

THINKING
DIFFERENTLY

Neurodiverse Inclusion in Financial Services

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Executive Summary

Partner

Barclays

Industry

Financial Services

Theme

Inclusive Design

Focus

Neurodiversity

The Challenge

Create a digital proposition for neurodiverse individuals and their financial wellness that can be piloted by Barclays in the UK.

We tackled this challenge in two parts:

1. Understanding neurodiversity in society
2. Understanding financial wellness for neurodiverse individuals

With these two paths explored, we then sought to identify the opportunities in the overlap between neurodiversity and financial wellbeing.

Top 5 Insights

1. Society is reframing the medical definition.
2. Self-diagnosis is gaining momentum and support by the community.
3. Prevalence in the UK population is under represented and the real numbers are close to 50%.
4. Two key challenges identified for neurodiverse individuals were sensory overload and difficulties in processing information.
5. Neurodiverse individuals are exceptionally risk averse because of cognitive distrust within themselves to take the right action.

Service Proposition

We proposed a two part solution:

- A semiotic based design language for neurodiverse individuals leveraging sound, infographics, shapes, colours and opacities as collective.
- A proactive credit score product which helps people make sense of their financial world. It is a minimum viable financial service experience that offers proactive support to improve their credit scores through small tasked integrated into their every day activities.

Impact

Neurodiverse Individuals:

- Improves financial service experience for 8 million neurodiverse individuals who bank with Barclays.

Barclays:

- Their services become accessible to a larger audience.
- Helps establish a sense of trust and credibility in the market.
- It can help position Barclays as an industry leader in Inclusive Design, thereby pushing other organisations to deliver neuro-inclusive financial experiences for the 16 million neurodiverse adults in the UK.

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Background

Thinking Differently: Neurodiversity in Financial Services

The world around us has been designed for the neurotypical audience. This makes it difficult for the neurodiverse individual to navigate and engage with everyday services.

It results in a disconnect for someone who thinks differently, as the world doesn't communicate in a way that makes sense to them.

Financial services are a fundamental need for both neurotypical and neurodiverse individuals. Yet, it remains exclusively designed for the neurotypical. It is of the utmost importance for industry players to become inclusive in their value creation and delivery, to ensure an equal experience is available for their customers.

The Royal College of Art and its Financial Futures Lab partnered with one of the UK's leading banks, Barclays, to develop an innovative service proposition.

Our project focuses on the intersection of neurodiversity and financial services and asks the pressing question, how do we make financial services work for those who think differently?

Our Challenge

1. Find the intersection between neurodiversity and financial services
2. Create a new digital proposition for neurodivergent individuals and their financial wellness
3. Provide an implementation plan for the solution to be piloted in the UK

Our Approach

The 'Double-Barrelled' Double Diamond

We began our project with a detailed and considered planning session. It became clear, that we had two very distinct areas that needed to be cared for in their own independent and robust explorations.

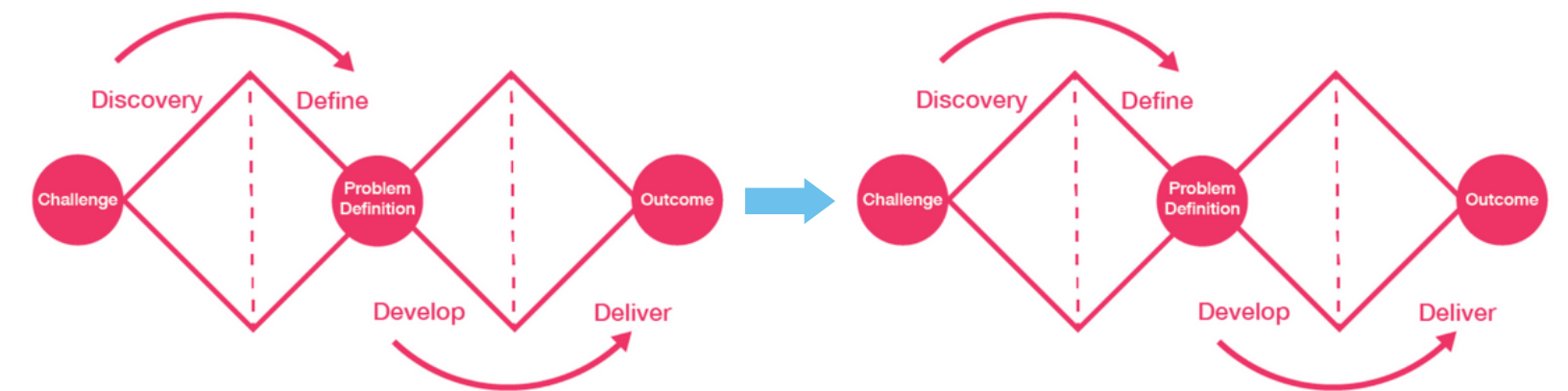
We created a 'double-barrelled' double-diamond approach. First, we tackled Neurodiversity and second, Financial Inclusion.

01 Neurodiversity Double Diamond

We allocated user-centred design themes to each phase of the neurodiverse double diamond; Understand, Empathise, Conceptualise and Build. While the double diamond provided the scaffolding, the themed phases outlined a specific goal related to user-centricity. All activities circled back to meet that specific goal to bring a level of focus and exceptional level of clarity to our user.

02 Financial Inclusion Double Diamond

A second double diamond, specific to financial inclusion and its role in the lived of neurodiverse individuals, helped funnelled our exploration and reveal undiscovered findings. We then applied the findings from from the neurodiverse double diamond to an entirely new service proposition. The continuity between both explorations provided a richness to the ultimate solutions.



Neurodiversity Double Diamond

Financial Inclusion Double Diamond

Discover

- Stakeholder Envisioning
- Understanding Neurodiversity
- Creating a Research Panel
- Primary Research

Define

- Opportunity Areas
- Hypothesis

Design

- Ideation & Prototyping

Deliver

- Neurodiverse Design Language

Discover

- Returning to Research

Define

- Opportunity Areas
- Hypothesis

Design

- Ideation & Prototyping

Deliver

- Service Proposition

Stakeholder Envisioning

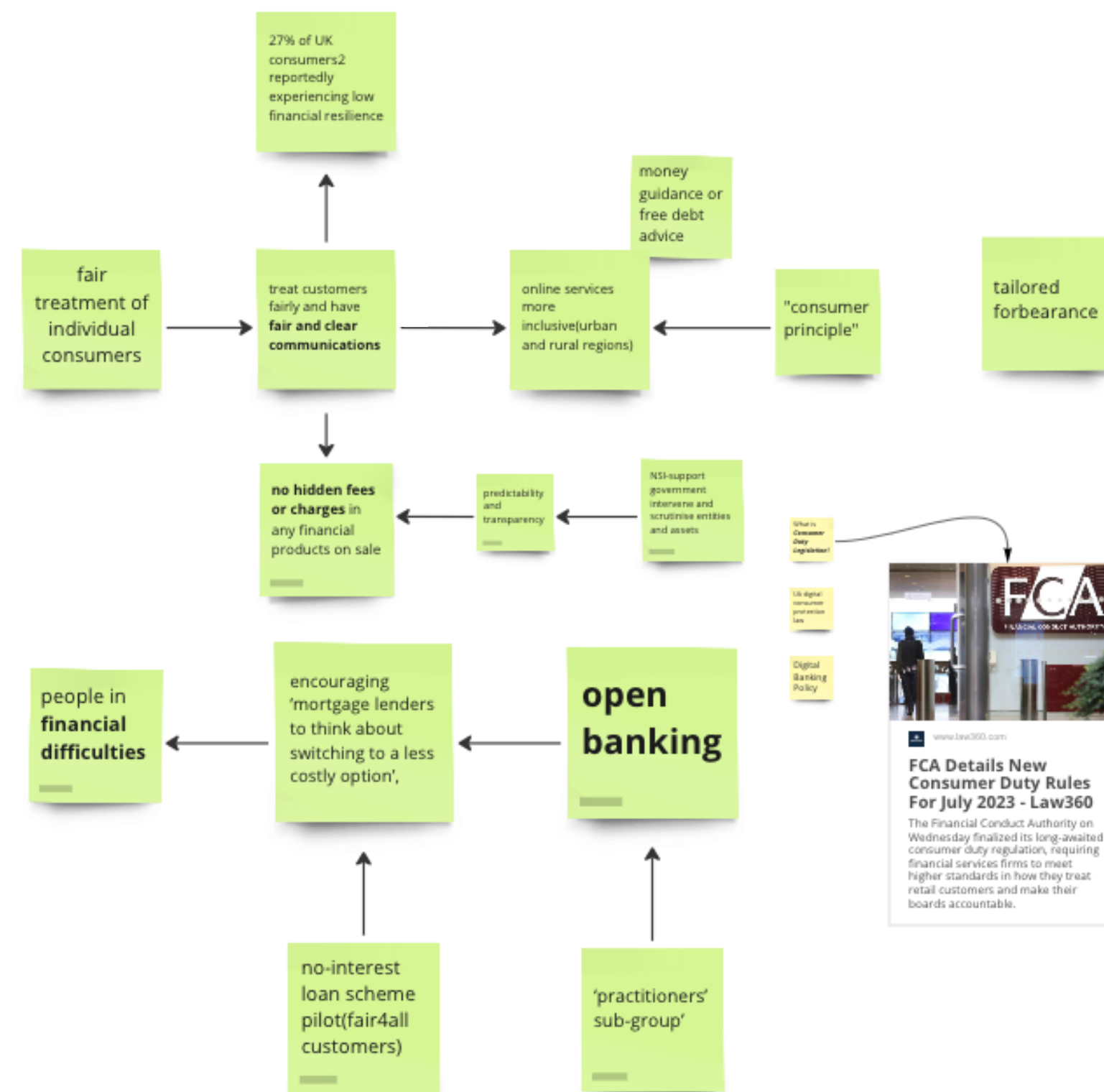
Consumer Duty Legislation

The true catalyst - for Barclays to initiate efforts on resolving the challenges neurodiverse individuals experienced with their products and services - was a regulatory requirement. The new Consumer Duty legislation rolled out by the UK government mandated that all financial institutions ensure their service experiences are equal for all of their customers - including those who are neurodiverse.

