Deriving personas based on user attitudes to interruption and information overload

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We want to understand how users experience

INFORMATION OVERLOAD

... and how much they have

TRUST IN ONLINE SERVICES

... as well as their views on

PRIVACY

&

CONTROL

➡ *so we conducted a*

SURVEY

We surveyed 135 users of collaborative and social systems about their views on information load, interruptions, trust in service providers, and how they felt about issues of privacy and control.

We want to gain an insight into how different types of user interact with these technologies and what matters most to them, so that we can understand their problems, design a solution and then evaluate it against their needs.
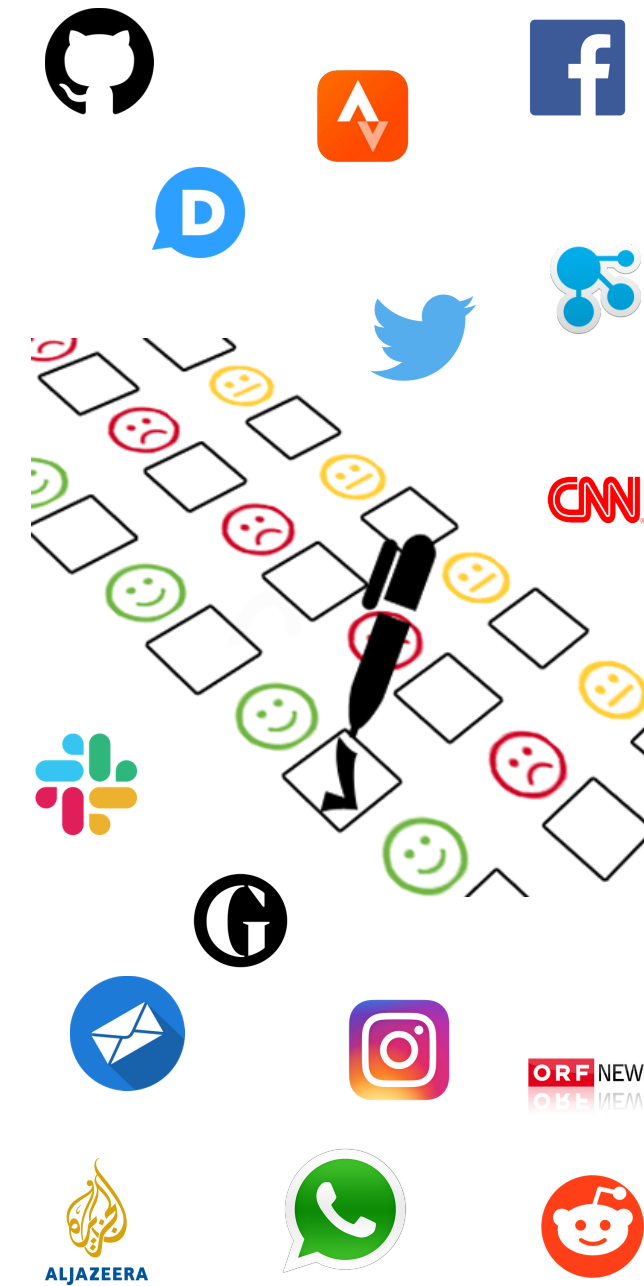
To view the full set of personas derived from this survey, visit https://doi.org/10.21954/ou.rd.7700579.v1 or use the QR Code above

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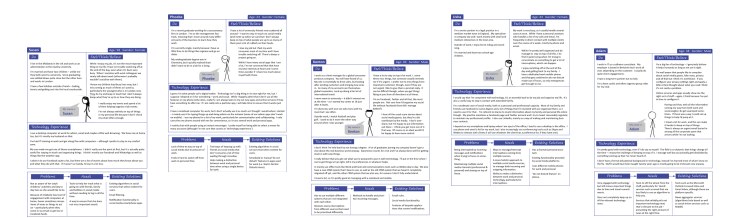
We're interested in information overload from diverse sources:
- Email & messaging
- Social media
- News sites & applications
- Collaborative work tools

Respondents were asked questions on 5 themes:
- Attitudes to interruptions
- Ability of services to understand & get things right
- Trust in online services
- Interaction with services, apps and technology
- Differentiation between work and personal use

We then applied the **PATHY TECHNIQUE** to turn these clusters into distinct **PERSONAS** using an empathy map to understand what the users feel, think & believe as well as what they do.

