How UXR and MRX uncovered the real users of an AI product

Ellen Kolstø
Design Principal, IBM

Linkedin: ekolsto
Twitter: @erkolsto

Ashwini Kamath
Sr Design Researcher, IBM

Linkedin: kamathashwini
Twitter: @ash_kamath

This is the story of UXR and MRX working together to define personas in an emerging domain

- Limited understanding of how organizations were building with AI, and who the key players were.

- Effective back and forth between UXR and MRX led to creating a better user experience.
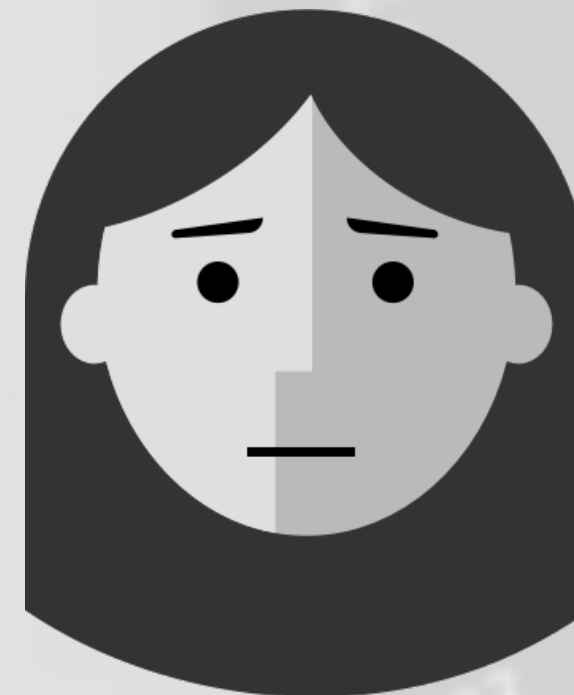
Meet IBM Watson Assistant

an AI powered virtual agent
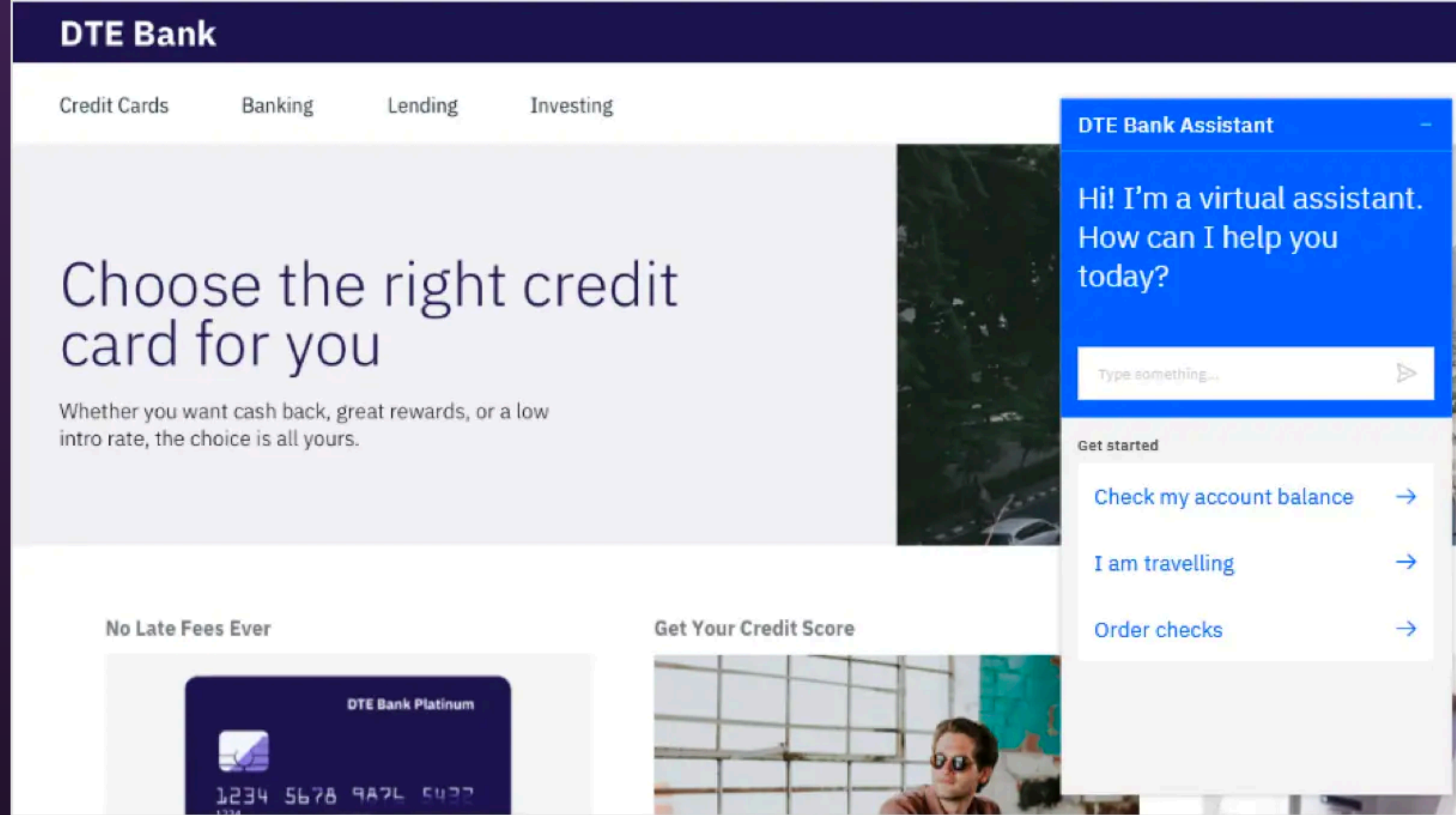
Who is our user?