We met with Caroline Dale, VP of External Regulatory Engagements at Barclays for an in-depth interview to understand more about; how the new legislation affects Barclays, where it currently stands with regard to the legislation requirements and what the future looks like. She shared with us the rollout plans for August 2022 and August 2023 timelines.

"We already have a commitment to serving all customers, including those experiencing vulnerability. As of 2023, there is a new Consumer Duty legislation that means we need to prove that our services are fit for our customers, meet their needs and are understood by all our customers. This is a big challenge for us."

- Caroline Dale,
Vice President, External Regulatory Engagement, Barclays



Consumer Duty Exploration

Understanding Neurodiversity

Secondary Research

We began with some initial desk research with the goal to define precisely what neurodiversity meant. We mapped out every condition classified as neurodiverse, representation in the population and defining characteristics. We wanted our intervention to solve - not for a specific neurodiversity - but rather a cluster of characteristics. Taking this approach would ensure our solution was designed with inclusivity at the forefront and remove any possibility of labels.

We began to unravel what would prove to be a complex system with conflicting information. We considered inputs across a range of different sources to triangulate our findings. This research fed into an ever-evolving mind map representing neurodiversity in the population.

Methods

- Book reviews
- Encyclopedia reviews
- Literature reviews +Journal Reviews

01. Book Reviews

We read several books to understand the evolution of neurodiversity: specifically, when it was first identified in the population, the medical position, treatments and the evolving list of conditions - that may or may not fall under the umbrella of neurodiversity. The research was supported by real-life accounts from individuals with different conditions. We began to better understand the role of the senses and Dr Stephen Porges's work on the Polyvagal Nerve Theory.

02. Encyclopedia Reviews

Understanding the medical definition seemed to be the most logical step. We reached for the Diagnostic and Statistical Manual of Mental Disorders, more commonly referred to as the DSM-5. It is used by medical professionals to diagnose neurodiverse conditions. The definitions were comprehensive, overlapping and although details, things still seemed vague and we needed another lens to truly develop a sense of empathy for our audience.

03. Literature+Journal+Reviews

Literature and journal reviews began to shed light on the role of design in neurodiversity. What affordances should be considered when designing thoughtful solutions that consider the needs of a neurodiverse individual? Inclusive sensory ethnography and design interventions across the spectrum became emerging themes.

Understanding Neurodiversity

Definition

Through secondary research, we were looking to unpack the term neurodiversity. We observed a huge shift happening. Society was reclaiming the definition of what it meant to be neurodiverse. The result as a huge disparity between its medical and societal definitions.

Neuroscientists were explaining it as an issue that society inflicts on science rather than science inflicting upon society and the DSM-5 defined it as disordered thinking.

Society had reframed neurodiversity as a sensitivity that often resulted in extraordinary abilities. We saw this reflected largely online with platforms such as LinkedIn leading the way prompting users to tag their profile with their own neurodiversity. It was clear that two camps of thought existed, and society positioned the conditions as special yet extreme – a 'superpowers' whose kryptonite was overstimulation.

So what is it exactly?

Neurodiversity is an umbrella term for the range of differences in individual brain function and behavioural traits, regarded as part of normal variation in the human population. The spectrum was vast. So vast that it left each one of us thinking that we had different neurodiversity. And to be honest, it started to form a fair share of empathy within each of us.

In further research, it was interesting to know that the behavioural traits of certain conditions overlapped. This meant a high chance of a person falling under two or more neurodiverse flavours of the spectrum. Yet, each individual was different from the others - even under a shared spectrum.

"It is more of an issue that society inflicts on science, rather than science inflicting upon society."

-Neurosurgeon's Definition

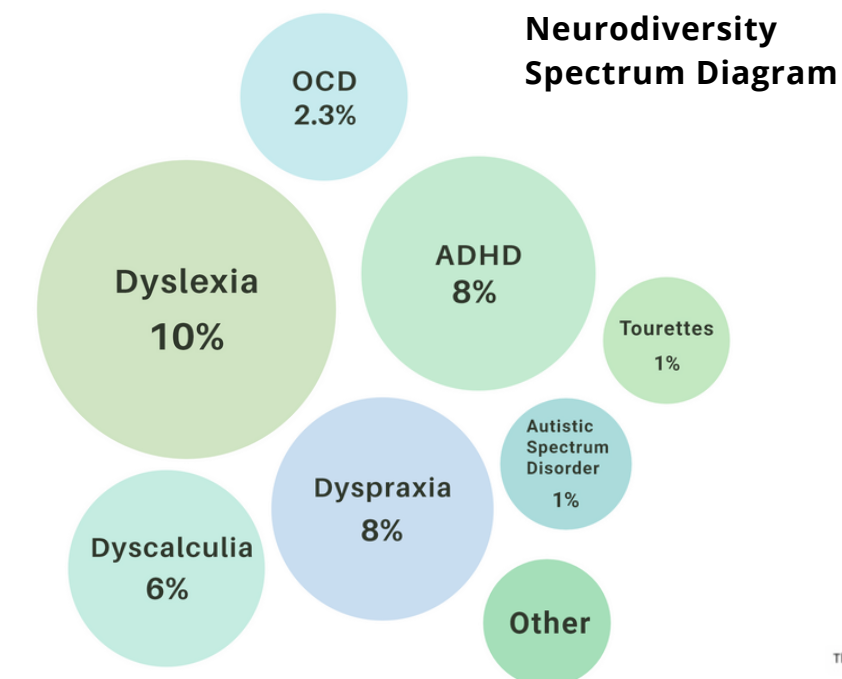
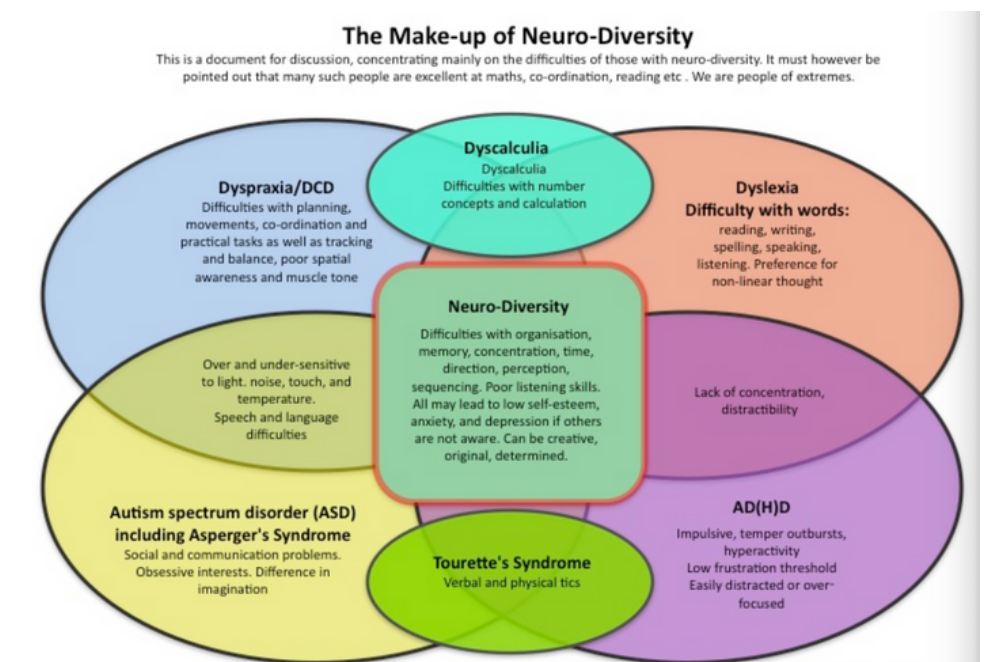


Chart Data from ADHD Aware



Why is it Important to Address?

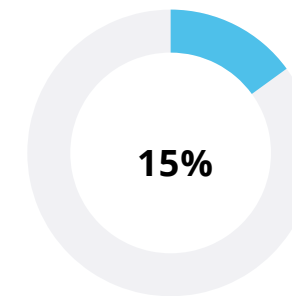
According to the current statistics, the number of neurodiverse people in the UK stands at 15% of the population. When estimated, about 1 in every 7 people in the UK is neurodiverse. Though we further learnt that this number only reflects medically diagnosed. This meant that 15% was a grossly underestimated percentage.

When accounting for medically diagnosed, self-diagnosed, and undiagnosed, the prevalence of neurodiversity in the UK population is estimated at 30%.

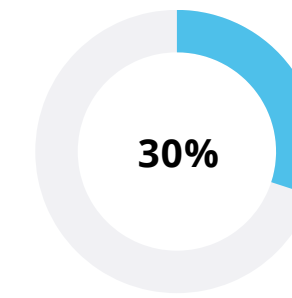
But there was another factor yet to be accounted for in these figures.

During our research, we learned there was a 6-year wait to get a medical diagnosis. This led us to challenge the current figures even further. It was clear, the figures were not only under-represented but growing at pace.

Having a clear understanding of these numbers, helped us understand the urgency - the urgency for all organisations to be inclusive in their value creation and delivery. Being inclusive to the nearly 30% of the population who are left out because the products and services around them aren't designed in a way that works for them.



