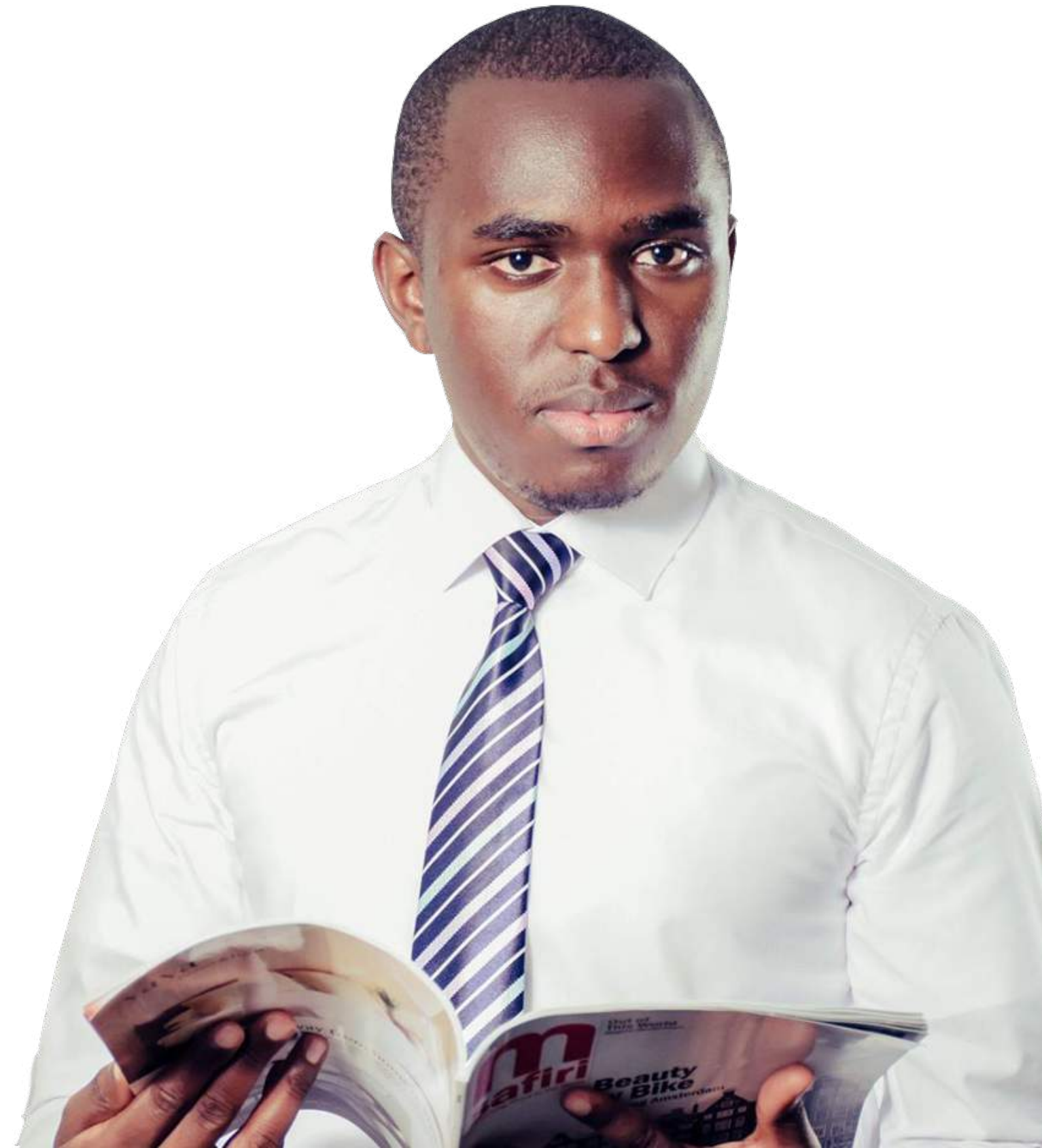


# Joseph Wachira

Senior UX/Product Designer



CHAPTER ONE

# About Me

ABOUT ME

I Am An Experience Designer, an Agile Practitioner, a Problem-solver and a Visual Communicator.

I have 9 years of practical experience across UX, research, marketing, and digital products for enterprise and consumer products.

ABOUT ME

# My Philosophy

**Nothing great was ever achieved without enthusiasm**

When tasked with a challenge I try to understand the core problem we're trying to solve. This helps me make informed decisions and build enthusiasm for creating the best experience.

**Clear experiences over unpredictability**

As designers, our goal is not to eliminate complexity or friction, but rather create a clear, intuitive and understandable product experience.

**We must constantly challenge our own assumptions**

It's easy to become over-confident in our ideas and opinions. Rigorous iteration and testing can help bring clarity and confidence to the work.

MY APPROACH

# How I Work

STEP 1

## Research

Understanding more about the problem, considering potential solutions and learning about the customer

STEP 2

## Principles

Crafting design principles to help guide the project decisions and ensure alignment amongst the team.

STEP 3

## User Journey

Diving deep into the user journey and exploring user stories, personas, channels, and user decision making.

STEP 4

## Design Exploration

Diverging wide and exploring a range of possible solutions. Testing, iterating, brainstorming and working through the problem.

STEP 5

## Design Refinement

Refining a chosen direction and polishing visual design, preparing designs for engineering handoff and documenting decisions made.

STEP 6

## Handoff

Working closely with engineering and product to ensure a successful handoff and implementation.

STEP 7

## Monitoring and Measuring

Having the project go live doesn't mean the work is done. We monitor and measure its performance to discover opportunities for improvement.

CHAPTER TWO

# The Work

CASE STUDY #1

# Rapid Prototyping to Deliver an Insights Dashboard in a Limited Timeframe

ROLE

**Research, Wireframing, UX Design, Prototyping, Visual Design**

DURATION

**Aug 2022 - Sept 2022**



## OVERVIEW

# Tasked to deliver a Dashboard UI within 2 weeks as a new hire.

This was the first project that I delivered from concept to execution for MTN.

The business required an Insights Dashboard for the Case Management platform, and with the project falling behind schedule due to previous lack of design resources, I was tasked with the challenge of delivering the interface design for the dashboard within a tight timeframe of just under 2 weeks as a new joiner in the team.

Despite the time constraints, I took on the project with optimism and was determined to find an efficient and user-centred design solution.





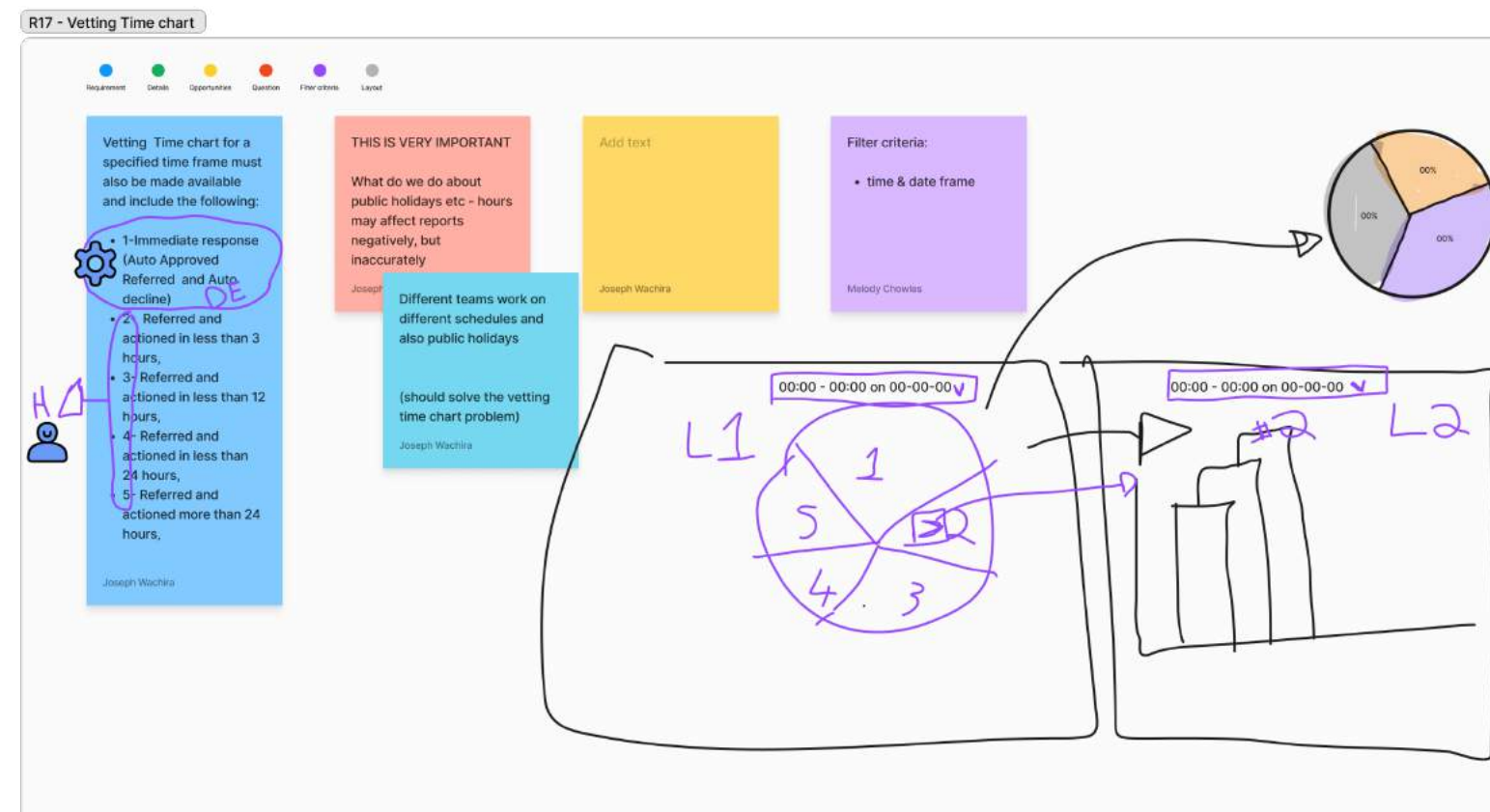
## APPROACH

# I proposed a Rapid Prototyping process to overcome the time constraints

To tackle the time constraints, I proposed a rapid prototyping process that would allow us to quickly brainstorm and visualise the dashboard interface.

This approach compressed what would have been a lengthy and complex project into a fast and result-oriented methodology.

I broke down the process into three phases, with the first two to be completed within the short timeline available and the third phase to be conducted once MVP 1 had gone live.



## APPROACH

# Broke down the process into 3 phases

### PHASE 1 (1 Week)

## Indulge and Learn

Immersed myself in the process and held daily technical meetings with the stakeholders. This deep dive allowed me to understand the requirements thoroughly and establish a strong foundation for the subsequent phases.

### PHASE 2 (1 Week)

## Design Exploration and Approvals

I focused on brainstorming and design exploration, collaborating with other designers from my team to expedite the process and gain valuable second opinions.

### PHASE 3 (After MVP 1 Development Delivery)

## Testing and Improving

We planned to conduct user testing and gather feedback to refine and enhance the dashboard's usability once the first version had gone live.

INDULGE AND LEARN

# Identified opportunities and questions for each requirement

I leveraged FigJam, a collaborative white-boarding tool, to brainstorm and identify opportunities and questions for each requirement.

These insights were then discussed with the business analysis and development teams to seek further clarity and obtain necessary approvals from the business.

Req ID	Requirement Name	Inspector Stakeholders	Requirement Description	Source	Comments
R1	Access of vetting dashboards	U/VD	A user must be able to access the vetting dashboards from the landing page	Insights/Filter	
R2	Access of vetting Dashboards	U/VD	Only users with rights to the vetting role will be able to view this dashboard	Insights/Filter	
R3	Mapping of order to case		In the order list, "Vetted" instances must be made a hyperlink to the case associated to the order. Users must be able to drill down into the case view from the order list and view all case related details regarding the order. Once in the case the system must display the following: Case Creation Date Queue: e.g. Referral Queue Process: e.g. pending dealer action External comments Last vetting action: Pending Credit Risk Agent Failed type: Business/Technical Failed:		
R4	Case View				
R5	Case history		User must have the ability to view the case history from case creation until the order moves out of vetting (approved/declined)		
R6	Number of Transaction Types	U/VD/Insights	New vs All Line vs Upgrades	Insights/Insights	Insights must send the transaction type to insights e.g. new vs add line
R7	Cancelled Cases View	U/VD/Insights	Cancelled Cases with vetting and where they occur (chopped vs unvetted). Filter by key reason for cancellations	Insights/Insights	Insights must send order status updates to insights e.g. chopped vs unvetted.
R8	Credit Risk Agent Performance	U/VD/Insights	Number of Applications processed in per specified date range Filter by transaction type	Insights/Insights	Insights must send customer type and transaction type
R9	Schedule adherence	U/VD	percentage of the working day where an agent is available to vet applications. Number of Cases per a day processed by an agent	Insights	Insights to provide calculation
R10	Order and Case visibility	U/VD	A Vetting user must be able to view the order and the details associated with a case after vetting. A Case in view must be made available which shows all cases in Case management including the following: Case Creation Date Customer Type (Customer/Employee Connect/IME) Application Type (New/Training/Upgrade) Queue: e.g. Referral Queue Process: e.g. pending dealer action External comments. UI users can see if this is possible SLA Status (in SLA/Out of SLA) Last vetting action: Pending Credit Risk Agent Failed type: Business/Technical/ N/A Failed:	Insights/Insights	UI users to see if this is possible. A detailed discussion is required. To check with the vetting team. Lynden
R11	Case List View	U/VD		Insights/Insights	
R12	Queue SLA's	U/VD/Insights	Out of SLA (Order is in a queue for...)	Insights/Insights	To check with the vetting team. Lynden
R13	Filter Criteria	U/VD	For all the dashboard, a user must have the ability to filter a case list by the date range	Insights/Insights	
R14	Filter Criteria	U/VD	A user must be able to filter cases associated with a specific customer type	Insights/Insights	
R15	Filter Criteria	U/VD	A user must be able to filter cases associated with a transaction type	Insights/Insights	
R16	DE outcomes	U/VD	Traceability must also be made for decisions made by the decisioning engine (DE). A view of stats approved vs auto-declined applications must also be presented.	Insights/Insights	Insights to provide case end order details
R17	Vetting Time chart	U/VD/Insights	Vetting Time chart for a specified time frame must also be made available and include the following: - Immediate response (Auto Approved/Referred and Auto-declined) - Referred and acted on in less than 3 hours, - Referred and acted on in less than 12 hours, - Referred and acted on in less than 24 hours, - Referred and acted on after than 24 hours,	Insights/Insights	What happens for applications which come at the end of the day and public holidays and after hours?
R18	A summary dashboard view	U/VD/Insights	A summary dashboard view of all cases for a specified date range must also be available and have the following: 1- Total Number Of Orders Submitted to vetting 2- Total Number of Applications referred by the Decisioning Engine with a split of approved vs declined orders vs referred cases 3- Total number of approved cases 4- Total number of declined cases 5- Total number of pending cases 6- Total number of awaiting dealer action 7- Total number of awaiting vetting action	Insights/Insights	Insights to provide information to insights about all actions which happen on the case in real time Insights to provide information to insights about all actions which happen on the case in real time
R19	Number of Cases Referred to manual vetting	U/VD/Insights	Including Missions (Processes in Queue) per date range Referral Reason SLA's must be made available per queue	Insights/Insights	
R20	The number of Cases in each queue	U/VD	Ability to filter by sales channel Ability to map an order to a case Ability to drill down to case detail (similar to order list) including time taken per customer and agents who have worked on the case including the action performed	Insights/Insights	
R21	Time to vet	U/VD/Insights	Per Queue Overall Aggregated time spent for cases across different queues Hourly view during Business Hours (Configurable) Total overall/actual time spent per case in the different milestones	Insights/Insights	
R22	Time to vet	U/VD/Insights	Based on source of application 1- Total Number Of Orders Submitted to vetting 2- Total Number of Applications referred by the Decisioning Engine with a split of approved vs declined orders vs referred cases	Insights/Insights	

### R1 & R2 - Access of Vetting Dashboards

A mind map with a central icon of a hand holding a green flag with three exclamation marks. The map branches into several nodes, each containing text and small icons. The nodes discuss various aspects of dashboard access, including user roles, permissions, and system configurations. The text is dense and appears to be a collection of notes or requirements.