- Market research defined technical roles as primary users.

- It wasn't clear if there were other players in the mix.

Deb
(Developer)

Using UX as a central point

- Who are the other players?

- Overall chatbot building workflow

- Attitudes and behaviors of key players

- Hand offs between the key players

Image source

Understanding team dynamics

- Picking up from where MRX left off, URX conducted ethnographic research for a deeper understanding of the users.

- We didn't know enough about *how* the technical user developed the chatbot.
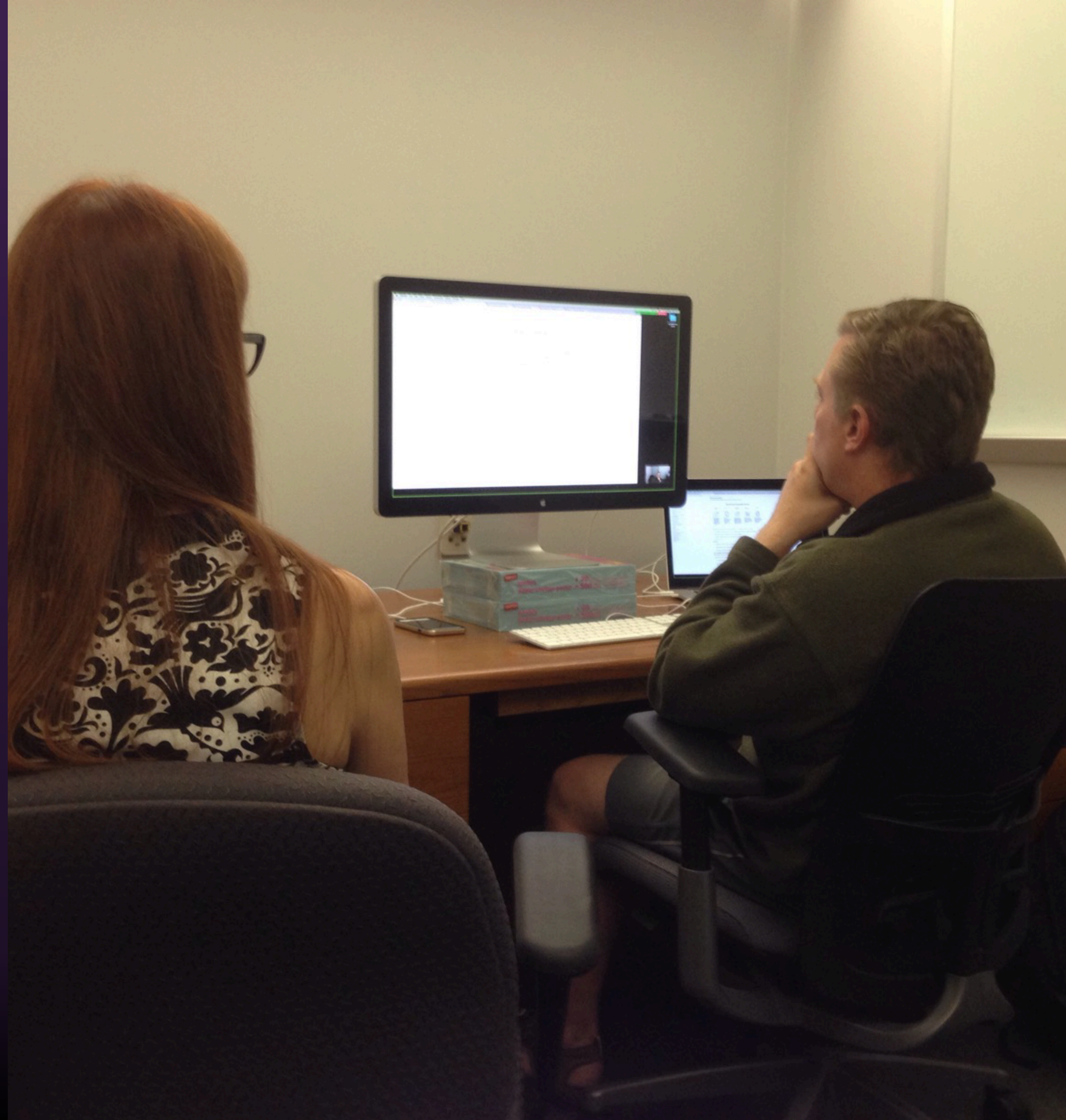
Key Insights

