

“I’m Literally Just Hoping This Will Work”

Obstacles Blocking the Online Security and Privacy of Users with Visual Disabilities

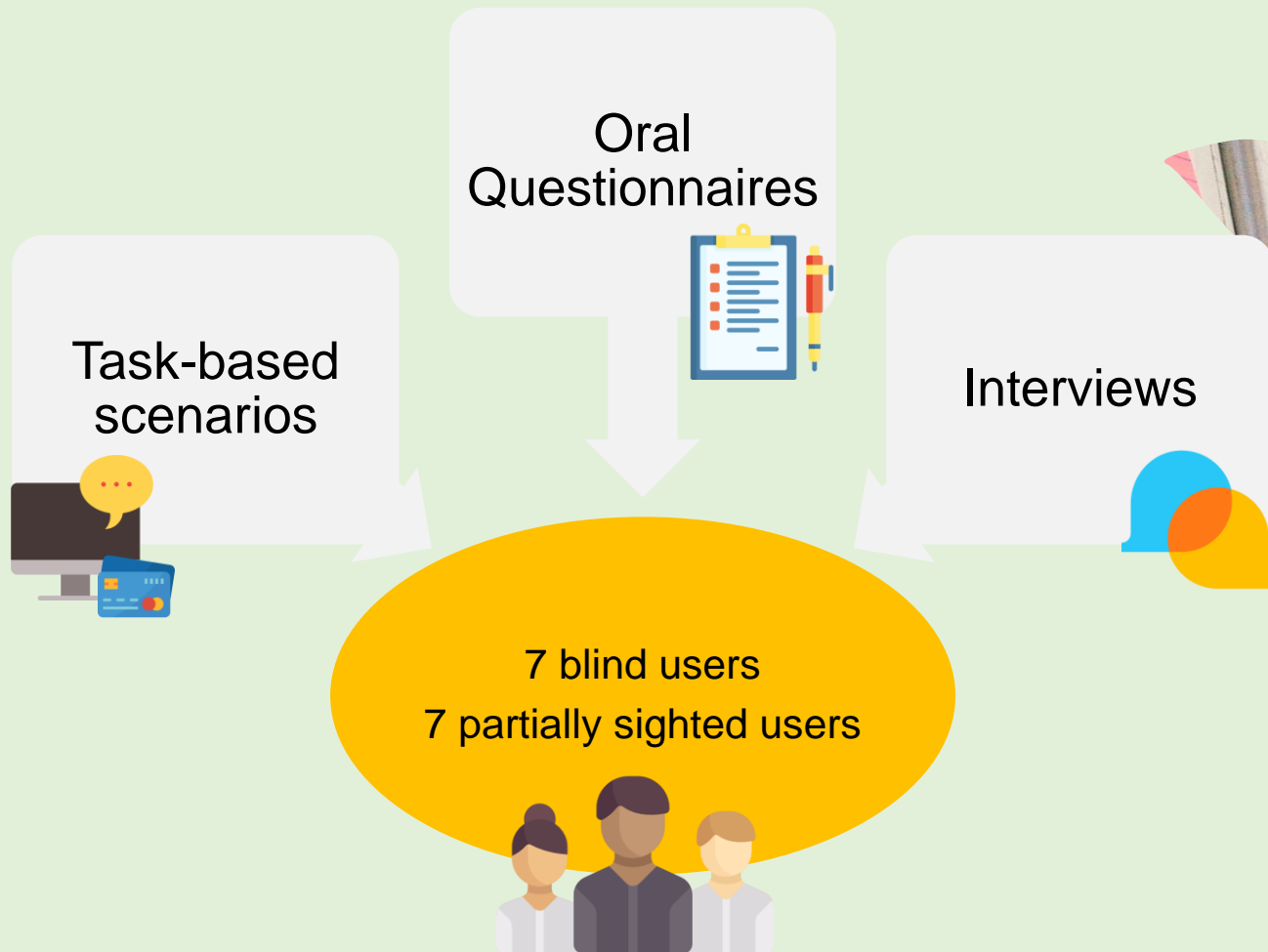
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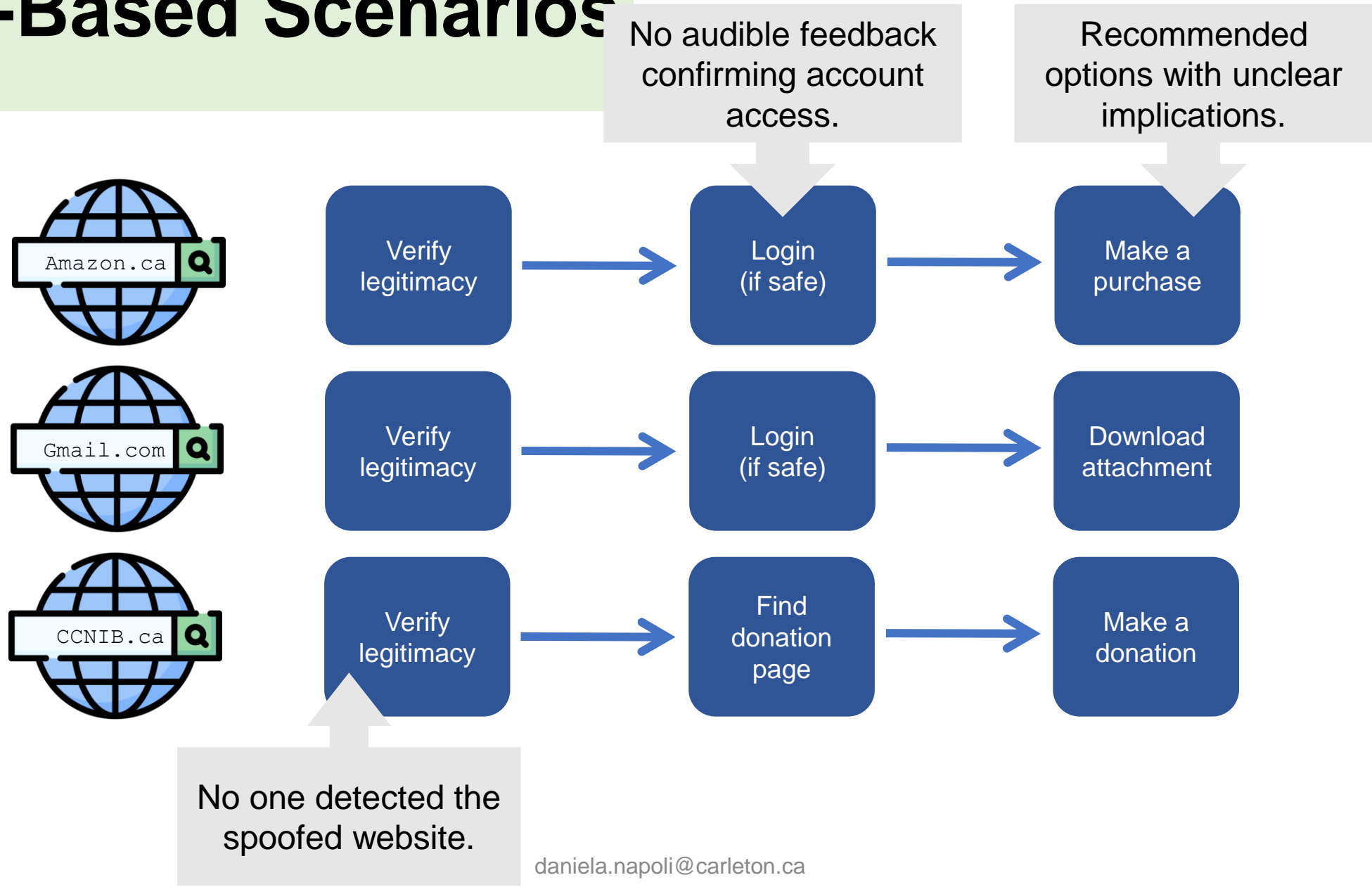