### R6 - Number of Transaction Types

A mind map for R6 - Number of Transaction Types. The central node is a pie chart showing three segments. To the right, a table lists values: 100, 500, 2,000. Below this, a larger pie chart is shown with segments labeled 'New', 'Application', and 'Aggrigate'. To the right of this chart, another table lists values: 800, 89, 1,111. The mind map branches contain text and smaller charts, including a bar chart and a line graph, illustrating different ways to visualize the data.

### R7 - Cancelled Cases View

A mind map for R7 - Cancelled Cases View. The central node is a pie chart. The mind map branches contain text and smaller charts, including a bar chart and a line graph. The text discusses various aspects of cancelled cases, such as reasons for cancellation and how to track them. The charts provide visual representations of the data being discussed.

### R8 - Credit Risk Agent Performance

A mind map for R8 - Credit Risk Agent Performance. The central node is a pie chart. The mind map branches contain text and smaller charts, including a bar chart and a line graph. The text discusses agent performance metrics, such as success rates and the number of cases handled. The charts provide visual representations of the data being discussed.

A flowchart titled 'Application types'. It starts with a central node 'Application types' which branches into 'New' and 'Application'. The 'New' branch leads to a 'Form' box with fields for 'Report', 'Case', and 'DOB'. The 'Application' branch leads to a 'Task Log/updates' box. Below these, there are several boxes containing text and icons, likely representing different stages or types of applications. The flowchart is designed to show the process flow from application submission to task completion.

A dashboard titled 'Level 1 (Dashboard landing)'. It features a central donut chart showing '1,803 Applications' with segments for 'New' (58%), 'Application' (40%), and 'Aggrigate' (1%). To the right, there is a table with columns for 'Case no', 'Case name', 'Case type', and 'Case status'. Below the donut chart, there is a line graph showing 'Application types' over time from Aug 1 to Aug 7. The dashboard includes various filters and controls for data manipulation.

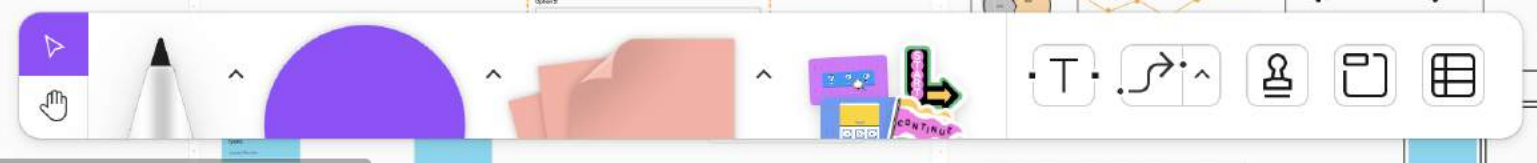
A dashboard titled 'Level 1 (Dashboard landing)'. It features a central donut chart showing '2,000 Applications' with segments for 'New' (50%), 'Application' (40%), and 'Aggrigate' (10%). To the right, there is a table with columns for 'Case no', 'Case name', 'Case type', and 'Case status'. Below the donut chart, there is a bar chart showing 'Cancelled cases' over time from Aug 1 to Aug 7. The dashboard includes various filters and controls for data manipulation.

A dashboard titled 'Level 1 (Dashboard landing)'. It features a central donut chart showing '000 Applications' with segments for 'New', 'Application', and 'Aggrigate'. To the right, there is a table with columns for 'Case no', 'Case name', 'Case type', and 'Case status'. Below the donut chart, there is a bar chart showing 'Cancelled cases' over time from Aug 1 to Aug 7. The dashboard includes various filters and controls for data manipulation.

A dashboard titled 'Level 2 (Separate page)'. It features a central line graph showing 'Application types' over time from Aug 1 to Aug 7. Below the graph, there is a table with columns for 'Application Type', 'Count', and 'Percentage'. The dashboard includes various filters and controls for data manipulation.

A dashboard titled 'Level 2 (Separate page)'. It features a central line graph showing 'Cancelled cases' over time from Aug 1 to Aug 7. Below the graph, there is a table with columns for 'Cancelled cases', 'Count', and 'Percentage'. The dashboard includes various filters and controls for data manipulation.

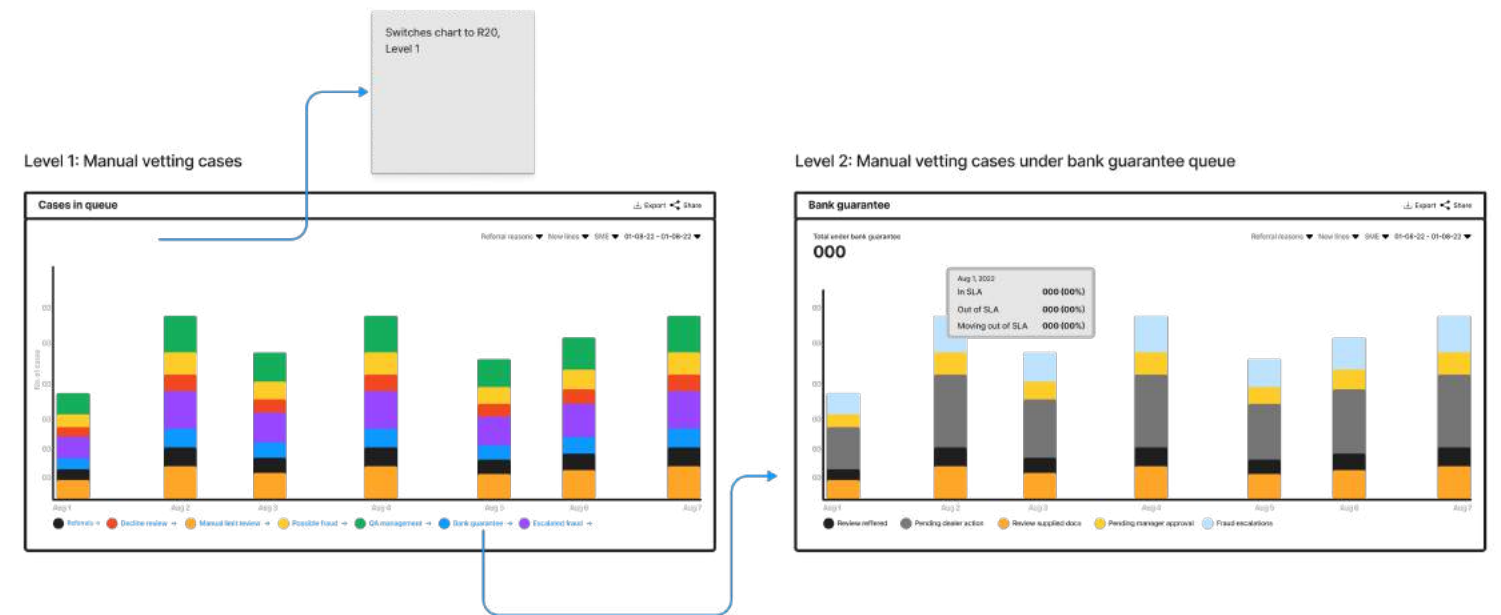
A dashboard titled 'Level 2 (Separate page)'. It features a central line graph showing 'Cancelled cases' over time from Aug 1 to Aug 7. Below the graph, there is a table with columns for 'Cancelled cases', 'Count', and 'Percentage'. The dashboard includes various filters and controls for data manipulation.



# Visualised each requirement to determine the optimal presentation for the data points

I sketched out visualisations for each requirement, determining the appropriate charts to use and showcasing how they would look.

Engaging the business team, we sought their approvals and refined the layouts based on their feedback.

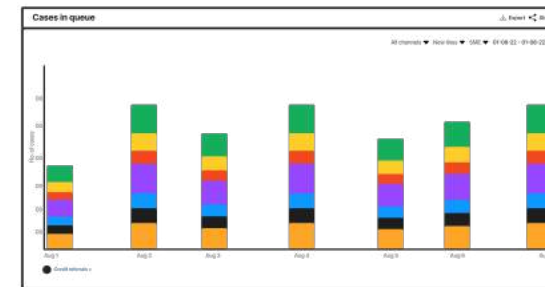


## DESIGN EXPLORATION

# Leveraged developer technologies to enhance collaboration and move faster

During one of the collaboration sessions with the development team, we learnt that they would be utilising ChartJS, an open-source JavaScript library for data visualisation, which supports a variety of chart types.

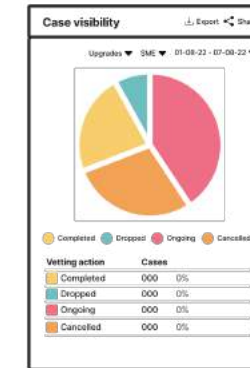
Recognising this as an opportunity to streamline the process, I recommended to the engineers which chart types to use for different data points on the dashboard.



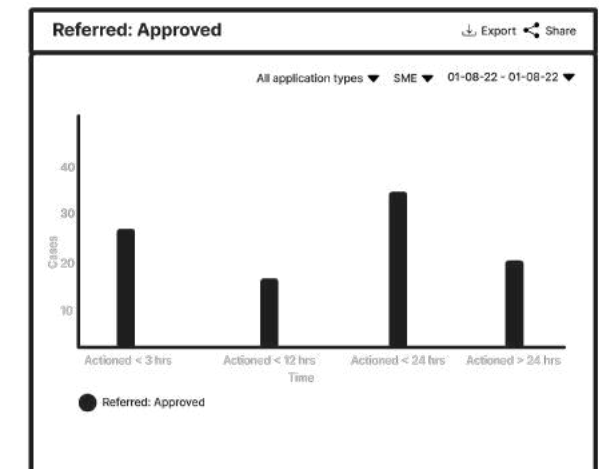
Stacked Bar Chart with Groups | Chart.js  
Open source HTML5 Charts for your website  
chartjs.org



Line Chart | Chart.js  
Open source HTML5 Charts for your website  
chartjs.org



Pie | Chart.js  
Open source HTML5 Charts for your website  
chartjs.org



Bar Chart | Chart.js  
Open source HTML5 Charts for your website  
chartjs.org

# Developed accessible colour palette for a cohesive visual experience

To ensure accessibility, I developed a WCAG 2 accessible colour palette specifically for the charts and provided guidelines on how to apply the colours consistently throughout the dashboard.

Additionally, I created styling guidelines for the different chart types, ensuring a cohesive and visually pleasing experience.



# Color palettes

The data visualisation color palette is designed to maximize accessibility and harmony within the dashboard for easy consumption and interpretation of data.

## Qualitative palettes

Qualitative palettes should be used when you want to distinguish discrete categories of data that do not have an inherent correlation.

The colors of this palette should be applied in sequence strictly as described below. The sequence is carefully curated to maximize contrast between neighboring colors to help with visual differentiation.

01. MTN Momo	0f6987	02. MTN Play	e12d6e	03. Sambuca	3c2314
04. Hot Cinnamon	da4c06	05. Jambalaya	75441b	06. Mine Shaft	323232
07. Ecstasy	a64e00	08. Bronze Yellow	845c02	09. Malachite	0f0b49
10. Zucchini	05552d	11. Tarawera	053241	12. Maroon Flush	be1e50
13. Plum	6c206c				

When the number of categories of data is under 5, you may choose to override the categorical sequence with one of the following alternatives.

### 1-color group

Option 1	Option 2	Option 3
MTN Momo	0f6987	MTN Play
Zucchini	05552d	Loulou

### 2-color group

Option 1	Option 2	Option 3
13. Tarawera	053241	Zucchini
MTN Momo	0f6987	Malachite
Option 4	Option 5	Option 6
Plum	6c206c	Malachite
Maroon Flush	be1e50	Hot Cinnamon

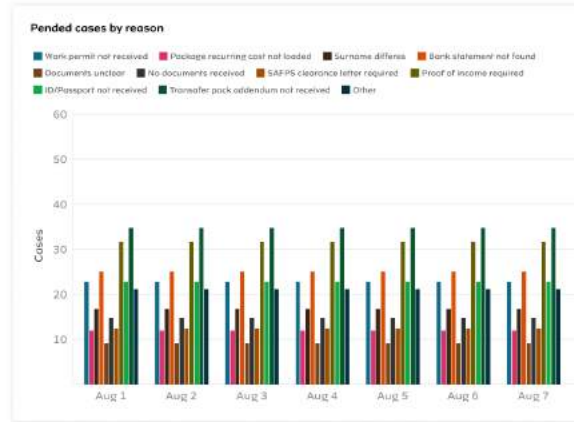
### 3-color group

Option 1	Option 2	Option 3
MTN Momo	0f6987	Jambalaya
MTN Play	e12d6e	Hot Cinnamon
Mine Shaft	323232	Tarawera
Option 4	Zucchini	05552d

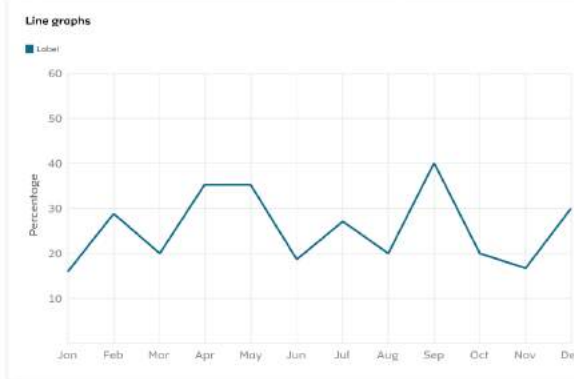
# Sample color application

The colors palette guide should be followed for a well-balanced outcome.

