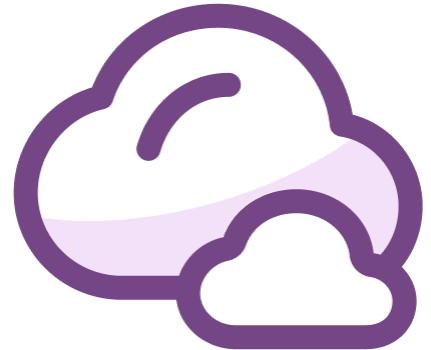


User Perception as it Informs AI Perception of Performance

Aparna Sundar

Senior Researcher at OpenSearch





**In your own words, describe what
you think an intelligent assistant is?**

- ⓘ Start presenting to display the poll results on this slide.



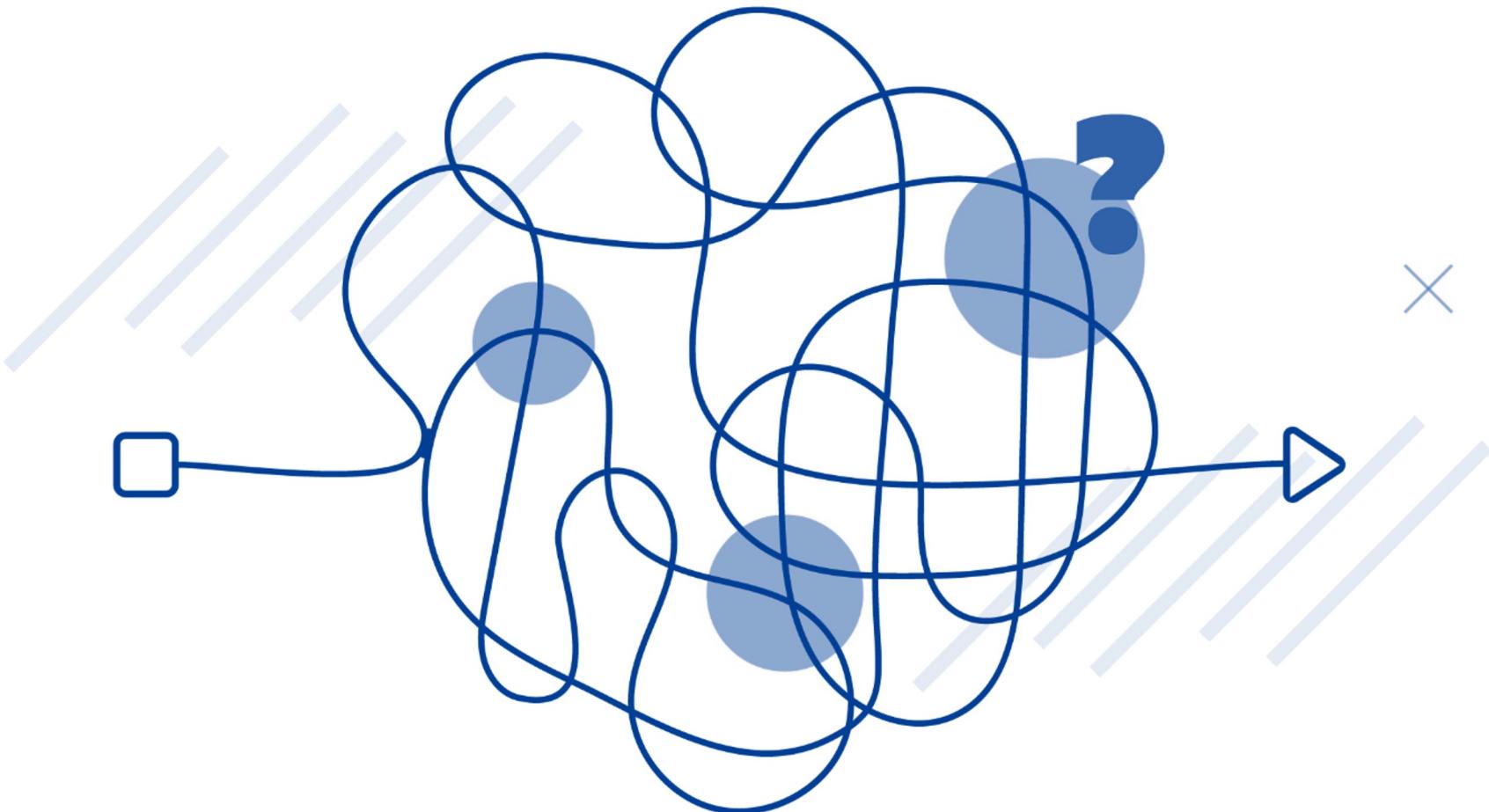
**How important is it for AI assistants
to be usable?**