Representation in Population including Medically Diagnosed Only



Representation in the Population including Medically Diagnosed, Self Diagnosed and Undiagnosed

Creating a Research Panel

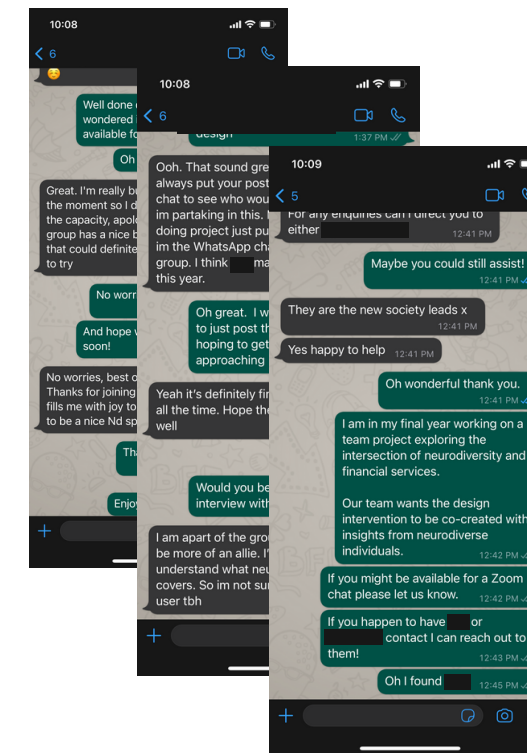
Through desk research, we managed to ascertain several insights and assumptions - often conflicting in nature. We decided to establish a panel of experts so we could discuss and validate our findings.

We began right in our backyard, the Neurodiversity Society at the Royal College of Art. We started having conversations with people via What'sApp, but when an interview was suggested, every single person ceased communication.

In tandem, we researched reputable organisations in the field and created a contact sheet. We started emailing each organisation in an attempt to initiate some dialogue. We managed to piece together a very helpful panel of experts - who just so happened to be neurodiverse themselves.

We also managed to collaborate with the Barclays Neurodiversity Group. They proved to be extremely open about their personal experiences and keen to share their first-hand experiences.

We also reached out to multiple subject matter experts (SMEs) working at the space of neurodiversity and inclusive design and considerations to care for.



Drop Offs in Participant Leads
while reaching out to people to share their experiences as neurodiverse individuals

Created a Contact Sheet
to track the organisations and experts we reached out to

Creating a Research Panel

After days of cold calls, and endless zoom meetings, we finally had our research panel in place which consisted of the following:

Subject Matter Experts

**THE HELEN
HAMLYN
CENTRE
FOR DESIGN**

Colum Lowe
Design Director

Dr Katie Gaudion
Senior Research
Associate

D&A Diversity
and Ability

Piers Wilkinson
Policy and
Campaigns Lead


Royal College of Art

**Rosemary Briggs
McCracken**
Neurodiversity
Tutor

Qona Ranking
Neurodiversity
Tutor

DEVELOPMENTAL FX
therapy that fits.

Tracy Stackhouse
Occupational
Therapist,
Executive Director
& Co-Founder

Research Participants

 **BARCLAYS**

8 Neurodiverse Participants

Primary Research

When we kicked off our Primary research, we started with two very important insights:

1. It takes much more effort to engage with neurodiverse individuals.
2. The SMEs in the field are neurodiverse themselves.

Interviews

We turned to our SMEs not just for their expertise but also for their own experiences as neurodiverse individuals. Also, we tried to learn how to better engage with a community - that thinks differently and communicates differently - for further research.

We leveraged the expertise from:

1. The Helen Hamlyn Centre for design - specifically, their extensive experience in inclusive design.
2. Diversity & Ability, for their experience in neurodiversity as a social enterprise.
3. The RCA Neurodiversity Tutors for their understanding of information processing.
4. Developmental FX for their expertise in the polyvagal nerve theory and its practical applications across sight and sound.

"They are not high or low functioning, but they just have different learning disabilities"

- *Katie Gaudion*
Senior Research Associate, Helen Hamlyn

"Neurodiverse is a title or identity which someone can embrace if they think it will help them in what they want to achieve."

- *Piers Wilkinson*
Policy and Campaigns Lead, Diversity & Ability



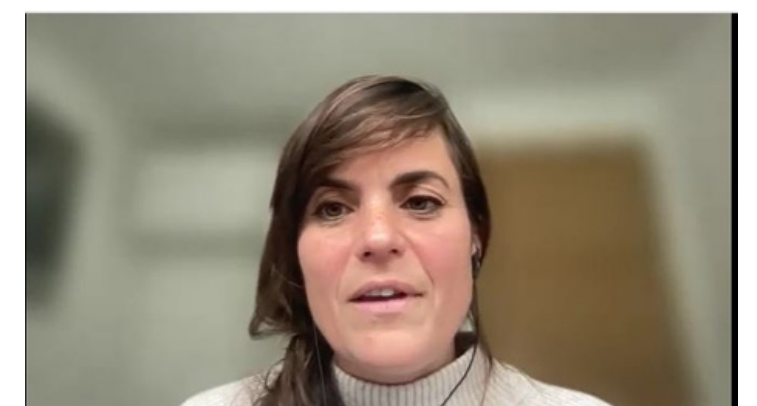
Rosemary Briggs McCracken
Neurodiversity Tutor
Royal College of Art



Tracy Stackhouse
Executive Director, Co-Founder
Developmental Fx



Piers Wilkinson
Policy and Campaigns Lead
Diversity & Ability



Dr. Katie Gaudion
Senior Research Associate
Helen Hamlyn

Primary Research

8 In-Depth Interviews Conducted

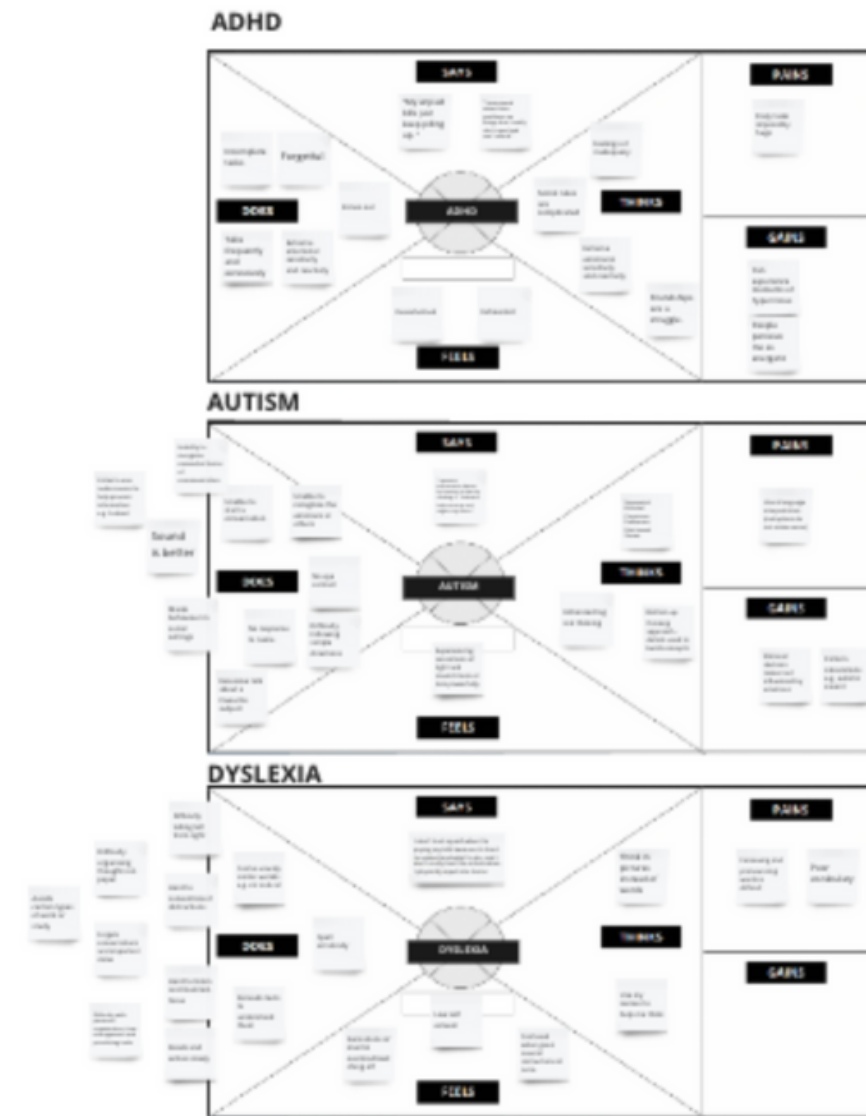
Our exploration revealed that external stimuli like sound and sight could be overwhelming and overstimulating for most neurodiverse individuals. Sensory overload was a significant issue. If sound and visual cues, such as light, are not used correctly, a neurodiverse person may feel uncomfortable in an environment that feels safe to the rest of us.

Hearing the correct sound frequencies, within the proper range and at the correct intonation and tempo, can create a sense of comfort, while the wrong ones can trigger fear, anger, and even confusion.

Another challenge with neurodiverse individuals was related to information processing. They tend to have a poor working memory, so it becomes difficult for them to deal with large sets of numbers and understand information that they read or which is being passed on to them. Throughout our conversations, we noticed references to assistive technology and its extensive use in the day-to-day life of neurodiverse individuals to help with information processing.

"Each individual's experience with neurodiversity is different. If you've met one person with autism, you've met one person with autism. Their definition is unique unto themselves."