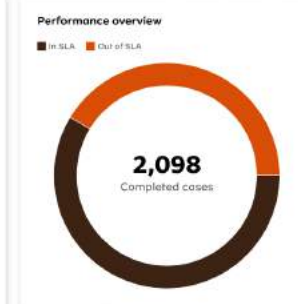
## Qualitative palettes



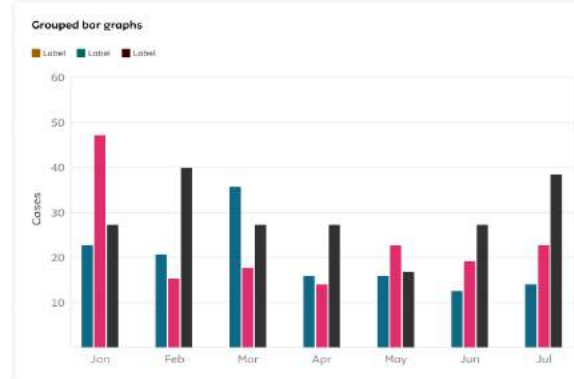
## 1-color group



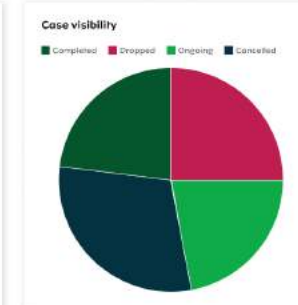
## 2-color group



## 3-color group



## 4-color group



# Comparisons

## Comparisons

### Bar chart

A bar chart provides a way of showing data values represented as vertical bars. It is sometimes used to show trend data, and the comparison of multiple data sets side by side.

Use bar graphs to compare different categories of data that are hierarchically equivalent.

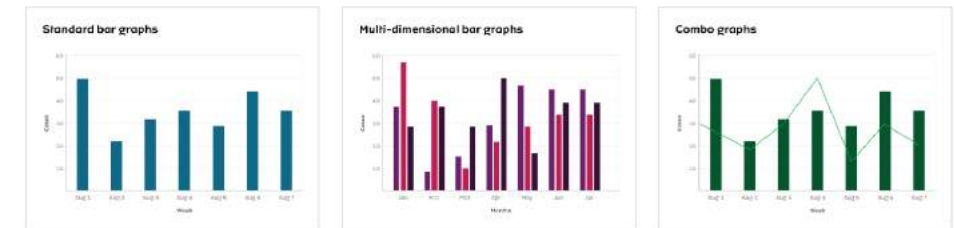
Use one color when charting the same type of metric.

### Specs

**Bar widths:** 32px, 24px, 16px, 8px, 6px, 4px depending on the density of bars

**Min gap between bars:** 1px

**Labels:** Include labels on the chart



## Trends

### Line charts

A line chart is a way of plotting data points on a line. Often, it is used to show trend data, or the comparison of two data sets.

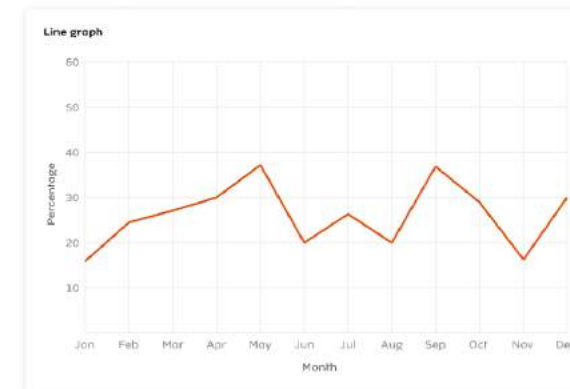
Line graphs are primarily used to show trends in time-based data (the x-axis is time based).

Since the majority of line charts can be incredibly complex, data points are optional and default line chart does not use them.

Use the color guidance to determine appropriate color pairings.

### Configurable specs

**Line weight:** 3px



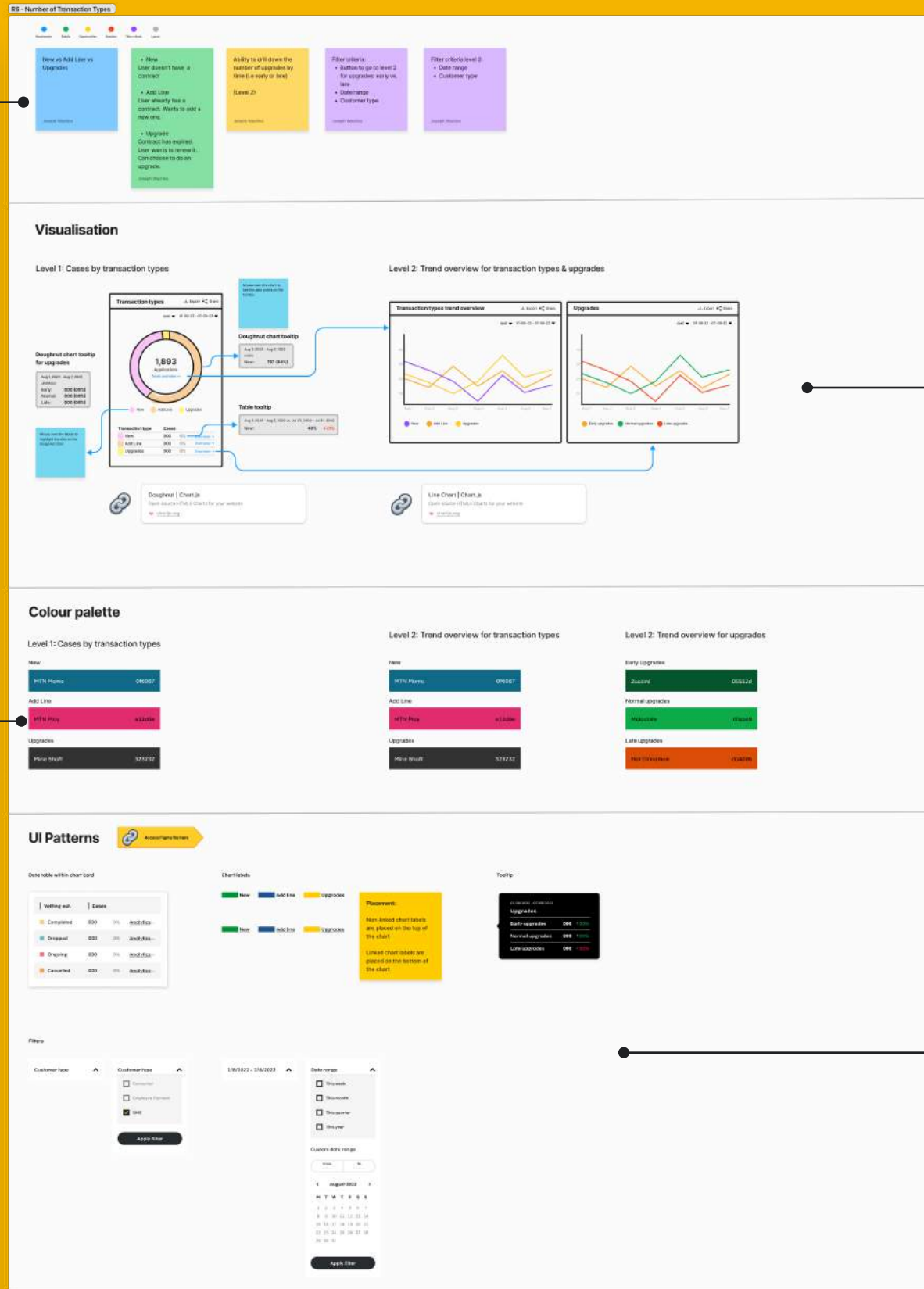
## Doughnut & Pie Charts

Pie and doughnut charts are divided into segments, the arc of each segment shows the proportional value of each piece of data.

They are excellent at showing the relational proportions between data.



Broke down requirements, identified opportunities and sort clarity.



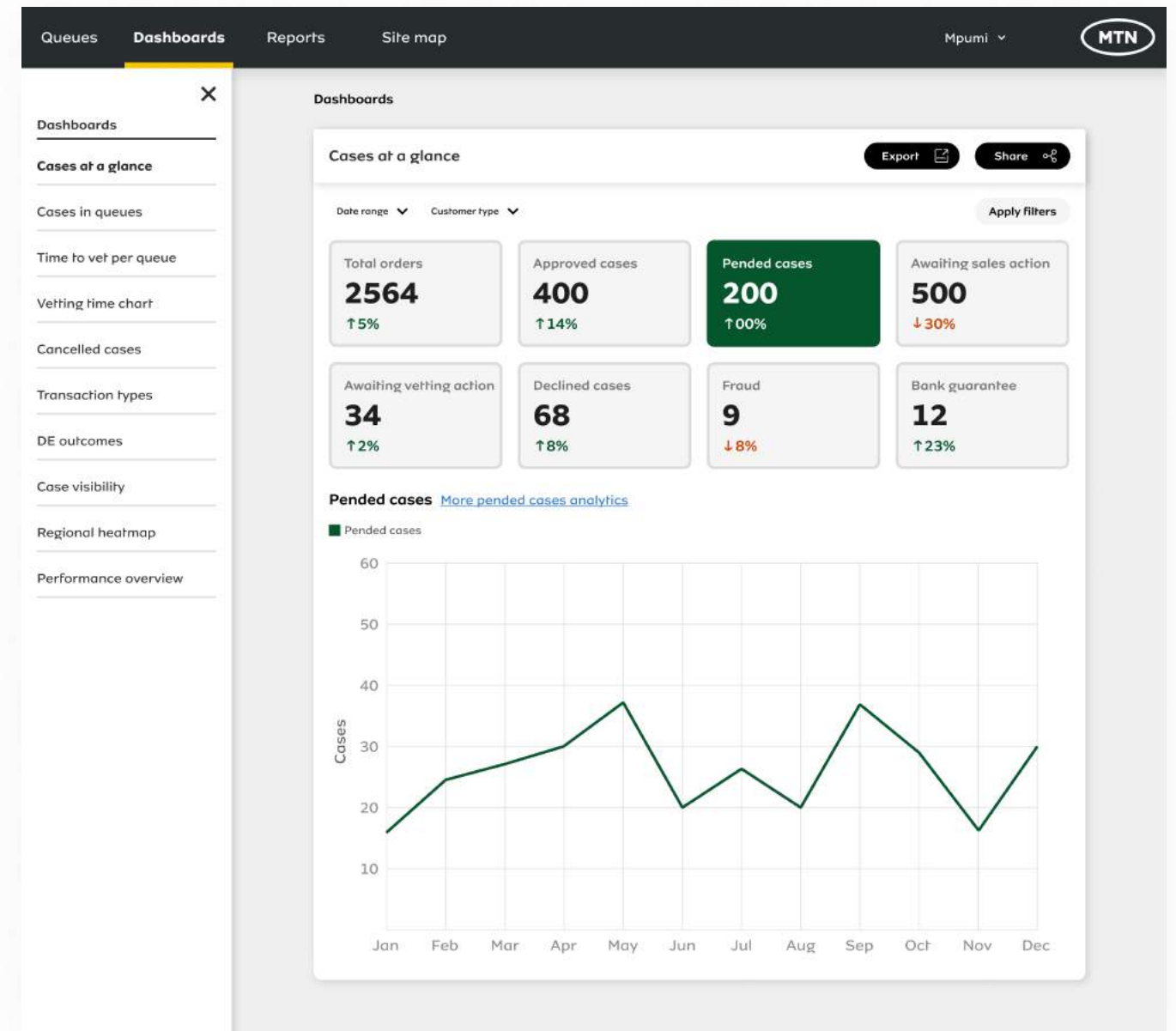
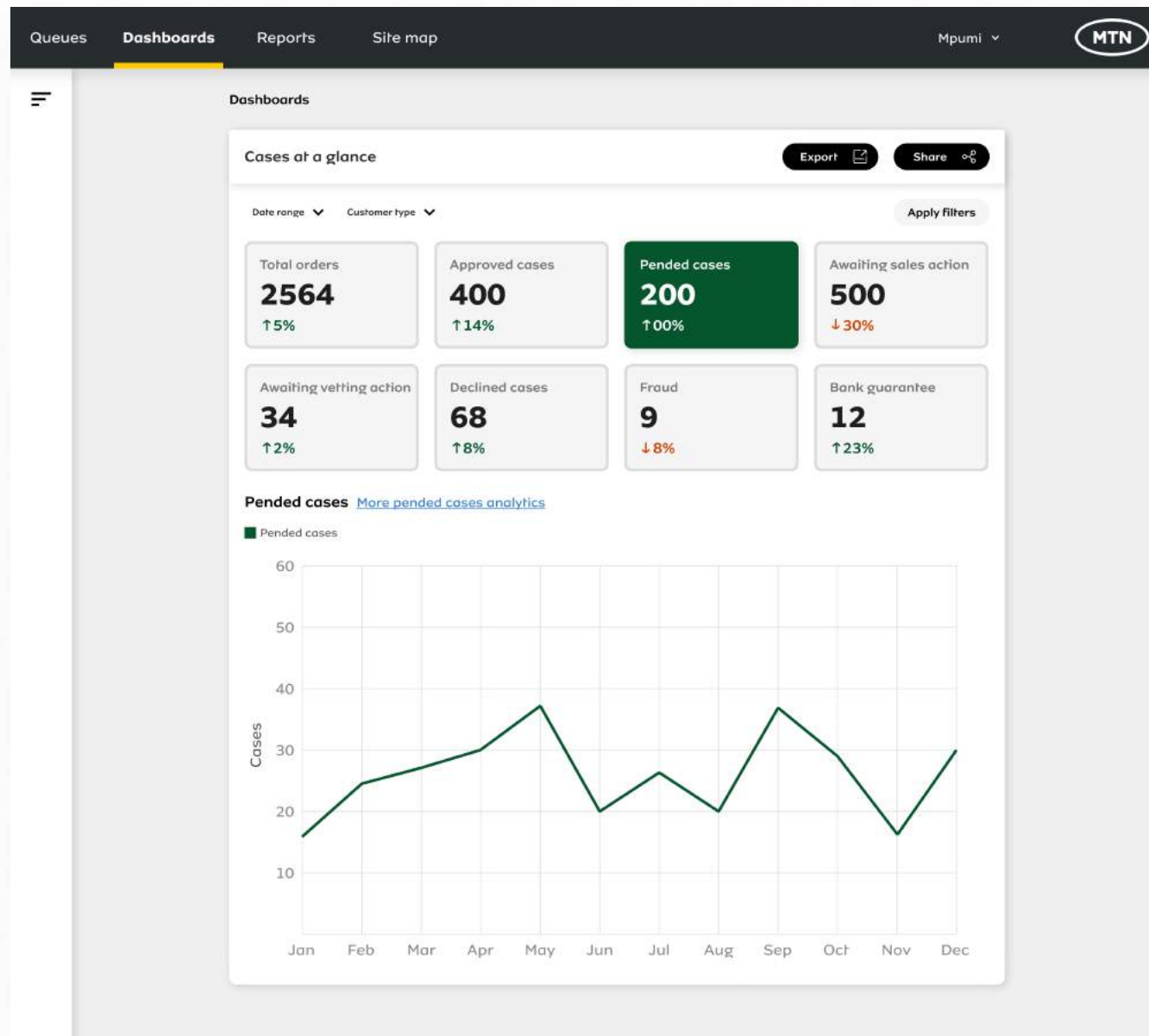
Visualised the data and provided recommendations for ChartJS for easy and fast implementation.