- ⓘ Start presenting to display the poll results on this slide.



Usefully Wrong AI

- A "usefully wrong" answer is an answer that may not be entirely accurate but can still be useful in certain contexts.
- Reasons:
 - Due to limitations in their data or algorithms, or if they are not properly trained or updated.
 - Due to limitations in their training data, algorithms, or understanding of complex queries.



Poor Design



**Do you design for an interface with
AI?**

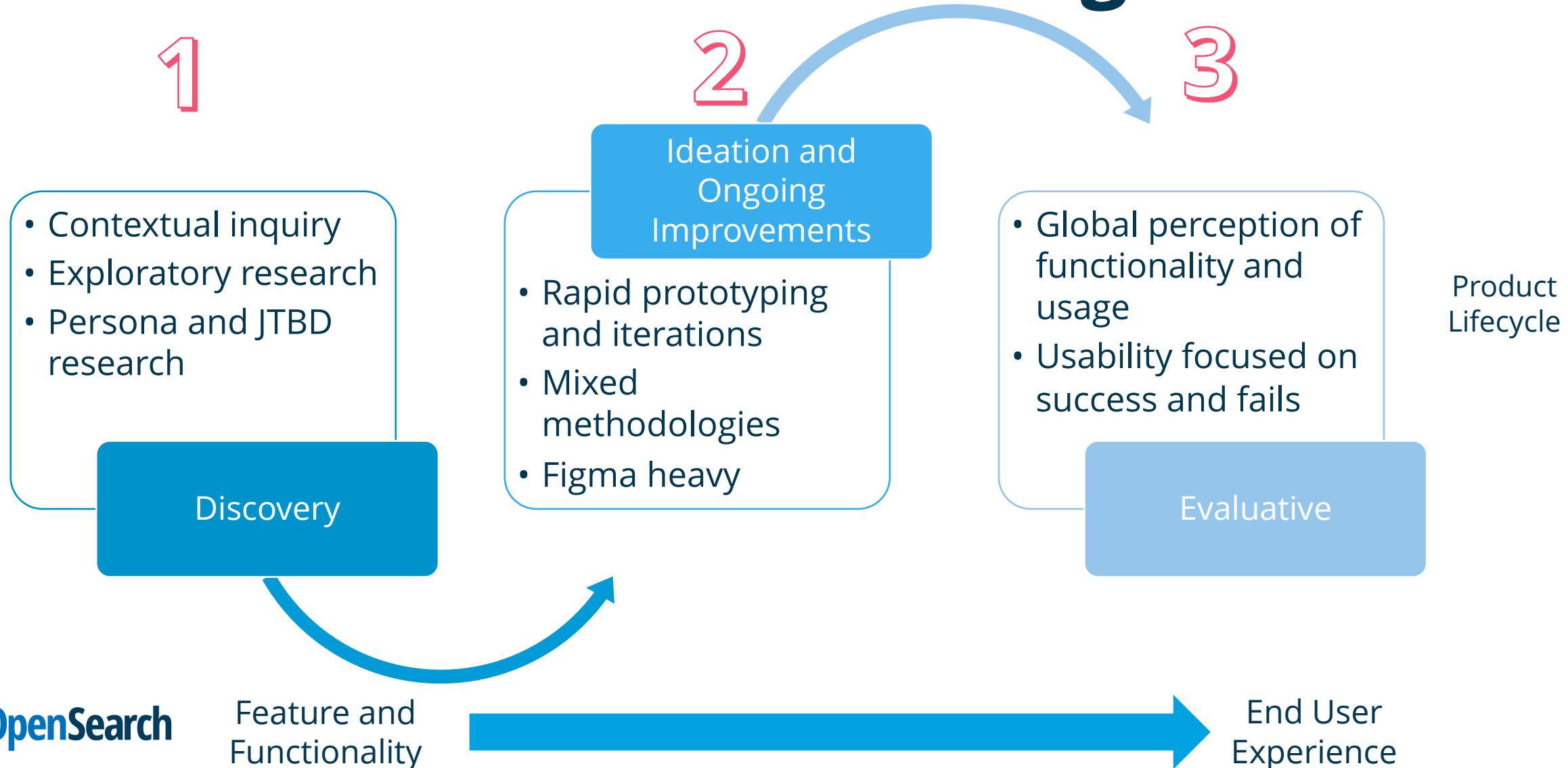
- ⓘ Start presenting to display the poll results on this slide.