Summary

- Poor usability impeded: logging in, checking URLs, knowing whether PII is on screen, understanding effects of default options
- Mental models of websites and trust in security advice weakened
- User security management strategies adapt as S&P awareness fluctuates across contexts and challenges faced



Task-Based Scenarios



Oral Questionnaires

	Effectiveness of advice					Likelihood to use advice				
	V. Ineffective	Ineffective	Neither	Effective	V. Effective	V. Unlikely	Unlikely	Neither	Likely	V. Likely
Use software from official sources	0	0	0	2	12	0	1	0	3	10
Use antivirus software	0	0	0	3	11	0	1	0	2	10
Do not open unexpected attachments	0	0	0	3	11	0	3	0	2	9
Think before clicking a link	0	0	2	1	11	0	0	1	4	9
Use strong passwords	0	0	0	4	10	0	0	0	5	9
Use multi-factor authentication methods	0	1	1	2	10	0	4	1	5	4
Use unique passwords between different sites	0	1	1	5	7	2	3	2	2	5
Frequently update software and systems	0	1	3	4	6	0	1	3	3	7
Only use websites with "HTTPS"	1	2	2	4	5	0	5	4	2	3
Enable automatic updates	0	1	7	3	3	2	1	3	1	7
Use a password manager	2	2	4	4	2	5	3	3	1	2

Participants tend to follow advice that they believe is effective.*

*Except for using multi-factor authentication

	Level of concern				
	V. Unconcerned	Unconcerned	Neither	Concerned	V. Concerned
Access to financial information	0	2	1	3	8
Stolen identity	1	2	2	1	8
Activity tracking	1	1	2	4	6
Stolen information about you/family	1	3	1	3	6
Infected with virus or malware	1	3	1	3	6
Public disclosure of personal information	1	3	2	2	6
Online scam or fraud	2	2	1	4	5
Hacked email account	2	3	2	4	5
Key-stroke logging software	1	2	0	7	4
Installing malware unknowingly	1	2	3	4	4
Surveillance	3	2	2	3	4
Eavesdropping	4	2	2	3	3

Participants were most concerned about their info, and the health of their devices.