Identified ideal colour palette to represent the data points while keeping accessibility in mind.

Laid out the recommended UI patterns to be used from the design system and designed the patterns that didn't exist.

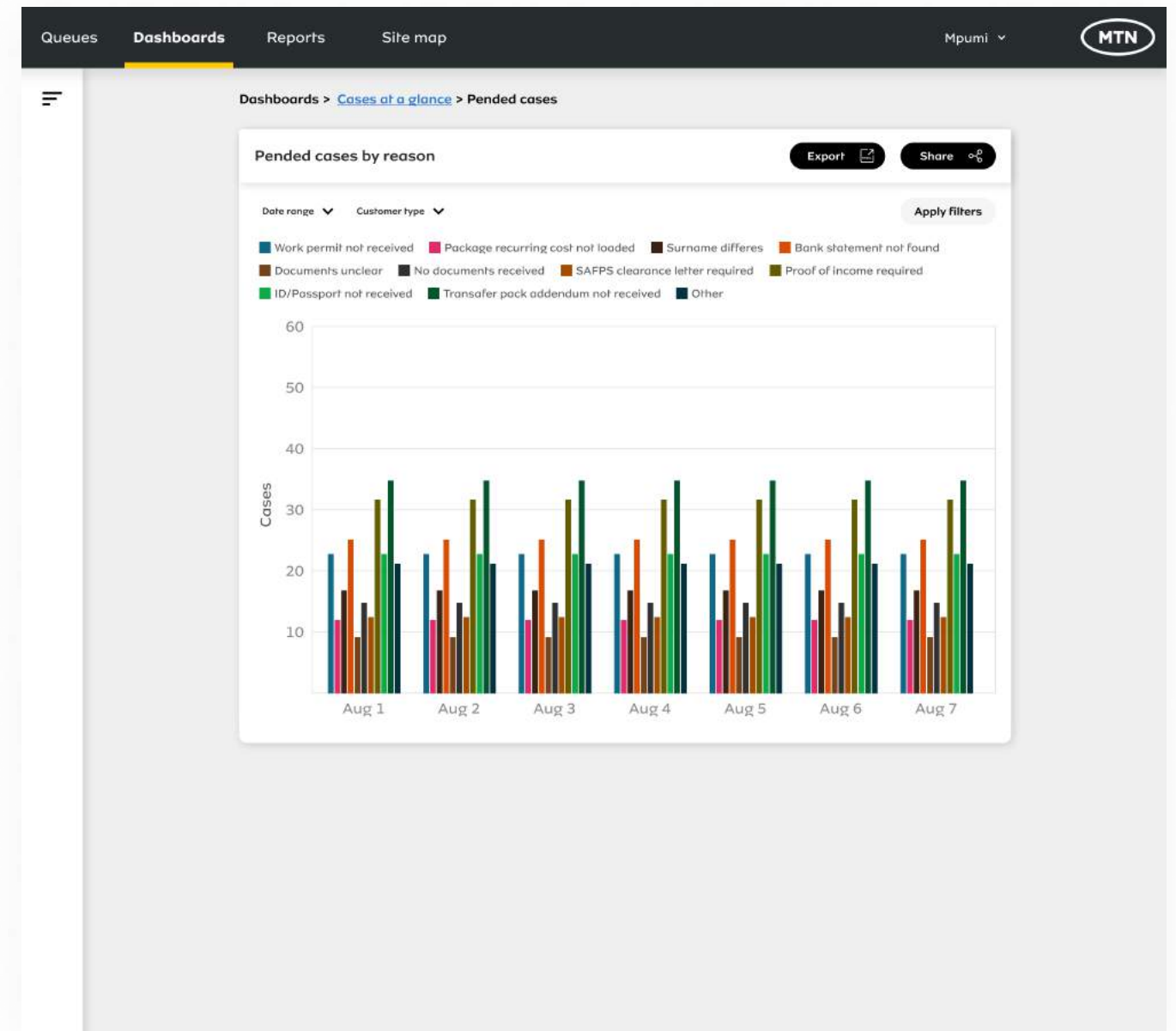
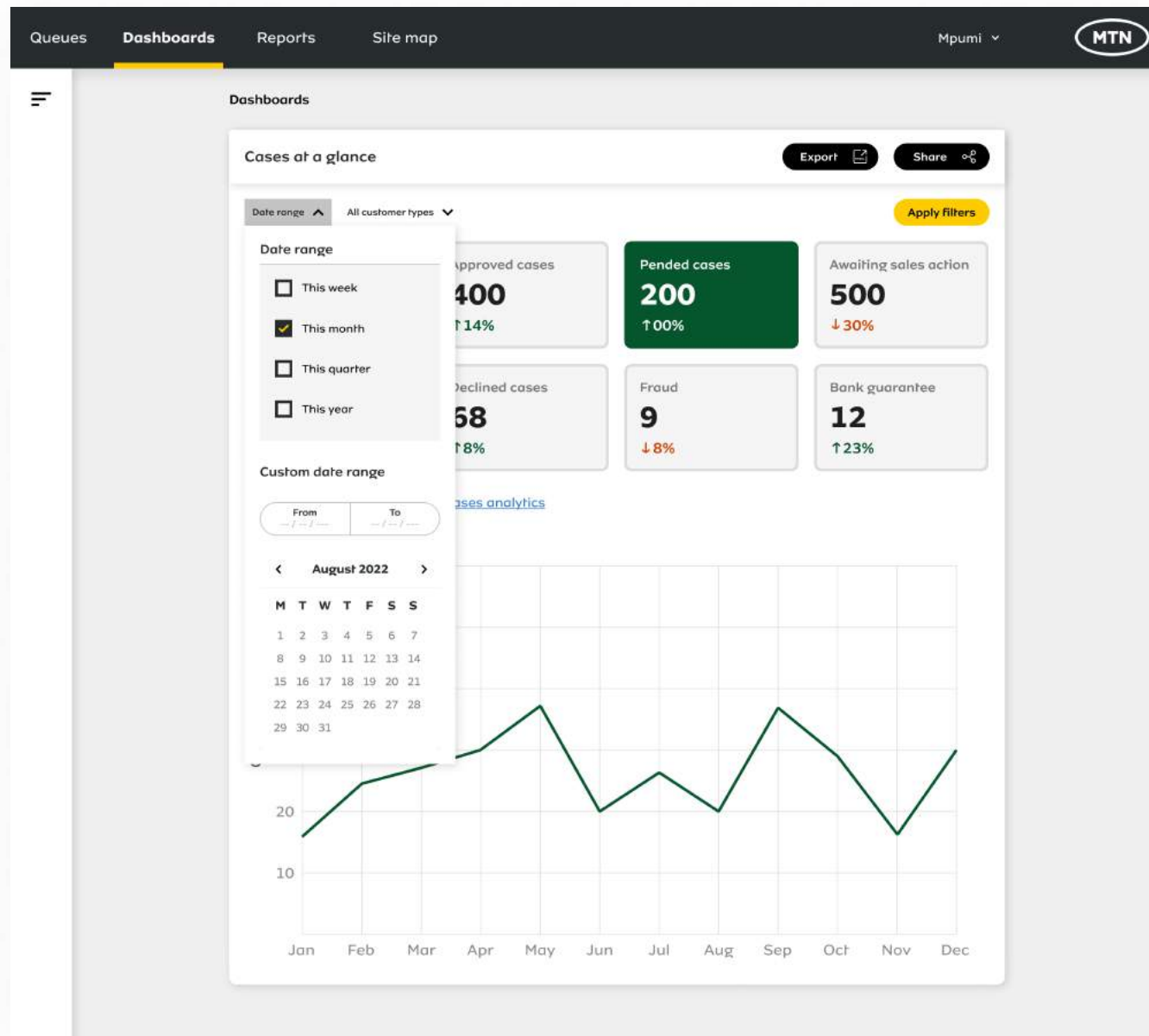
FINAL DESIGN

# The Dashboard



FINAL DESIGN

# The Dashboard



## COLLABORATION

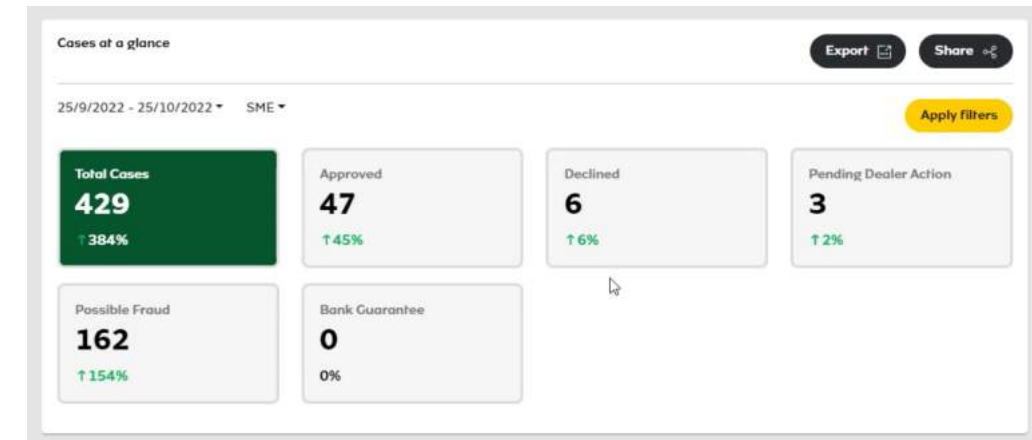
# Design Handoff

The design documentation that we put together helped guide the engineers through the implementation process.

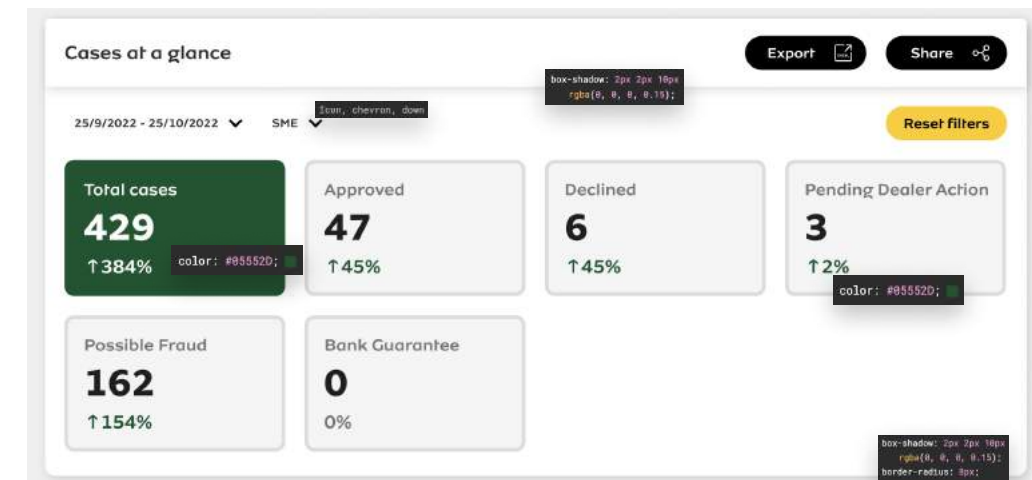
I worked closely with the engineers to ensure that the user interface design was implemented as intended.

The use of ChartJS ensured accurate data visualisation, while the accessible colour palette and style guidelines promoted a consistent and inclusive user experience.

### Implementation



### Handoff Review



## RESULTS

# Received recognition and praise for the approach and results

By prioritising user-centred design, breaking down the process into manageable phases, and leveraging existing technologies, we were able to meet the business requirements and exceed expectations in a limited timeframe.

The business team commended the approach, and I received recognition and praise for fostering a strong relationship with the engineering team, which enabled a smooth and swift execution of the project.

