

The future of AI interfaces: Research and roadmap to 2030

Bridging present user experiences
with sci-fi vision

AI promises to radically remake the entire digital landscape. In this report, the Data & AI research and strategy team at TELUS Digital looks at the expectations of real users — the everyday, end-consumers interacting with this technology — to craft future interfaces and experiences.

We set sights on the year 2030 — a horizon near enough that the solutions envisioned here are viable. By the end, you'll gain a roadmap for a future you can start building today.

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Bridging present user experiences with sci-fi vision

Author

Katie Krol, PhD
Senior Product Researcher,
Strategy Consulting
TELUS Digital



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Our approach to research

[See our detailed methodology in the Appendix ↓](#)

To create a viable roadmap, our research approach was designed to balance visionary thinking with the practical realities of human needs. While technology advances at lightning speed, our fundamental needs for communication, connection and control remain constant (Kock, 2005). Therefore, we implemented a three-pronged method to capture the full spectrum of user desire:

What users already like



We gathered feedback on what users enjoy and would improve about their favorite AI interfaces.

What else they'd use today



We had users design their ideal interfaces in a "build-your-own-interface" task, grounded in five scenarios spanning key consumer verticals.

What they dream of



We captured their unconstrained, "blue sky" visions for 2030 in emotionally rich audio recordings.

A toolkit of [47 interface "building blocks"](#) creates a unified language for this method. All qualitative and quantitative feedback from the [80 diverse AI users](#) surveyed was systematically mapped to these blocks.

Building block categories

- Task oversight
- Triggers
- Outputs
- Customization

What our data analysis revealed



1. A unified ranking of what interface elements resonate most. ([Our resonance score ↓](#))



2. A network analysis of how users combine elements. ([Our five user mindsets ↓](#))

Explore our 2030 vision



EXECUTIVE SUMMARY

The 2030 vision: Four key findings and strategic implementations

Our research points to four clear, actionable findings that outline what users want from the next generation of AI and how they want to interact with it:

Core attributes of the ideal AI system (The "what")

FINDING ONE

The future of AI is a seamless, ambient conversation.

FINDING TWO

AI must be deeply personal.

FINDING THREE

The dominant interaction model is delegation.

FINDING FOUR

Interaction needs are a prioritized spectrum.

Models of interaction users want to adopt (The "how")

FINDING ONE

The future of AI is a seamless, ambient conversation

The current landscape of artificial intelligence is built on a strong conversational foundation. Users have achieved a remarkable level of fluency with today's interfaces, with an overwhelming majority finding it easy to communicate their needs (94%) and feeling that the AI generally understands their intent (93%). This success suggests a need for evolution, rather than revolution.

The 2030 vision is not about replacing conversation, but about liberating it. The desire to free the conversation from the confines of a single chat window was a dominant theme, with 83% of users describing a future of fluid, on-the-go interactions across contexts and devices.

83% of users want a future of **fluid, on-the-go interactions** across contexts and devices



This vision of a single, continuous conversation is enabled by an AI that becomes an ambient, multimodal presence, supported by a persistent, ongoing dialogue. While both text and voice are valued, with **type a prompt** and **speak a command** ranking closely for inputs, and **text response** and **spoken response** ranking closely for outputs, the dream for the future is clearly voice-centric. When asked to describe their ideal 2030, users organically mentioned voice commands and responses (66%) far more often than text (25%), signaling where their excitement truly lies.

This excitement for a voice-native future supports the broader vision of a seamless conversation that moves with the user — an unbroken thread of context and assistance. This invisible partner is activated not just by commands, but by context, powered by the high resonance of aspirational, passive triggers like **location-based trigger**, **system event trigger**, **time-based trigger**, **biometric data** and **environmental sensors** — features that would enable AI to understand when and where it's needed without being asked.

Participants on their ideal 2030 AI experience

“My ideal AI experience would be ... it's with me, it goes **everywhere I go**.”

“It's auditory ... I'd like it to be integrated and **seamless**. When I get in my car, [it] just would transition through the car, and then to my smart home, to really have that constant connection.”

“It would not be a visual representation, but more invisible. And it would be in my ear, on my watch, at home, on my devices ... and I would communicate with it **verbally**.”

“The interaction is mostly **voice-based** but with visual feedback when I need it, like subtle pop-ups on my smart glasses or watch where I can talk to it while I'm brushing my teeth, commuting or even cooking dinner. It happens **everywhere**.”

The path forward



Build for the unbroken conversation: Users envision an AI that is not restricted to a chat window, but in a single, ongoing dialogue that moves with them. The key is to **build a voice-forward, multimodal presence** that makes this seamless, ambient conversation a reality.

FINDING TWO

AI must be deeply personal

The desire for a deeply personal AI serves a dual purpose: It must be both a hyper-efficient assistant and an emotionally intelligent partner. An overwhelming majority (89%) of users rate “Having the AI remember my preferences and past interactions” and “The AI learns from past interactions and adapts its behavior accordingly” as critical.

Before anything else, users want to grant the AI access to their digital ecosystem to make it a more effective tool and become a true partner.



This practical need for an AI that truly knows the user is powerfully reflected in the data: The top two building blocks overall are **connect external apps** and **user profile and context**. This shows that before anything else, users want to grant the AI access to their digital ecosystem and the context it needs to make it a more effective tool. This is further supported by the high rank of a user-controlled, **customizable memory** and the frustrations users have with the limited memory of today’s tools.

However, this need for personalization goes beyond simple productivity. Users want a true partner that understands them. This desire for a deeper, more relational connection is also reflected in the data, particularly in the high resonance of aspirational features like the ability to **adjust AI personality**. This evolves the AI’s role into that of a personalized coach or supportive companion.

Participants on their current AI experience

I just wish AI could maintain longer dialogue and memory without starting a new chat.

[My virtual assistant] is good, but doesn’t actually know me. In 2030, it [should] actually be able to **learn my routines** ... what I should be eating ... know the ins and outs of my work ... or even bring up a song. It’ll know my music taste.

Participants on their ideal 2030 AI experience

I would use it to improve myself. AI would probably help me check in with my **mental health** and keep me motivated. What would make this exciting for me is that I feel alone in my life, and sometimes it’s hard to get motivation. So, I think that, with having this entity that’s ‘on my side,’ I would be more productive and achieve more of my goals.

I would like to have an AI model that is very similar to me, that really **understands my personality**, understands who I am and kind of presents like a black woman.

When I wake up in the morning, for example, I can speak to it. **‘What should I wear today?’** And based on all the information I’ve given it, based on [our] history of conversation, maybe it’ll say, ‘You should wear this and this for the temperature. Remember, you have this professional meeting today.’ And then it recommends what I should put on.

The path forward



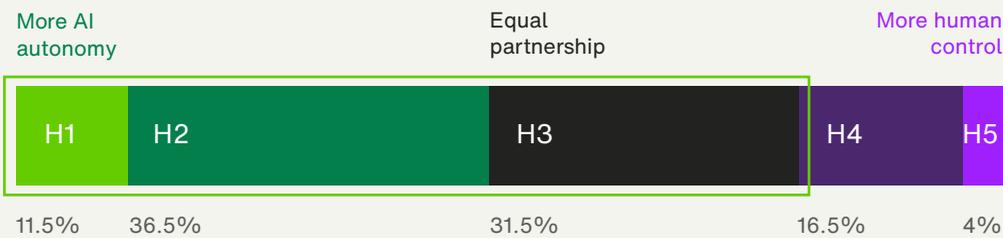
Foster a deeply personal partnership: Success depends on creating a true partner that **“knows” the user**. This is built on a foundation of practical integration (connected apps, user-controlled memory) that earns the trust required for a deeper, more emotional and relational partnership.

FINDING THREE

The dominant interaction model is delegation

When it comes to how users want to interact, the most desired model is one of delegation. Users are ready to evolve from a human-in-the-loop supervisor to a human-at-the-lever director of an AI that can actually produce a completed action. This preference is clearly quantified by their responses on the Human Agency Scale (Shao et al., 2025), where participants chose from the following statements for each of the five agentic AI scenarios:

- I want the AI to handle the task entirely on its own. (Level H1)
- I want the AI to work independently but check in for key decisions. (Level H2)
- I want equal partnership where the AI and I actively collaborate. (Level H3)
- I want to maintain primary control while receiving AI assistance. (Level H4)
- I want full control with the AI only providing basic support. (Level H5)



+71% of users envision AI acting as a second brain in their ideal 2030 experience



Across all scenarios, users leaned toward high AI autonomy. High AI autonomy (H1 + H2) accounted for 48% of all selections, more than double high human autonomy (H4 + H5), which accounted for only 21%. An additional 32% want a fully equal partnership with AI. This is a strong quantitative signal that users are not just open to delegation, but actively prefer it.

The core motivation for this is a desire for the AI to function as a “second brain,” reducing their daily mental load. However, this desire for proactivity is

not unconditional; it is carefully balanced with a non-negotiable demand for user visibility.

This need for visibility is demonstrated by the high rank of several foundational building blocks. Users want visibility into the AI’s process with features like announce plan, show “thought” process and the AI’s request for approval.

Participants on their ideal 2030 AI experience

“The AI can book my travel reservations because it knows all my preferences, but before it books, it always shows me my options. AI can find me restaurants that I like nearby, book reservations if needed. AI is just my all-around, go-to tool to make my life easier ... **it takes care of the hard stuff.**”

“Basically, I would want it to be **proactive** and be able to do tasks for me predicated on the things that I need it and want it to do.”

“It **gives me more time** and headspace for things that matter most.”

