to device info and app and hw info.
  - Recommendation: Considering the nature of the feature (i.e. a service), It would seem acceptable to keep the proposed logic

Tasks with *Low* success

- Change your password
  - Route: My account →   Jane Doe
  - Success rate: 16%
  - Failed. The majority of users went to security to find the password instead o the intended jane doe account.

A good matrix highlighting success across tasks

68	100%																
			1	2	3	4	5	6	7	8	9	10	11	12	13	
			Change your password	Opt out of marketing emails	Update your city name so the app knows your time zone when setting lights to turn off at sunset.	Log out	Get troubleshooting tips for your smart device setup.	Contact customer support	Read the company's privacy policies.	Turn on 2-step verification (add an extra layer of security to your account in case your password is stolen).	Turn on Touch ID / fingerprint scanning for logging in	Enable option to remember your Wi-Fi information for future smart plug setup	Check for updates for your smart plug.	Add Alexa control to your smart plugs	Identify your app version	Average
			11	21	40	33	48	50	48	47	47	31	43	32	36	37.5
			16%	41%	75%	66%	96%	96%	92%	90%	90%	55%	88%	64%	80%	73%
My Account																
	Jane Doe, janedoe@gmail.com (but with your name instead)		11	21	40	33			1	2		1	1	1		
	Security Settings		56	6	3	10				47	47	17		1		
	Connect to other Services		1	6	4	6			1			5		32	1	

Impact

✓ Optimal workshop proved itself useful in both its practicality and analysis results. We consequently adopted the tool for tests across other projects and BUs.

✓ Card sorting informed the architectural flow

✓ Tasks with mild success were carefully considered in terms of their frequency of use and importance in relation to other tasks.

✓ Important and successful tasks like 2 step verification and turning on touch ID were released in the production app

✓ We learned that the task that failed was also impersonable since it didn't have the participant's name and therefore it couldn't be relatable. A task like this was deferred for usability tests instead.

What we could have done differently

- Tasks that involve accounts are better left for moderated user testing since generic accounts are unrelatable