



**LEARNOVATE**

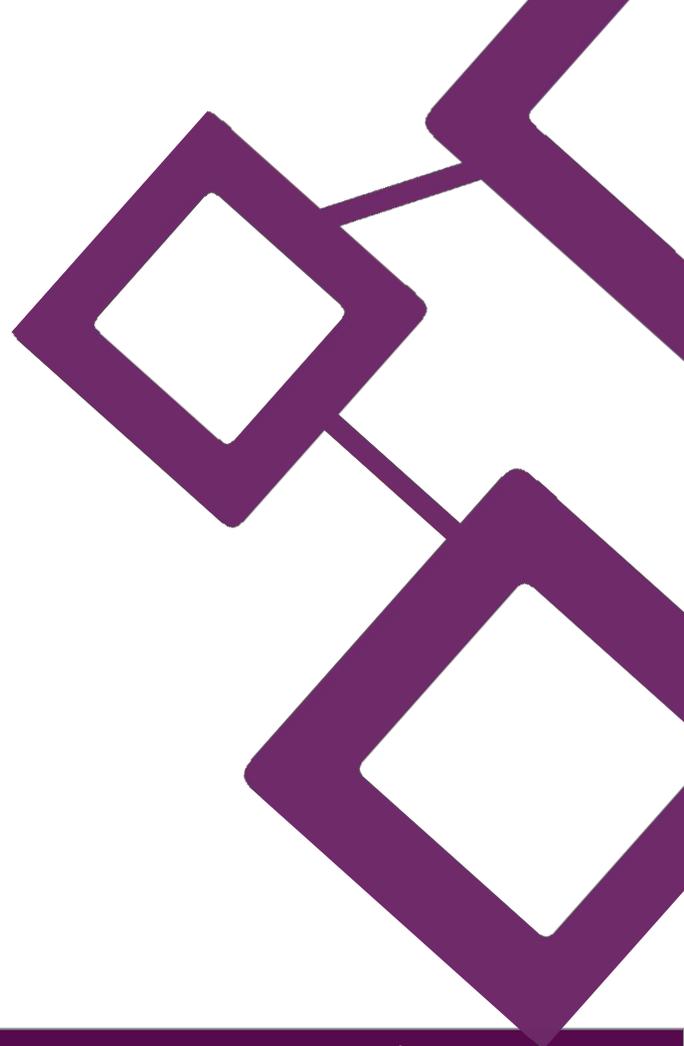
Leading Learning Innovation

# [Chatbots]

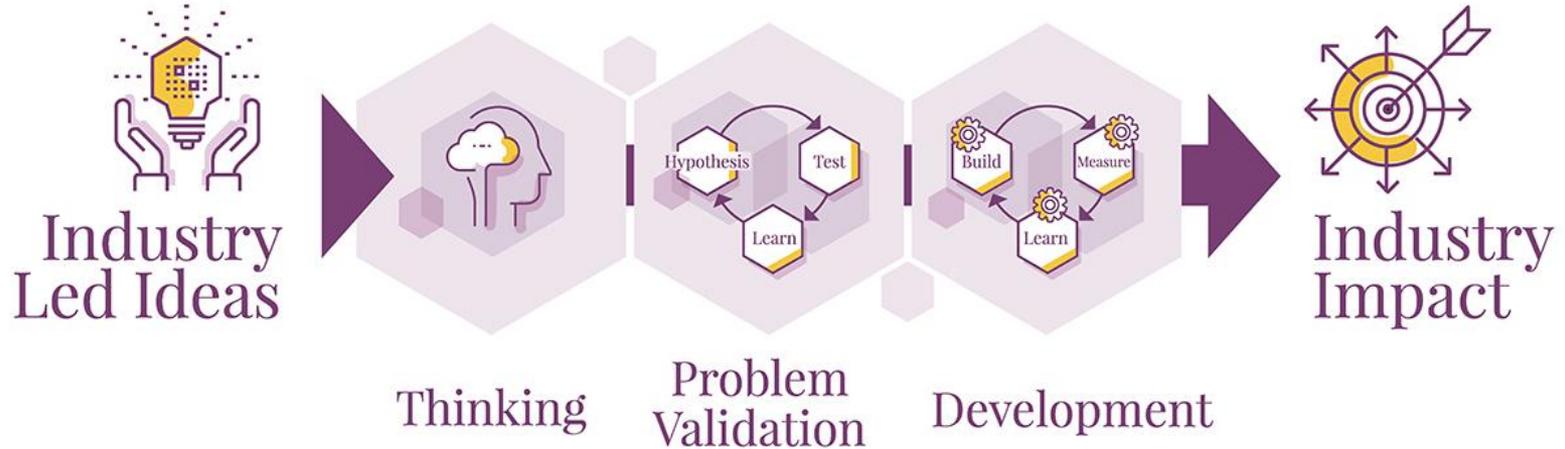
Getting the job done [in the field] with the help of your personal chatbot



# Context



# 'Phase 2' Project



## Phase 2 Projects

### Stage A

#### Team

- Learning Science
- Innovation Services

### Stage B

#### Team

- Learning Science
- User Experience
- Technology
- Innovation Services

Get out of the building

Customer/Problem

Solution

Validate Customer-Problem Fit

Validate Problem-Solution Fit

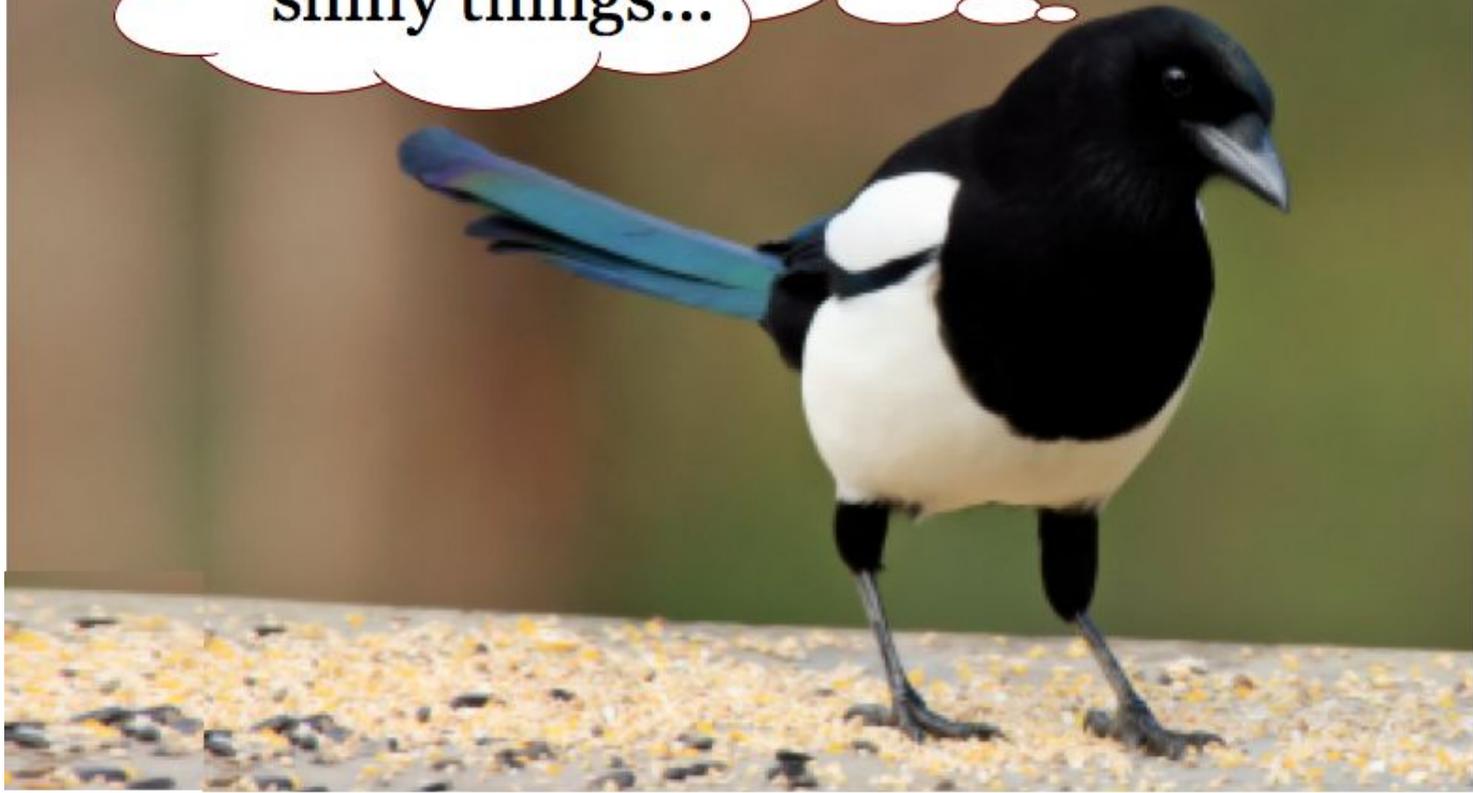
#### Tools

- Buyer Personas
- Jobs to be done
- Value proposition Canvas
- Problem validation

#### Tools

- Mock-ups
- Wireframes
- Prototypes
- Validation experiments

Mmm... must have  
shiny things...



# ‘Shiny Things’



A pragmatic response to the need for project outputs that are visually engaging as we approached the end of year 2

## Phase 2 Projects

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# Why Chatbots?