“It just takes out a chunk of stress of my daily schedules ... I would be able to save time and **I would feel more energetic and more focused about what is most important.**”

The path forward

Empower confident delegation: Users are ready to become a human-at-the-lever. The key is to **build a proactive second brain on a foundation of trust**, providing robust controls and clear process visibility to earn that delegation.

FINDING FOUR

Interaction needs are a prioritized spectrum

While delegation is the dominant desire, our research shows that user needs are not monolithic. To understand how users combine building blocks into coherent interfaces, we used [exploratory graph analysis \(EGA\)](#).

This network analysis visualizes each building block as a node, with the connections (or “edges”) between them representing how often they were selected together. The analysis then groups these nodes into “communities,” **revealing five distinct “mindsets”** that users adopt based on the task’s context and stakes. This shows that even a user who prefers to delegate will shift their interaction model when the situation calls for it, as illustrated by the quotes on the next page.

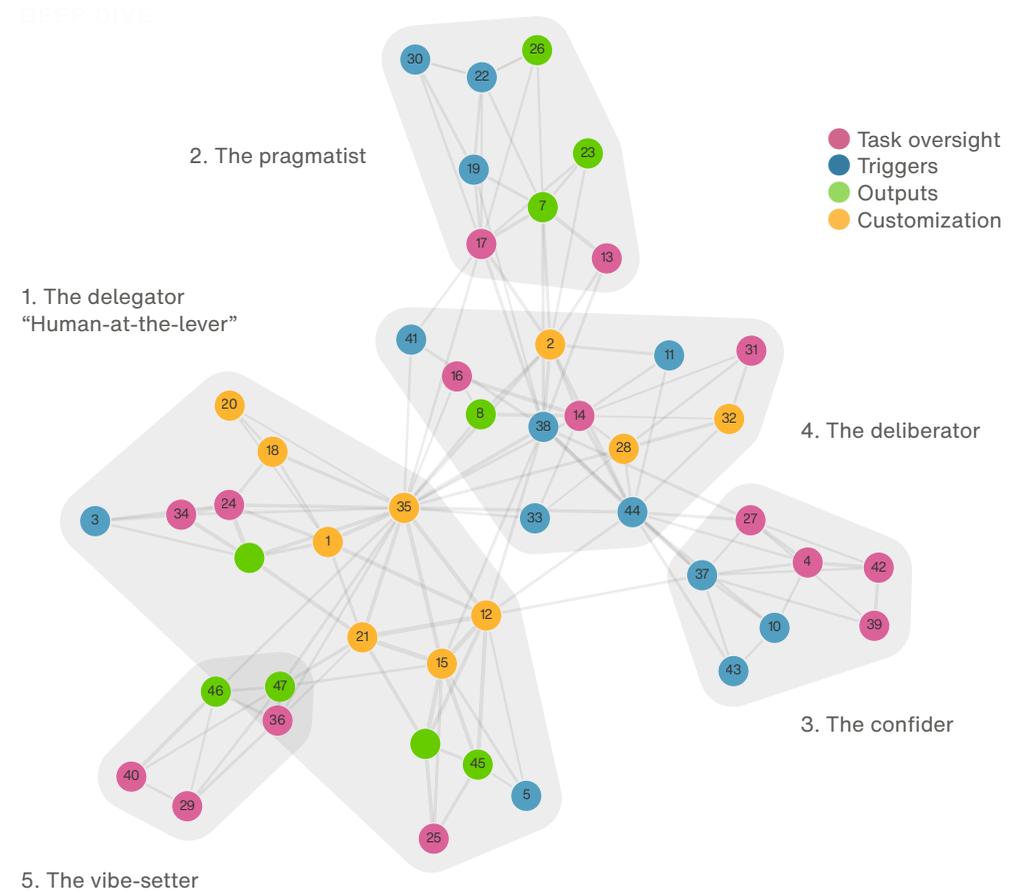
Crucially, these mindsets are not used equally. By analyzing the average [resonance score](#) of the building blocks that constitute each mindset, we can establish a clear hierarchy of importance. This provides a data-driven roadmap for prioritization:

- The delegator** (average resonance: 0.46) — A human-at-the-lever mindset that plans ahead to let the AI work autonomously.
- The pragmatist** (average resonance: 0.36) — A human-in-the-loop mindset that needs to see the “gears turning” to build trust.
- The confider** (average resonance: 0.32) — A companion-focused mindset that values the AI for its constant presence and awareness.
- The deliberator** (average resonance: 0.26) — A cautious mindset that uses the AI as a sounding board for complex topics.
- The vibe-setter** (average resonance: 0.08) — A mindset characterized by an interest in using AI to control one’s physical environment.

Mindset fluidity

Although this hierarchy ranks the mindsets by popularity, our findings show that users do not remain fixed within a single one. Our survey participants provided clear evidence for this fluidity, as users naturally described visions that spanned multiple mindsets (e.g., combining features from the confider and the deliberator).

The data is quite definitive: Not a single user (0%) stuck to just one mindset. The vast majority (83%) described features that spanned three or four of the five mindsets, with the most common being four distinct mindsets (42%). This clearly shows that users don’t fall under one type; they expect the interface to be adaptive to their changing context and needs. This suggests that each individual possesses a **unique “mindset spectrum”** — a personal distribution of preferences across all five mindsets — rather than belonging to a single, fixed category.



Our research shows that users move between five distinct mindsets, depending on the task, and that each individual possesses a unique mindset spectrum.

Participants on their ideal 2030 AI experience

“My ideal AI experience would be one that can be like my second brain, help[ing] me remember things. I would also like it to be like a financial planner, as well as a search engine and a way to brainstorm ideas.

Participant on the shift between the delegator (“second brain”), pragmatist (“search engine”) and deliberator (“brainstorm ideas”) mindsets

“It would wake me up with a visual or auditory [cue]. Maybe it lights up, kind of like a sunrise ... and then it would give me a daily briefing of what I have to do for the day. As I go through my day, if I’m passing a restaurant or a shop ... it would be able to offer me suggestions like, 'Maybe you should pick up a gift for this person because their birthday is coming up soon.'

Participant on the shift from the vibe-setter (“wake me up with a light”) to the delegator (“daily briefing”) and the confider (“offer me suggestions”)

“Like on the Starship Enterprise [from Star Trek], I could interact with my AI just by speaking to it. I can ask it to display on my television set. If I want to purchase something, it's going to pull up options for this product I'm looking for. And I can tell it I want to purchase one of those, and it'll automatically handle the process. If necessary, I would train it to tell me things. Maybe I need to exercise, and it can tell that I'm still working on my computer. You know, it would just be a complete support device that would help me to plan, coordinate, organize and just keep my life on track. It could help me plan meals, essentially just an overall assistant.

Participant on the shift from the vibe-setter (“like on the Starship Enterprise”) to the delegator (“it'll automatically handle the process”) to the confider (“a complete support device”)

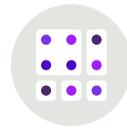
The path forward

Design for adaptability: There is no single "perfect" interface. The **ultimate AI experience is adaptive**, allowing users to fluidly shift between the five key mindsets — from delegator to vibe-setter — based on the task at hand.

Deep dive: The building blocks of future interfaces



The building blocks of future interfaces



Our quantitative analysis of 47 interface “building blocks” provides the component-level evidence for these themes. We can see a clear hierarchy, from the foundational elements required to enable these experiences to the user mindsets that define how people want to interact with them. To better understand the strategic importance of each block, we mapped them into **four distinct quadrants**:

- **Foundational**
- **Pragmatic**
- **Aspirational**
- **Niche**

This was done by plotting each block’s selection frequency in the guided “build-your-own-interface” task against its organic mention frequency in the “dream” 2030 scenarios. This allows us to distinguish between practical necessities (high guided selection) and features that generate true excitement for the future (high dream mentions). [See our detailed methodology in Appendix A.](#)

The foundational building blocks

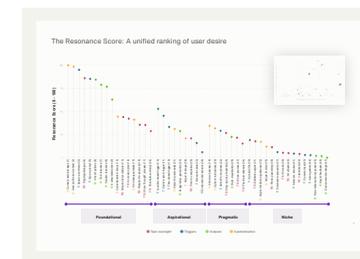
Our analysis identifies a core set of 16 “table stakes” features that serve as the evidence-backed foundation for the next generation of AI interfaces. These features fall into the “foundational” quadrant because they were selected frequently in the guided selection task and were mentioned frequently when dreaming about the ideal 2030 interface.

The story they tell is clear: Users want to front-load the AI with customization elements so they can have a seamless, voice-first conversation with an AI that already knows them, has context and has access to their tools.

This is powerfully supported by the fact that **Speak a command** (rank 3) outranked the traditional **type a prompt** (rank 5) and is complemented by the desire for an **ongoing dialogue** (rank 4). However, this seamlessness is not a blank check; users still demand robust oversight on the process so they feel — and are — in control.