- Colum Lowe
Design Director, Helen Hamlyn



Empathy Maps Created
to better understand the pain and gain points

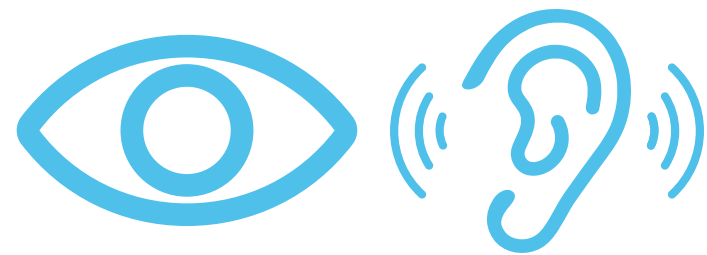
Sue Simpson, Executive		
	Goals "I want to be more organised and feel in control of my finances. Right now, my bills are controlling me."	Motivation • Self-motivated to climb the corporate ladder • Own my own home • Retire early
About Profession: Doctor Age: 42 years Relationship Status: Married Location: London, England	Frustrations • Daily tasks prove incredibly challenging • Unable to keep on top of my monthly bills and pay bills of late have despite having the funds readily available, I simply forget. • Retail therapy to my go-to at times of stress, and I buy things I really don't need and haven't budgeted for.	Brands Technology: Apple Banking: Boots Retail: Primark, H&M Food: Sainsbury's, Waitrose Clothing: Primark, Next Food Shop: Waitrose, Marks & Spencer Coffee: Starbucks
Personality Over achiever with hyper focus Barely an hour to spare to be without supplies of energy. A natural overachiever that uses on verbal communication for expression.	ND Diagnosis Status Condition: ADHD Status: Undiagnosed I have no idea that I have ADHD. Lots of bits to help me remember what I need to do. I struggle with my memory and even in my career. The things I have in the past are normal frustrations for everyone. I have no reason to suspect anything is wrong with me.	
Miley Martin, Self-Employed		
	Goals "Creating a rich family experience for my son and I. He's my world."	Motivation • Raising my son, he is my everything and want to make sure he has the life he's further would have wanted. • Take on the dual parenting role with the aim of doing my best husband proud.
About Profession: Doctor Age: 38 years Relationship Status: Married Location: York, England	Frustrations • I have to rush on the go, all the time, but nothing ever seems to get done. I lose interest in activities quickly and just abandon them even if they're done. I also have trouble with time management and understanding how long something will actually take, especially when I don't consider factors like distractions. • It's embarrassing to say, but I'm not a great speaker. I rely on my speech to correct my own mistakes.	Brands Technology: Android Banking: Local Independent Bank Retail: Primark, Next, Debenhams, Matala, Sainsbury's Food Shop: Tesco, Farmers Coffee: Peet
Personality My life is my family, their needs always come first. I always either coming or going. I just can't seem to ever sit still. But the thing with that, I like to have lots on the go.	ND Diagnosis Status Condition: ADHD Status: Self-Diagnosed Condition: Dyslexia Status: Undiagnosed My son was diagnosed with ADHD, and through his diagnosis, I suspect I have it too. I haven't been officially diagnosed but over the past few years it's been a struggle. I've been with it this long, so I just apply the same coping mechanisms that I've researched for my son. I do not take medication.	
Evie Erloy, Graduate Student		
	Goals "Use my abilities to think differently in a way that empowers my future opportunities."	Motivation • I love learning and understand complex problems with ease. • The particularly enjoy recognising patterns in things and can identify really interesting concepts from the smallest of details.
About Profession: Student Age: 23 Relationship Status: Single Location: Cambridge, England	Frustrations I have ADHD + Autism, I was diagnosed at a young age. So many people don't understand what it means, so I tend to 'act' or 'mask' to fit in socially. It can be exhausting to constantly be acting and adjusting that over my past couple of years. My memory isn't great either. I'm especially sensitive to light and sound. I rely on a lot of assistive technology, and its annoying that the experiences are so inconsistent. It's hard to find the best way to use a multi-sensory world.	Brands Technology: Apple Banking: Boots Retail: Primark, H&M Food: Sainsbury's, Waitrose Clothing: Primark, Next Food Shop: Sainsbury's Local Coffee: Independent
Personality I keep to myself. A good time for me to explore books and reading. I don't need a lot of alone time to recharge, more than most. I make sure to plan for that to help me decompress my senses.	ND Diagnosis Status Condition: ADHD Status: Medical Diagnosis Condition: Autism Status: Medical Diagnosis My ND was diagnosed as a child, so I have learned what I need to do to be successful and apply my skills of thinking differently to differentiate me from society. I embrace my differences and am proud that I have these gifts.	

Personas Created
to better empathise with our target audience

Opportunity Areas

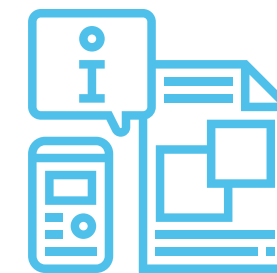
Focussing In

We landed on two areas of opportunity. We shared these insights with our panel of experts to ensure we were on the right path forward.



Sensory Overload

Neurodiverse individuals face issues with visual and auditory overload making them feel overwhelmed, and in certain situations experience a strong sense of fear



Information Processing

Neurodiverse individuals face issues processing information that is presented to them as it is usually written and shown in a way which is not designed for their needs

Our Hypothesis

We believe that if we care for sensory fit and provide information in a way neurodiverse people can understand, it will help reduce sensory overloads and aid in information processing

Neurodiverse Design Language

Understanding Blueprint

We needed to better understand the design language Barclays used across their ecosystem and whether it cared for the specific needs neurodiverse individuals required in order to process information.

We had a 1:1 working session with Noel Lyons, Chief Design Officer at Barclays. He walked us through 'Blueprint.' Blueprint is a design language platform leveraged by all Barclays employees when modifying or creating new interventions.

If a new design language was required for their neurodiverse audience, it could be made available to their entire organisation through this platform. Further, it would ensure a systematic rollout and consistent implementation across all Barclays products and services.

Landing on Semiotics

A few recurring themes presented during our research as they pertained to information design. We discovered that sensory overload, experienced by neurodiverse individuals, happens when one of the 5 senses becomes overstimulated.

Learning how to communicate information through more than one sensory capability would disperse the knowledge across all senses and reduce the overload on one of the senses.

We began exploring the possibility of communicating information through multi-sensory methods such as sight, sound infographics, shapes, colours and opacities. The application of these methods collectively is called semiotics and helps neurodiverse people process information.



Noel Lyons
Chief Design Officer, Barclays

Semiotics:



Sound



Infographic



Shape



Colour



Opacities

What about
Finance?

Back to Research

After identifying the need for a new semiotic-based design language, we began to think about what this meant in finance. So we connected back with our research panel and began researching problems faced in finance.

A common theme presented during our interview sessions was problems with credit and lending. Neurodiverse people engage with a credit cards primarily to establish a healthy credit score to achieve future goals, like buying a house. Not for accessing credit itself.

We realised that credit cards are not the only factor in building a healthy credit score. We also realised that this is a common need for neurotypical and neurodiverse people. However, it was mentioned in our research too often to ignore. So we explored further and uncovered a unique need - something that Neurotypical people do not experience.

Neurodiverse people experience cognitive distrust because of sensory overload and issues processing information. This leads to them not being able to act on tasks in a timely manner. They are thus more likely to have negative markers on their credit score.

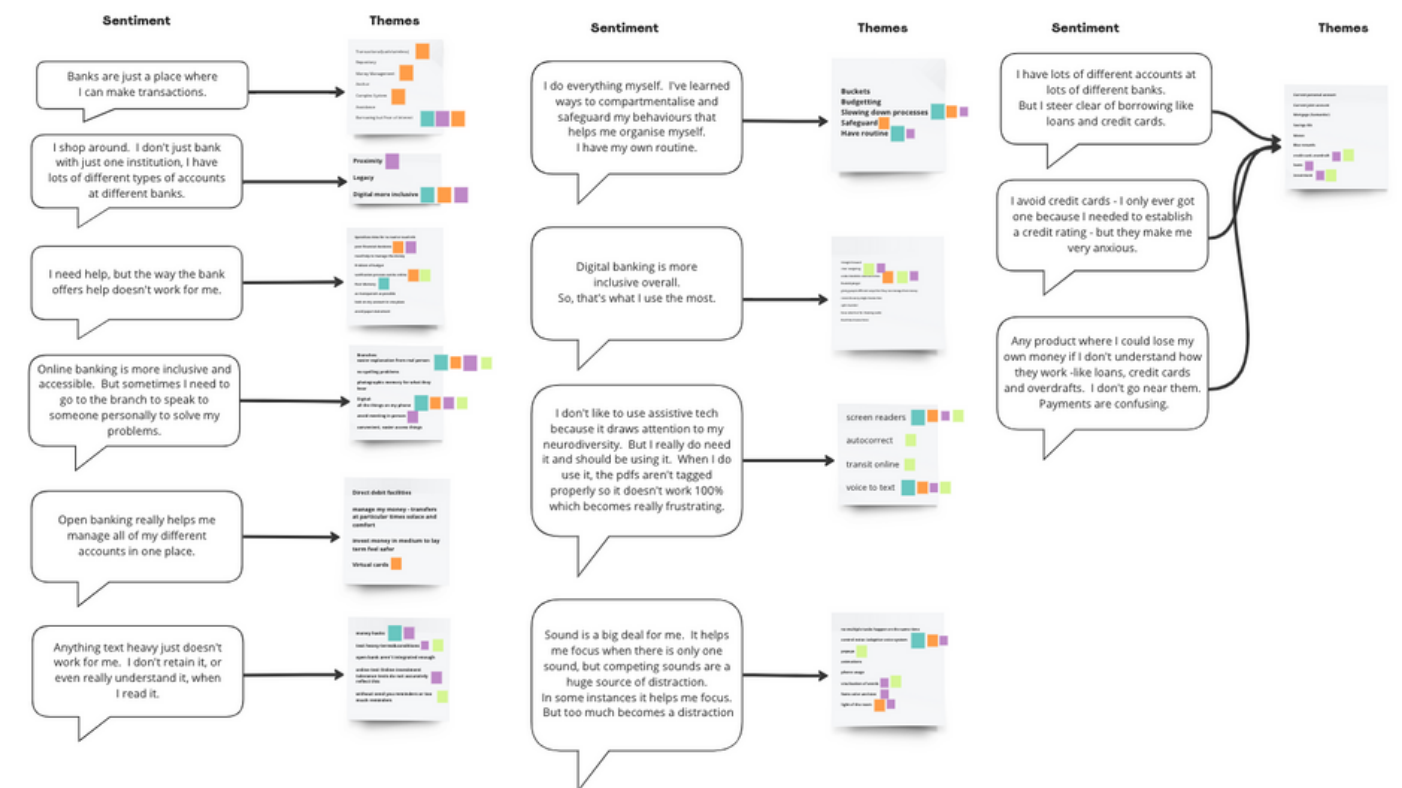
The implications come with a hefty sentence - a negative marker on their Credit Score that follows them for six years.

We decided to take up credit scores as our use case to bring digital semiotics and affordances to life.

"I have lots of different accounts at lots of different banks. But I steer clear of borrowing like loans and credit cards."