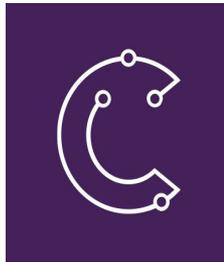
- Lots of hype in the media
- Familiar concept to many - easy to explain
- Lots of potential
- We initially looked at Chatbots in the schools space
  - but couldn't validate the problem we were trying to solve

# Industry Partners



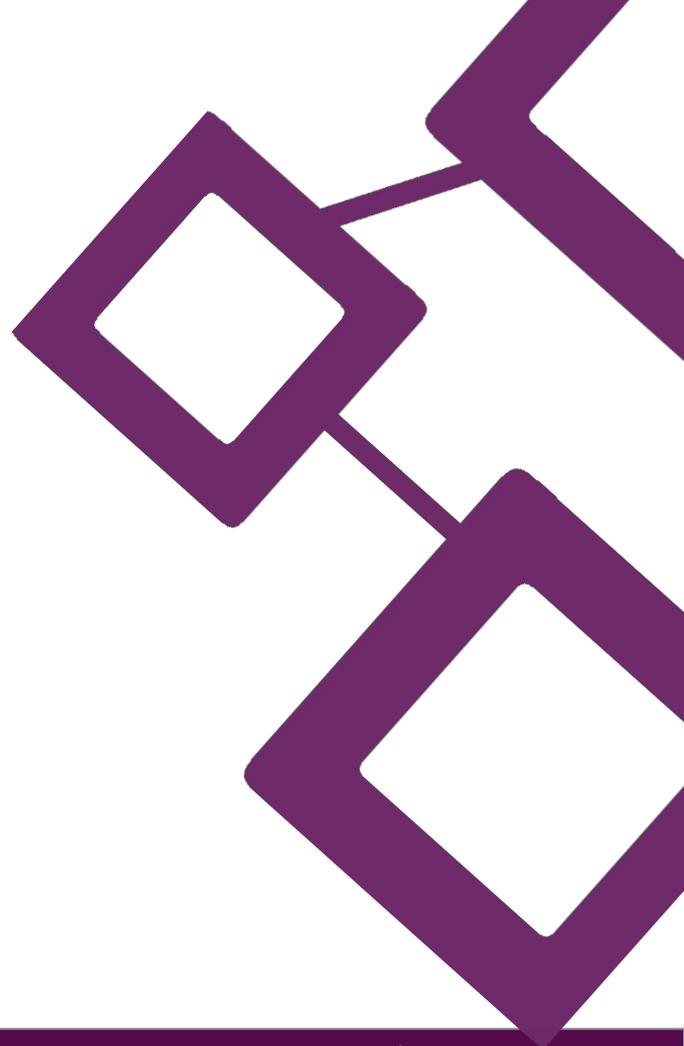
Enovation

PRIMARK®



Connector

# Customer



# Organisation

Multinational organisation in the technology sector that supply their own hardware into both client companies and consumers.

- Large enterprise: around 10,000 employees worldwide
- Approx 500 employees in Irish facility
- Industry Sector: Technology
- Specialities: Innovation & Technology, Engineering, Customer Service

# Problem

What's the problem that we're trying to solve?

Nowadays, within the corporate sector, there is a need for efficiency and high performance of the employees, a need for improvement of the team performance to get the jobs done using new technologies to automate and get more accurate ways to generate new and faster solutions for their customers.

Understanding the User's problem

Through the Problem Workshop, we could get deeper into the user's problem through some methods as the creation of personas to found out the main pains and the jobs to be done.

# Problem

Addressing a need in the organisation:

- Workplace team performance and efficiency
- Consistency and accuracy of the information
- Employee's time working on the field and the workplace
- A way to provide user data of the learning progress

# Goals

- Provide performance support tools to an employee
- Increase efficiency in the support for training/learning
- Support the team lead that doesn't have time for training and support the team
- Provide data about how employees learn and what they need to learn
- Deliver a personalised way of learning as part of performance support
- Provide a fast response or suggest other ways of support based on the user experience

# Solution - ChatBot

## *A different approach of using an AI assistant for corporate performance support*

Supporting technicians in the field in finding the information they need to get the job done through more intuitive and natural interactions with their personalised chatbot assistant.

# Solution - ChatBot

- Improving a technician's effectiveness and efficiency
- Saving money for the organisation by reducing the time spend solving individual issues
- Increasing the team's overall performance in a measurable way
- Through faster access to just the right information at the right time

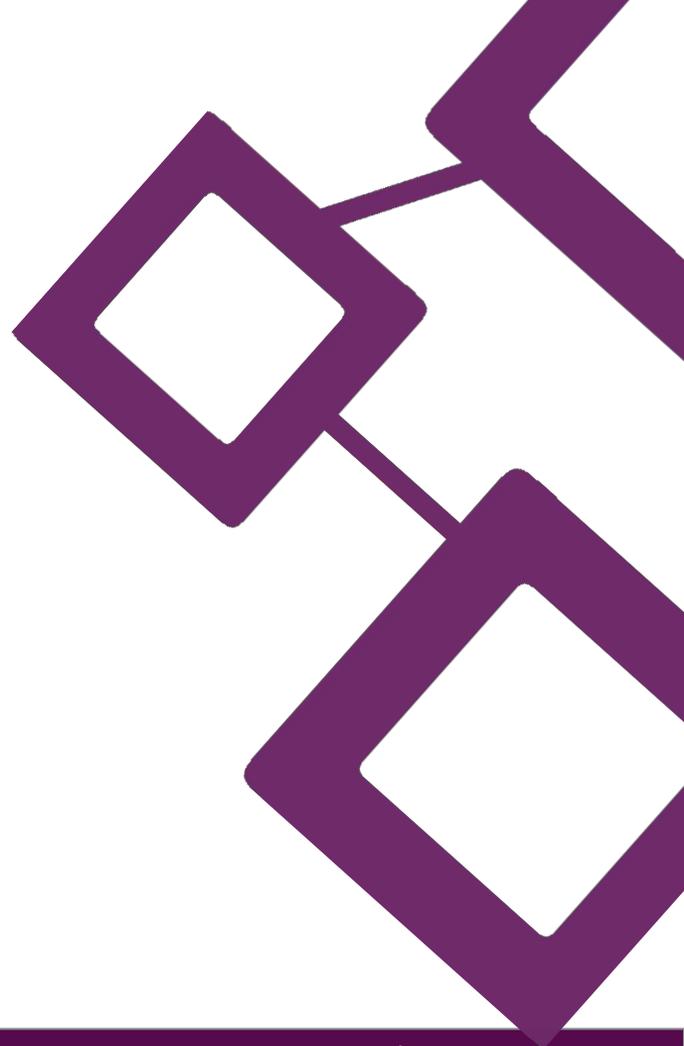
# Chatbots for performance support teams

- Provide employees with the right answer at the right time
- Eliminate frustration of searching for information across multiple sources
- Do the 'boring' tasks for them
- Help them make better decisions, faster
- A time-saving resource for internal employees
- To boost accessibility, efficiency, and employee satisfaction
- Help improve the overall customer experience (help better meet the needs of customers)



# Getting into the Details

# Research



# Chatbot Benefits

## *User Intimacy*

- Accessibility – available 24 x 7 x 365
- Quality – better decisions based on a full view of user data and history of interactions
- Empathy – can pass to a human agent for difficult or sensitive issues
- Drive loyalty through deep insight, rewards and gamification
- Increase interaction with proactive engagement

# Chatbot Benefits

## *Operational Efficiency*

- Reduce cost – fewer human agents
- Consistency – fewer errors and greater consistency
- Self-learning – improves with every decision/interaction
- Scalable – just more computing, no hiring/training
- Can support all users

# Chatbot Benefits

## *Innovation*

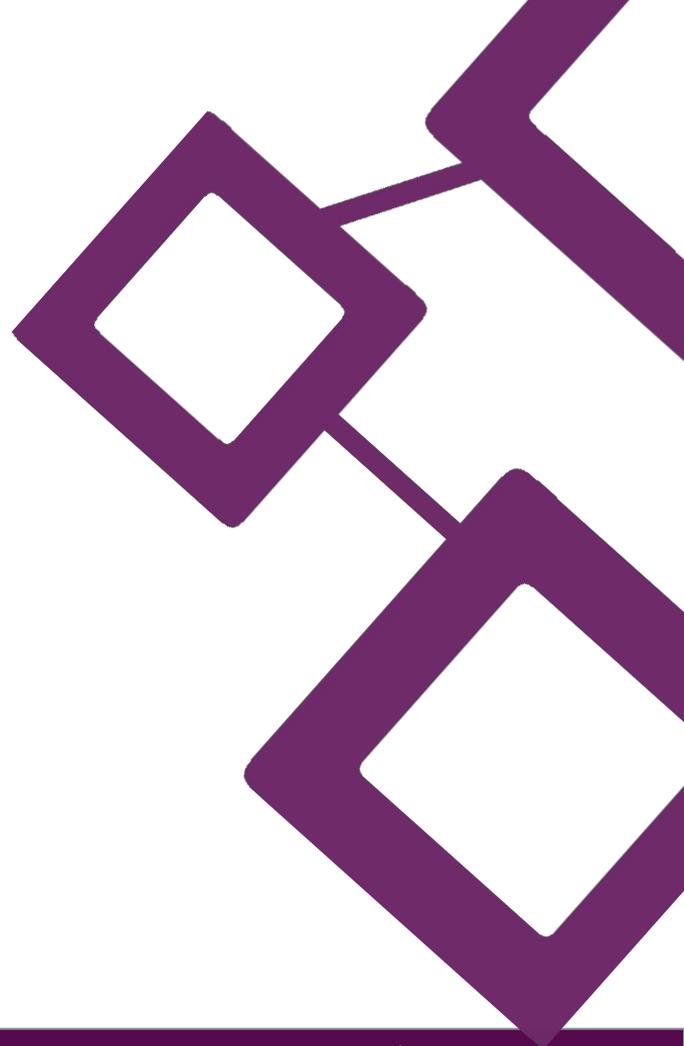
- Ecosystem orchestration
- Deeper customer journeys
- Emotional intelligence and NLP
- Personalised interaction
- Scenario play/planning (“what if” analysis)
- Smart visualisation

# UX Guidelines for Chatbots

- Be upfront about using a bot and not a human.
- Clearly tell people what tasks the bot can do.
- Create bots for simple tasks. Complexity is not well handled in the limited bot interface.
- Tolerate typos and ambiguity.
- Allow people to interact with the bot both through free-text input and selection of links.
- Save information from one task to the next.
- Be honest about not understanding. Offer an escape hatch in the form of a real human.