These foundational features can be grouped into three key areas:

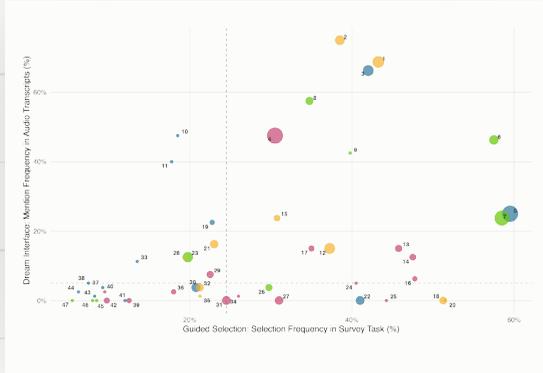
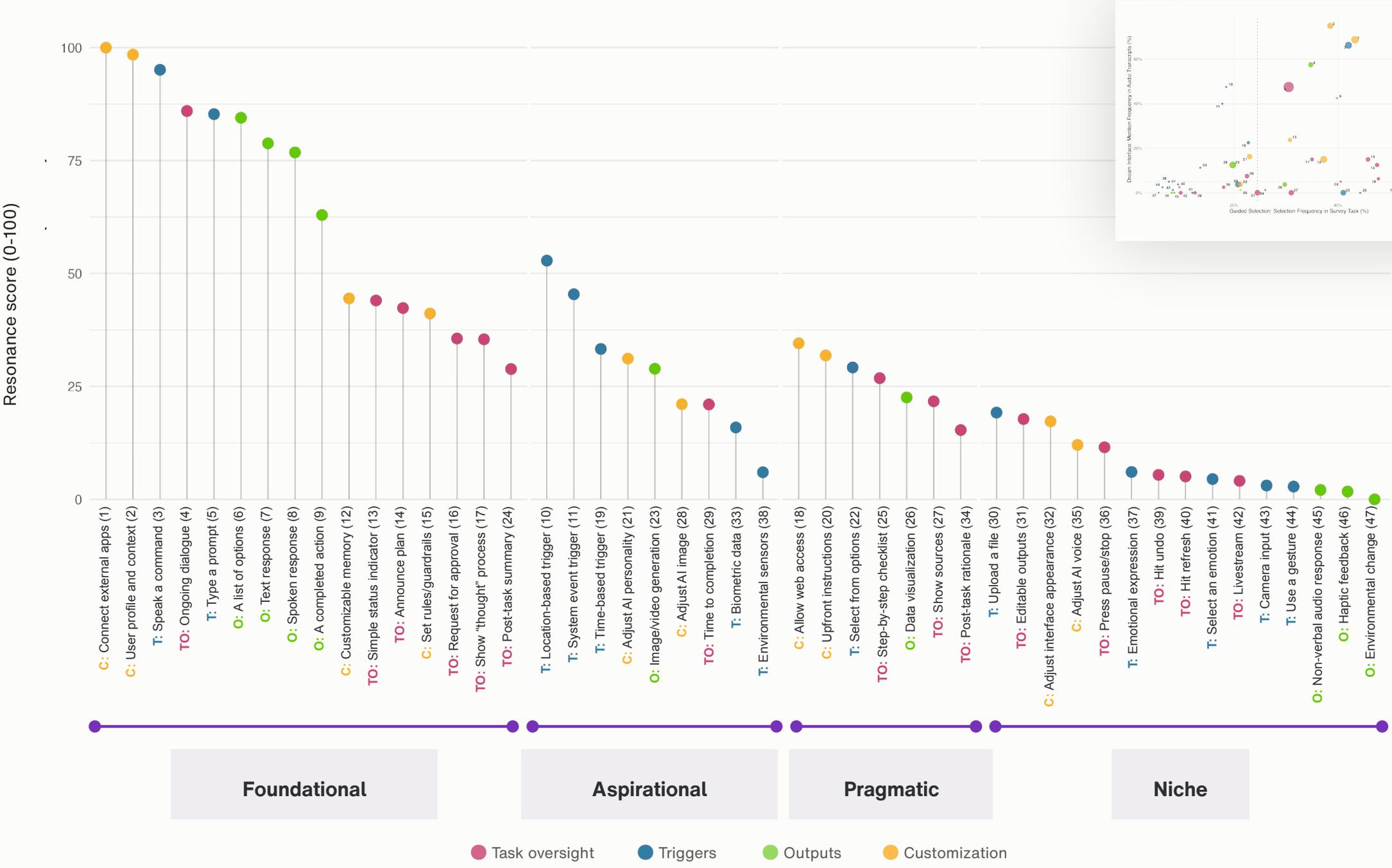
1. **Deep personalization and context:** The AI must first understand the user and their rules.
 - **Connect external apps** (customization, rank 1)
 - **User profile and context** (customization, rank 2)
 - **Customizable memory** (customization, rank 12)
 - **Set rules/guardrails** (customization, rank 15)
2. **Seamless conversation:** The AI must communicate naturally and efficiently.
 - **Speak a command** (triggers, rank 3)
 - **Ongoing dialogue** (task oversight, rank 4)
 - **Type a prompt** (triggers, rank 5)
 - **Text response** (outputs, rank 7)
 - **Spoken response** (outputs, rank 8)
3. **Transparent and controllable action:** The AI must get things done, but in a way that builds trust through visibility and user control.
 - **A list of options** (outputs, rank 6)
 - **A completed action** (outputs, rank 9)
 - **Simple status indicator** (task oversight, rank 13)
 - **Announce plan** (task oversight, rank 14)
 - **Request for approval** (task oversight, rank 16)
 - **Show “thought” process** (task oversight, rank 17)
 - **Post-task summary** (task oversight, rank 24)



The resonance score of all 47 building blocks



The resonance score: A unified ranking of user desire



Beyond the core: Pragmatic, aspirational and niche building blocks

While the foundational blocks are the “must-haves,” the pragmatic, aspirational and niche blocks offer a roadmap for current usability, brand differentiation and future growth.

Pragmatic blocks: The low-hanging fruit

Features in this category were highly selected in scenarios but were not frequently discussed in users’ musings about 2030, suggesting they are practical necessities rather than excitement-inducing features. These are workhorse features that solve immediate usability needs. Implementing these well will likely reduce user friction and make the AI experience more capable and reliable in the short term.

- **Allow web access** (customization, rank 18)
- **Upfront instructions** (customization, rank 20)
- **Select from options** (triggers, rank 22)
- **Step-by-step checklist** (task oversight, rank 25)
- **Data visualization** (outputs, rank 26)
- **Show sources** (task oversight, rank 27)
- **Post-task rationale** (task oversight, rank 34)

Aspirational blocks: What gets users excited

These are the features that generate excitement, and they reveal two key desires for the future.

First, the high resonance of passive triggers like **location-based trigger** (rank 10) and **biometric data** (rank 33) is the gateway to the proactive, context-aware “second brain” users crave.

Second, this quadrant highlights the desire to move beyond a generic tool to a unique partner, with features like **adjust AI personality** (rank 21) and **adjust AI image** (rank 28) allowing users to shape the AI’s persona to better fit their own, supporting the need for a more deeply personal AI.

- **Location-based trigger** (triggers, rank 10)
- **System event trigger** (triggers, rank 11)
- **Time-based trigger** (triggers, rank 19)
- **Adjust AI personality** (customization, rank 21)

- **Image/video generation** (outputs, rank 23)
- **Adjust AI image** (customization, rank 28)
- **Time to completion** (task oversight, rank 29)
- **Biometric data** (triggers, rank 33)
- **Environmental sensors** (triggers, rank 38)

Niche blocks: The seeds of specialization

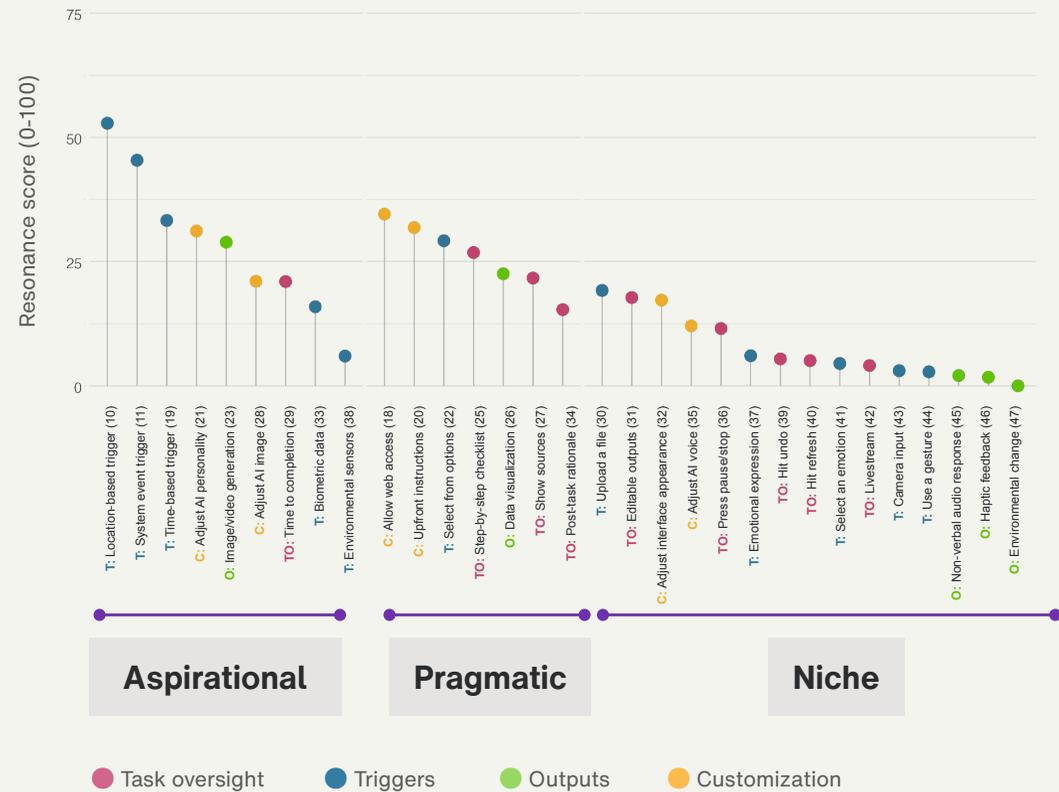
This quadrant contains the most specialized and futuristic ideas. While many of these features have low overall appeal, they point toward powerful, specialized use cases.