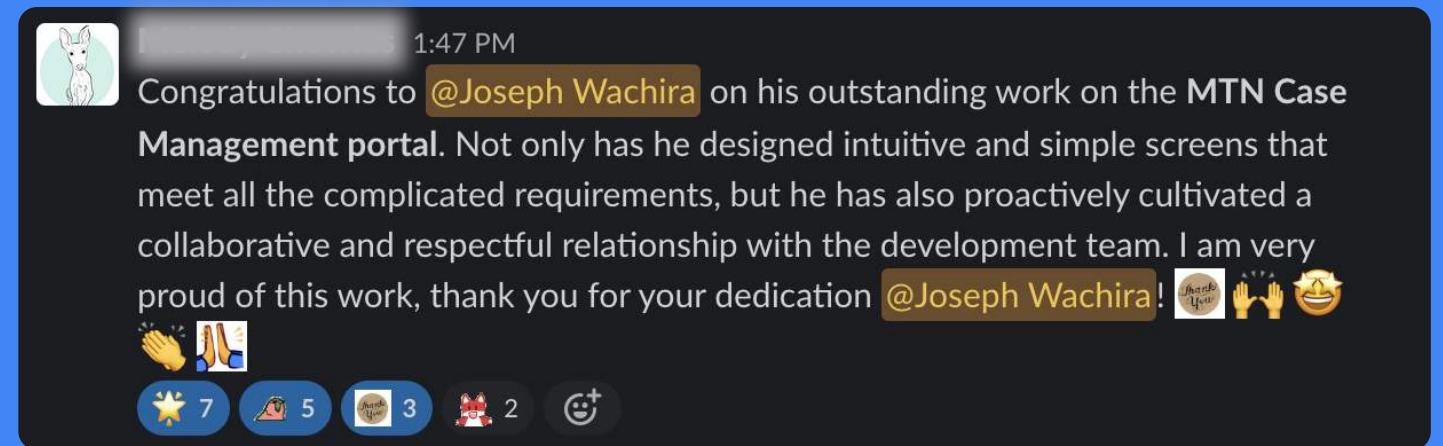


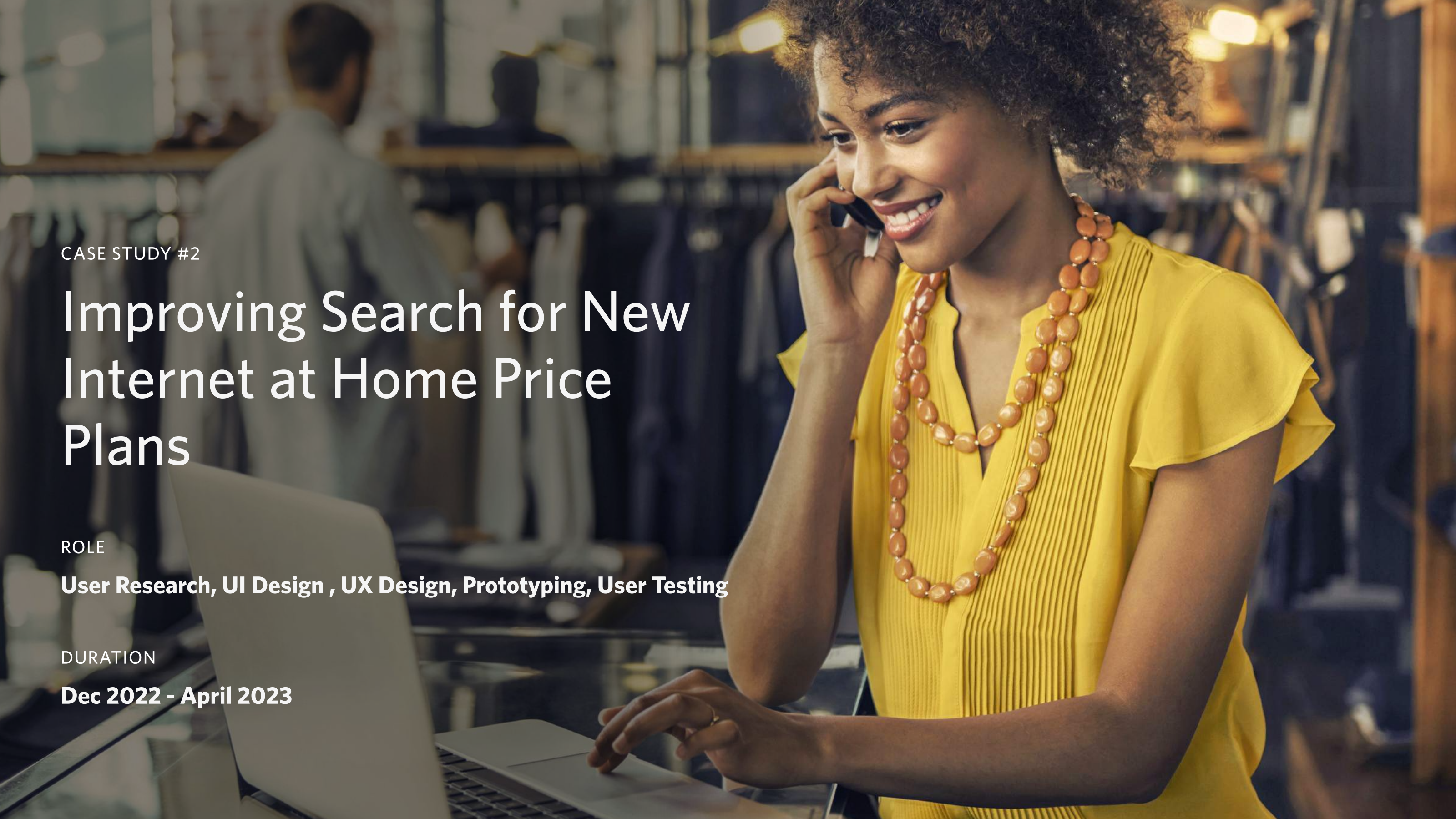
## CONCLUSION

# Ability to take on complex projects under tight deadlines and deliver exceptional results.

This case study demonstrates my ability to take on complex projects under tight deadlines and deliver exceptional results.

The insights dashboard serves as a testament to my expertise in UX design, rapid prototyping, and successful collaboration with cross-functional teams.



A woman with curly hair, wearing a bright yellow top and a matching necklace, is smiling while talking on a mobile phone. She is sitting at a desk with a laptop open in front of her. The background is a clothing store with racks of clothes and other people in the distance.

CASE STUDY #2

# Improving Search for New Internet at Home Price Plans

ROLE

**User Research, UI Design, UX Design, Prototyping, User Testing**

DURATION

**Dec 2022 - April 2023**

## OVERVIEW

# Introduction of new price plans

In 2019, MTN introduced the Residential Segment with the strategic intent to win the Home Broadband market and by doing so, diversify MTN's mix of products and services.

As the market evolved with increased competitor activity and tough economic conditions resulting from COVID19 pandemic, MTN introduced new Residential price plans to stay competitive and offer better value aiming to entice consumers to consider MTN's Home offerings during their buying process.





OPPORTUNITY

# Make the new network-agnostic uncapped plans easy to understand and sell to customers

The challenge and opportunity for this project was to introduce uncapped plans that are network agnostic, easy to understand and sell on a month-to-month basis by improving the deal search and selection process.

Plan Name	Speed	Price (PM)	Features
HOME INTERNET STARTER	10Mbps	FROM R249	Free to use router. Month-to-month. No contract. Cancel anytime.
HOME INTERNET PRO	20Mbps	FROM R399	Free to use router. Month-to-month. No contract. Cancel anytime.
HOME INTERNET PREMIUM	35Mbps	FROM R499	Free to use router. Month-to-month. No contract. Cancel anytime.
HOME INTERNET ULTRA	60Mbps	FROM R699	Free to use router. Month-to-month. No contract. Cancel anytime.
HOME INTERNET INFINITE	MaxSpeed	FROM R999	Free to use router. Month-to-month. No contract. Cancel anytime.

## GOALS

# What do we want to achieve?



### Increase sales

Increase uptake of the new uncapped home internet plans and grow sales across MTN Branded Retail Channels.

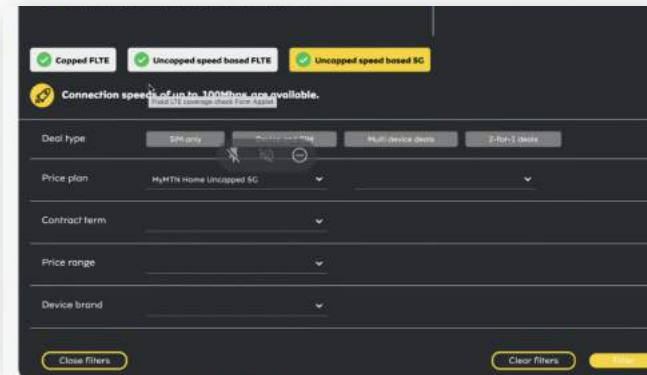


### Serve customers faster

Empower the store agents to serve customers faster while offering the right data plans that suites the customer needs.

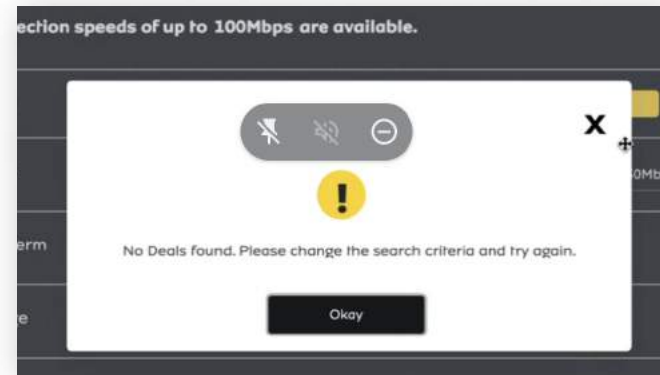
## RESEARCH

# How do agents feel about the search filter for deals?



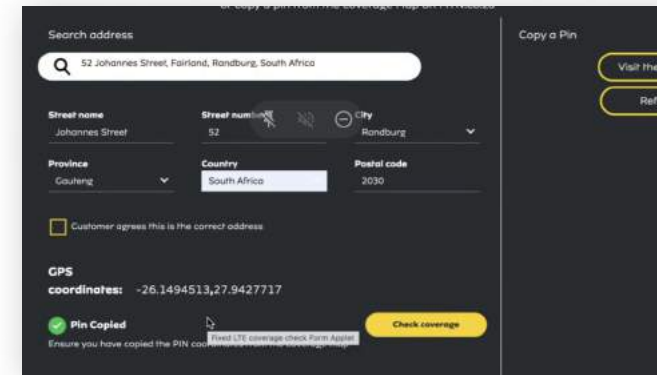
### Long and Tedious

Agents have a hard time inputting all the variables needed to display the deals.



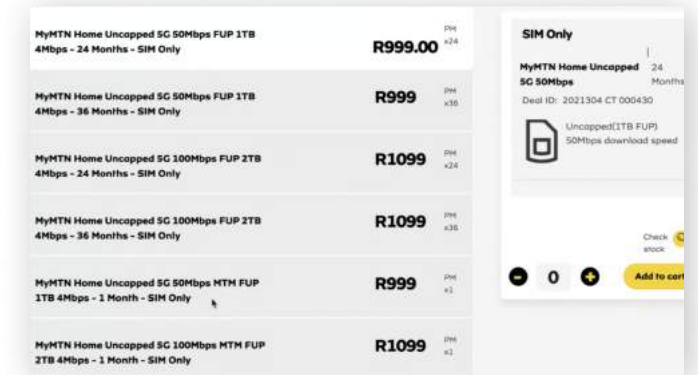
### Learning Curve

Agents levels of understanding about how the search filter works varied across board.



### Unclear

It was not clear how searching for address worked as they had to manually input the address on the form below the search field.



### Fair Use Policy

It is not easy to remember the deals Fair Use Policy (FUP) so as to communicate to customer before filtering.

## RESEARCH

# Proposed Solution

Introduce a new, improved search filter for our owned and branded retail channels that empowers the agents to sell the new simplified MyMTN Home plans and easily upsell other available coverage options to the customers.

## Before

- 1 How does the customer prefer to be connected?
- 2 Fixed Connection
- 3 Where does the customer want to be connected?
- 4 Has the customer confirmed the address?
- 5 Verify the address
- 6 Check available coverage
- 7 What deal type does the customer prefer?
- 8 How long does the customer want the contract to be?
- 9 The customer's budget is within which the price range?
- 10 What type of device does the customer want?

## After

- 1 How does the customer prefer to be connected?
- 2 Fixed Connection
- 3 Where does the customer want to be connected?
- 4 Check available coverage
- 5 What connection speed does the customer want?

**NOTE:** The steps indicate the process through which the agent undertakes before they are presented with the available deal plans to sell to the customer.

# Design Principles

## Educate at the right moment

We need to ensure that product education is done in a timely and effective manner.

Agents should have very clear information to help customers make informed decisions.

## Transparency builds trust

It's imperative that we are empathetic and understanding of our agents.

It's our responsibility to be clear and transparent about the data retrieval process, consent, and data security.

## Empowering

Drivers need to be confident on how and when to pay. Payment options should be convenient and informative.