"Any product where I could lose my own money if I don't understand how they work - like loans, credit cards and overdrafts. I don't go near them. Payments are confusing."

"I avoid credit cards - I only ever got one because I needed to establish a credit rating - but they make me very anxious."



Sentiment to Themes Analysis from Interview Data Points

Our Hypothesis

We believe that if we bring transparency around the person's credit file and care for the content and ways of information delivery, we will be able to give neurodiverse individuals the agency to take control of their credit scores.

Ideation + Prototyping

Preliminary Round

We began ideating on our two areas of focus; sensory fit and information processing. Our first instalment of prototyping included 4 concepts for each focus area. We presented these to two neurodiverse panels, including attendees from the Barclays and RCA neurodiversity groups, for feedback followed by co-creation sessions.

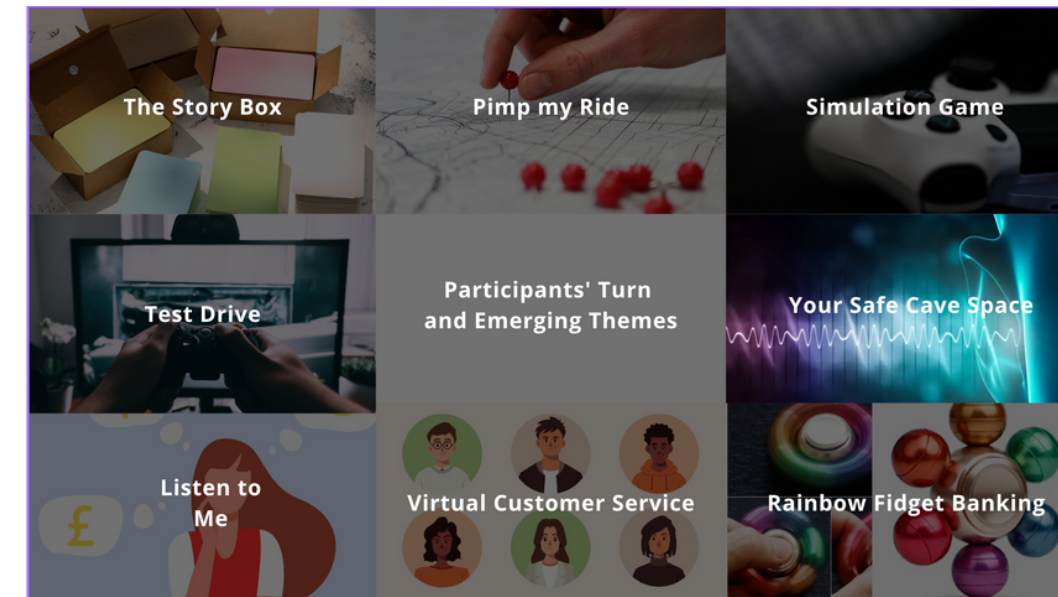
We closed off each session with the attendees co-creating a solution which helped us identify what was most important to them. And also identified the themes that mattered the most.

Findings

From these sessions, we found a few recurring themes and discovered the collective application of these themes is called Semiotics, which helps neurodiverse people process information.

- Sound is preferred to textual information, and it reduces sensory overload.
- When combined with Infographics, shapes, colour and opacities it's even more powerful and aids in information processing.
- When shapes and colours are considered individually, they help in the symbolism and associations of the information.
- The opacities are important to be somewhere between 40 - 60 % so that it doesn't overwhelm the neurodiverse individual.

This validated our Theory of Change. We believe that if we design semiotics and affordance-based communication, it will improve sensory fit, and information comprehension and retention for neurodiverse individuals.



Conceptual Prototypes Created

1. Information Processing

1. **The Story Box** included physical colour coded cards with bite sized information.
2. **Test Drive** gave individuals the ability to experience a financial product without commitment so as to understand what to expect before they apply.
3. **Pimp my Ride** was a customised journey routing system which surfaced only relevant information.
4. **A Simulation Game** that gamified financial products by leveraging information presented in a timely manner.

2. Sensory Fit

1. **Your Safe Cave Space** which transformed the branch experience caring for visual and auditory needs.
2. **Listen to Me** introduced customised sound and voice
3. **Rainbow Banking** using colours to communicate banking actions to be done through stimming devices.
4. **Virtual Customer Service** by creating a neurodiverse AI Personal Banker

Ideation + Prototyping

Secondary Round

We then progressed with a second instalment of prototyping focussed on testing semiotics and auditory interventions which included 3 additional prototypes.

We took these prototypes to our Subject Matter Experts for testing. This included;

Colum Lowe, Design Director at the Helen Hamlin Centre
Piers Wilkinson*, Policy & Campaigns Lead, Diversity & Ability
Rosemary Briggs McCracken*, Neurodiversity Tutor, RCA

"Everything I've seen here would be helpful for neurodiverse - and also for the elderly or those with vision impairments."

- Colum Lowe
Design Director, Helen Hamlyn

"If the technology used for vision impaired can take the leap and be used for neurodiversity, I'd be all for it."

- Piers Wilkinson
Policy and Campaigns Lead, Diversity & Ability

Semiotic Intervention

Traffic Light System

Included colour coding to match the universal traffic light system accentuated with imagery and short, direct messaging.



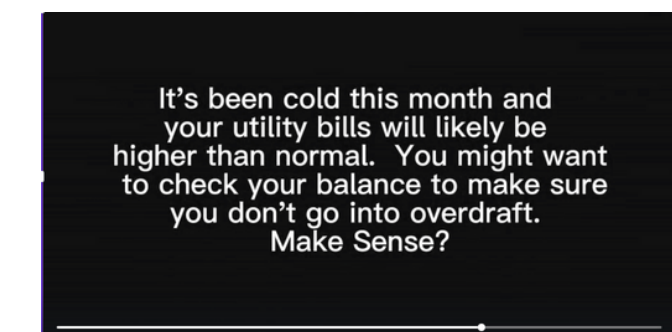
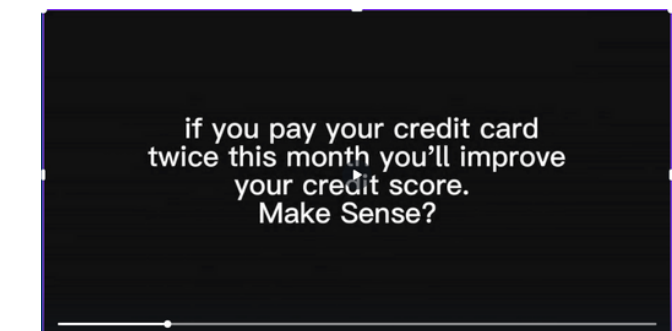
Traffic Light System

Auditory Intervention

Voice Narration & Tonality Prototype

Short messaging is narrated with accompanying text to provide multiple methods to process the information.

Three different narration voices were used including generic, Dad and David Attenborough



Voice Narration & Tonality Prototypes

Service Proposition



Introducing NuroMinder:

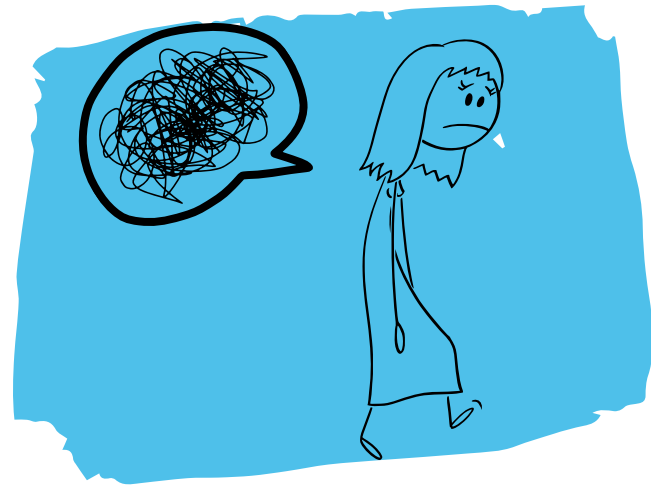
See, Hear, or Watch details about what small steps you can take today to improve your credit score and create greater opportunities for tomorrow.

NuroMinder is an inclusive financial service that helps neurodiverse individuals proactively manage their credit scores by communicating small, task based actions in a semiotic based design language to improve information processing reduce sensory overload.

Let's take a look at how Nurominder helps Sue.

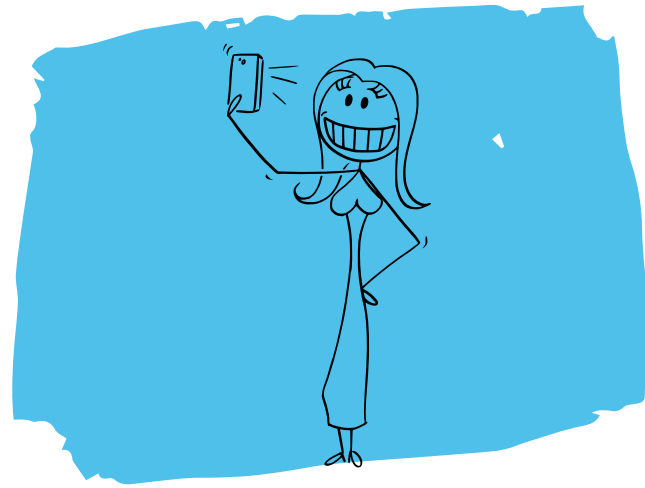


Service Proposition



1. Diagnosis

Sue self-diagnoses herself as neurodiverse. She begins incorporating tools to help her process financial information differently. She downloads the Nurominder App.