For instance, **haptic feedback** (outputs, rank 46) sees its highest usage in the “health monitor” scenario, suggesting its potential for discreet, personal notifications. The niche quadrant also reveals a fascinating glimpse into the future of non-verbal communication with AI. The idea of using emotion as a trigger — either passively through the AI detecting an **emotional expression** (rank 37) or actively by the user **selecting an emotion** (rank 41) — resonated most strongly in the low-stakes “content recommendation” scenario.

While not yet mainstream, these deeply communicative triggers sit on the cusp of the aspirational quadrant, signaling an emerging user interest in more emotionally intelligent and intuitive interactions, particularly for creative or mood-based tasks.

- **Upload a file** (triggers, rank 30)
- **Editable outputs** (task oversight, rank 31)
- **Adjust interface appearance** (customization, rank 32)
- **Adjust AI voice** (customization, rank 35)
- **Press pause/stop** (task oversight, rank 36)
- **Emotional expression** (triggers, rank 37)
- **Hit undo** (task oversight, rank 39)
- **Hit refresh** (task oversight, rank 40)
- **Select an emotion** (triggers, rank 41)
- **Livestream** (task oversight, rank 42)
- **Camera input** (triggers, rank 43)
- **Use a gesture** (triggers, rank 44)
- **Non-verbal audio response** (outputs, rank 45)
- **Haptic feedback** (outputs, rank 46)
- **Environmental change** (outputs, rank 47)

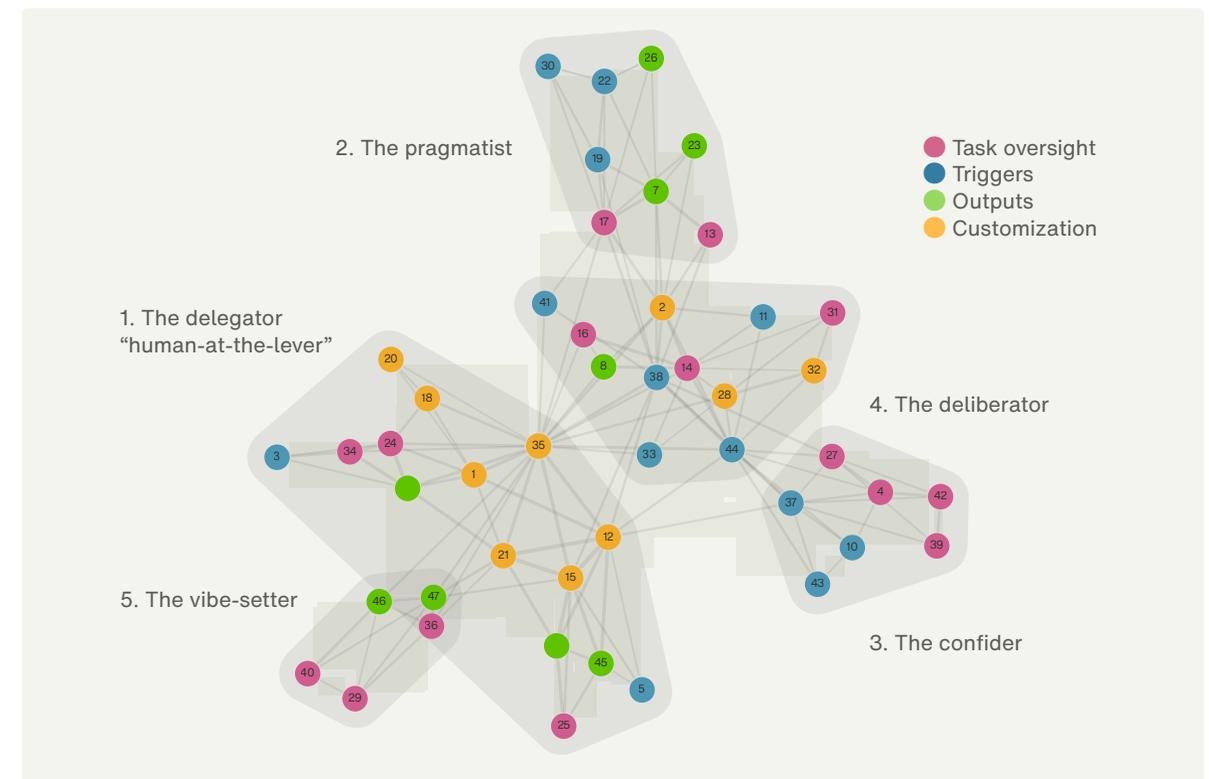
The opportunity roadmap: Aspirational, pragmatic and niche



The five user mindsets: A deeper dive into the “how”



Our network analysis revealed five key mindsets, which represent the distinct ways users group features together. These mindsets are not rigid personality types, but rather dynamic modes of interaction that users adopt based on the task at hand.



MINDSET ONE

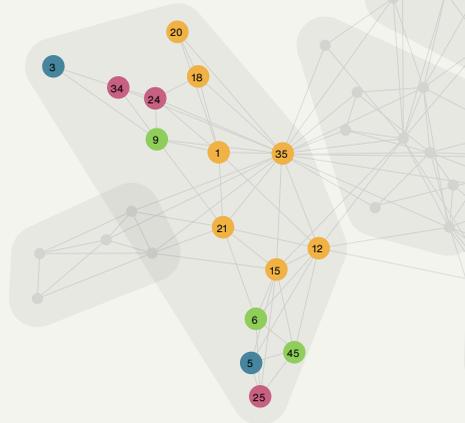
The delegator

In this mindset, the focus is on planning ahead to set the AI up for success and then letting it work autonomously to get things done.

This mode of interaction is built primarily from foundational and pragmatic blocks, where the user front-loads the AI with customization elements — like **connect external apps**, **upfront instructions** and **set rules/guardrails** — so the AI can execute tasks as the user would. Once the parameters are set, the

ideal output is a completed “action.” This mindset does not require in-process visibility, but demands a full report afterward, as shown by the inclusion of post-task summary and post-task rationale.

1. The delegator



Building blocks in this mindset and their overall resonance rank:

- Connect external apps (rank 1)
- Speak a command (rank 3)
- Type a prompt (rank 5)
- A list of options (rank 6)
- A completed action (rank 9)
- Customizable memory (rank 12)
- Set rules/guardrails (rank 15)
- Allow web access (rank 18)
- Upfront instructions (rank 20)
- Adjust AI personality (rank 21)
- Post-task summary (rank 24)
- Step-by-step checklist (rank 25)
- Post-task rationale (rank 34)
- Adjust AI voice (rank 35)
- Non-verbal audio response (rank 45)

● Task oversight ● Outputs
● Triggers ● Customization

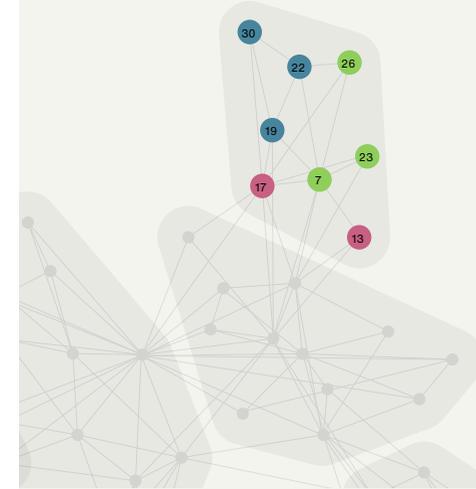
“My ideal AI would be one that is competent and can complete tasks on its own, but never without my oversight and direction.”

Participant 42, on their ideal 2030 AI experience.

task oversight, like show “thought” process and simple status indicator and traditional outputs from the foundational and pragmatic quadrants (e.g., text response).

This mode of interaction is not about seeking more autonomy from the AI, but rather better tools to demystify its process and verify its outputs.

2. The pragmatist



Building blocks in this mindset and their overall resonance rank:

- Text response (rank 7)
- Show “thought” process (rank 17)
- Simple status indicator (rank 13)
- Time-based trigger (rank 19)
- Select from options (rank 22)
- Data visualization (rank 26)
- Image/video generation (rank 23)
- Upload a file (rank 30)

● Task oversight ● Outputs
● Triggers

“Having some way of ... reviewing the AI’s thought process, seeing the AI lay out its plan, give a rationale ... that sort of thing will be important for me to understand the AI.”

Participant 28, on their ideal 2030 AI experience

“If I could improve one thing, it would be to add more visual task indicators and progress feedback while the AI is generating responses. I think it would help manage expectations, even during longer replies, and it would help provide a better sense of control and clarity during interactions.”

Participant 12, on their current AI experience

MINDSET TWO

The pragmatist

This mindset aligns most strongly with the traditional human-in-the-loop method of AI interaction, where the goal is reliability for a discrete task, not a deep personal relationship.

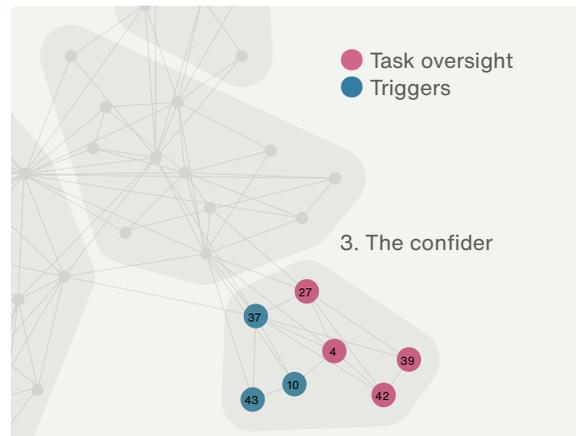
In this mode, the user needs to see the “gears turning” to build trust. Instead of delegating, the focus is on staying involved and making the current “prompt-refine” cycle more transparent. This mindset is heavy on in-process

MINDSET THREE

The confider

This mindset is defined by the desire for an ever-present, context-aware companion where the relationship is the feature.