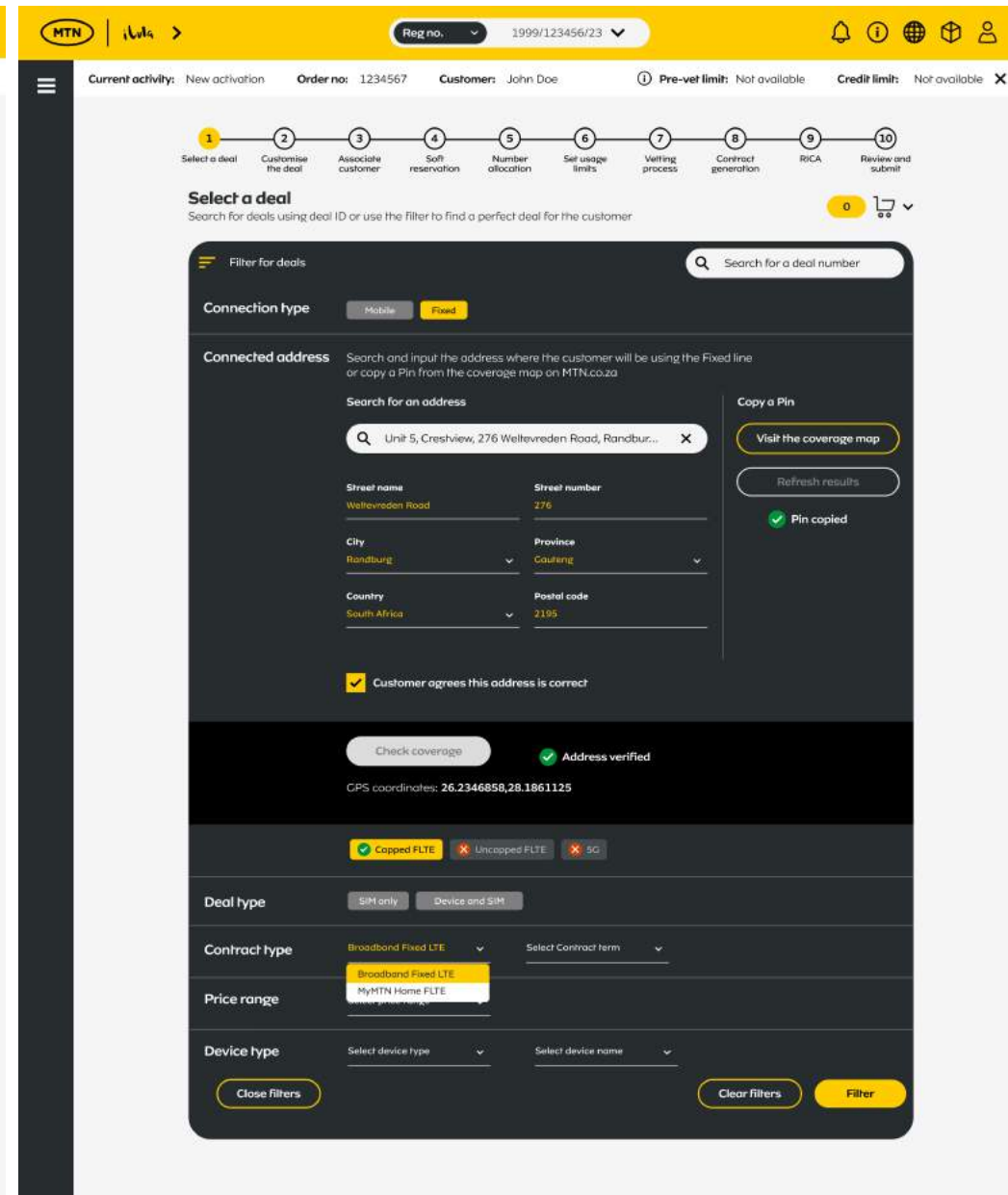
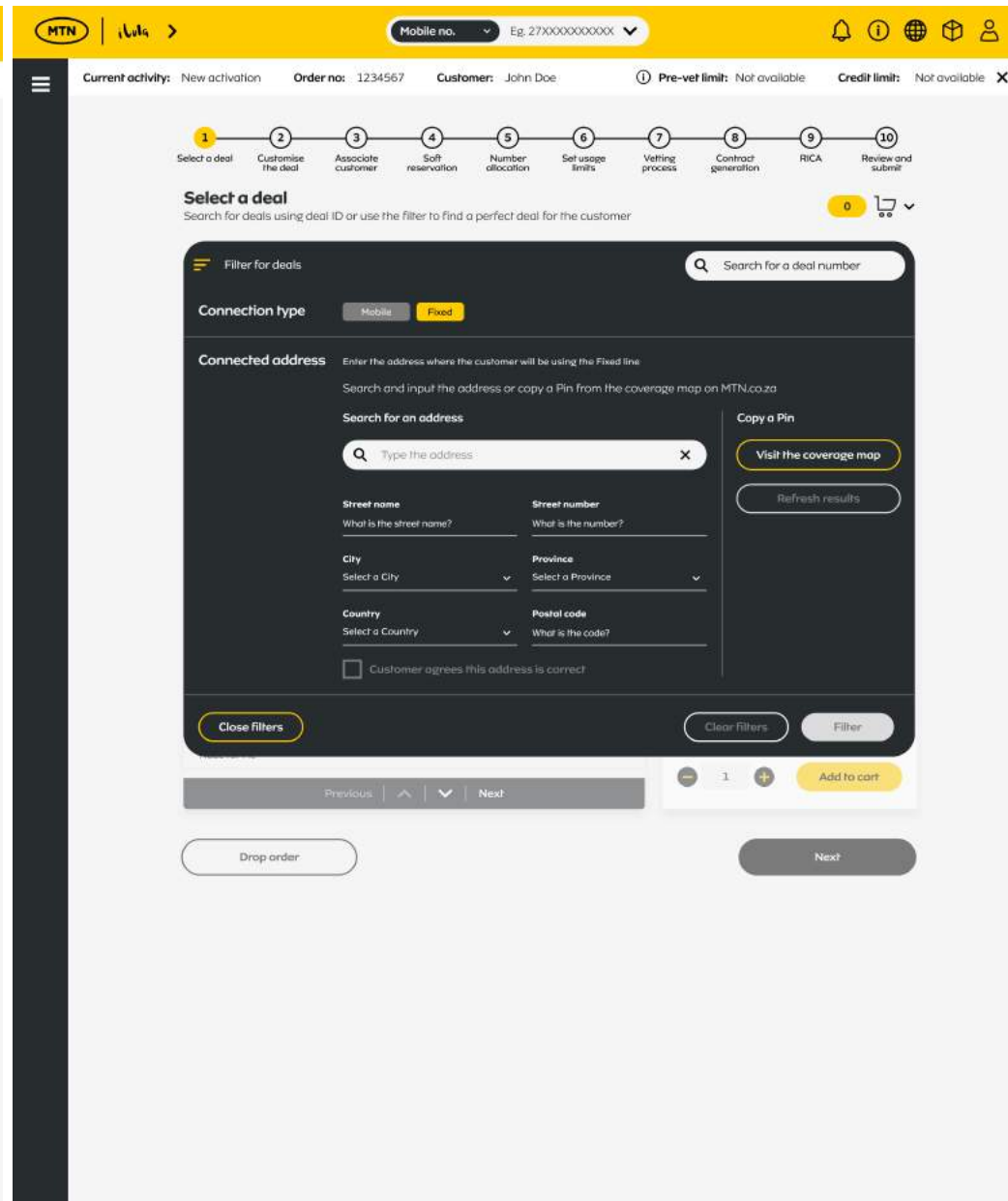
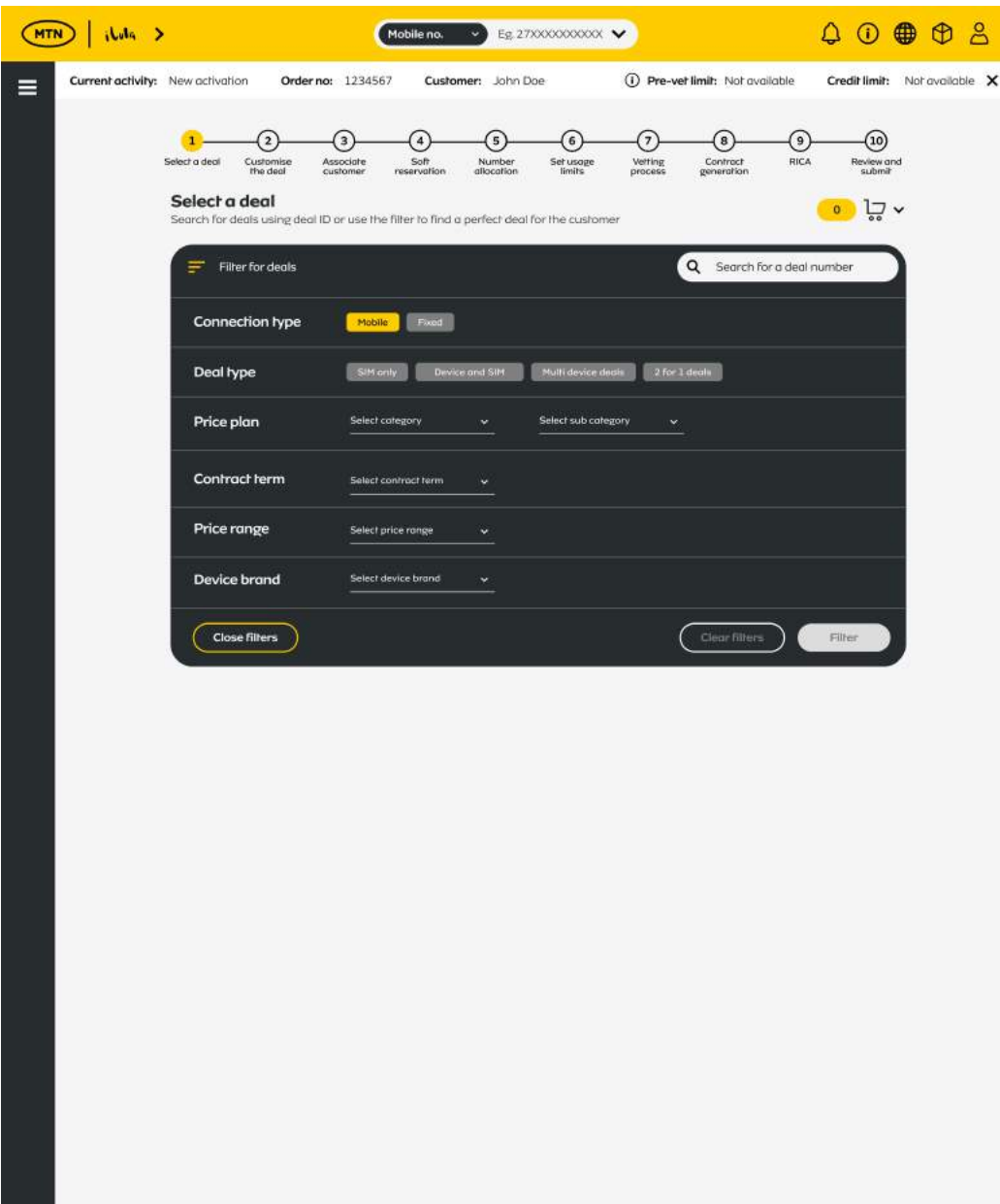
We should accommodate different customer types and payment methods, allowing for manual entry of banking details when necessary.

# How does the deal search filter look like?

FILTERING MOBILE DEALS

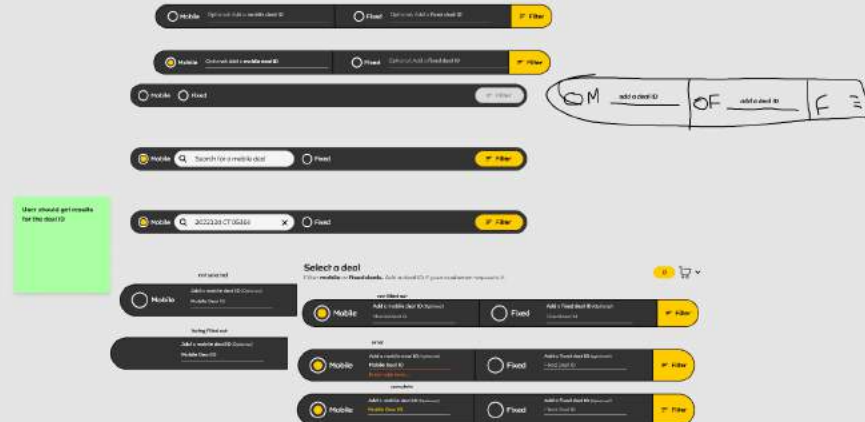
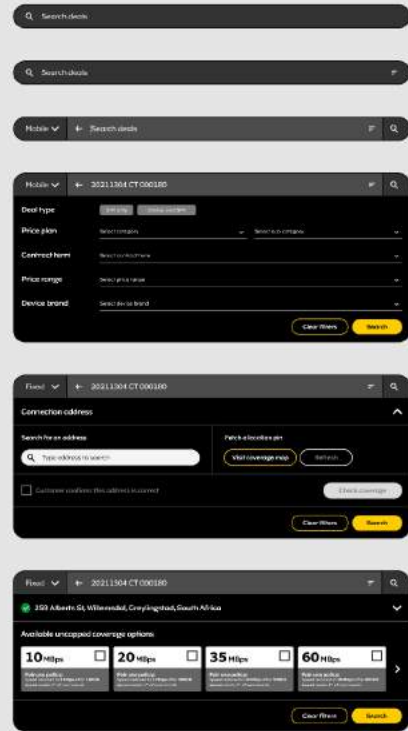
FILTERING FIXED DEALS

FILTERING FIXED DEALS

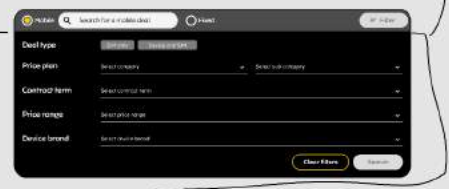
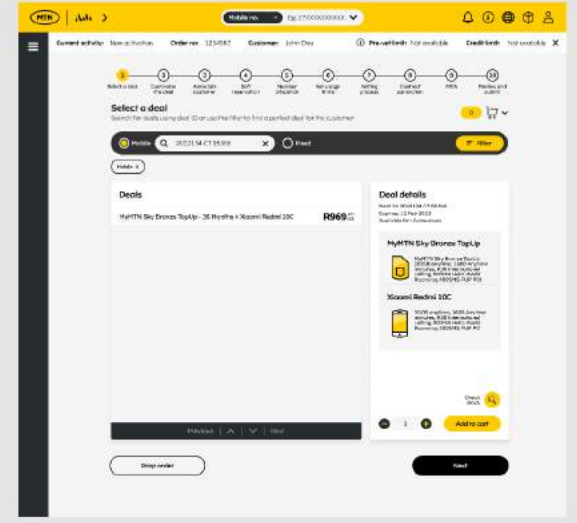