What is your current role?

- ⓘ Start presenting to display the poll results on this slide.

Phases of research in design



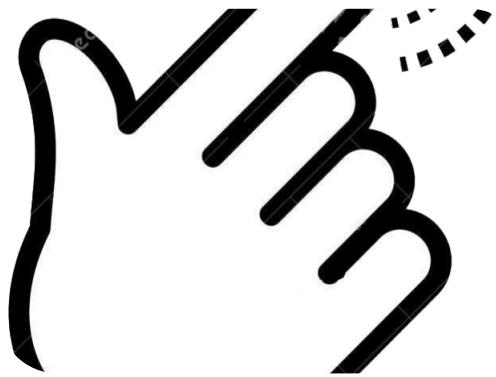
Rapid Ideation on AI Solutions

2

Ideation and Ongoing Improvements

- Rapid prototyping and iterations
- Mixed methodologies
- Figma heavy

Design of AI Elements



Evoking AI



Persistence

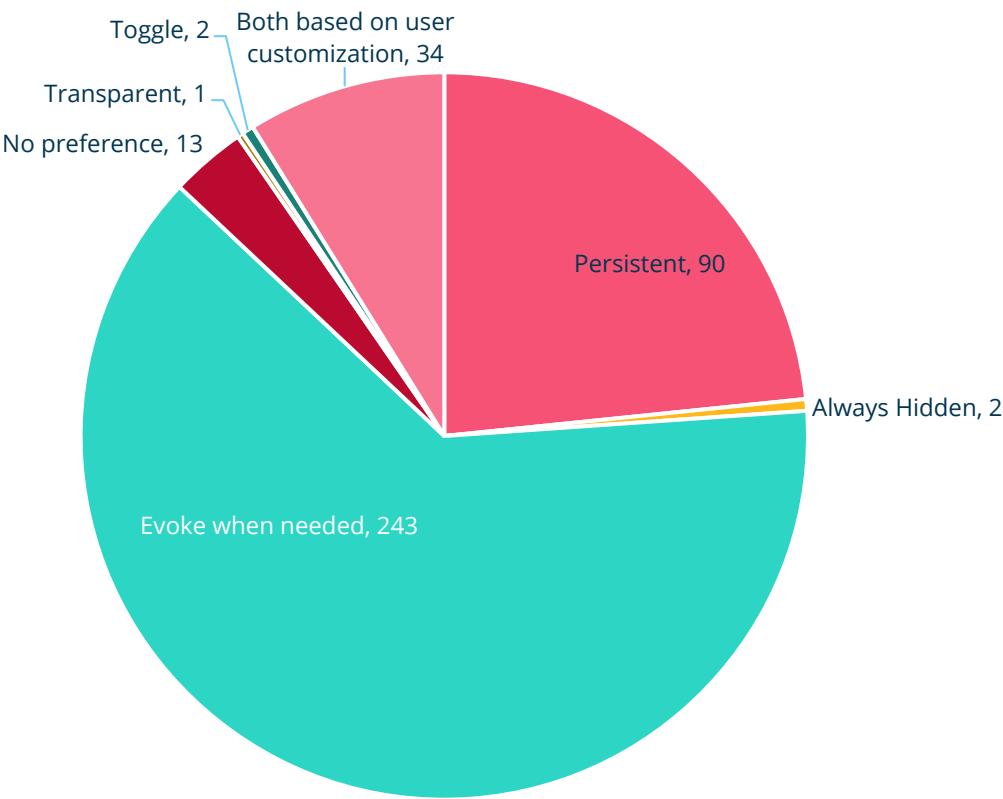


Icons

Use and State of AI

State of AI

Do You Want the AI Assistant to be Persistent or the Ability to Evoke it?

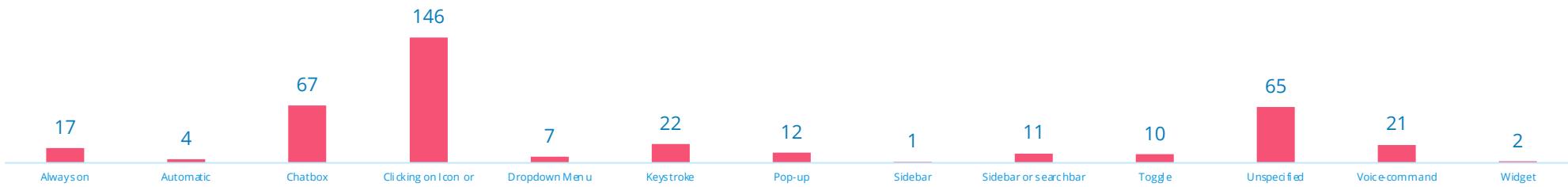