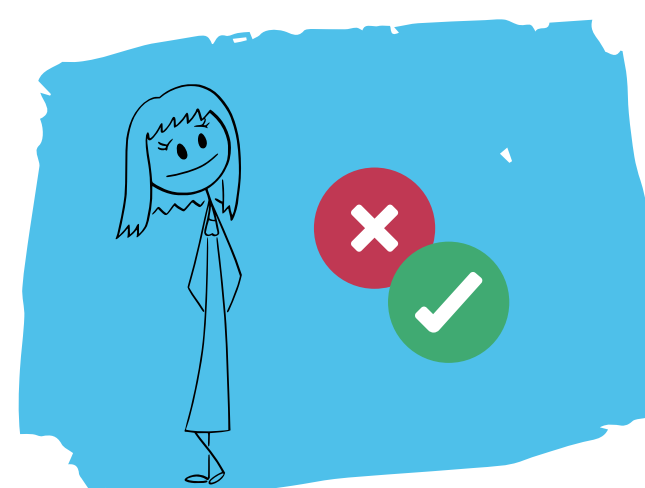
2. Sensory Preferences

Sue is immediately prompted to customise her semiotic and sensory preferences. She then links her Barclays account.



3. Soft Credit Check

Nurominder asks Sue if she'd like to perform a soft check on her credit score and learn about last month's activities.



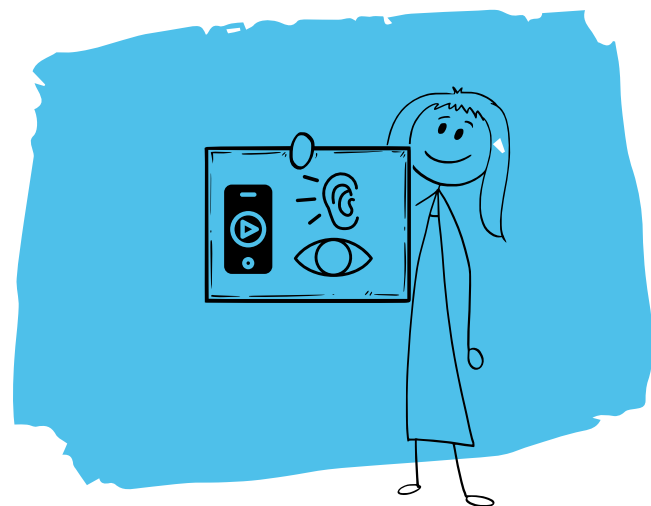
4. Positive Negative Colour Coding

These activities are colour coded to red and green to indicate a negative or positive marker on her credit file.



5. Universal Traffic Colour System

Sue is then shown a short list of tasks that can improve her credit score which is colour coded to the universal traffic colour system.



6. Information Processing

Sue is asked if she would like to know how a task affects her credit score and given the option to; See It, Hear It, or Watch it.



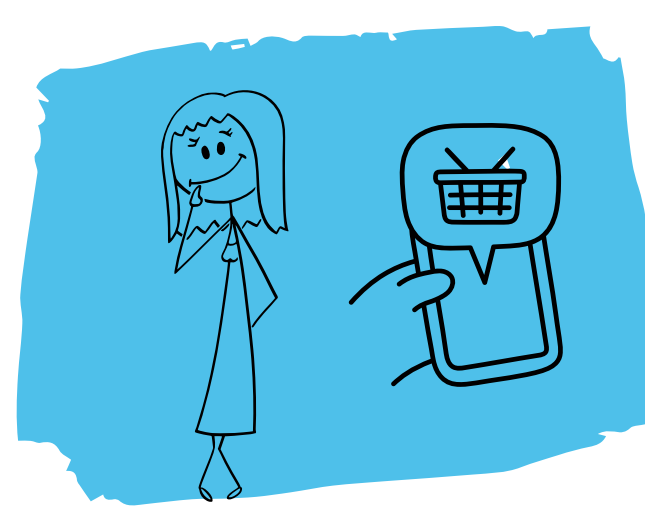
7. Hear It

She selects Hear It and is asked whom she would like to hear it from. She selects Sir David Attenborough. An audio message plays on her mobile.



8. Tip

Sir David shares information on late bill payments and their effect on credit scores and a tip on how direct payments can avoid this from happening.



9. Preventative Measure

Sue is deep-linked through to her Barclays account to set up the direct payments.



10. Sensory Markers

Barclays's Analytics team can learn from Sue's sensory preferences, and evolves future content options to be tailored to her sensory preferences.

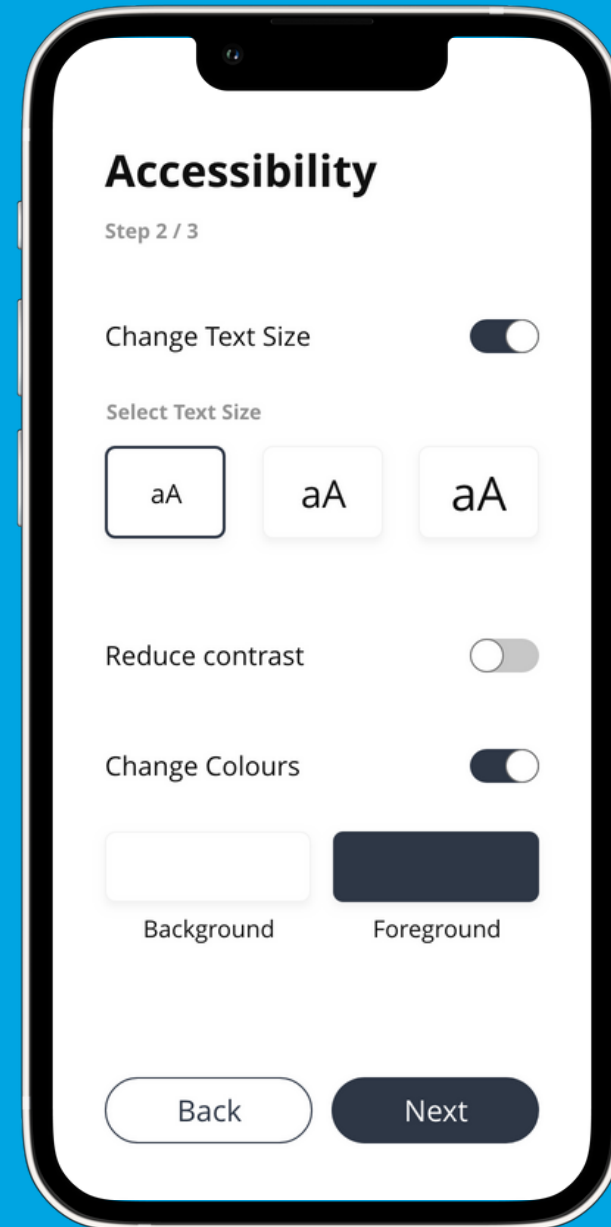
Service Features + Benefits

Sensory + Semiotic Preferences

Preferences do not default by design. Instead, preferences are the first step in the onboarding process. This ensures that all information presented is surfaced in a way that works for the user from the outset.

Features & Benefits

- Customise semiotic and sensory preferences
- Deliver personalised multi-sensory content
- Reduce sensory overload



Screen:
Accessibility Settings

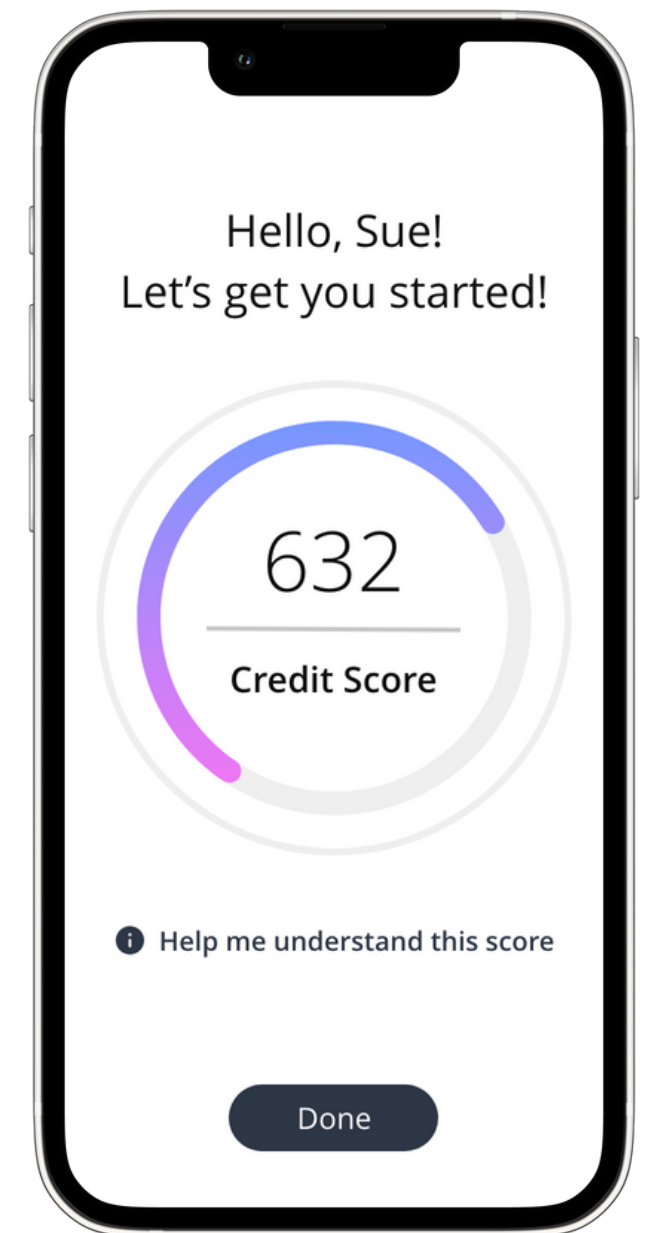
Check Credit Score

A soft check on your credit score gets the process underway immediately. The score populates on the screen with a number, doughnut graph and colour attribute to minimise visual distractions and keep the focus on the task at hand.

A simple call to action - to invite the user to understand what the score means - anchors the page.