What we learned

The chatbot builder is not only a developer

- People who have the most knowledge about the customer and the information they seek wear the hat of chatbot trainer.

- Brought into this role for their subject matter expertise.

- Typically, do not have development or coding skills.

It takes a village

- Different roles with varying skillsets jump in through the process.

  - Developer starts the process.

  - They bring in subject matter experts and data science.

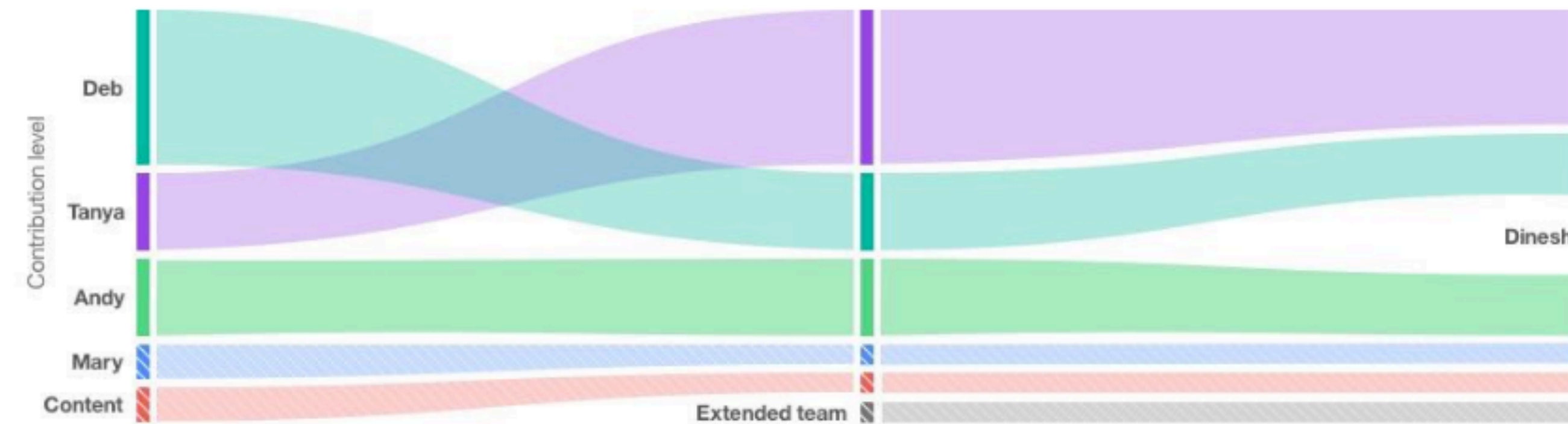 - Add on extended teams such as marketing, sales, legal etc.