Do You Want the Assistant to be Persistent or Have the Ability to Evoke it?	Responses
Persistent	90
Always Hidden	2
Evoke when needed	243
No preference	13
Transparent	1
Toggle	2
Both based on user customization	34
Total	385

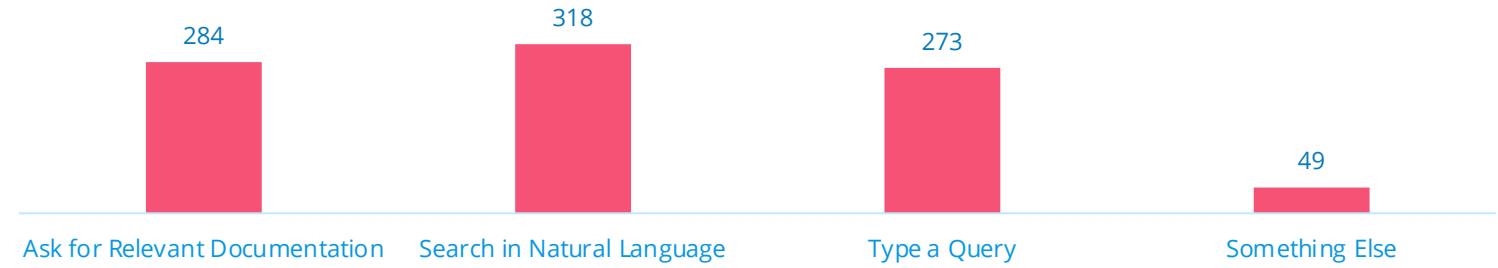
Use and State of AI

State of AI

How Would You Want to Invoke the AI Assistant on a Dashboard?



What Would You Like to Do with the AI Assistant?



Icons

Icons and symbols break up blocks of text, making the information on your page more digestible and easier to read.