Features & Benefits

- Soft check won't impact her credit score
- Minimal visual elements
- Simple call to action to 'understand' is readily available



Screen:
Check Credit Score

Service Features + Benefits

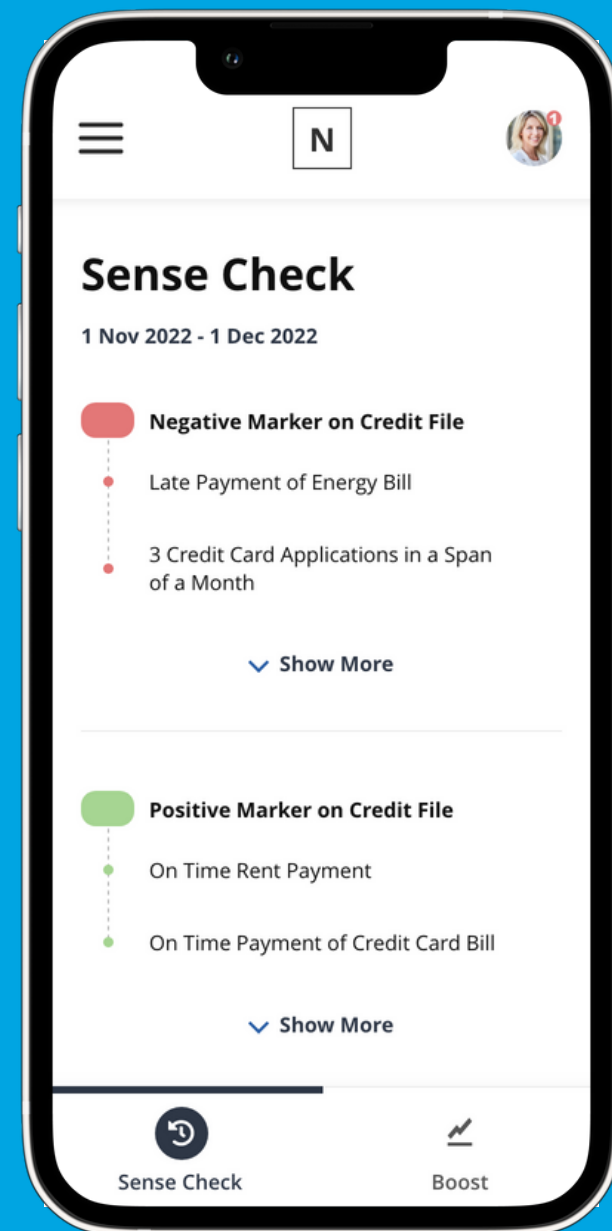
Review Past Markers

Current markers are populated and classified into positive and negative sections. Red and green colour coding reinforces the classification of information.

Each category surfaces a maximum of three line items. The user can expand upon each section when/if they chose to in order to learn more.

Features & Benefits

- Red and green colour coding
- Instills transparency



Screen:
Sense Check

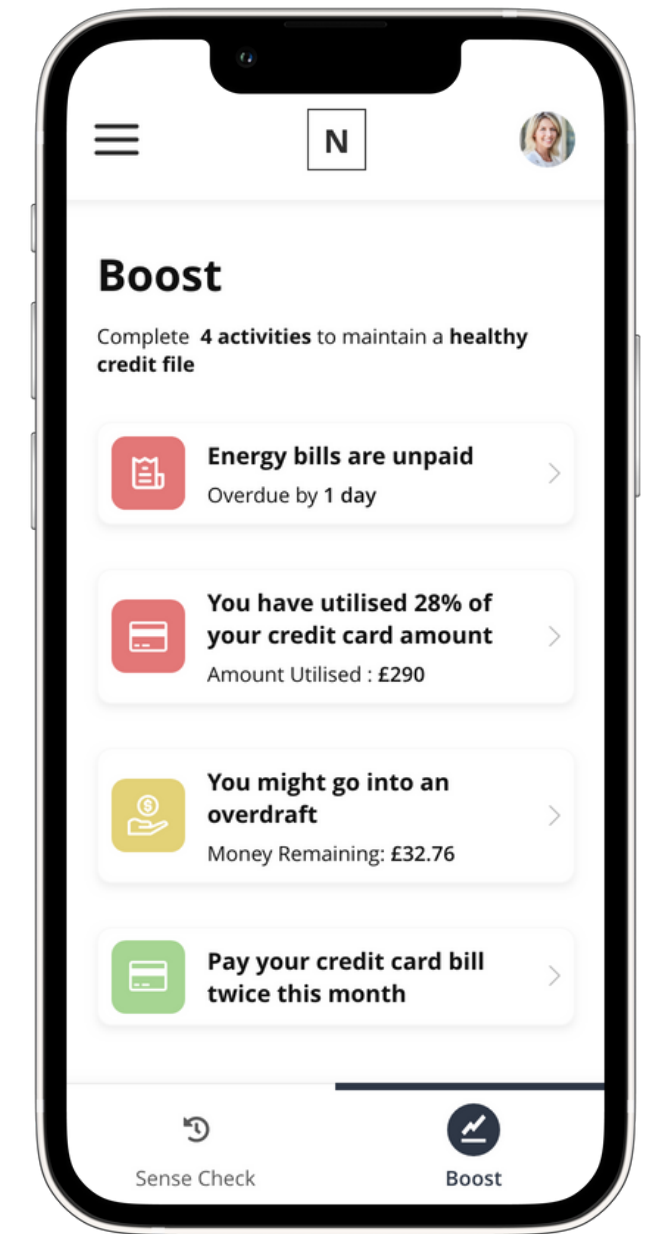
Boost Credit Score

The Boost functionality surfaces a shortlist of prioritised tasks users can choose to undertake to improve their credit score.

These tasks are categorised by the universal traffic light system to use colour affordances that aid in information processing

Features & Benefits

- Red action required
- Amber cautionary warning
- Green best practices to continue



Screen:
Boost

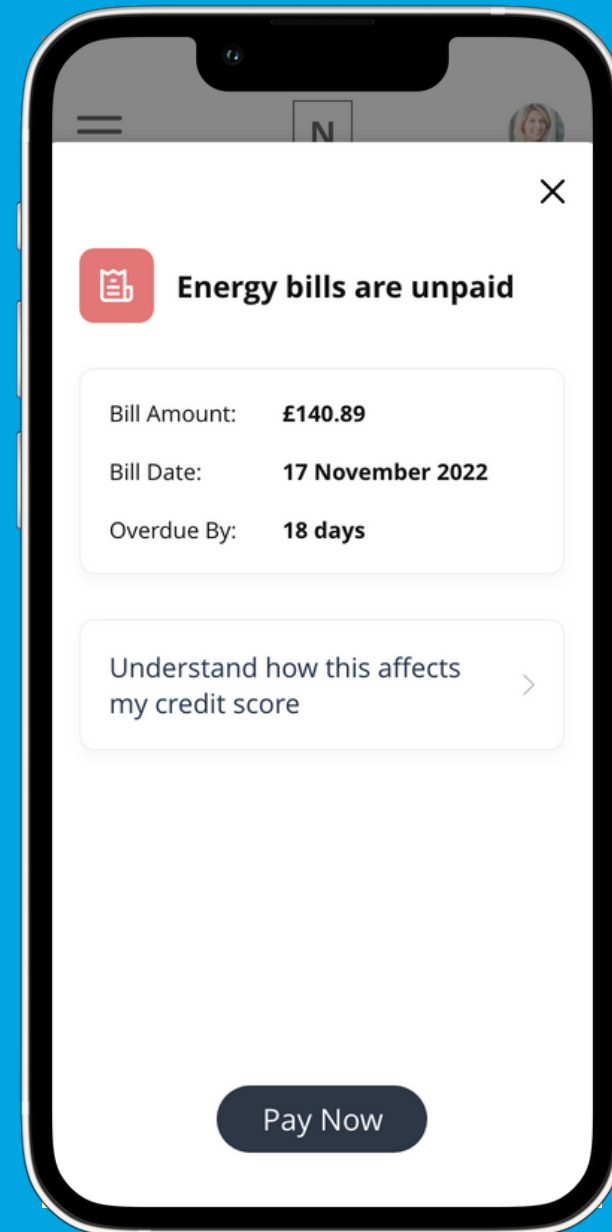
Service Features + Benefits

Marker Detail Page

Learn more about why and how a marker was attributed to your credit score. The information is surfaced in the way you process information best; See, Hear or Watch the information for each item.

Features & Benefits

- Information in the format of choice
- Facilitate information processing



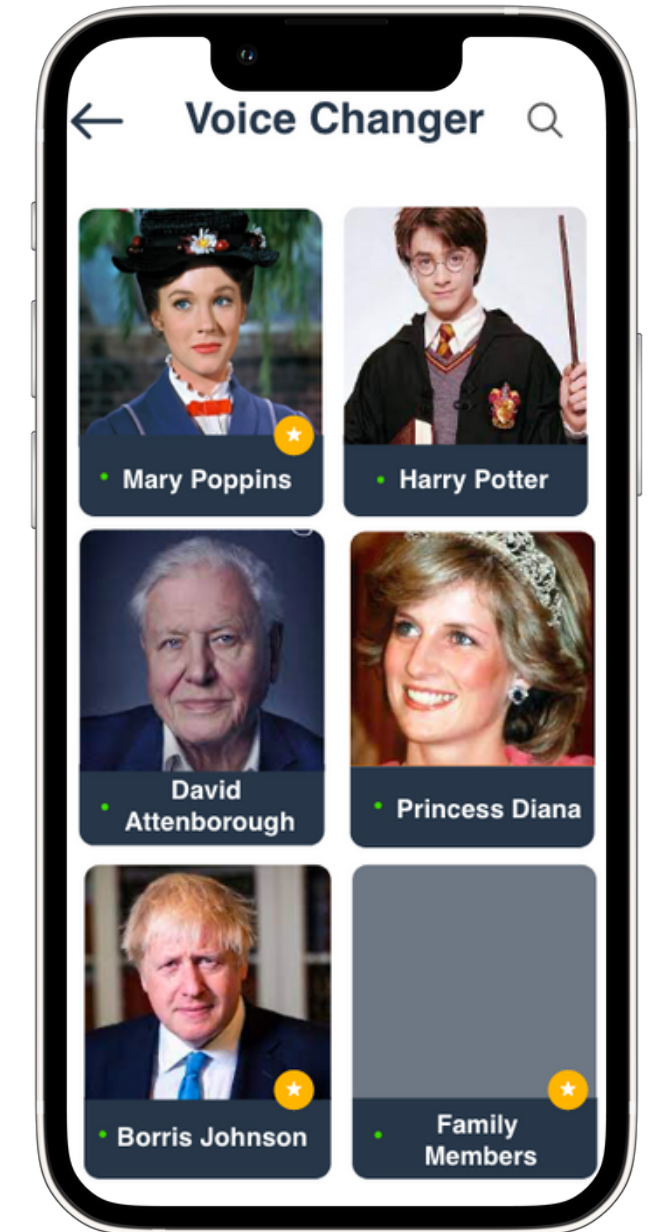
Screen:
Marker Detail Page

Narration Styles

User's opting to 'Hear' their information are given options on who they would like to narrate their information. Narration styles include iconic personalities from the UK. Consideration is given to the tone of voice and authenticity (and humour) of each narrator ensuring the content is shared in the most entertaining way possible.