## DESIGN EXPLORATION

# Exploring the visual design for the deal search component

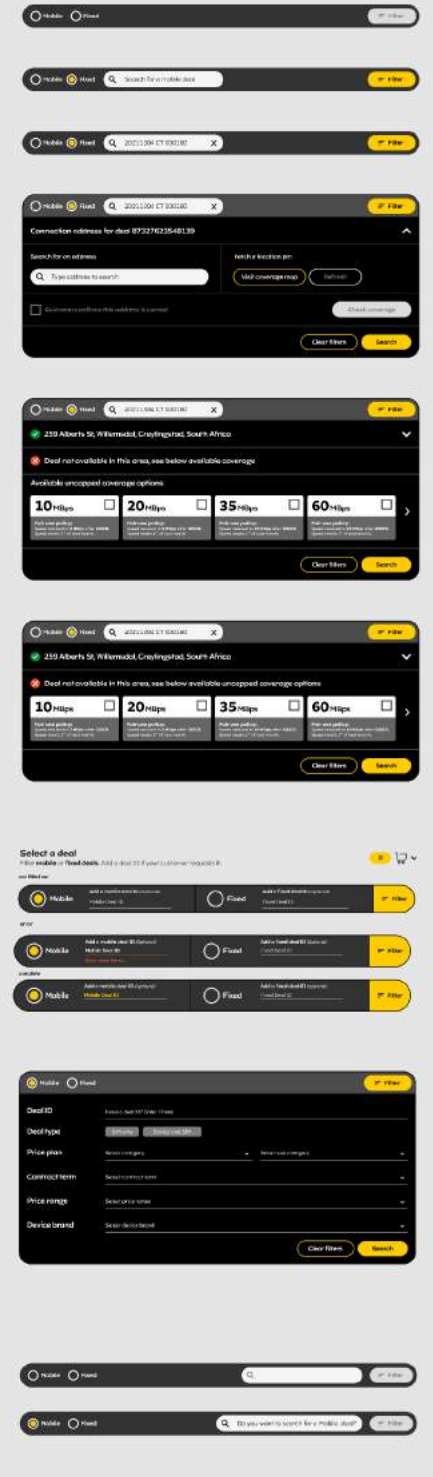


Users should get results for the deal ID

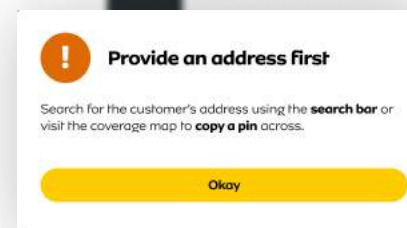
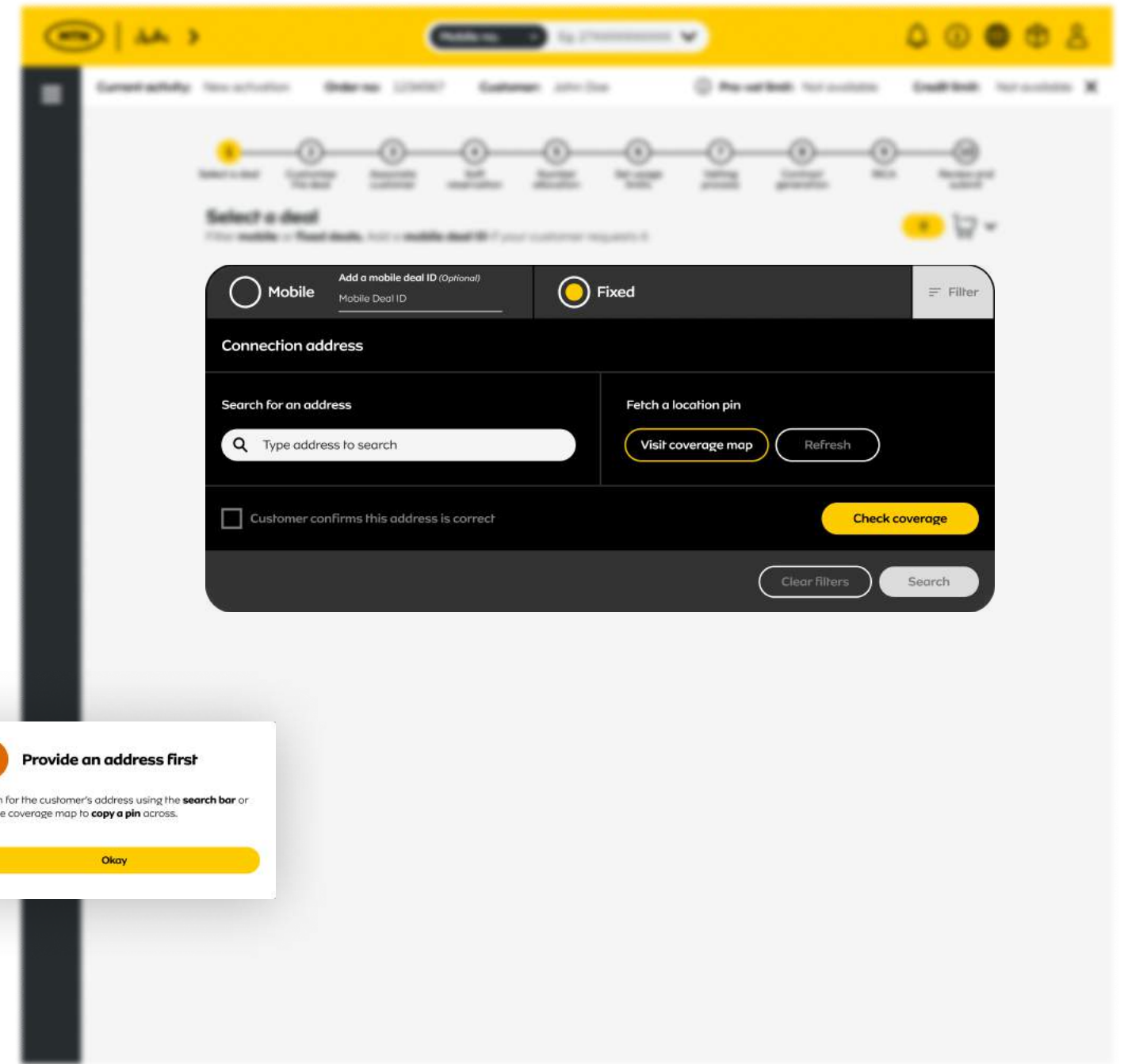
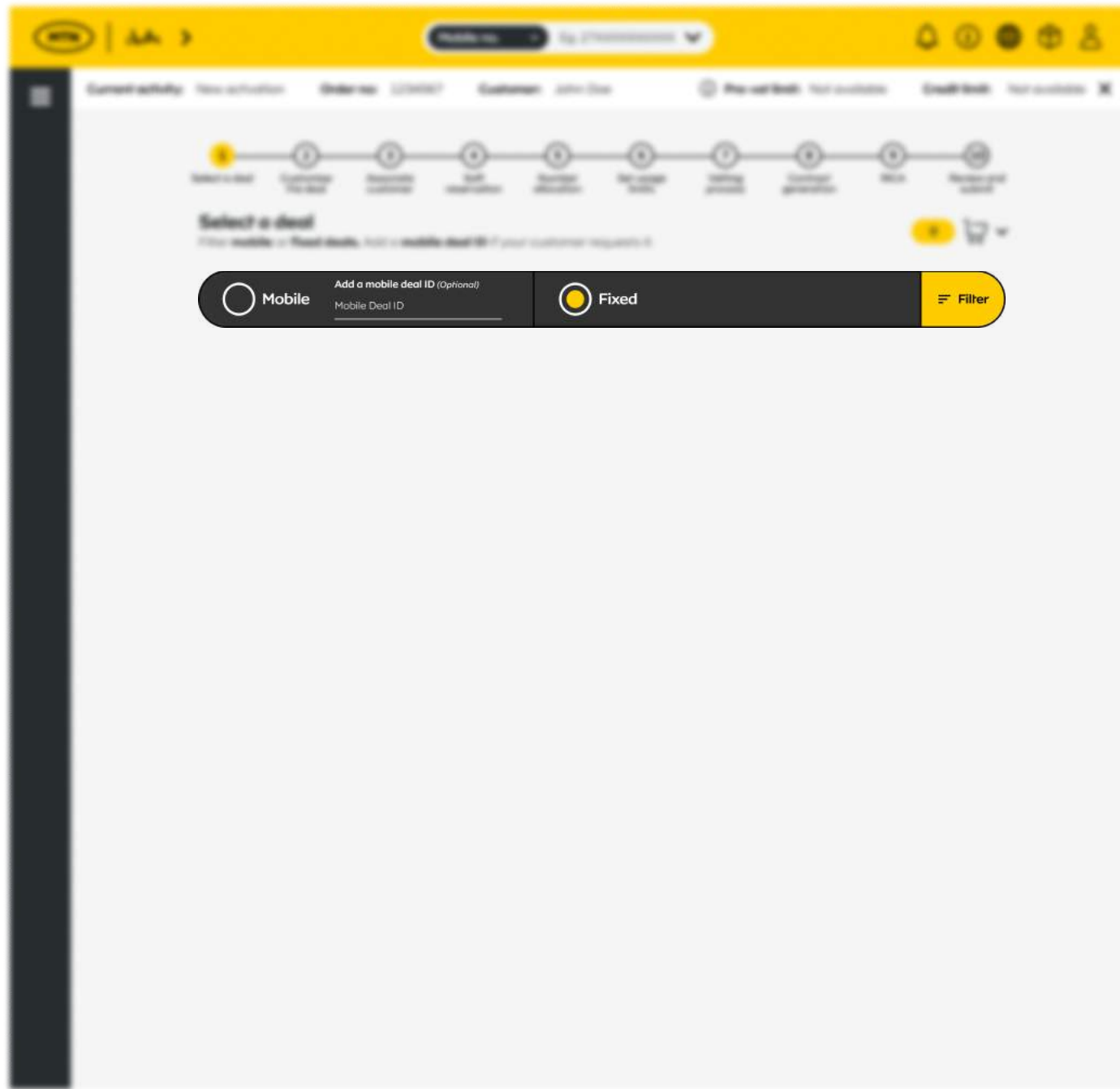


Upon clicking the Filter button, the user gets results for that particular deal ID

This should be the case even if the user has already specified any of the filters in the panel (this is a possibility)

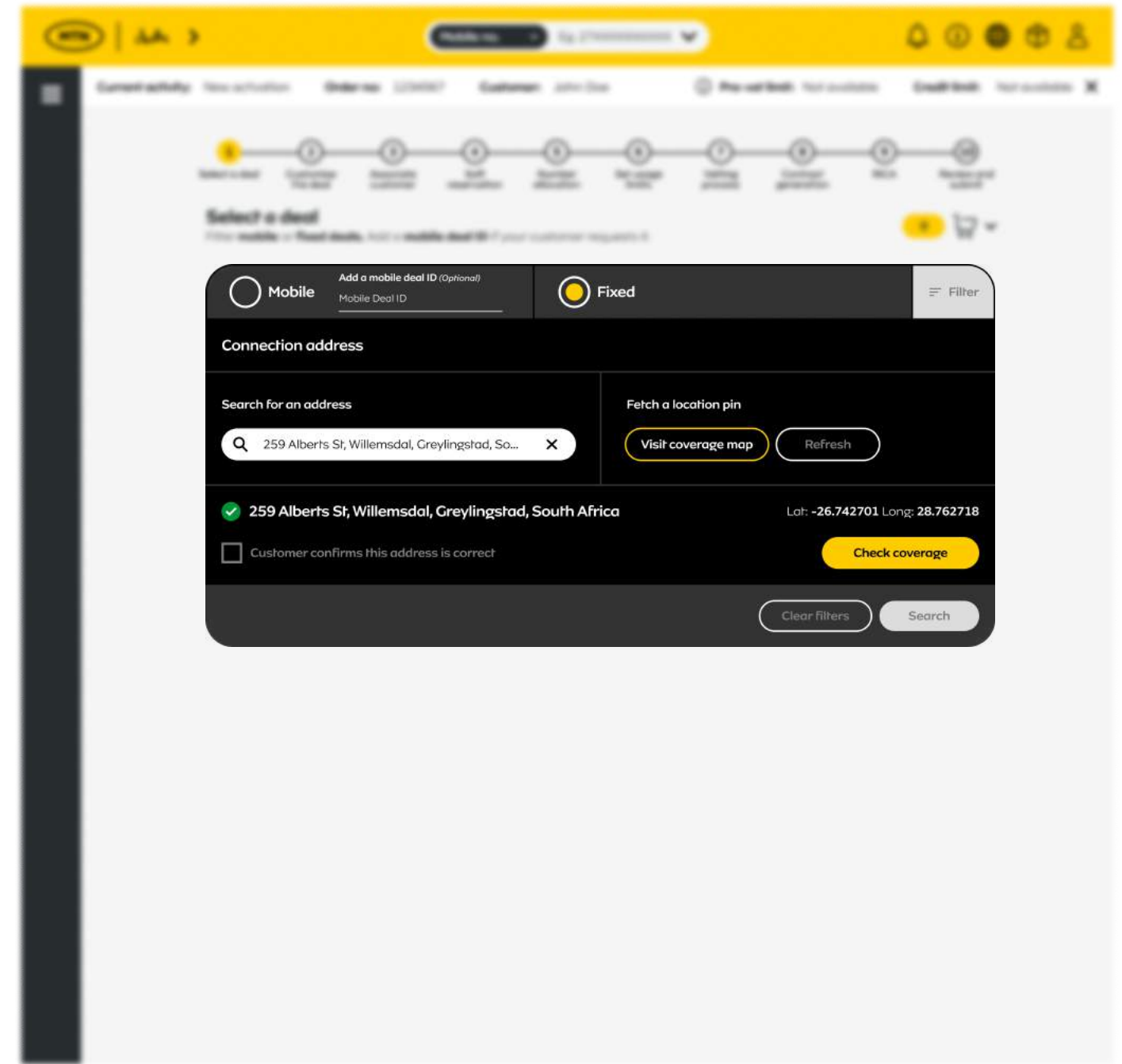
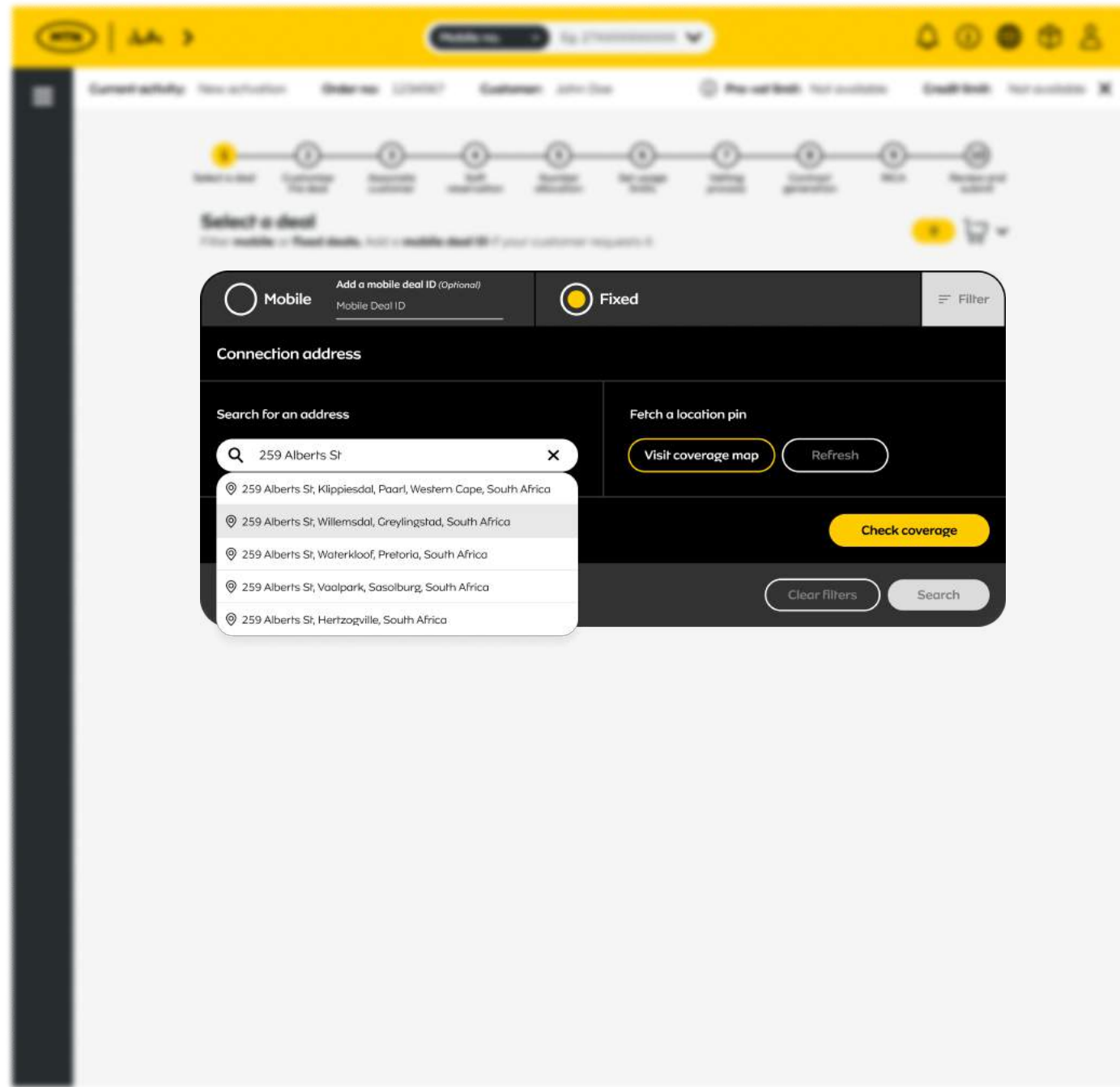