<https://www.nngroup.com/articles/chatbots/>

# State of the Market



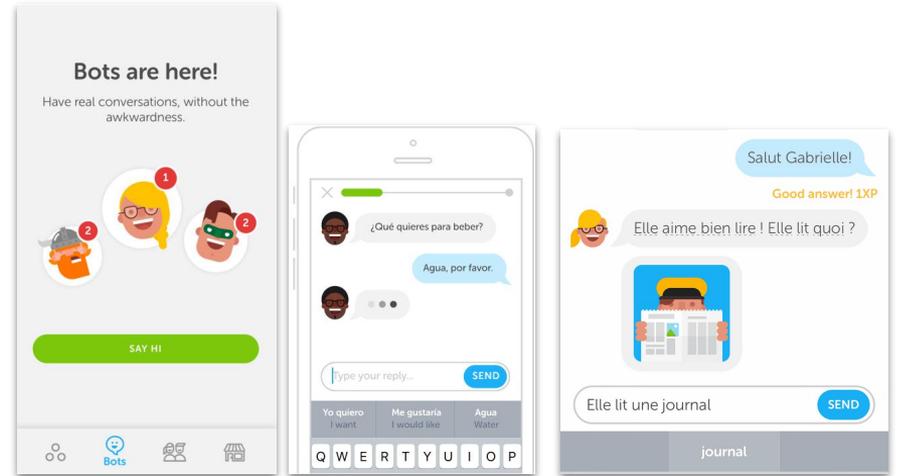
# State of the Market

- Chatbots
  - Customer Support
  - Language Learning
  - Information
- Field Service Management Software

# State of the Market Chatbots

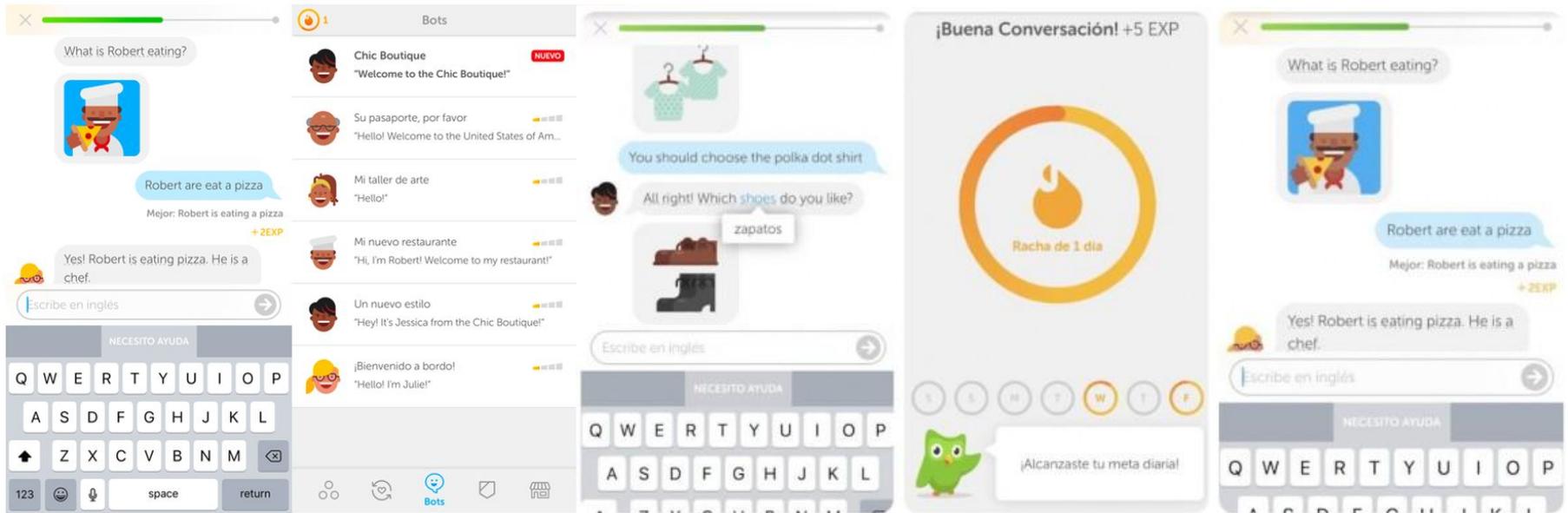
## EXAMPLE 01 - DUOLINGO

- Gamified platform for Language
- Chatbots using personalised learning
- User can choose a Bot persona



<http://bots.duolingo.com/>

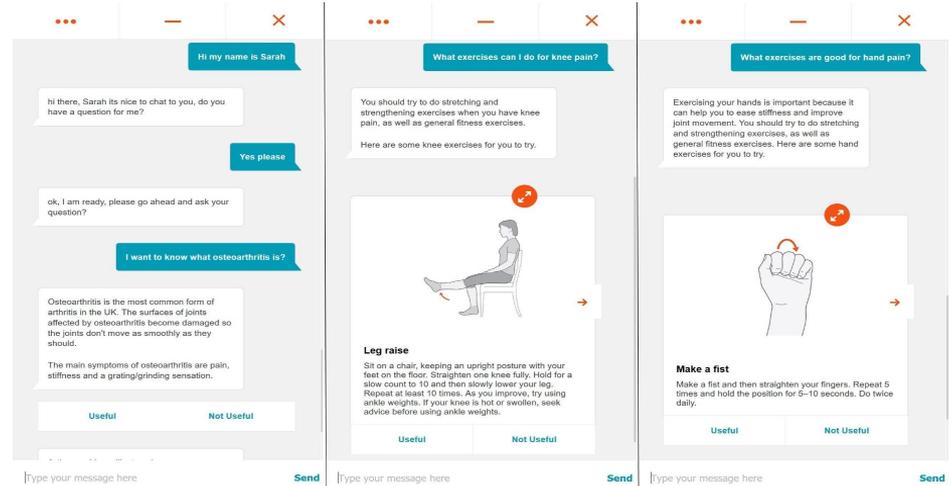
# EXAMPLE 01 - DUOLINGO



<http://bots.duolingo.com/>

# EXAMPLE 02 - IBM Watson AI Assistant

- Pre-trained content
- Easy-to-use tooling to quickly engage with customers
- Maintain ownership of data, insights and training with a scalable assistant
- Customer care virtual assistant
- Customer care voice assistant



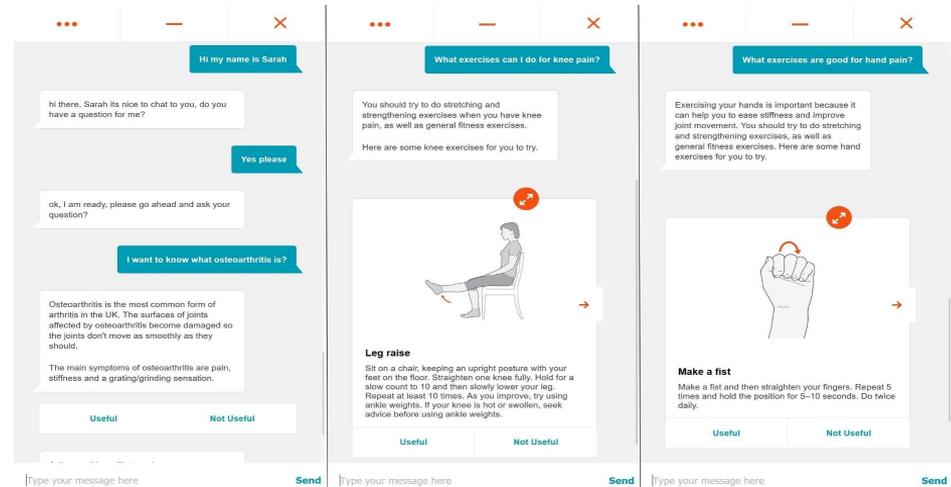
Use case: Arthritis Research UK

<https://www.ibm.com/watson/ai-assistant-2/>

[https://www.youtube.com/watch?time\\_continue=2&v=xdGaynxnt4M](https://www.youtube.com/watch?time_continue=2&v=xdGaynxnt4M)

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## EXAMPLE 03 - OPERATOR Chatbot (Intercom)

*Customer experience*

- Machine learning to improve the suggestions that it makes
- Apply Customer satisfaction surveys (Rating)
- Send Notifications
- Setup to define skills that the leader wants to their teams

<http://operator.com/>

<http://operator.tumblr.com/>

<https://www.youtube.com/watch?v=LbVWOQeo7Po>



**Message experts** to get personalized recommendations

Chat one-on-one and see what experts pick just for you. It's personal shopping as easy as texting.

I'm looking for a new living room side table for my new apartment.

I found 3 options for you, let's first drill down on the look and feel you're looking for. What do you think?