In this mode, the value is placed on the AI's presence and awareness, not on completing tasks. This mindset is built by layering aspirational and niche passive triggers on top of a foundational ongoing dialogue (rank 4). Crucially, this mindset has no action- or task-based outputs — it's about being, not doing.



● Task oversight
● Triggers

3. The confider

Building blocks in this mindset and their overall resonance rank:

- Ongoing dialogue (rank 4)
- Location-based trigger (rank 10)
- Show sources (rank 27)
- Emotional expression (rank 37)
- Hit undo (rank 39)
- Livestream (rank 42)
- Camera input (rank 43)

“As I kind of go through my day, if I'm passing a restaurant or a shop or something, it would be able to offer me suggestions like, 'Oh, you know, maybe you should pick up a gift for this person because their birthday is coming up soon!'”

Participant 75, on their ideal 2030 experience

“On the go, you know, being able to [bring up a song or mood] I'm in, even though I haven't told it what kind of mood I'm in, it'll kind of know my music taste ... stuff like that.”

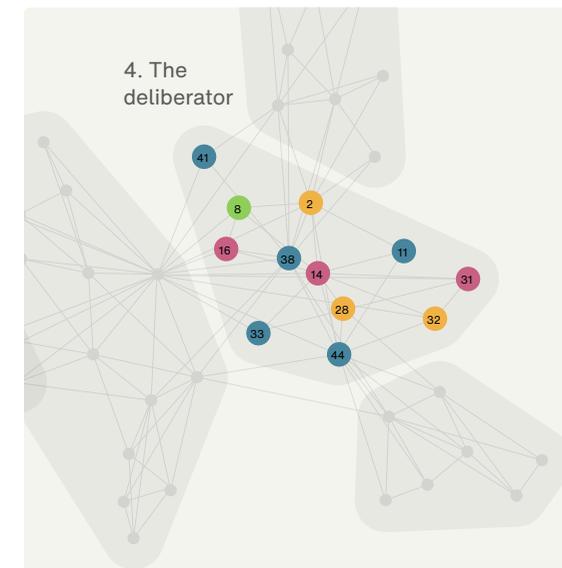
Participant 72, on their ideal 2030 experience

MINDSET FOUR

The deliberator

In this mindset, the user seeks a sounding board for complex or sensitive topics. The goal isn't for the AI to do anything, but to think with and speak to the user. This is a more cautious mode of interaction that demands active oversight.

This mindset is built around deep customization to create a comfortable entity to confide in, paired with foundational, permission-based task oversight where the conversation is the final product.



4. The deliberator

● Task oversight
● Triggers
● Outputs
● Customization

Building blocks in this mindset and their overall resonance rank:

- User profile and context (rank 2)
- Spoken response (rank 8)
- System event trigger (rank 11)
- Request for approval (rank 16)
- Adjust AI image (rank 28)
- Editable outputs (rank 31)
- Adjust interface appearance (rank 32)
- Biometric data (rank 33)
- Environmental sensors (rank 38)
- Announce plan (rank 14)
- Select an emotion (rank 41)
- Use a gesture (rank 44)

“I think it's important that people and humans still maintain control. I'm not really too fond of the idea of AI just, like, being set free and doing stuff on its own.”

Participant 59, on their ideal 2030 AI experience

“I love using AI as a sounding board. It's just having something to bounce ideas off of.”

Participant 13, on their ideal 2030 AI experience

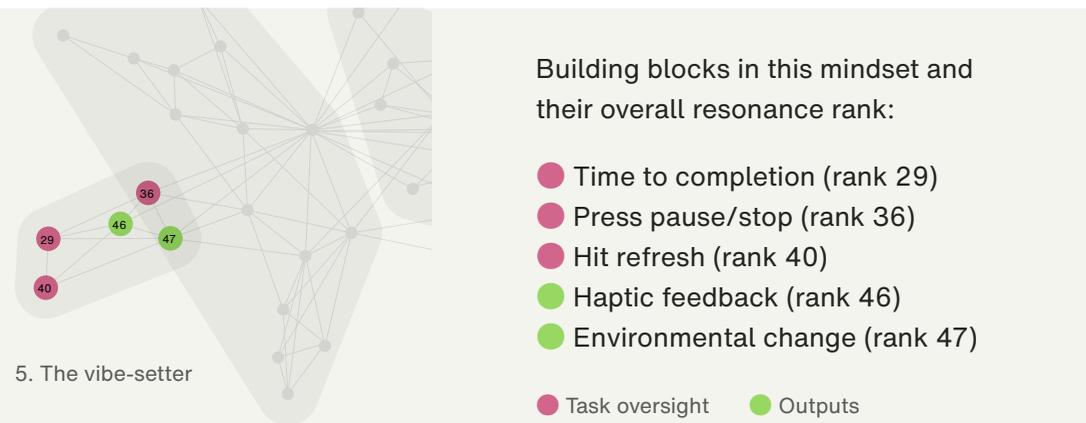
“I want it to be able to respond quickly and effectively, be able to have open rapport with me. I do like when [AI has] a personality, which makes it a little bit more fun to talk to and it feels like you're talking to an actual person and not just a computer.”

Participant 14, on their ideal 2030 AI experience

The vibe-setter

This mindset is characterized by an interest in using AI to control one’s physical environment. It is not focused on conversational tasks or complex actions.

This mindset operates through niche and aspirational outputs (haptic feedback, environmental change) with safety-net elements of task oversight (e.g., press pause/stop).



“I expect this AI to be available through all of my household devices. So it’s kind of all connected. Like if I sent a message to a phone to turn on the stove, to set it to 350 ... Instead of using your oven app or your thermostat app, you can just use this through your AI technology.

Participant 30, on their ideal 2030 AI experience

“It would wake me up with a visual or auditory [signal], maybe it lights up, kind of like a sunrise to help get you there and slowly wakes you up ...

Participant 75, on their ideal 2030 AI experience

Designing for the adaptive interface

How will we interact with AI in the future? Science fiction has long imagined the answer, but our research paints a clear and optimistic picture of the future of AI interfaces. Users are ready for — and actively excited about — an AI that is more deeply integrated into their lives. They envision a future where AI breaks free from the chat window to become an ambient, multimodal partner that is deeply personal and “just gets them.” Furthermore, users are eager to shift their interaction model from constant supervision to confident delegation, offloading cognitive tasks to a proactive second brain that they can direct.

This enthusiastic vision, however, is built upon a non-negotiable foundation of user control. The desire for a more agentic AI is directly tied to the ability to customize its behavior and oversee its actions. This is not a paradox, but a prerequisite for trust.

The path forward begins with the 16 foundational building blocks — the “table stakes” that provide the necessary guardrails for delegation. A key insight within this foundation is the clear preference for voice as a primary interaction method; the fact that **speak a command** (rank 3) outranked **type a prompt** (rank 5) is a powerful signal that users are ready for a more natural, hands-free and ambient future.

Ultimately, our research shows that users’ needs are not static; they fluidly shift between different interaction models — our five mindsets — based on the context, user needs and stakes of the task at hand. Therefore, the ultimate AI interface is one that is adaptive. It must provide that robust, voice-forward foundation but also be flexible enough to allow users to add, remove or re-prioritize building blocks as they move from being a delegator for routine work to a deliberator for high-stakes tasks. By building for this adaptability, we can create AI that is more powerful and agentic, as well as being more trustworthy and aligned with fundamental human needs.



Let’s connect

Fortune 1000 companies trust TELUS Digital to craft AI-fueled experiences that drive results. As your end-to-end transformation partner, our expert teams strategize, build and operate solutions, customized to your industry.

Appendix

Appendix A: Detailed methodology

Participants

The study included 80 adult participants who were intentionally recruited to represent a diverse mix of age groups, gender identities and racial/ethnic backgrounds. To qualify, participants had to be 18 or older and have used at least one traditional LLM chatbot-style AI tool in the past six months, with a minimum usage frequency of at least a few times a month. This screening process ensured a sample of active, experienced AI users with varied comfort levels and lengths of experience, providing a rich dataset for analysis. The vast majority of participants (92%) reported using AI tools at least a few times per week, with 63% indicating using AI multiple times a day.

Demographics: The sample was diverse, with a broad age range (18 to 65+), a balanced gender identity (51% woman, 49% man, 1% transgender), and representation across various racial and ethnic backgrounds (59% White, 21% Black or African American, 14% Asian, 11% Hispanic or Latino, 1% Native American or Alaska Native, 3% Other). Note that participants were allowed to select more than one option. Therefore, percents may not add up to 100.

Employment: The participant group was predominantly employed at least part-time (85%). 14% reported not being currently employed, and 1% were retired. 9% of participants reported being students. Among employed and retired participants, the most represented industries were education and academic institutions (16%), healthcare and medical services (15%), and media, arts and entertainment (15%).

Tech savviness: The majority of participants reported being comfortable with new technology, with 91% describing themselves as “somewhat comfortable” (31%) or “very comfortable” (60%).

AI experience: Participants were not new to AI; 85% had been using AI tools for at least six months, with over half (54%) having used them for more than a year. ChatGPT was the most commonly used tool (91%), followed by Gemini (71%).

Usage patterns: AI is deeply integrated into both personal and professional lives. The top purposes for using AI were personal productivity (90%) and work/professional tasks (85%), with common activities including calendar management, email and research.