Features & Benefits

- Presented in the tone most comfortable to the user leveraging generative AI



Screen:
Narration Styles

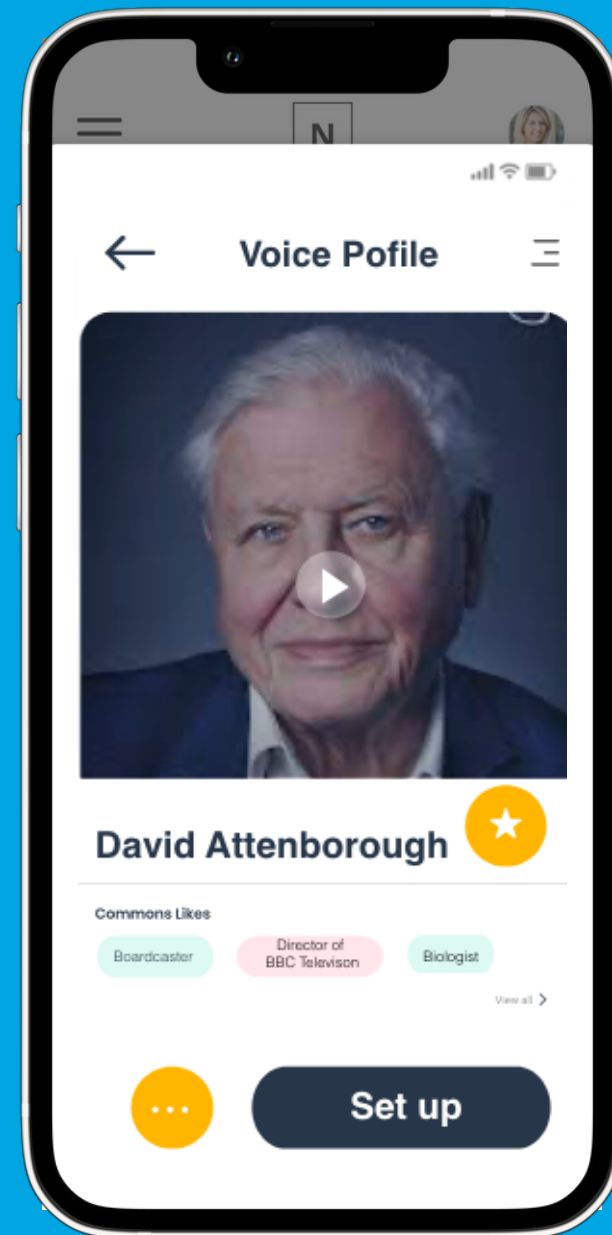
Service Features + Benefits

Narrator Profile

Learn more about the Narrator speaking to you. Presenting information that reinforces trust and accountability which Barclays can associate themselves alongside.

Features & Benefits

- Learn more about the selected narrator and reinforce trustworthiness



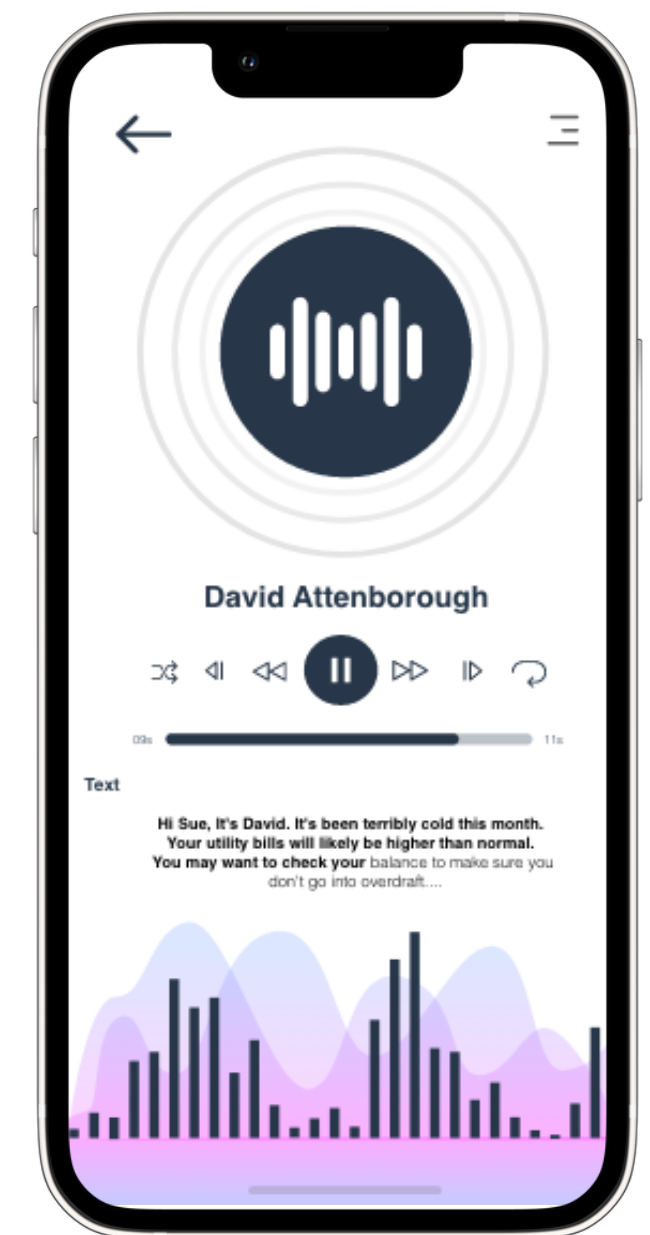
Screen:
Narrator Profile

Narration Controls

Narration controls enable the user to adjust the volume and pace. It also provides text clips of the audio being recited to reinforce the messaging being recited.

Features & Benefits

- Enables the user to have complete control and flexibility over multiple aspects of the audio clip so it may be adjusted for their sensory and environmental needs on a case-by-case basis

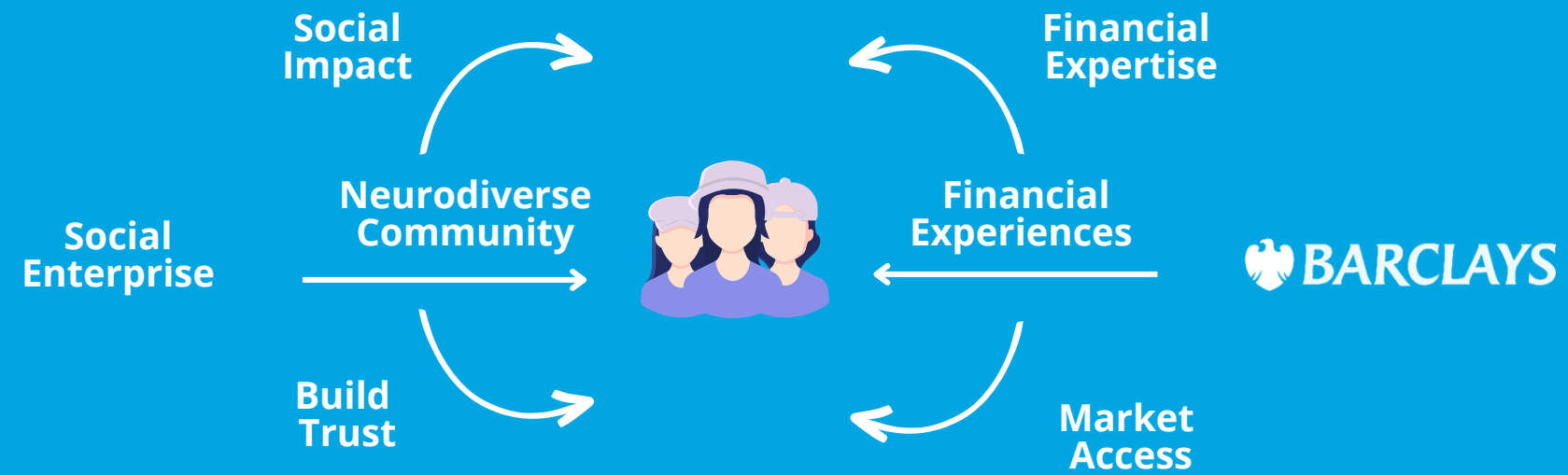


Screen:
Narrator Controls

Impact

Neurodiverse Individuals:

- Improves financial service experience for 8 million neurodiverse individuals who bank with Barclays.



Barclays:

- Their services become accessible to a larger audience.
- Helps establish a sense of trust and credibility in the market.
- Position Barclays as an industry leader in Inclusive Design, thereby pushing other organisations to deliver neuro-inclusive financial experiences for the 16 million neurodiverse adults in the UK.

Our Learnings

1

Audience Engagement

Engaging with this audience is difficult, not because they don't want to speak, but because we communicate with neurotypical tools

2

Neurodiverse Design Language

A robust neurodiverse design language needs to be rolled out across the banking ecosystem for all products and services.

3

Micro Interventions

There is no one size fits all. Micro interventions are needed to nudge forward.

THINKING
DIFFERENTLY

Neurodiverse Inclusion in Financial Services

Aditi Singh, Monica Henderson, Soumitra Sathe, Zhenni Yu