Normann Copenhagen  
Block Table

\$280.00



Rove Concepts  
Scando End Table

\$295.00



Terence Woodgate  
Mag Side Table

\$825.00



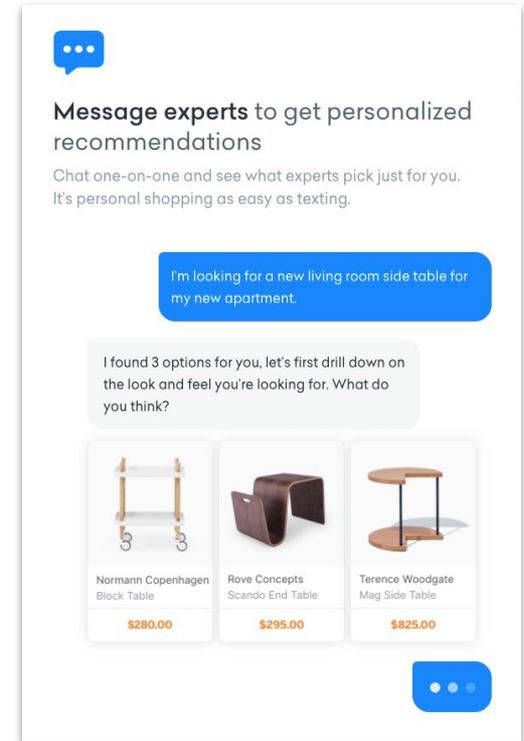
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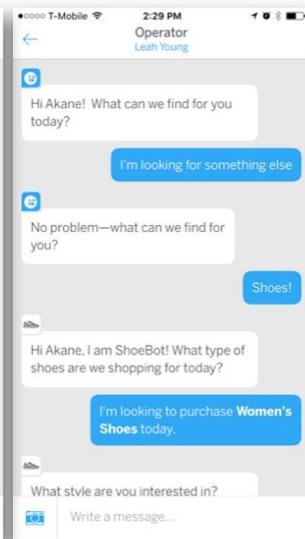
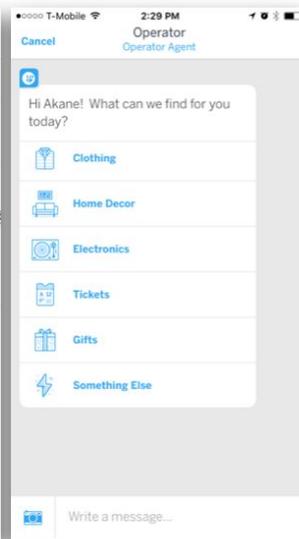
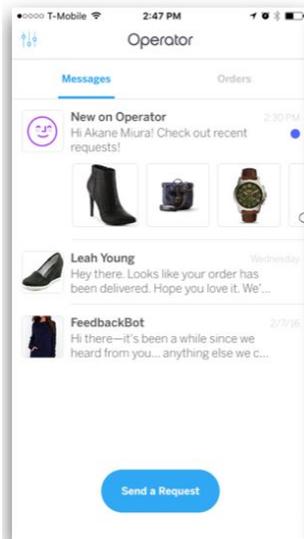
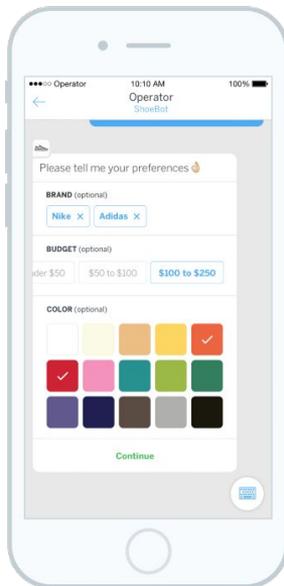
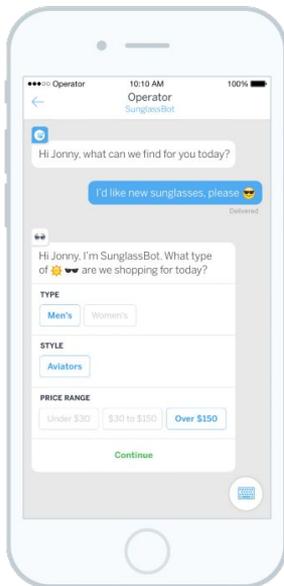
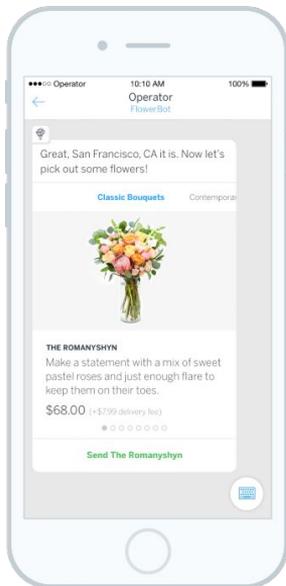


The screenshot displays a chatbot interface with a blue header icon. The main text reads: "Message experts to get personalized recommendations" followed by "Chat one-on-one and see what experts pick just for you. It's personal shopping as easy as texting." A user message in a blue bubble says: "I'm looking for a new living room side table for my new apartment." The chatbot response in a light grey bubble says: "I found 3 options for you, let's first drill down on the look and feel you're looking for. What do you think?" Below this are three product cards:

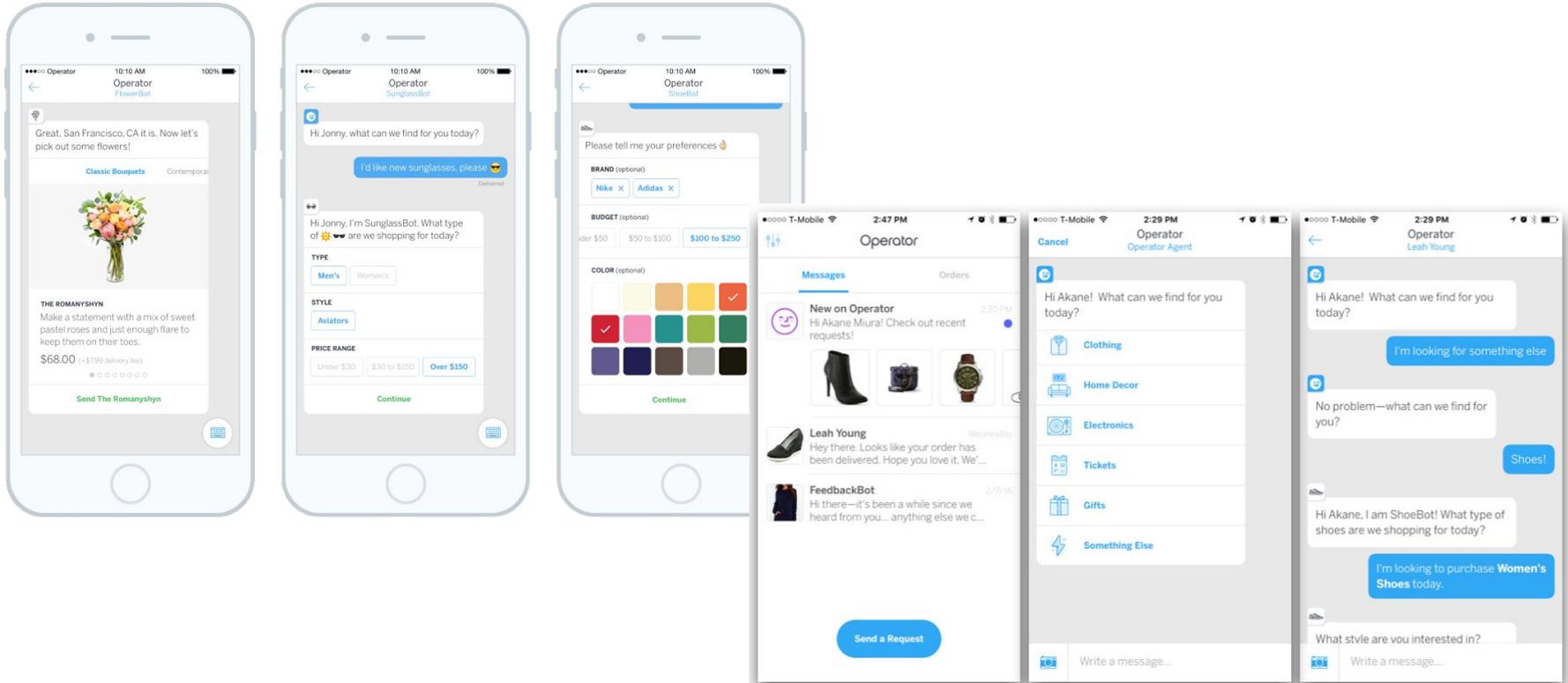
Product Name	Price
Normann Copenhagen Block Table	\$280.00
Rove Concepts Scando End Table	\$295.00
Terence Woodgate Mag Side Table	\$825.00

A blue chat icon is visible in the bottom right corner of the interface.

# EXAMPLE 03 - OPERATOR



# EXAMPLE 03 - OPERATOR Chatbot (Intercom)



# Benchmark – General Features

- Integration with Apps/Frameworks (Slack, Email, Dropbox, GitHub, Facebook, Skype, Twitter,...)
- Gamification for chatbots to engage users
- Bot personality: gender, tone of voice or written, avatar
- Facial, Context, Voice - Emotion Recognition for chatbots for supporting in learning/training to identify learners emotions, engagement and curve of learning

# State of the Market Field Service Management Software

# FSM Software

- [Microsoft Dynamics 365 for Field Service](#)
- [Verizon Connect Field Service Management Software](#)
- [SalesForce Field Service Lightning](#)
- [Fieldpoint Mobile Field Service App](#)
- [Intuit Field Service Management ES](#)
- [ServiceMax Field Service Management](#)
- [Click Software](#)

## Top 20 Most Popular FSM Software

PRODUCT	CUSTOMERS	USERS	TWITTER	FACEBOOK	LINKEDIN
ClickSoftware	15,400	708,400	4,222	1,182	23,543
Corrigo	9,451	1,000,000	349	46	5
mHelpDesk	20,704	92,160	1,747	6,880	1,837
UpKeep	29,250	53,000	1,756	1,314	1,181
Jobber	10,000	170,000	3886	8,153	2,210
Coresystems	8,451	195,229	2,709	7,461	4,249
Housecall Pro	15,000	43,536	1,230	15,739	1,590
ServicePower	160	537,200	3,242	2,508	2,809
FieldEdge	7,200	56,700	316	702	3,163
Oracle Field Service	300	245,000	20,090	220,429	5,284
ServiceMax	400	285,000	5,808	1,296	30,033
simPRO Software	4,000	100,000	2,221	2,442	3,560
ServiceTitan	3,000	100,000	1,753	18,853	5,154
Dynamics 365	1,040	85,000	63382	137	960
Astea International	600	185,000	535	193	4,012
Formitize	6,236	27,200	546	4,387	182
WorkWave Service	5,600	23,000	848	2,131	3,365
Opti-Time	750	140,000	655	376	2,858
Explorer Shafers	4,500	45,000	138	134	475
Wintac	3,097	18,582	1,291	1,599	310