Defining the building blocks

The 47 “building blocks” used in the interface design scenarios are the foundational elements of this research. To develop this list, we conducted a deep-dive analysis of numerous AI interfaces, ranging from traditional LLM chat-based tools to more complex, agentic platforms like Cursor, Perplexity, Deep Research and Operator.

We meticulously mapped the specific attributes and functionalities of each interface, which led to a natural categorization of features into four key areas: Triggers (how a task is initiated), outputs (how the AI delivers results), customization (how the user can personalize the experience), and task oversight (how the user can monitor or guide the AI’s process). Within triggers, we distinguish between active triggers, where the user explicitly initiates an interaction (e.g., typing a prompt), and passive triggers, where an event initiates an interaction without direct user command (e.g., a biometric change or reaching a specific location).



Visual guide: Participants
[Page 29](#)

● **Triggers:** How tasks or interactions are initiated (e.g., the user typing a prompt, a system event)

● **Task oversight:** How the user can monitor or guide the AI’s process during a task (e.g., progress indicators, providing feedback, seeing its work)

● **Outputs:** How the AI delivers results (e.g., text response, haptic feedback, data visualization)

● **Customization:** Global settings configured to personalize the experience across tasks (e.g., connecting apps, setting rules, adjusting AI style)

Strategic feature quadrants

To understand the strategic importance of each of the 47 building blocks, we utilized a multi-pronged approach with three distinct datastreams designed to capture both explicit and implicit user preferences. This methodology allowed us to triangulate user desire by understanding what they already like in current tools, what they select when presented with explicit options and what they envision for the future when completely untethered.

Our journey began by gathering qualitative data on participants’ current joys and pain points. We then invited them to explicitly build their ideal interfaces for five different agentic AI scenarios. Finally, we captured their blue-sky concepts for their future AI via audio recordings. These three distinct data streams were then coded against our 47 building blocks and plotted on a two-by-two matrix:

Bubble size (present-day relevance): Derived from open-ended text responses about users’ favorite AI tools, this metric captures which building blocks were organically mentioned as either “currently enjoyed” or a “desired improvement,” measuring immediate relevance.

X-axis (guided selection): Derived from the “build-your-own-interface” task, this is the percentage of times a block was explicitly selected across all 400 interface design tasks, measuring its appeal when presented as an option.

Y-axis (dream interface): Derived from the “ideal 2030 AI” audio transcripts, this metric is the percentage of times a block was organically mentioned, measuring its top-of-mind importance and future desire.

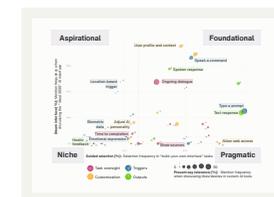
The medians of the X and Y axes were used to divide the plot into four quadrants: Foundational (high/high), aspirational (low/high), pragmatic (high/low) and niche (low/low).

The resonance score

To create a single, unified ranking of all 47 building blocks, we developed a composite “resonance score.” This score synthesizes our three key metrics — gleaned from the guided interface builder, the text-based open-ends and the audio transcripts — into a single value, allowing for a clear prioritization of features. The score is a weighted average, calculated as follows:

$$\text{Resonance score} = (\text{guided selection \%} * 1.0) + (\text{present-day relevance \%} * 1.25) + (\text{dream interface \%} * 1.5)$$

The weights were chosen to place the most emphasis on features users dream about for the future (dream interface) and those that are relevant to them today (present-day relevance). The final score was then normalized to a zero-to-one scale, and a resonance rank from one (highest) to 47 (lowest) was assigned to each building block.

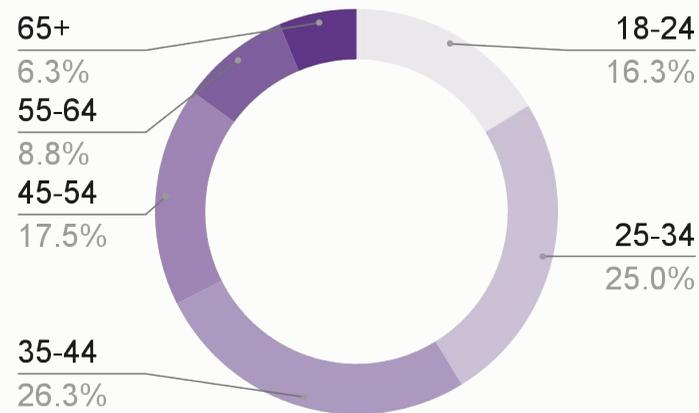


Visual guide:
Resonance score
[Page 31](#)