Interviews

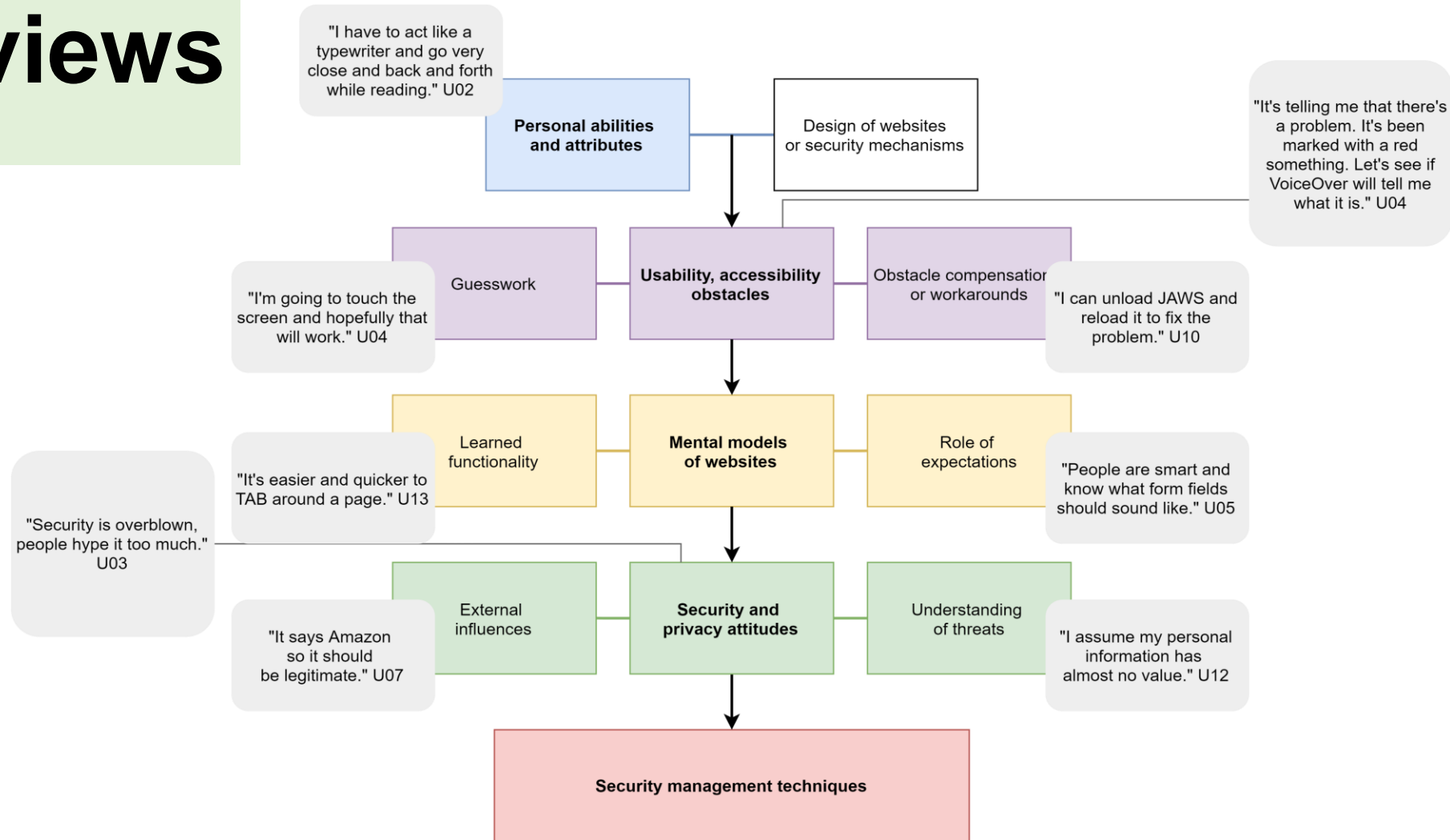


Figure 2: Relationships between the main codes formulated during our thematic analysis of **participant interviews and feedback comments**. Example excerpts are also included.

States of Online Security and Privacy

Security and privacy vigilance	High	Concerned, overwhelmed “I feel like a lamb to the slaughter.”	Comfortable, unimpeded <i>An ideal state not observed</i>
	Low	Jaded, resigned “It doesn’t matter whether you have the best [software], it can still be hacked.”	Unconcerned, overconfident “Security is overblown. People hype it too much.”
		Low	High
Faith in protective strategies			

Thank you!

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