<https://blog.capterra.com/most-popular-field-service-software/>

# Common Features in FSMS (according to Salesforce)

- Create work orders
- Manage and monitor technicians
- Scheduling and order management
- Vehicle and technician location tracking
- Job status updates
- Route optimisation and GPS navigation
- Time tracking and driver logs
- Knowledge and asset repositories
- Parts and inventory management
- Integrated invoicing/payment processing
- Customer portals
- Regulatory compliance measures



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# Salesforce Knowledge Base

## Maximize agent productivity.

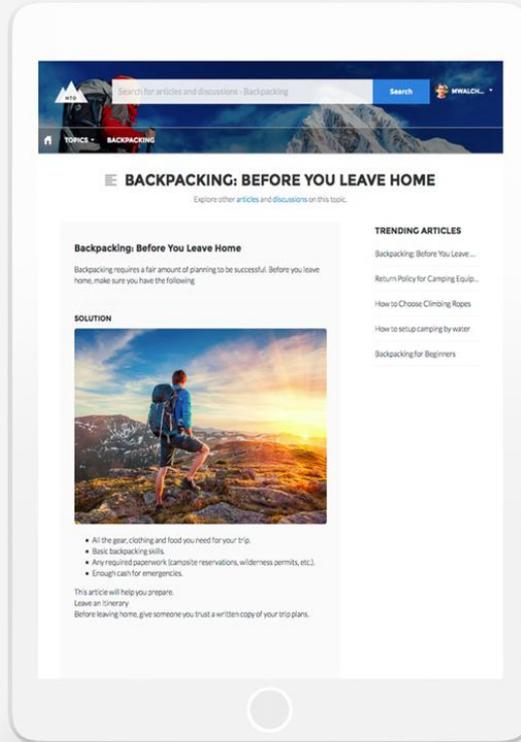
With a cloud-based knowledge base embedded right into the console, agents can easily find, access, and deliver the right answers to customers. Sharing knowledge to any channel or device is only one click away. Better still, agents can contribute to the knowledge base to ensure that the best answers are always accessible to the whole team.

## Help customers help themselves.

Extend your knowledge base to your service website, whether it's a secure customer (or partner) portal, part of your public site, or integrated into a public customer community. And to ensure an effortless customer experience, knowledge is accessible from any mobile device.

## Streamline your knowledge management process.

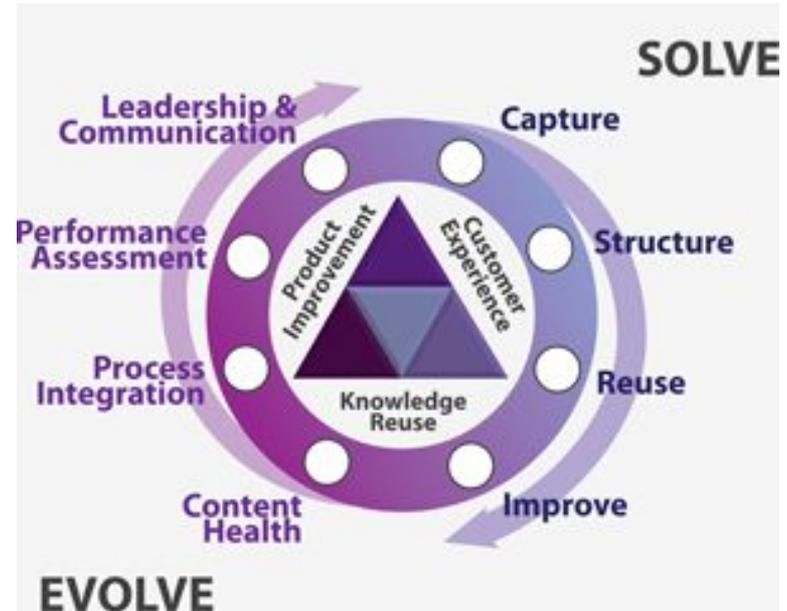
Apply industry best practices and ensure the accuracy of articles with the first KCSv5 verified knowledge management and incident management solution.



# Side Note – KCS Methodology

In a nutshell, KCS strives to:

- Integrate the reuse, improvement, and (if it doesn't exist) creation of knowledge into the problem solving process
- Evolve content based on demand and usage
- Develop a knowledge base of collective experience to date
- Reward learning, collaboration, sharing, and improving



<https://www.thekcsacademy.net/kcs/>

# Fieldpoint Mobile Field Service Software

## FIELDPOINT'S MOBILE FIELD SERVICE SOFTWARE INCLUDES



**Native Mobile Field Service App**  
- Available in the app store and Google Play



**Routing and Mapping Customer Work Orders**



**Integrated Parts Management**



**Tracking Tasks, Labor, and Expenses**



**Advanced Checklisting Management**



**Capture Pictures and Read Barcodes Onsite**



**Faster Invoicing and Collect Customer Signatures Onsite**



**Online and Offline Synchronization**

# Traditional FSM Software Platform



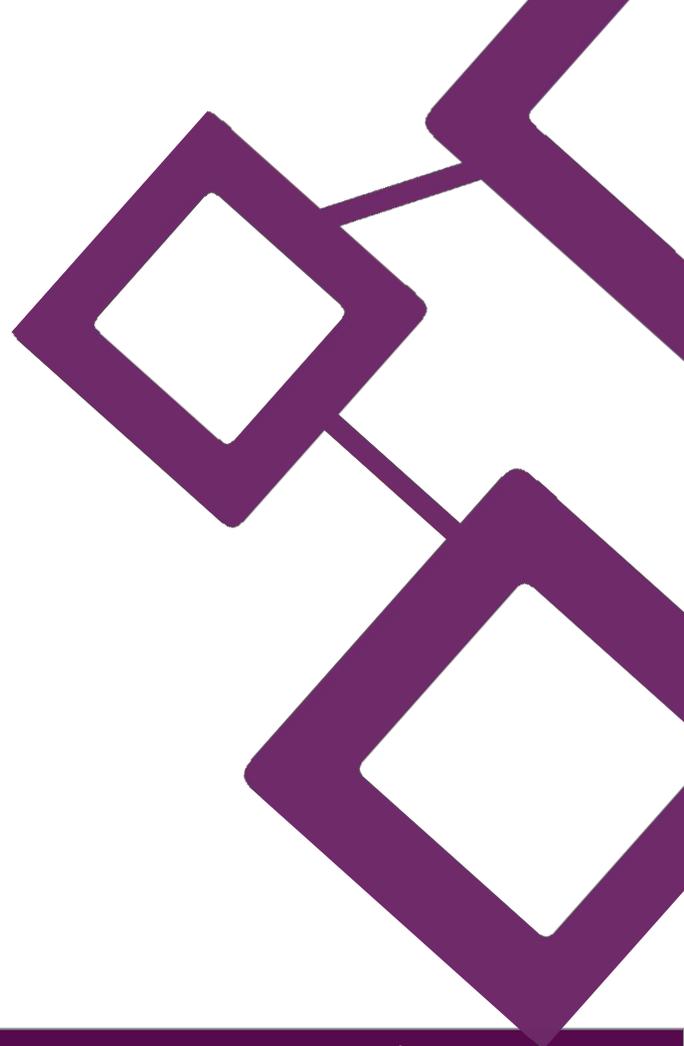


# Problem Workshop

# Problem Workshop Overview

- Develop Personas for both 'Buyer' and 'User(s)'
- Jobs to be Done
- Pains
- Gains
- Rank from most important to least important

# Customer Organisation



# Organisation

Multinational organisation in the technology sector that supply their own hardware into both client companies and consumers.

- Large enterprise: around 10,000 employees worldwide
- Approx 500 employees in Irish facility
- Industry Sector: Technology
- Specialities: Innovation & Technology, Engineering, Customer Service

# Personas Overview

Through the Personas method during the Problem Workshop, we have created 3 user personas to understand the user's problems and behaviours and then tell a story about their interactions and with the system - ChatBot.



Buyer Persona:  
Mick (Manager)

---



User Persona:  
Frank (Experienced Technician)

---



User Persona:  
Mary (Frank's colleague - Expert Technician)

---



# Buyer Persona – Mick

## BUYER PERSONA



## MICK SMITH

---

Manager in IT or Operations

---

Decisions influenced by General Manager,  
Financial Controller & Front Line Team Members

---

### Perceptions/Beliefs:

Open to technology  
Wants team to be efficient

---

Age: 50

---

Education: Degree in Engineering or IT

---

Salary: €65K



# User Persona – Frank

## USER PERSONA



## FRANK WALSH

---

Master technician with over 10 years experience

---

### Perceptions/Beliefs:

Open to using technology  
See value in working as a team and supporting his colleagues

---

**Age:** 35

---

**Education:** Bachelor's Degree in Engineering

---

**Salary:** €55K

---

# User Persona - Mary

## USER PERSONA



## MARY MUNOZ

---

Master technician with over 8 years experience

---

### Perceptions/Beliefs:

Open to using technology

Has time to chat

Willing to learn and share knowledge

---

**Age:** 32

---

**Education:** Master's Degree in Engineering

---

**Salary:** €60K

---

# JTBD Overview

Jobs to be Done	Pains	Gains
<ol style="list-style-type: none"><li>1. Support &amp; develop his team</li><li>2. Cost</li><li>3. How Frank is Perceived</li><li>4. Be Innovative</li></ol>	<ol style="list-style-type: none"><li>1. Getting 'buy-in' from team on new initiatives</li><li>2. Limited budget for expensive new solutions</li><li>3. Time</li><li>4. Challenging technical environment</li></ol>	<ol style="list-style-type: none"><li>1. Support the team</li><li>2. Support customers</li><li>3. Mick's personal goals</li></ol>