OpenSearch Dashboards

Not Secure https://54.212.104.99:80/app/alerting#/dashboard?alertState=ALL&from=0&search=&severityLevel=ALL&size=10000&sortDirection=d...

Alerting Alerts

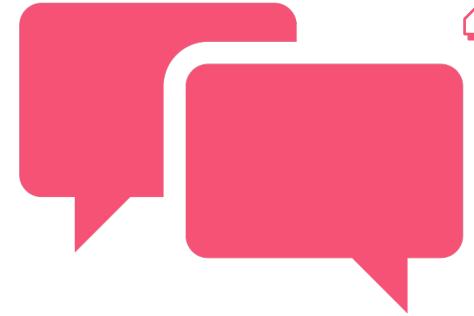
Alerts Monitors Destinations

View alert details Acknowledge

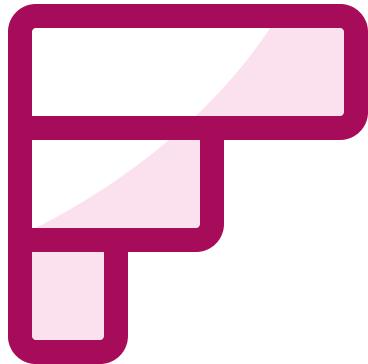
Search All severity levels All alerts < 1 >

Alerts	Active	Acknowledged	Errors	Trigger name	Trigger start time	Trigger last updated	Severity	Monitor name
1 alerts	0	0	1	always_true_trigger	02/14/24 12:35 pm	02/28/24 1:12 pm	3	sample_query_lev...
1 alerts	0	0	0	sample_trigger	02/14/24 12:27 pm	02/14/24 12:31 pm	3	sample_query_lev...
1 alerts	0	1	0	always_true_trigger	02/14/24 12:23 pm	02/14/24 12:25 pm	3	sample_query_lev...
46 alerts	46	0	0	sample_alerts_fly...	02/14/24 12:16 pm	02/14/24 12:16 pm	4	sample_alerts_fly...
1 alerts	1	0	0	sample_alerts_fly...	02/14/24 12:16 pm	02/28/24 1:11 pm	2	sample_alerts_fly...

2



- *Curiosity*
- *Expect a tool tip to pop up*
- *Generative AI dialog*
- *Not drop down with suggestions based on prior bias*
- *Finds this useful*



**Rank order the most important
attributes of AI assistance**

- ⓘ Start presenting to display the poll results on this slide.



Are you currently designing for AI solutions?

ⓘ Start presenting to display the poll results on this slide.

2

The screenshot shows two windows side-by-side. On the left is the 'Alerting' tab of the OpenSearch Dashboards, titled 'Alerts by triggers'. It features a search bar, filters for 'All severity levels' and 'All alerts', and a table with columns: Alerts, Active, Acknowledg..., Errors, Trigger name, Trigger ... (with a dropdown arrow), Trigger last ..., Severity, and Monitor name. The table contains five rows of sample data. On the right is a dark-themed window for the 'OpenSearch Assistant'. It has a header 'Have any alerts triggered today?' with an 'Ask question' button. The main area says 'Welcome admin to the OpenSearch Assistant!' and 'I can help you analyze data, create visualizations, and get other insights.' Below that is a 'How can I help?' section with a note about potential inaccuracy and a 'Have any alerts triggered today?' button. At the bottom are sections for 'Available suggestions' and 'How was this generated?'. A red speech bubble icon is in the top right corner of the dashboard window.