The significant question responses for each cluster provided a set of statements used to construct the personality and circumstances of the persona.

This laid out a path to understand the needs of diverse users and design solutions for them.

We used a **TWO-STAGE CLUSTERING** technique to identify distinct groups of respondents within the set:
- K-means (k=3) applied to each of the 5 question sets individually
- K-means (k=5) cluster of clusters across the 5 cluster results from step 1

Chi-squared tests applied to each question/cluster combination determined significant relationships.

Next, these personas will be used for ongoing design, development & evaluation

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Adam
Age: 38   Gender: Male

Do

I work in IT as a software consultant. My employer is based in Berkshire but I work all over, depending on the customer. I usually do quite short engagements.

I have a long-term partner but no kids.

I'm a keen cyclist and often organise group rides for my club.

Feel/Think/Believe

I'm a big fan of technology – I genuinely believe it helps humanity as long as we use it right.

I'm well aware that people like to complain about social media giants, fake news, privacy and all that but I think it's overblown. If you configure your privacy settings right and apply a little critical thought about what you read I think it's not really a problem.

Online services and apps usually show me the right sort of stuff – again, I think because I've put in time to configure it.

Having said that, with all the information coming my way from both work and social angles I do get swamped sometimes. If there was a way I could set up things to help I'd jump at it.

I travel a lot for work, and this can make it harder to keep on top of things. There's always an urgent email buried in among all the corporate spam that arrives while I'm not looking.

My name is **Adam**

Technology Experience

I'm pretty good with technology, even if I do say so myself. The field is so dynamic that things change all the time – I enjoy the challenge of keeping on top of it. I manage well but occasionally get blindsided by something coming up that I've never heard of.

I don't have a formal educational background in technology, instead I've learned most of what I know on the fly. Stuff I would have been taught twenty years ago is mostly going to be irrelevant now anyway.

Problems	Needs	Existing Solutions
Very engaged with technology but still misses important things due to time and travel commitments. Does not completely keep up on all the relevant technology news.	Tools to sift the wheat from the chaff, particularly for 'dumb' services such as email that are less likely to use an algorithm to help you. Services that reliably pick out important technology news that's relevant to the job – presenting the right amount of news at the right time.	Tools such as the Microsoft Outlook Focused Inbox and Gmail Inbox, although these are platform-specific. News aggregator services (algorithmic/rule based as well as social driven services such as Reddit)

Persona artwork courtesy of https://xkcd.com

Susan
"I'd like to be more in touch with my extended family without having to log on all the time"