# Jobs to be done (ranked)

<b>1. Support &amp; develop his team</b>	<ul style="list-style-type: none"><li>- Ensure his team has enough information to get the job done</li><li>- Support his team in the field</li><li>- Develop his team's capability</li><li>- Ensure the team performs to a high standard</li></ul>
<b>2. Cost</b>	<ul style="list-style-type: none"><li>- Reduce the time it takes his team to complete jobs</li><li>- Hit his required metrics set by management</li><li>- Make his team more efficient when working in the field</li><li>- Ensure his team get accurate information when they need it</li></ul>
<b>3. How Frank is perceived</b>	<ul style="list-style-type: none"><li>- Do a good job and be respected by his employees</li><li>- Wants the respect of peers and senior management</li><li>- Demonstrate the effectiveness &amp; efficiency of his team</li><li>- Reduce budget spends where possible</li></ul>
<b>4. Be innovative</b>	<ul style="list-style-type: none"><li>- Offer new ways for performance improvement</li><li>- Be innovative in relation to solutions and cost savings</li></ul>

# Pains - Barriers (ranked)

<b>1. Buy-in from team</b>	<ul style="list-style-type: none"><li>- Team may not want to use new system</li><li>- Team members may feel they know more than the system</li><li>- Resistance to tech and new processes</li></ul>
<b>2. Cost &amp; budget</b>	<ul style="list-style-type: none"><li>- Cost of a new solution may be an issue</li><li>- May not be budget for a new solution</li><li>- Management may not buy in to new solution</li></ul>
<b>3. Time</b>	<ul style="list-style-type: none"><li>- Not a lot of time for training on new systems</li><li>- Mick's time is limited - there is only one of him with his knowledge</li><li>- Mick may be stretched as well as his resources</li></ul>
<b>4. Internet &amp; access</b>	<ul style="list-style-type: none"><li>- Team may not have internet access while on the road</li><li>- Access to relevant resources when needed can be an issue</li></ul>

# Gains – Outcomes (ranked)

<b>1. Support the team</b>	<ul style="list-style-type: none"><li>- Improvement in efficiency</li><li>- Improved productivity</li><li>- Easier management of staff</li><li>- Happier staff who do a good job</li></ul>
<b>2. Support customers</b>	<ul style="list-style-type: none"><li>- Greater efficiency for customers – takes less time to solve an issue</li><li>- Satisfied customers leading to better metrics</li><li>- Fewer calls to the centre</li></ul>
<b>3. Mick's personal goals</b>	<ul style="list-style-type: none"><li>- Respected by staff and peers</li><li>- Team stay as they see Mick as a good manager</li><li>- Possibility of early retirement</li></ul>



# Solution Workshop

# Overview of solution workshop steps

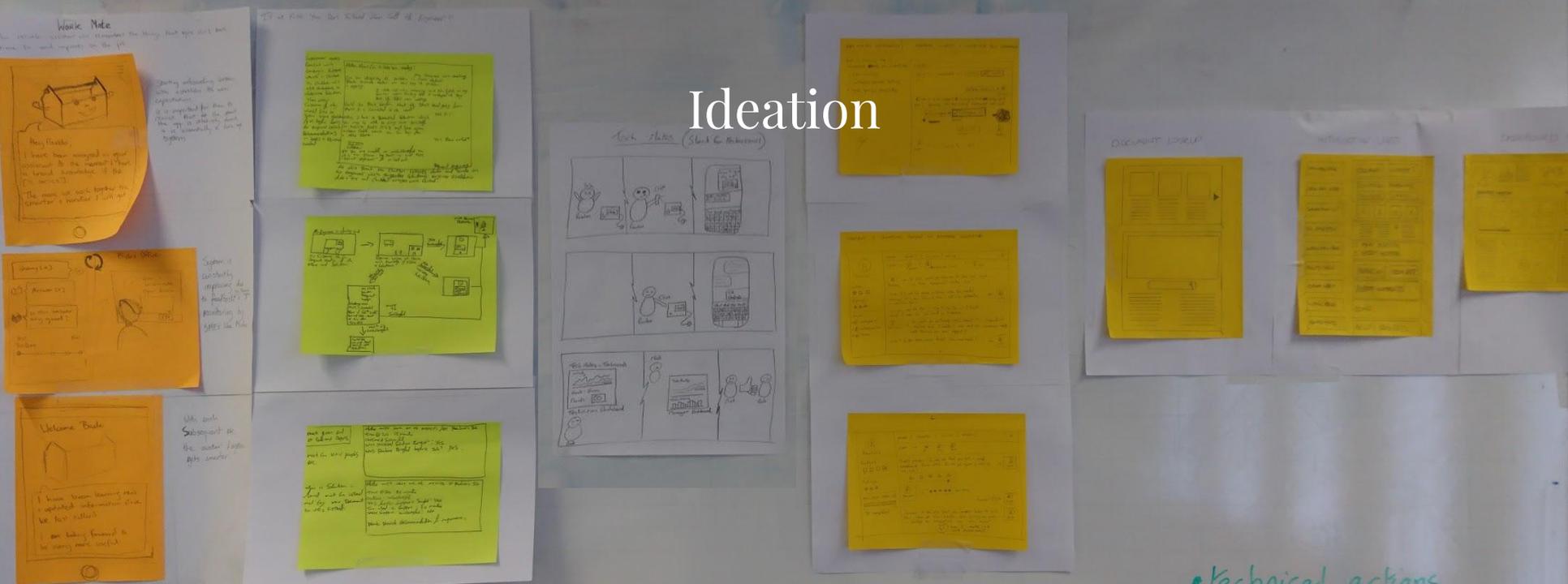
- Lightning Demos
- User flow
- Solution ideation
  - Ideas
  - Crazy 8's
  - Storyboarding
- Effort/Impact Matrix

# Overview of solution workshop steps

- Lightning Demos
- User flow
- How might we...
- Solution ideation
  - Ideas
  - Crazy 8's
  - Storyboarding
- Effort/Impact Matrix



# Ideation



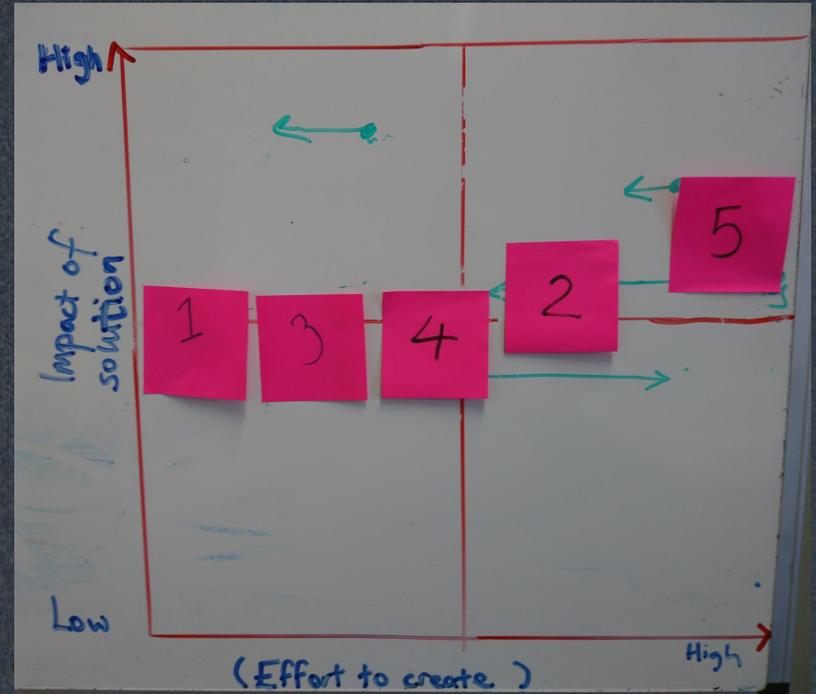
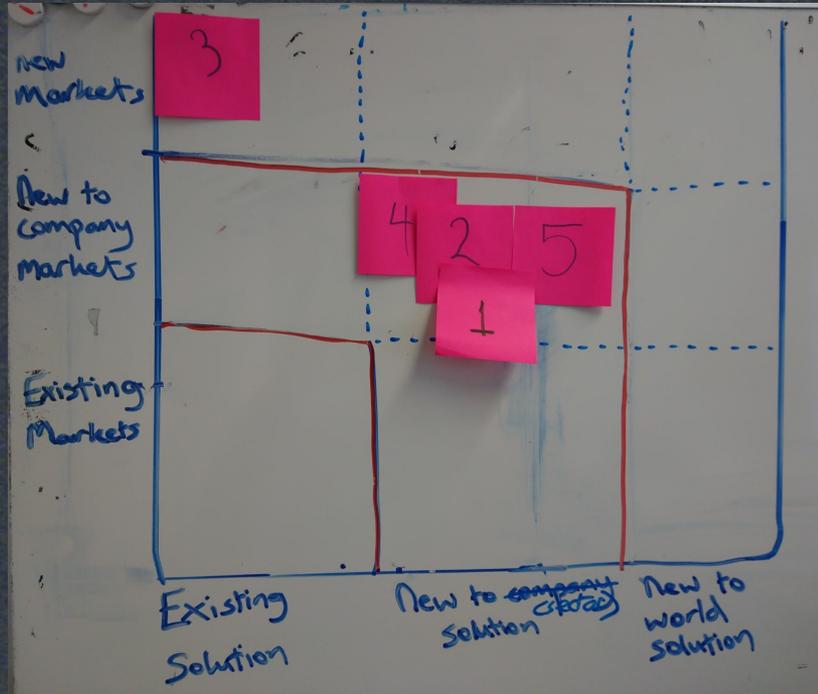
Boozy the AI powered personal assistant that learns as it goes to become your personal technical assistant