Conversational system development team evolution

Conversational system development team evolution

1. New Project
A small team works on a vision and the build to demonstrate what a system can do for the business

2. Reality Check
The team discovers the need to design the conversation as well as the growing volume of data.

3. POC Matures
As the team gets closer to a more built-out POC, and is preparing for a go/no-go decision.

4. Ramping up to Production
Approval means pressure to get moving faster and team gets much larger.

Contribution level: Deb, Tanya, Andy, Mary, Content, Dinesh, Paula, Extended team

1. New Project
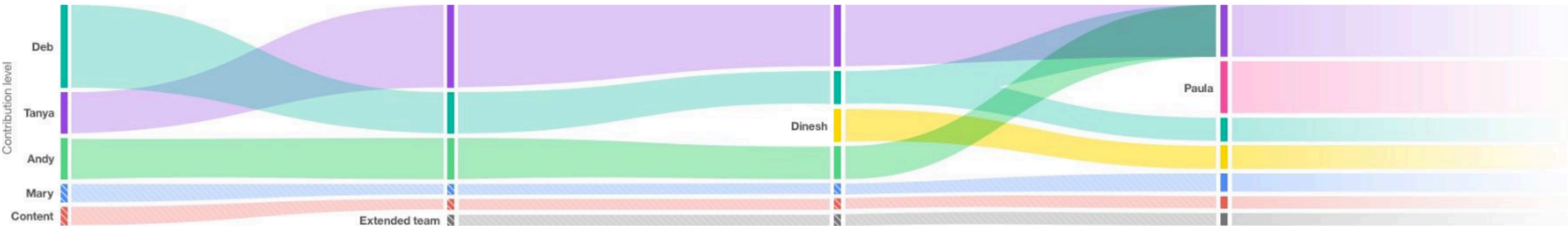
Deb
Works on workspace set-up/initial build/initial Conversational Design.

Tanya
Works on inputing intents, entities and initial Conversational Design.

Andy
Works on workspace set-up/initial build/initial Conversational Design.

Mary
In start-ups & small companies, oversees the project as a future revenue-generating initiative.

Content
(e.g. SMEs, BAs in customer service, product and/or marketing) They are consulting on system content.

2. Reality Check

Tanya
Becomes a key player as the driver of developing Conversational Design.

Deb
Continues to work on the build and conversational design but is consulting regularly with Tanya and extended team members on the business side.

Andy
Fills holes on the team as needed. May be working in a Tanya or Deb role.

Mary
In start-ups & small companies, continues to champion the project

Content
(e.g. SMEs, BAs in customer service, product and/or marketing) They are consulting on system content.

Extended Team
The core team may start to tap into product, data science, marketing, other developers or UX on an as-needed basis

3. POC Matures

Tanya
Is a key player as the driver of developing Conversational Design.

Deb
Either becomes a Tanya or stays on the project in a traditional developer role for command line, integration, API calls and/or automation.

Dinesh
A data scientist or person with analytics experience comes on board to test models and consider how to measure performance.

Andy
At this stage will most likely become a Tanya based on his ability to learn new things.

Mary
In start-ups & small companies, continues to champion the project.

Content
(e.g. SMEs, BAs in customer service, product and/or marketing) They are consulting on system content.

Extended Team
The core team continues to work with product, data science, marketing, other developers or UX on an as-needed basis.

4. Ramping up to Production

Tanya
Now drives Conversational Design as well as coordinate with other departments to continue building/ maintaining the system strategy

Paula
Paula is given oversight for the project. She also coordinates with teams as well as reports on progress to Mary.

Deb
Stays on to handle traditional developer role for command line, integration, API calls and/or automation.

Dinesh
Heavily involved in measuring performance & testing flows.

Mary
In larger companies, Mary becomes a key stakeholder who will get regular updates. In smaller companies, she continues with project oversight.