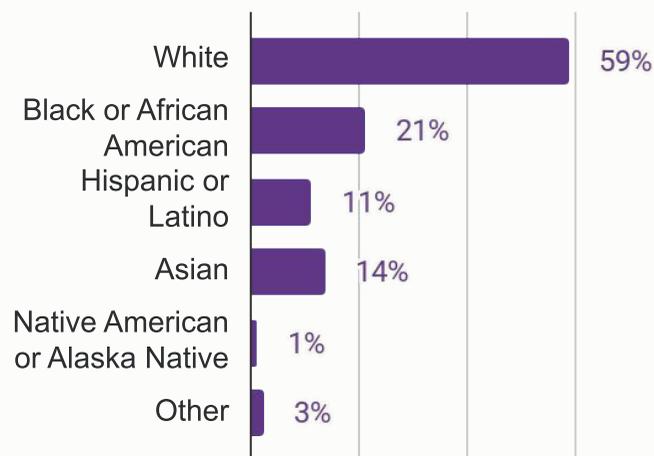
Participants

We heard from a diverse group of 80 tech-savvy end-consumers

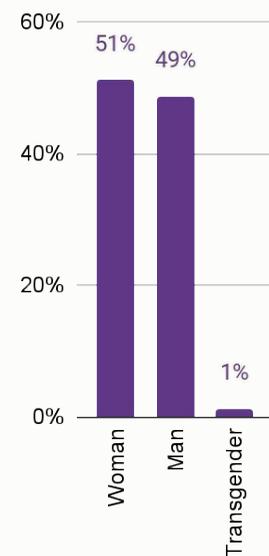
Age range



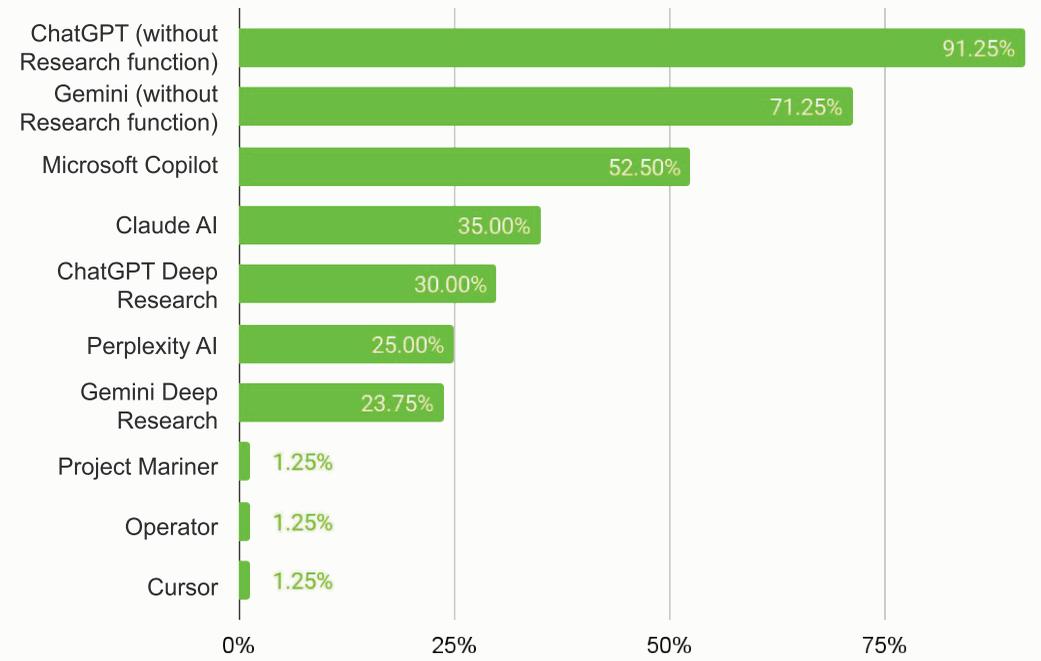
Race/ethnicity



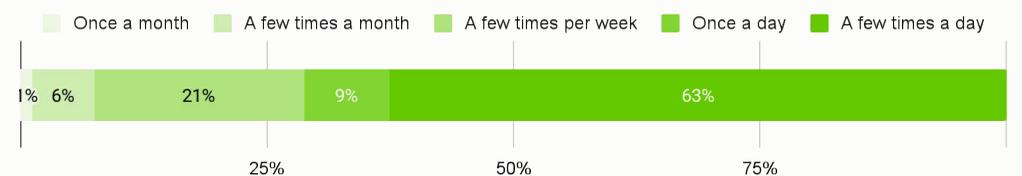
Gender



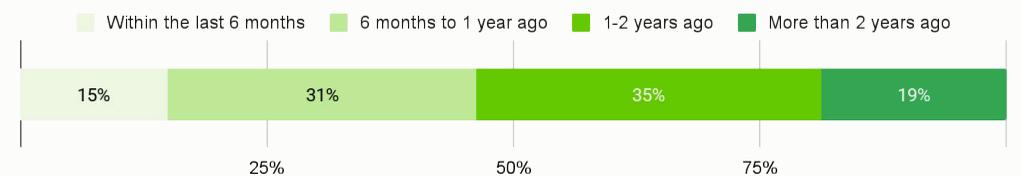
AI tools used in the past 6 months



AI tool use frequency



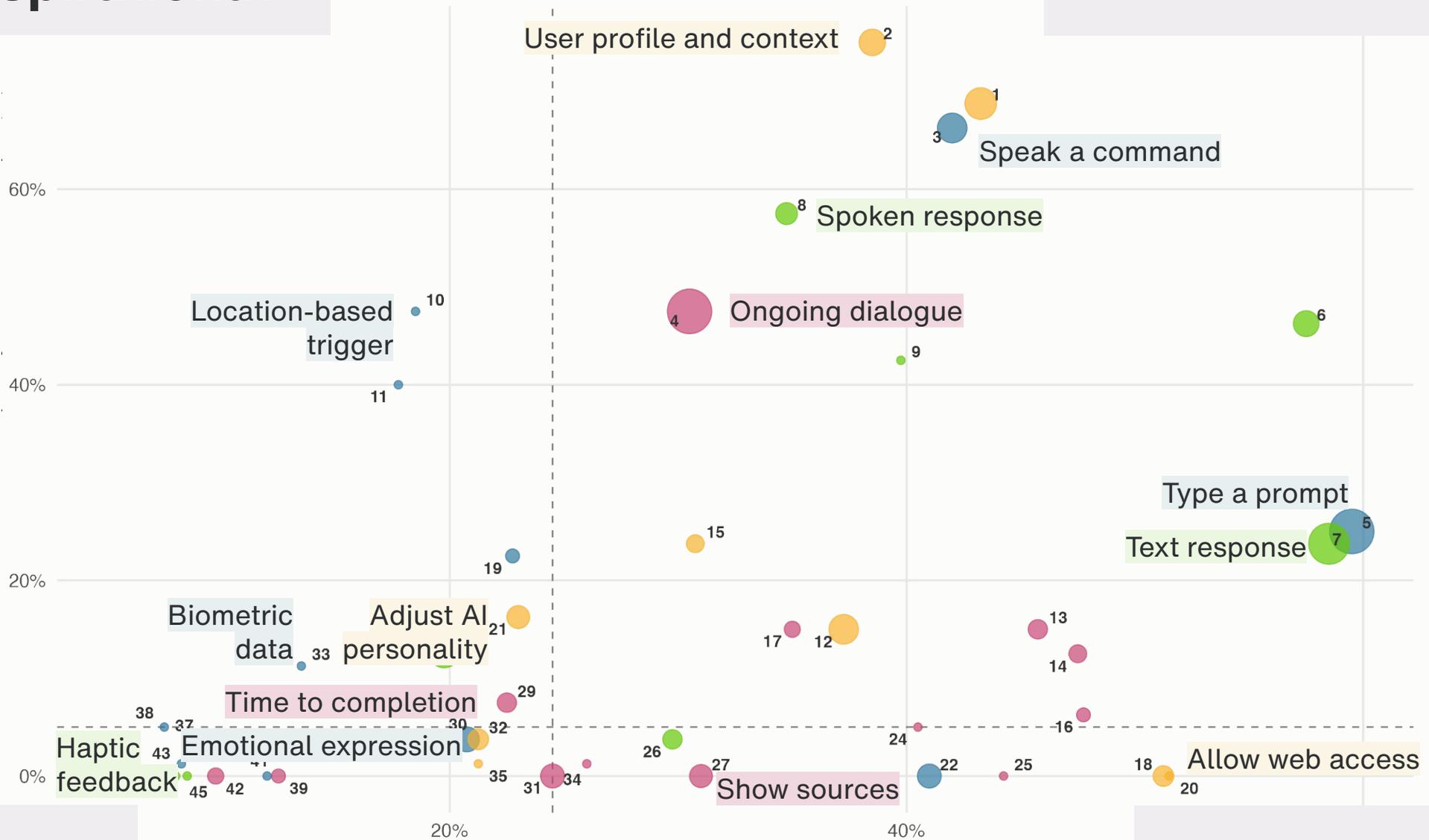
Duration of experience with AI tools



Aspirational

Foundational

Dream interface (%): Mention frequency when discussing the "ideal 2030" AI interface



Niche

Guided selection (%): Selection frequency in "build-your-own-interface" tasks

Pragmatic

-  Task oversight
-  Triggers
-  Customization
-  Outputs

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Present-say relevance (%): Mention frequency when discussing likes/desires in current AI tools

The 47 building blocks

Building block	Definition	Resonance rank	Strategic quadrant
● Triggers			
Speak a command	A process is initiated by a spoken command	3	Foundational
Type a prompt	A process is initiated by typed text	5	Foundational
Location-based trigger	A process is initiated by a physical location	10	Foundational
System event trigger	A process is initiated by a system event (e.g., new email, phone call)	11	Aspirational
Time-based trigger	A process is initiated by a specific time or scheduled event	19	Aspirational
Select from options	A prompt or action is selected from a predefined list or AI suggestion	22	Pragmatic
Upload a file	A process is initiated by providing a file (e.g., doc, image, video, data)	30	Niche
Biometric data	A process is initiated by physiological data (e.g., heart rate)	33	Aspirational
Emotional expression	A process is initiated by a detected emotional expression (e.g., from voice, face)	37	Niche
Environmental sensors	A process is initiated by sensor data (e.g., temperature, light)	38	Aspirational
Select an emotion	An emotional state is actively selected to inform a process	41	Niche
Camera input	A process is initiated by a static image or live video feed	43	Niche
Use a gesture	A physical gesture (e.g., hand wave) initiates an activity	44	Niche
● Task oversight			
Ongoing dialogue	A persistent channel for both the user and AI to ask questions and provide feedback during a task	4	Foundational
Simple status indicator	A basic sensory cue (e.g., a sound, an animation) indicates the AI is actively working	13	Foundational
Announce plan	The AI states its plan of action for visibility before it begins	14	Foundational
Request for approval	The AI must ask for and receive explicit approval before executing a task or key decision	16	Foundational
Show "thought" process	The AI provides a narrative explanation of its reasoning and choices as it works	17	Foundational
Post-task summary	After a task is complete, the AI provides a summary or log of the steps it took	24	Foundational
Step-by-step checklist	AI provides the high-level actions it's taking, indicating which are complete, in progress or upcoming	25	Pragmatic
Show sources	The AI cites its sources (web pages, documents, etc.) to support its reasoning	27	Pragmatic
Time to completion	An estimated countdown or indicator of when the task will be finished	29	Aspirational
Editable outputs	The user can directly edit or modify the AI's final output	31	Niche

Building block	Definition	Resonance rank	Strategic quadrant
Post-task rationale	After a task is complete, the AI provides an explanation of why it made certain decisions	34	Pragmatic
Press pause/stop	A way for the user to immediately interrupt or halt an ongoing AI process	36	Niche
Hit undo	After a task is complete, the user can review and reverse	39	Niche
Hit refresh	The user can request a redo of the AI's output	40	Niche
Livestream	A real-time feed of the AI's actions and its output as it's generated (e.g., word-by-word text, browser clicks)	42	Niche
● Outputs			
A list of options	The AI provides several choices or suggestions to pick from	6	Foundational
Text response	The AI delivers a response or result as written text	7	Foundational
Spoken response	The AI speaks a response or result out loud, with a voice	8	Foundational
A completed action	The AI performs a task (e.g., sends an email, books a flight)	9	Foundational
Image/video generation	The AI creates a new visual asset	23	Aspirational
Data visualization	The AI presents information as a chart, graph, or map	26	Pragmatic
Non-verbal audio response	The AI creates a new audio asset (e.g., sound, music)	45	Niche
Haptic feedback	The AI creates a tactile sensation for the user (e.g., device vibration)	46	Niche
Environmental change	The AI creates a change in the user's environment (e.g., room temperature change)	47	Niche
● Customization			
Connect external apps	Grant access to other tools like your calendar, email or files	1	Foundational
User profile and context	Provide the AI with general information about your role, interests and background to inform its responses	2	Foundational
Customizable memory	The user can view, edit or delete the AI's memory of past tasks and interactions	12	Foundational
Set rules/guardrails	Define ethical boundaries or "off-limits" topics/actions	15	Foundational
Allow web access	Permit the AI to search the live internet for information	18	Pragmatic
Upfront instructions	Provide all rules, context and goals for tasks at the start	20	Pragmatic
Adjust AI personality	Change the AI's communication style (e.g., formal, witty), if applicable	21	Aspirational
Adjust AI image	Provide or modify the AI's image/avatar, if applicable	28	Aspirational
Adjust interface appearance	Customize the visual theme of the interface, such as font and color scheme, if applicable	32	Niche
Adjust AI voice	Change the AI's voice, if applicable	35	Niche

User mindsets: Exploratory graph analysis (EGA)

To understand how users combine building blocks into coherent interfaces, we used exploratory graph analysis (EGA), a network analysis technique that identifies clusters of related items (Golino & Epskamp, 2017).

This analysis was run on the data from all 400 interface design tasks (80 participants × five scenarios) to reveal the “universal” patterns in how users construct their ideal AI. To achieve this, the data was structured so that each of the 400 designs was its own data point. A connection (an “edge”) between two building blocks in the network means that when designing a single interface, participants who selected one of those blocks also tended to select the other. This approach is critical as it reveals which features are conceptually linked in users’ minds, rather than simply correlating users’ overall preferences. The resulting “communities” of highly connected blocks form the basis of our five distinct user mindsets.