• tier-1 customer support chatbot  
 • motivation (community)  
 technician support chatbot

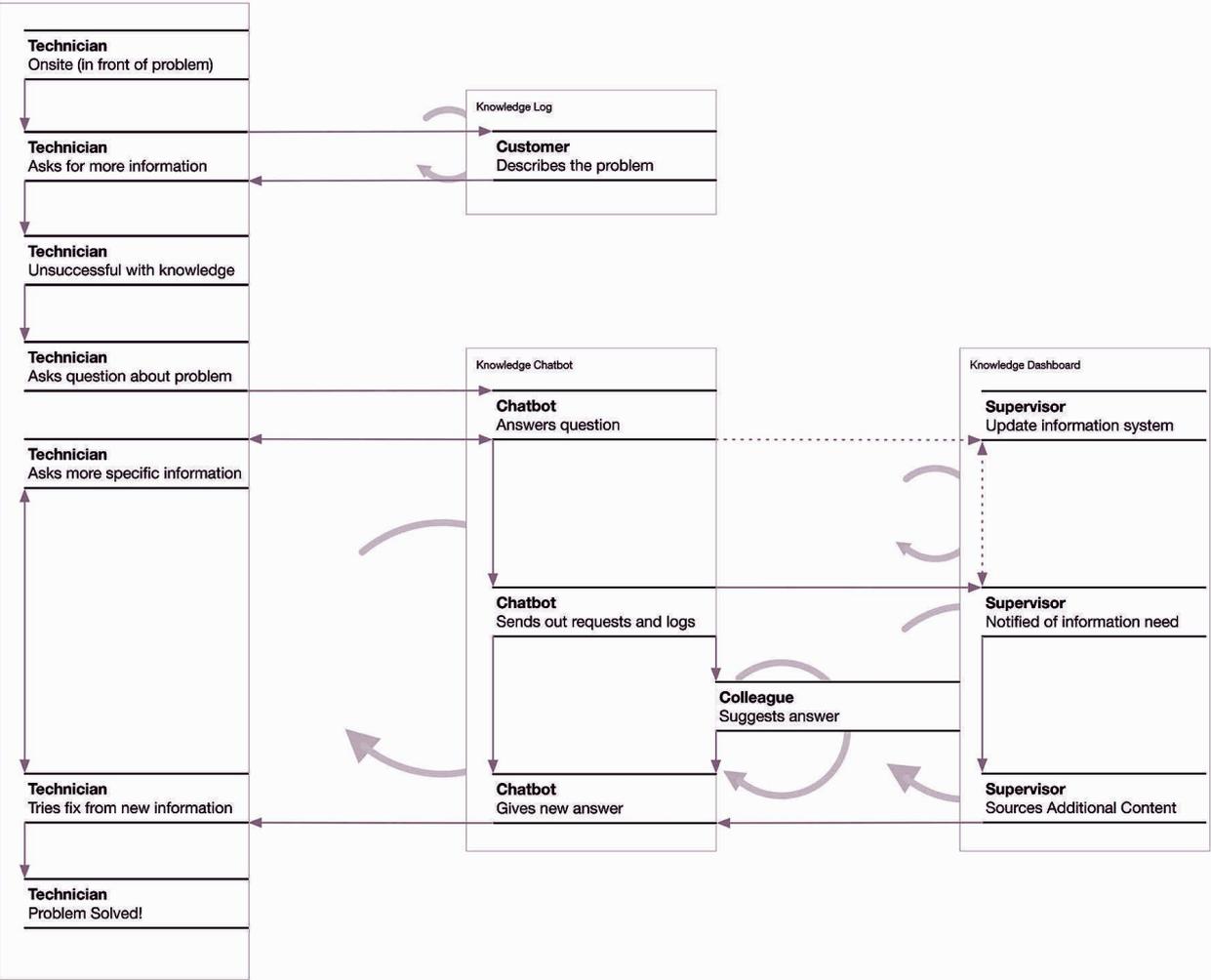
• expert recommendation  
 • Motivation (community)

• technical actions  
 • visualisation  
 • user interactions  
 • retrieval of tech docs.  
 • other functions - ordering parts, etc.

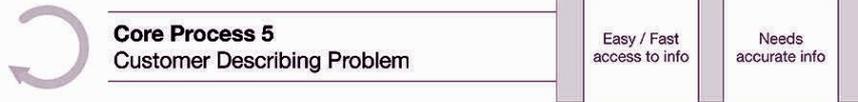
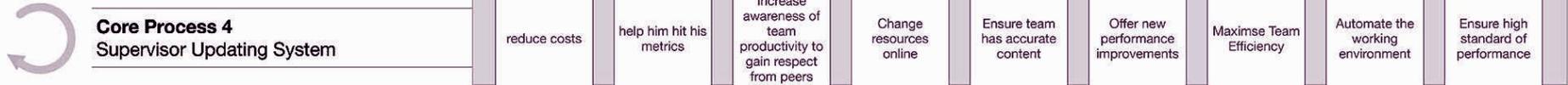
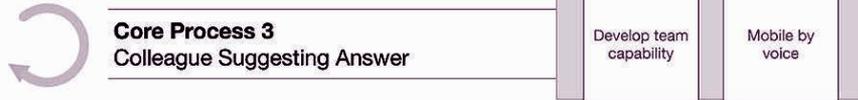
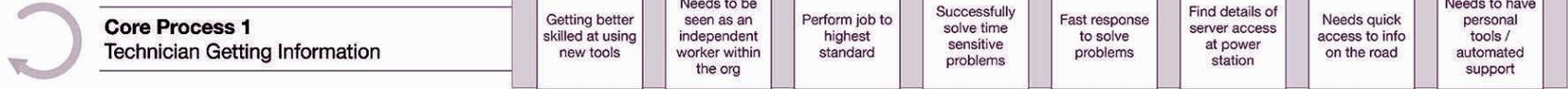
# Effort/Impact Matrix



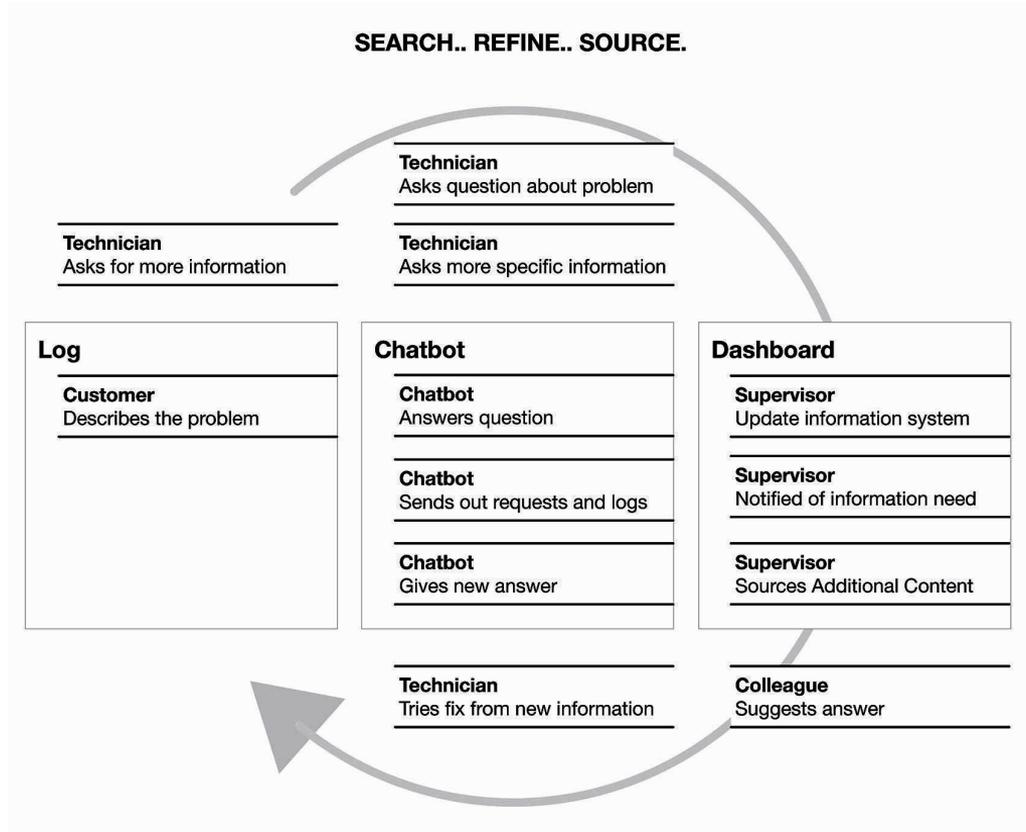
# Core Process Priority Mapping



# Core Processes



# System Process Flow



# What Chatbot can do? (Technician)

---



ChatBot supports technicians with fast and accurate information through options of content - docs and links



ChatBot creates tagged Notes to register important actions in the conversation related to new issues and solutions



ChatBot suggests answers based on informal tacit knowledge generated by the colleagues in the form of 'Notes'



ChatBot recommends an expert - based on availability and rating - to help the technicians, in a chat format

# What Chatbot can do? (Manager)

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ChatBot analyse user's performance through the rating system and evaluation if the support was useful or not



ChatBot sends notifications about the team usage and productivity within the community