- *Responses would be relevant to the item on the screen clicked*
- *Response would be more general if the top icon was evoked*



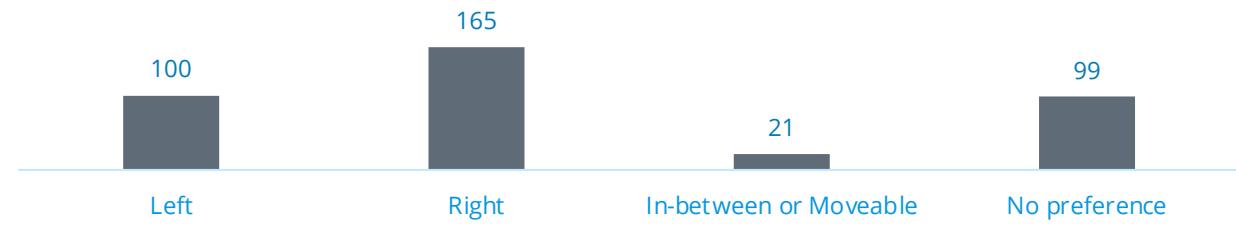
Primary and Secondary Interface

Spatial Anchoring of an Assistant

Flexible About Location?



Where Should the AI Assistant be Located?

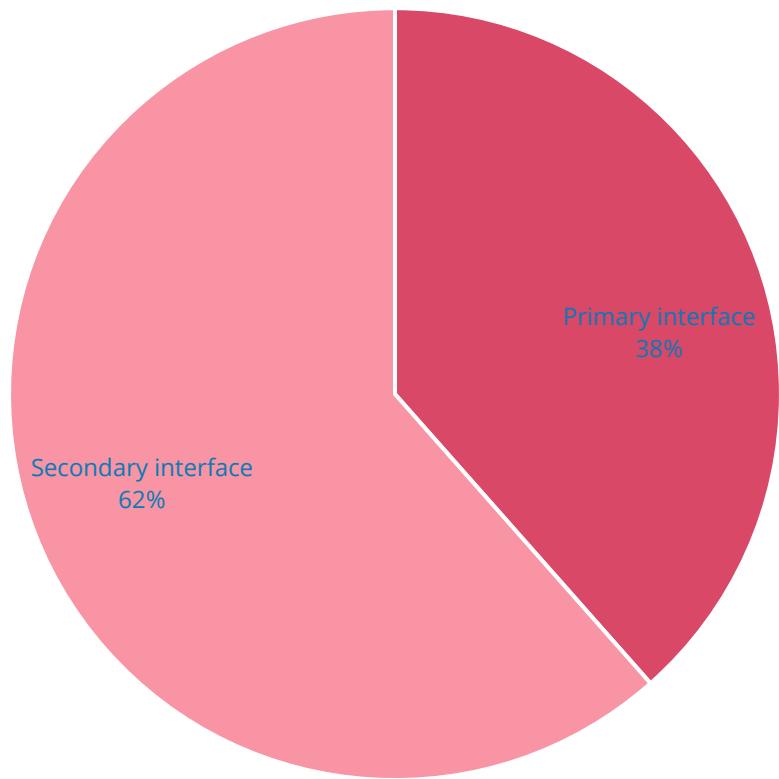


Where Should the AI Assistant be Located?