# Fixed deal search filter 1/3

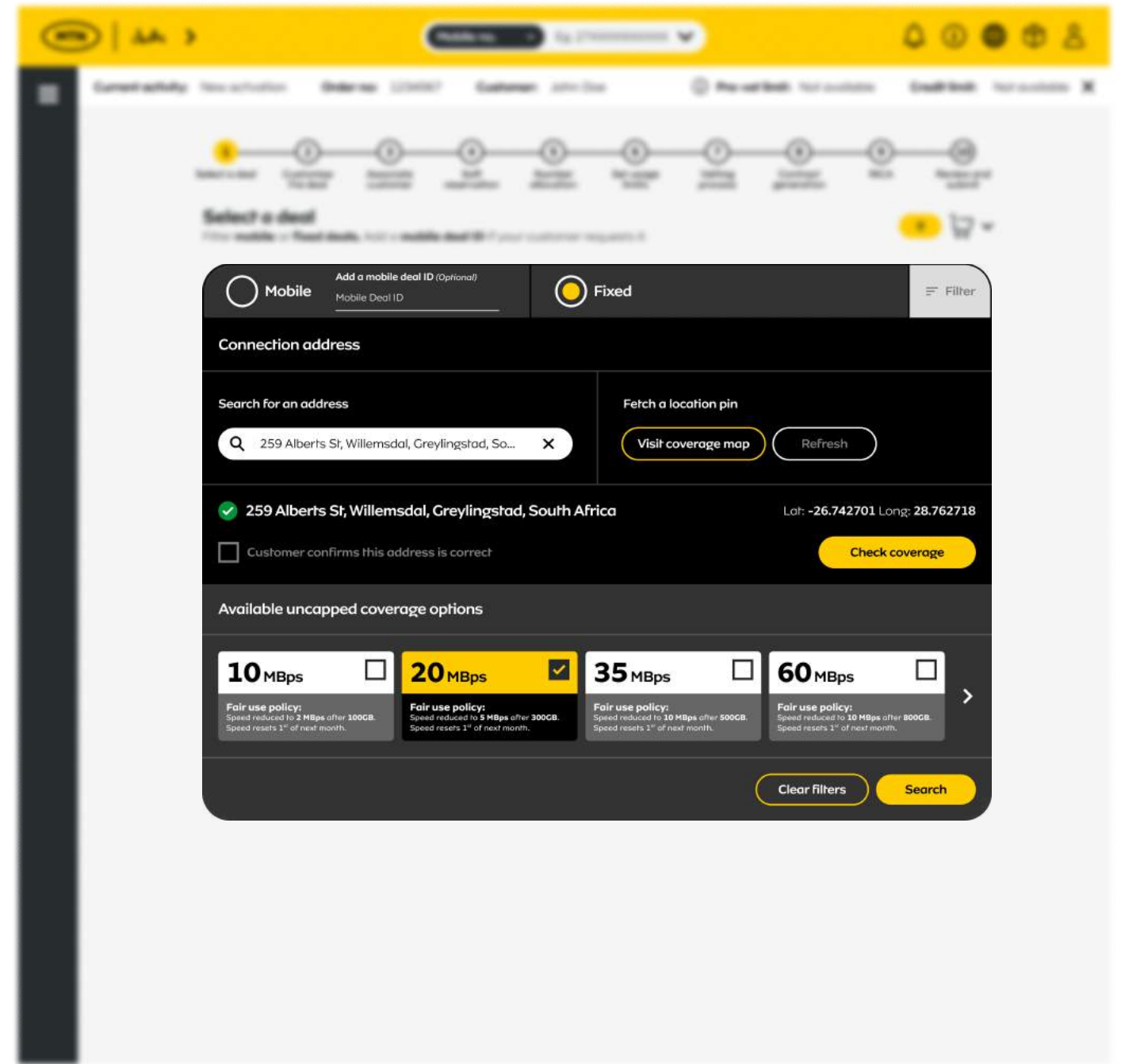
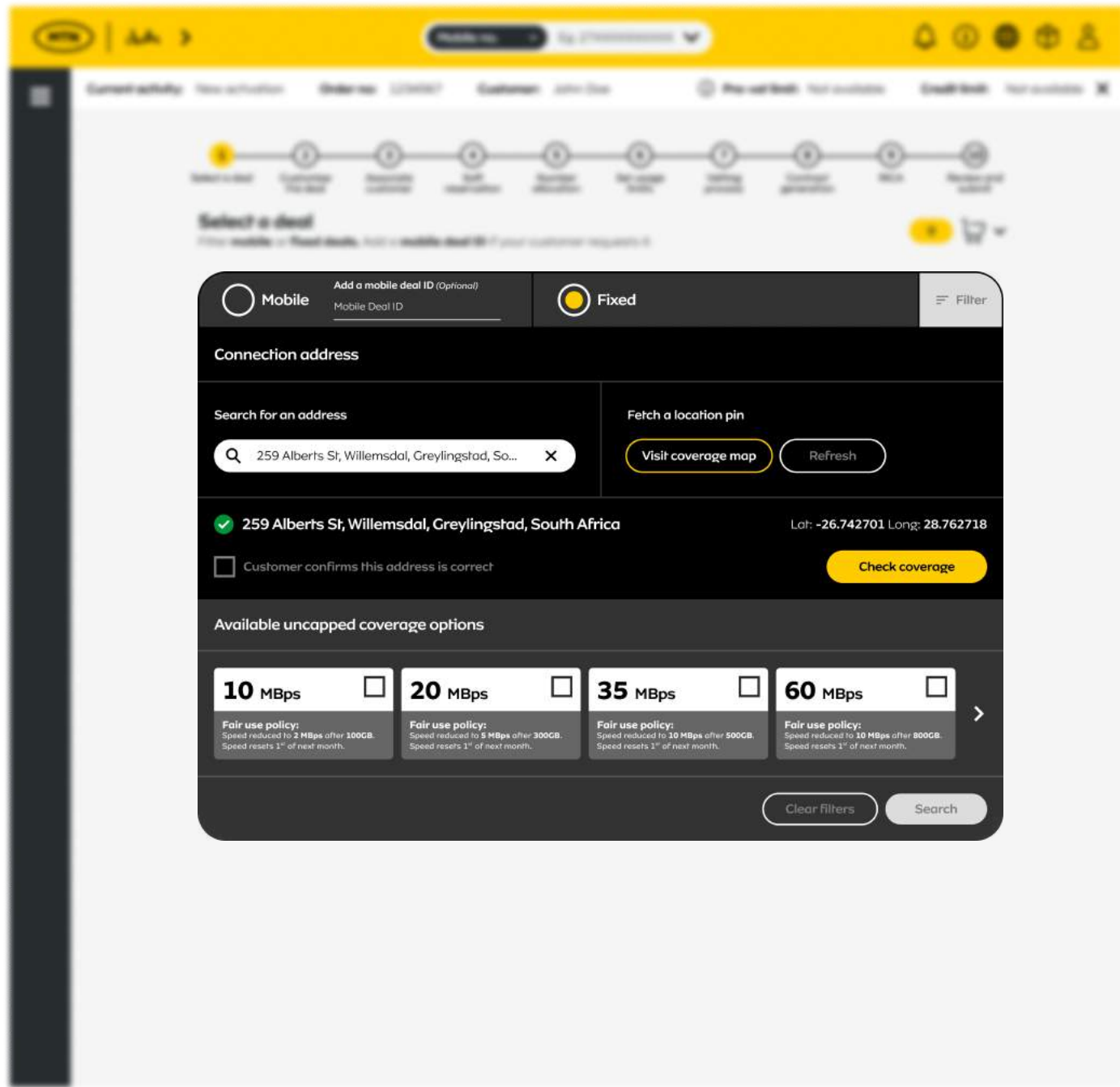




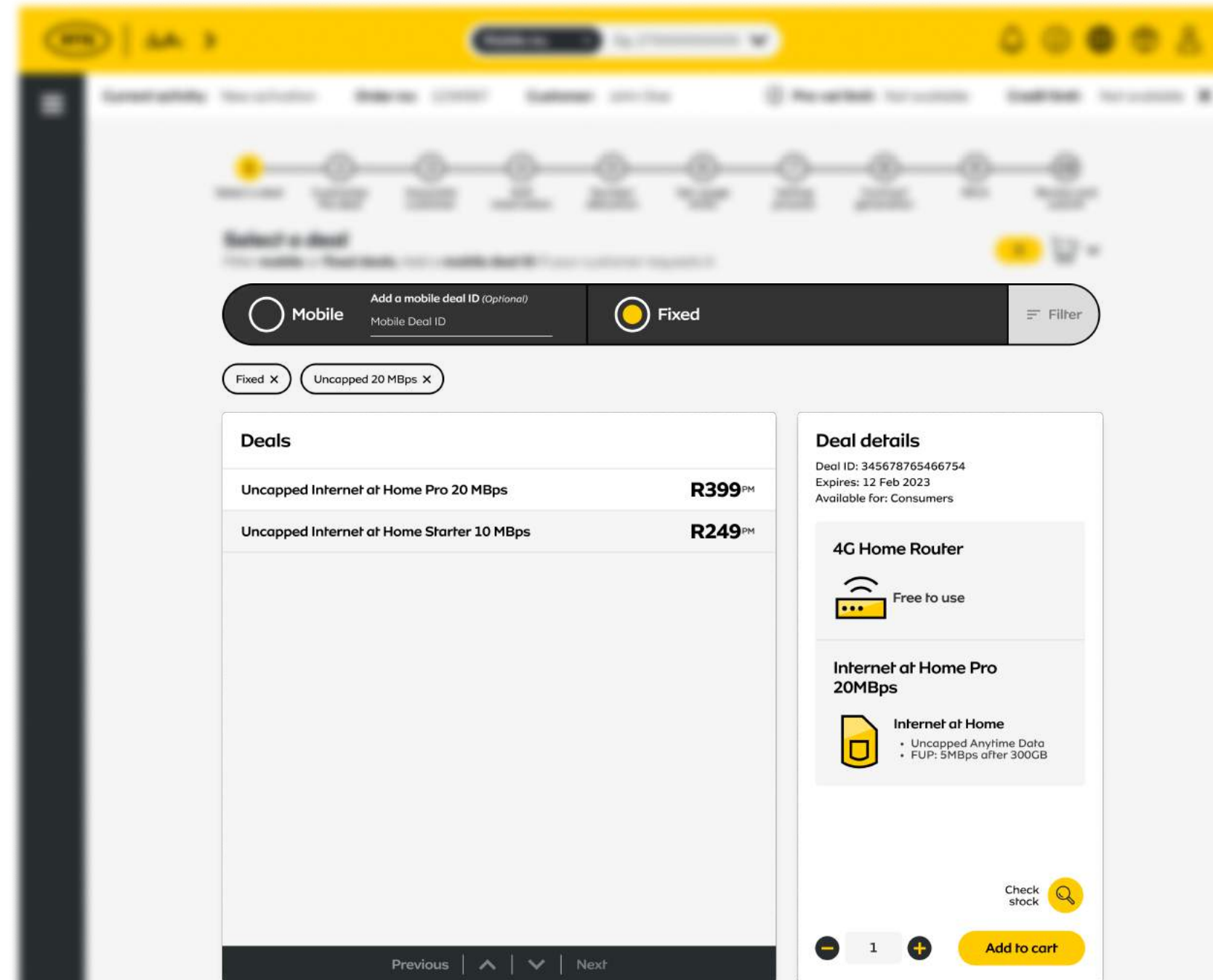
# Fixed deal search filter 2/3



# Fixed deal search filter 3/3



# Fixed deal search results



RESULTS

# Business impact

29%

INCREASE IN SALES

Branded stores recorded an increase in the uptake of new home plans

53%

FASTER

Agents served customers faster using the new improved search filter.

96%

AGENT SATISFACTION

Agents were happy about the new solution.

*NOTE:* Data within the first month of beta launch compared to previous month

CHAPTER THREE

# Final Pitch

ABOUT ME

# What sets me apart

I care about the end-to-end experience

I think about the whole journey. You'll often find me collaborating with other disciplines to uncover opportunities or strategic initiatives.

My background helps me build empathy

Having started as a frontend developer, designed for emerging markets, and worked with global teams, I am able to build empathy and craft relevant experiences across the product lifecycle.

I'm committed and able to think in the long term

Creating durable, sustainable solutions often requires thinking in the long term and betting on many unknown paths. This perspective helps inform my decision making.

# Asante!

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