Phoebe
"I have trouble switching off... I'm not convinced my social apps have my best interests at heart"
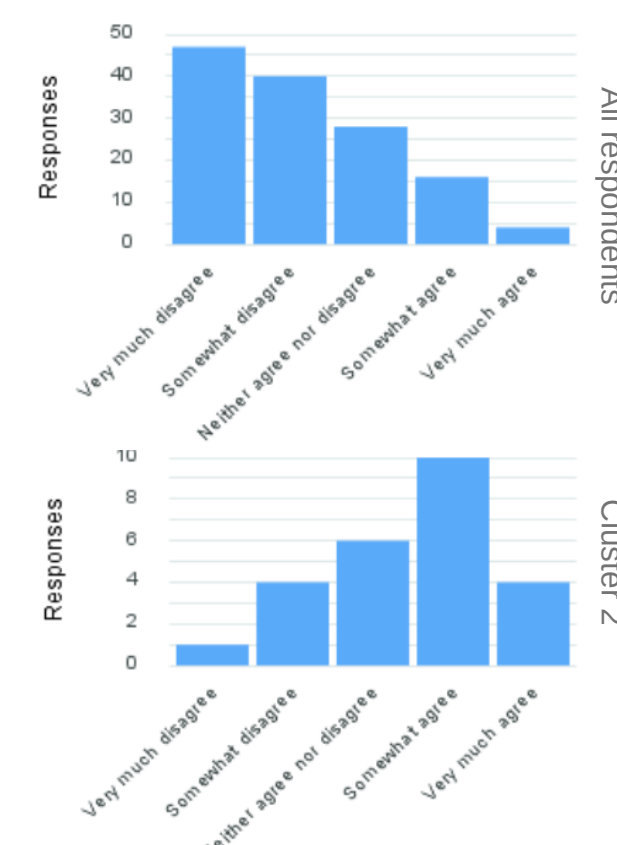
Kenton
"It can be difficult to stay on top of customer comms when you have things flying at you from all directions at all times"

Usha
"I find it annoying to get lots of interruptions when I am trying to concentrate on something"
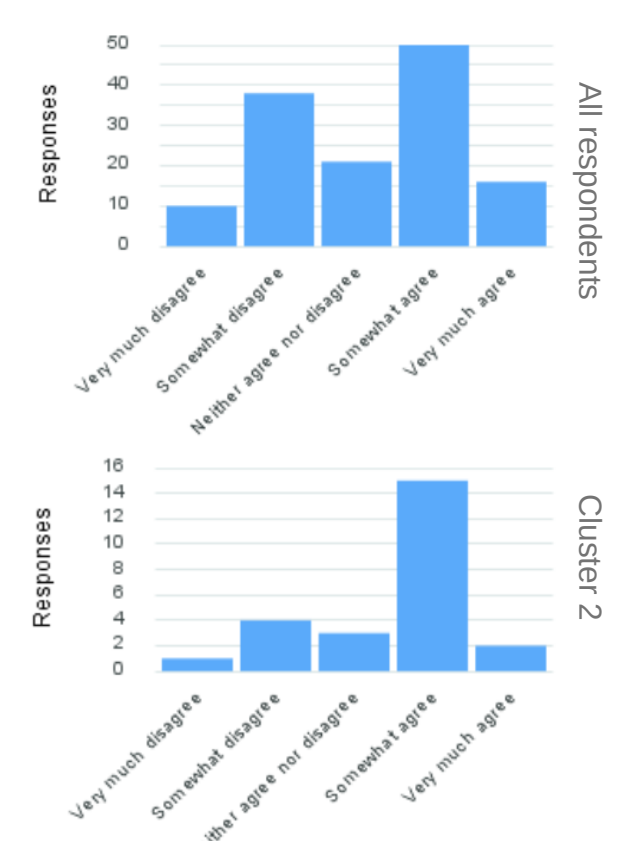

Some examples from the data...

"I'm happy to let a computer make decisions about what to show me"

The first chart to the left shows all respondents' answer to this question; the second shows the responses only for cluster 2 (persona 'Adam'). We can see that cluster 2 differs significantly from the majority on this topic, and we used this as a defining feature of the persona of Adam.

"I receive so much information online that I often miss things that are important or time critical"

The first chart to the right shows all respondents' answer to this question; the second again shows cluster 2's responses. While there is a double peak across all respondents, suggesting diverse views, cluster 2 more clearly experiences problems from overload.

References: **Ferreira, B., W. Silva, S. D. Barbosa, and T. Conte** (2018): Technique for representing requirements using personas: a controlled experiment | **Cooper, A.** (1998): The Inmates Are Running the Asylum | **McGinn, J. J. and N. Kotamraju** (2008): Data-driven persona development | **Tu, N. T. N., X. D. X. Dong, P. L. P. Rau, and T. Z. T. Zhang** (2010): Using cluster analysis in persona development