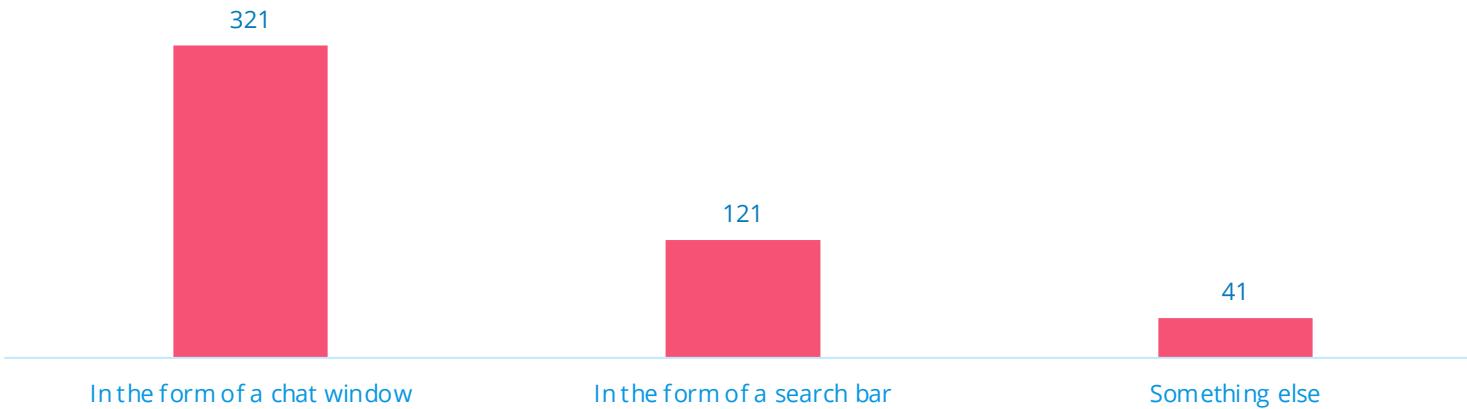


Interface and Format

On A Dashboard, The AI Assistant Would be My

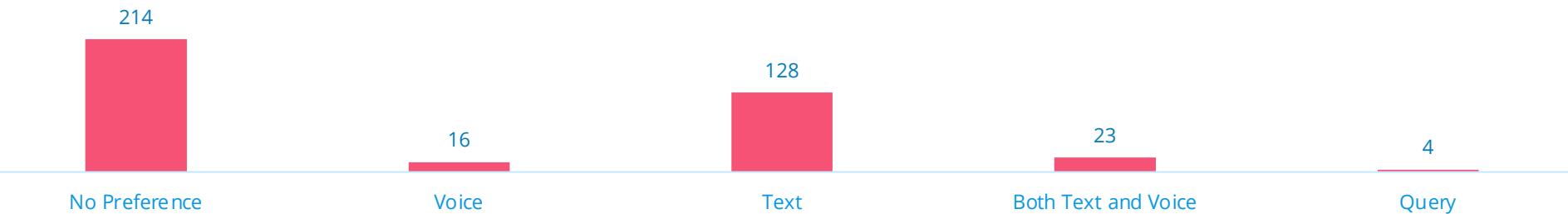


What Format will the Dashboard AI Assistant Be In?

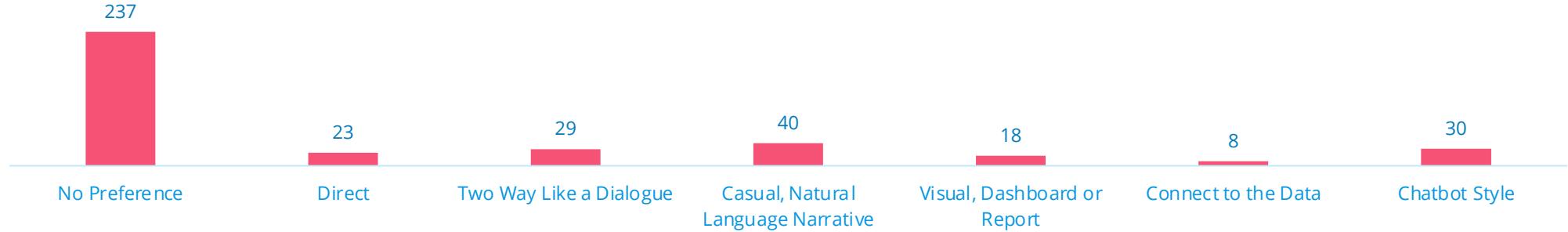


Communication

Describe the Nature of Communication You Would Have with the AI Assistant?