Content
(e.g. SMEs, BAs in customer service, product and/or marketing) Are on the team a percentage of their time.

Extended Team
Are now on the team a certain percentage of their time. May include: Analytics, UX design, developers, LOB, etc.

■ Key team members   ▨ Supporting team members

Outcomes and Impact

Defined 8 key personas

- Provided the team with a detailed understanding of the full team that was working to build chatbots.

- Outlined the personas' jobs to be done that our product functionality needed to address.

- Went from designing for a single person to designing for a team.

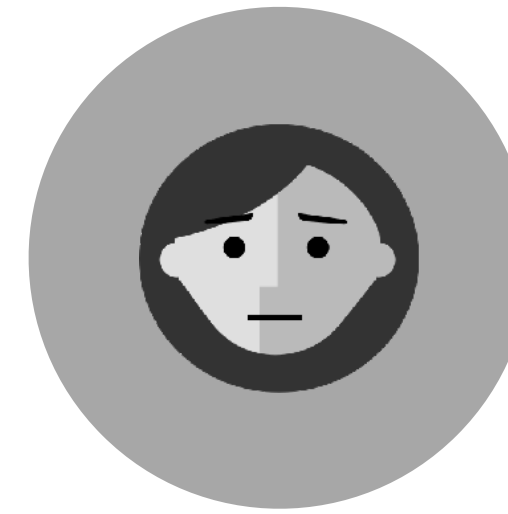- Personas are integrated into the team's playbook.
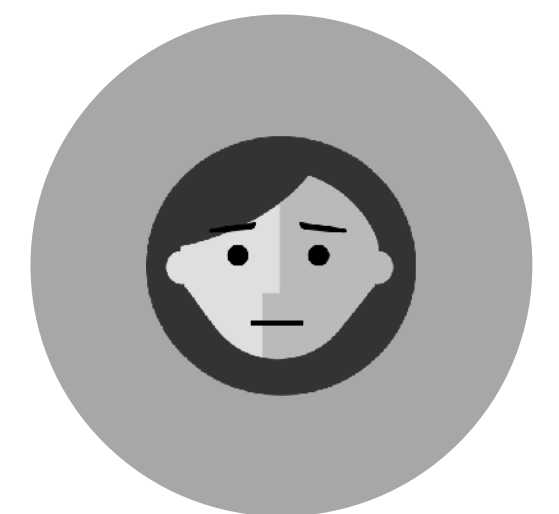
Bob
(CIO/CTO)

Mary
(Executive)

Deb
(Developer)

Tanya
(Trainer)

Dinesh
(Data Scientist)

Paula
(Product Manager)

Ernesto
(Employee End User)

Cade
(Customer End User)

Product redesigned for a team of users that don't code

- UI tailored to users with no prior development skills.

- Included a graphical user interface where no coding was required to build the chatbot.

disambiguate

If bot recognizes:

intents[0].confidence > 0.4   ⊖   **and** ∨   intents[1].confidence > 0

Then respond with:

1. Sorry, I can only handle one request at a time. Would you like to

Add a variation to this response

And finally

Wait for user input ∨

Product redesigned for a team of users that don't code

- UI tailored to users with no prior development skills.

- Included a graphical user interface where no coding was required to build the chatbot.

Research insights influenced product roadmap

- Research insights influenced product OKRs and KPIs

- Product is being measured on how well the user experience enables users to meet their goals.

Image source

80% of users with no coding experience should be able to build a simple dialog in less than 30 minutes.

- Product business goal for 2020

"

This is very easy to use. Honestly when you explained the task, I started panicking and thinking it is above my expertise level. But I liked the workflow. I want my teammates to use this [new functionality].

"

- IBM Watson Assistant Customer

60% faster to build a chatbot!

UXR and MRX paved the path for product success

- MRX started by defining the developer

- UXR built on that and brought to light an entire team of users.

Image source

Thank you! Questions?

Ellen Kolstø
Design Principal, IBM

Linkedin: ekolsto
Twitter: @erkolsto

Ashwini Kamath
Sr Design Researcher, IBM

Linkedin: kamathashwini
Twitter: @ash_kamath