Appendix B: Scenario-specific insights

Scenario one: Personal finance

Your AI financial assistant knows that you haven’t used your gym membership in six months, which costs you \$50 per month. The AI assistant suggests canceling the membership to save money. The AI can handle the entire cancellation process, including any necessary communications with the gym.

Key insight: In this financial context, users prioritize customization and comprehensive process visibility, reflecting a logical, step-by-step mental model. The ranking of top building blocks follows a traditional interaction flow, starting with a type a prompt (trigger, 63%), followed by a text response (output, 60%), and then a request for approval (task oversight, 59%). This shows a clear user need to initiate, review and then approve. Users lean towards letting the AI do the work (57% prefer high AI autonomy – the highest proportion among our five scenarios), enabled by the guardrail of providing clear upfront instructions (customization, 53%). While type a prompt remains the dominant trigger, this scenario saw the highest selection rate for speak a command (48%), suggesting a desire for quick, conversational financial management.

Top building blocks (selected by at least 40% of users):

- Type a prompt (trigger, 63%)
- Text response (output, 60%)
- Request for approval (task oversight, 59%)
- A list of options (output, 55%)
- Upfront instructions (customization, 53%)
- Allow web access (customization, 51%)
- Speak a command (trigger, 48%)
- A completed action (output, 46%)
- Connect external apps (customization, 44%)
- Post-task summary (task oversight, 44%)
- Step-by-step checklist (task oversight, 44%)
- Customizable memory (customization, 41%)
- Announce plan (task oversight, 41%)
- Simple status indicator (task oversight, 40%)
- Select from options (trigger, 40%)

Scenario two: Health and wellness

Your AI assistant knows your health metrics and medication schedule. It notices that you’ve been forgetting to take your evening medication and your blood pressure readings have been slightly elevated. The AI assistant suggests devising and implementing a plan to help you remember your medication and improve your health metrics.

Key Insight: The high stakes of health lead to a desire for proactive, passive monitoring balanced with cautious oversight. This preference for passive initiation is underscored by the fact that within triggers, type a prompt sees its lowest selection rate (45%) in this context, while the passive trigger of biometric data is highly selected (49%).

Intriguingly, the highest-ranked features for this scenario are not triggers at all, but rather upfront instructions (customization, 53%), text response (output, 51%), and announce plan (task oversight, 50%), emphasizing that for sensitive health topics, users are more concerned with establishing a clear plan than with how the interaction is initiated.

This explains the tension in agency preference: while many lean toward AI autonomy (44%), this scenario also saw the highest leaning toward a desire for human autonomy (26%), reflecting a need to feel in control when stakes are high. Notably, speak a command was not a top-selected trigger, indicating that users might prefer the privacy and precision of typing or the passivity of biometric monitoring for health matters.

Top building blocks (selected by at least 40% of users):

- Upfront instructions (customization, 53%)
- Text response (output, 51%)
- Announce plan (task oversight, 50%)
- Step-by-step checklist (task oversight, 49%)
- Biometric data (trigger, 49%)
- Customizable memory (customization, 46%)
- Simple status indicator (task oversight, 46%)
- Type a prompt (trigger, 45%)
- Request for approval (task oversight, 43%)
- A list of options (output, 43%)
- Connect external apps (customization, 41%)

Scenario three: Travel and logistics

You’re on a vacation in Europe, and your AI travel assistant has just received an alert that a transit strike will affect your plans to travel from Paris to Rome tomorrow. The AI assistant can quickly find alternative transportation options, adjust your hotel bookings if necessary, and update your itinerary while staying within your budget and preferences.

Key insight: In a high-stress, dynamic travel situation, users are most willing to delegate but not without guardrails, and their primary concern is the result, not the process.

This is powerfully demonstrated by the top-ranked building block: A list of options (output, 65%) outranks even the primary trigger, type a prompt (trigger, 60%). This indicates a “do the legwork, but I’ll make the final call” mindset where the quality and clarity of the output are paramount.

This scenario saw a high preference for full AI autonomy (16%) and required that the AI have real-time information, reflected in the high selection of allow web access (customization, 60%). The high selection of speak a command (45%) underscores the need for hands-free, on-the-go interaction during a travel crisis.

Top building blocks (selected by at least 40% of users):

- A list of options (output, 65%)
- Type a prompt (trigger, 60%)
- Allow web access (customization, 60%)
- Request for approval (task oversight, 59%)
- Text response (output, 58%)
- Announce plan (task oversight, 55%)
- Step-by-step checklist (task oversight, 51%)
- Upfront instructions (customization, 49%)
- Simple status indicator (task oversight, 49%)
- Select from options (trigger, 49%)
- A completed action (output, 48%)
- Post-task summary (task oversight, 46%)
- Speak a command (trigger, 45%)
- Connect external apps (customization, 44%)
- User profile and context (customization, 40%)

Scenario four: Career development

Your AI assistant has analyzed your work performance data and industry trends. It has identified a skill gap that could be holding you back from a promotion. The AI assistant could help you develop this skill by finding relevant courses or resources and scheduling learning sessions that fit into your busy calendar.

Key insight: When the advice is personal and subjective, as in career development, users treat the AI as an analyst whose work must be transparent and verifiable. Similar to the travel scenario, the top priorities here are the outputs, with text response (65%) and a list of options (64%) ranking just above type a prompt (trigger, 63%). This scenario is defined by a need for visibility and evidence, with the highest selection rates for step-by-step checklist (task oversight, 54%), show sources (task oversight, 53%) and show “thought” process (task oversight, 49%) across scenarios. Reflecting the analytical and perhaps visual nature of this task, this is one of two scenarios where speak a command was not a top-selected trigger, with users heavily favoring type a prompt.

Top building blocks (selected by at least 40% of users):

- Text response (output, 65%)
- A list of options (output, 64%)
- Type a prompt (trigger, 63%)
- Allow web access (customization, 58%)
- Announce plan (task oversight, 54%)
- Step-by-step checklist (task oversight, 54%)
- Upfront instructions (customization, 54%)
- Show sources (task oversight, 53%)
- Select from options (trigger, 51%)
- Request for approval (task oversight, 49%)
- Show “thought” process (task oversight, 49%)
- Data visualization (output, 46%)
- A completed action (output, 45%)
- Post-task summary (task oversight, 45%)
- Connect external apps (customization, 45%)
- User profile and context (customization, 45%)
- Simple status indicator (task oversight, 44%)

Scenario five: Lifestyle and entertainment

After a busy week, you’re looking forward to a relaxing evening of entertainment at home. You’d like your AI assistant to help plan your evening by recommending a movie or show and suggesting ways to enhance your experience.

Key insight: The subjective, personal entertainment context brings to light differing user preferences for control and simplifies interface needs, returning to a traditional interaction model.

The top building blocks follow a simple trigger -> output flow, with type a prompt (trigger, 68%) as the top selection, followed by a list of options (output, 61%). With less at stake, users require fewer complex oversight features, with the only task oversight item within the top 40% being a simple status indicator (50%).

Regarding control, this scenario simultaneously saw the highest desire for full user control (9%) and tied for the highest desire for full AI autonomy (16%), suggesting that users either want to delegate completely (“just pick something for me”) or take full creative ownership. This is likely reflective of differing preferences and attitudes about the creative arts.

Regarding triggers, this scenario tells a story of both convention and experimentation. While traditional inputs like type a prompt (68%) and speak a command (46%) remain dominant, this context is unique in revealing an appetite for more nuanced interaction. Notably, the non-verbal triggers of select an emotion (23%) and emotional expression (21%) reach their highest selection frequency here, suggesting that when tasks are subjective and creative, users desire more emotionally intelligent ways to communicate their needs beyond simple text or voice commands.

Top building blocks (selected by at least 40% of users):

- Type a prompt (trigger, 68%)
- A list of options (output, 61%)
- Text response (output, 59%)
- Allow web access (customization, 56%)
- Upfront instructions (customization, 50%)
- Simple status indicator (task oversight, 50%)
- Speak a command (trigger, 46%)
- Connect external apps (customization, 43%)
- Customizable memory (customization, 41%)
- User profile and context (customization, 40%)

Appendix C: Task delegation

To provide additional context on user priorities for delegation, a portion of our survey explored the relationship between the desire to delegate common household tasks to an AI and the perceived time commitment for those tasks.

The table below details this relationship, highlighting tasks that are ripe for AI intervention. Meal planning/grocery lists registered the highest desire for delegation (72%) and highest perceived time commitment (61%), followed by calendar management, identifying these as prime opportunities for AI-powered solutions.

Perceived time commitment: The combined percentage of users who rated a task as taking “a lot of time” or “a great deal of time” in a typical month.

Desire to delegate: The combined percentage of users who would delegate a task “a lot” or “entirely” to AI.

Household task	Desire to delegate	Perceived time commitment
Meal planning/grocery lists	72%	61%
Calendar management	65%	51%
Travel planning	58%	44%
Health/wellness tracking	57%	43%
Financial planning/tracking	52%	49%
Home maintenance scheduling	51%	39%
Media/entertainment curation	46%	36%
Social event planning	44%	30%

References

- Golino, H. F., & Epskamp, S. (2017). Exploratory graph analysis: A new approach for estimating the number of dimensions in psychological research. *PLoS ONE*, 12(6), Article e0174035. <https://doi.org/10.1371/journal.pone.0174035>
- Kock, N. (2005). Media richness or media naturalness? The evolution of our biological communication apparatus and its influence on our behavior toward e-communication tools. *IEEE Transactions on Professional Communication*, 48(2), 117-130.
- Shao, Y., Zope, H., Jiang, Y., Pei, J., Nguyen, D., Brynjolfsson, E., & Yang, D. (2025). Future of work with AI agents: Auditing automation and augmentation