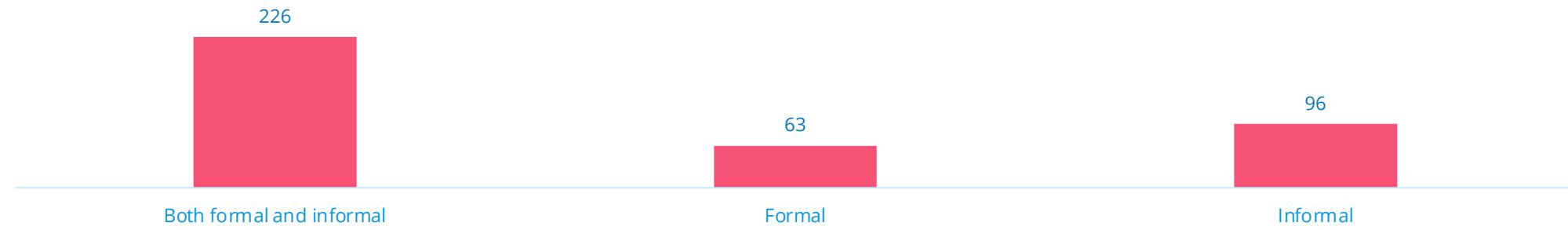
Describe the Nature of Communication You Would Have with the AI Assistant?



Language and Tone

Communication

If you Had to Categorize the Communication with the AI Assistant, What Would It Be?



The screenshot shows two browser tabs. The left tab is titled 'Alerting' and displays a table of alerts by triggers. The right tab is titled 'Have any alerts triggered today?' and shows the OpenSearch Assistant interface.

Alerts by triggers

Alerts	Active	Acknowledg...	Errors	Trigger name	Trigger ...	Trigger last ...	Severity	Monitor name
1 alerts	0	0	1	always_tr...	02/14/24 12:35 pm	02/28/24 1:12 pm	3	sample_q...
1 alerts	0	0	0	sample_tr...	02/14/24 12:27 pm	02/14/24 12:31 pm	3	sample_q...
1 alerts	0	1	0	always_tr...	02/14/24 12:23 pm	02/14/24 12:25 pm	3	sample_q...
46 alerts	46	0	0	sample_al...	02/14/24 12:16 pm	02/14/24 12:16 pm	4	sample_a...
1 alerts	1	0	0	sample_al...	02/14/24 12:16 pm	02/28/24 1:11 pm	2	sample_a...

Welcome admin to the OpenSearch Assistant!

I can help you analyze data, create visualizations, and get other insights.

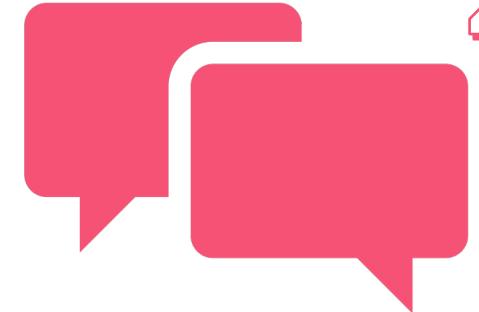
How can I help?

The OpenSearch Assistant may produce inaccurate information. Verify all information before using it in any environment or workload.

Have any alerts triggered today?

Ask me anything... Go ↗

2



- Use of an AI assistant in debugging
- Usefulness is a function of its correctness
- Association to documentation vs. Association to solution



Overall Thoughts



TEST ITERATIVELY



RAPID PROTOTYPING



CONSENSUS

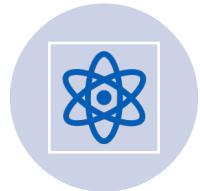
Tools



Recording tool



Enjoy HQ (insights)



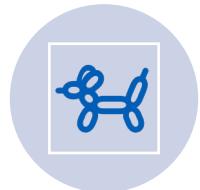
UserZoom (testing setup)



Hot Jar (task automation)



Pendo (AI as an automation layer)



VisualEyes (automated study)



Attention Insight (predictive analytics)



Applitools (test automation)



Authors

Aparna Sundar



Dr. Aparna Sundar is a senior UX researcher at AWS covering all areas of the OpenSearch UI. She has over 20 years of experience in the field of research and design and actively publishes in the area of cognitive science.

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Questions

Read up more on OpenSearch.org