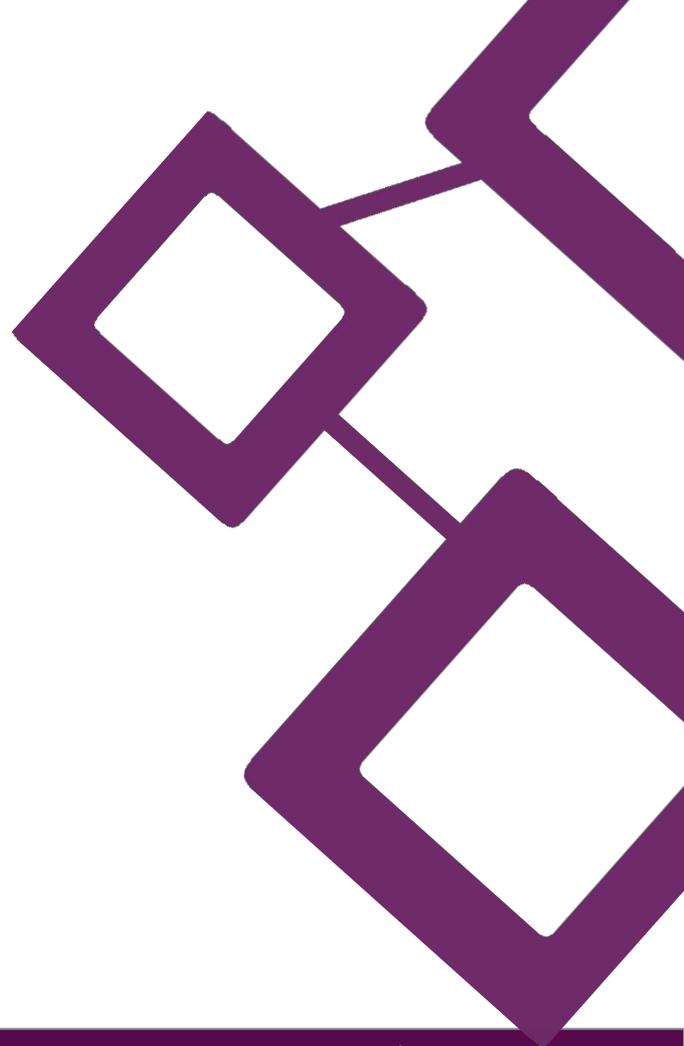


Manager is able to visualize data related to the usage and effectiveness of the ChatBot



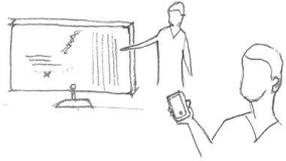
Manager is able to visualize data related to the team performance through the metrics in the dashboard

# Use Case Scenario



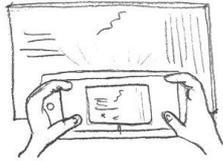
# Storyboard Overview

Scene 1



Understanding the customer's problem:

Scene 2



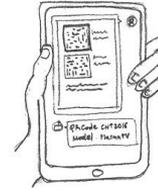
Logging details of the customer's problem

Scene 3



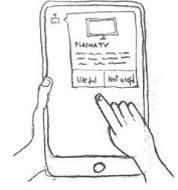
Technician needs personalised assistance

Scene 4



[Chatbot] auto recognises device from photo

Scene 5



Interaction between Chatbot and technician

Scene 6



Use Cases:

Use Case 1A:  
Chatbot interaction with Technician

Scene 7



Use Case 1B:  
Chatbot suggests a Note

Scene 8



Use Case 1C:  
Chatbot recommends an Expert

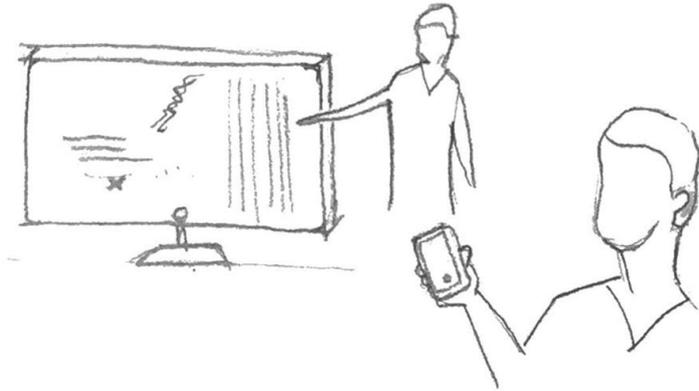
Scene 9



Use Case 1D:  
Manager Dashboard

# Understanding the problem

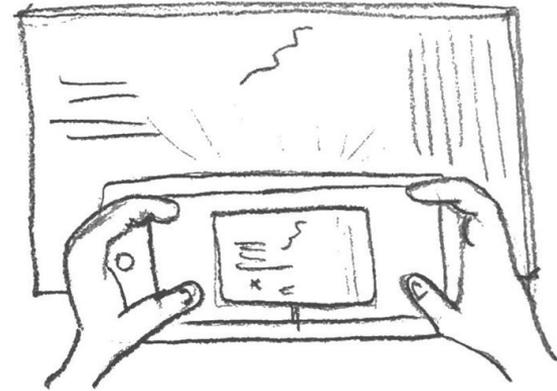
Scene 1



## Understanding the customer's problem:

Frank, an experienced technical, calls to customer's house to investigate a technical fault they have reported. The customer explains their problem to Frank and he takes a closer look

Scene 2



## Logging details of the customers problem

Frank tries several approaches to resolve the issue but has no luck. Taking out his mobile phone he takes a picture of the faulty device

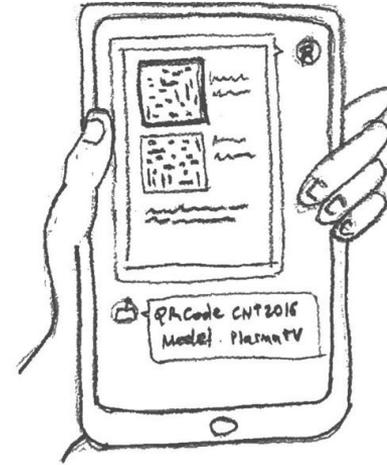
# Requesting personalised support

Scene 3



**Technician needs personalised assistance**  
Frank opens the [Chatbot] app on his phone and starts a new chat. He uploads the photos he just took of the faulty device, he finds this quicker than typing in a model number

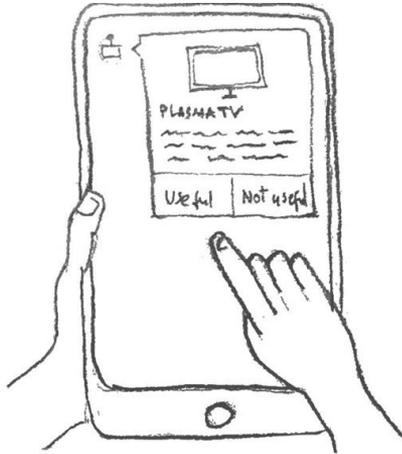
Scene 4



**[Chatbot] auto recognises device from photo**  
The Bot recognises the device model using image recognition and provides Frank with some useful information to help him fix the issue

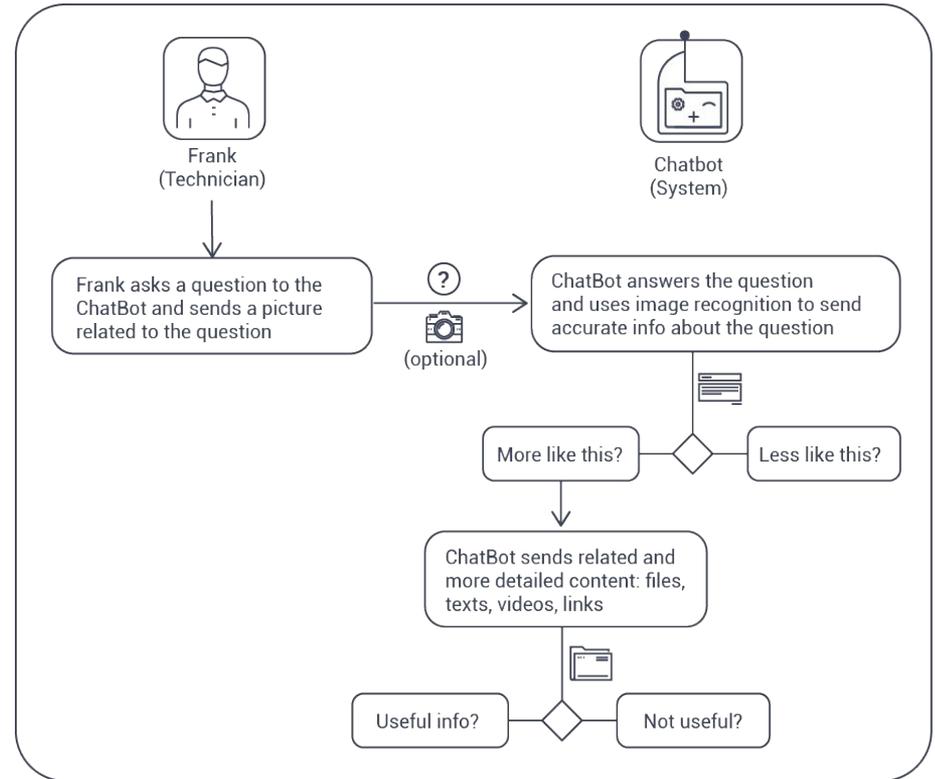
# Addressing information need

Scene 5



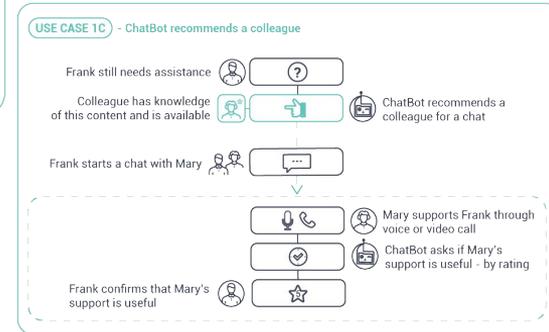
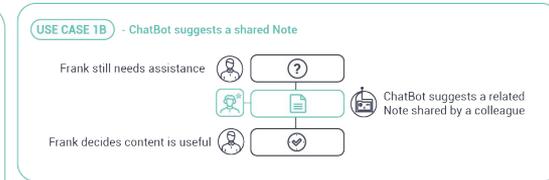
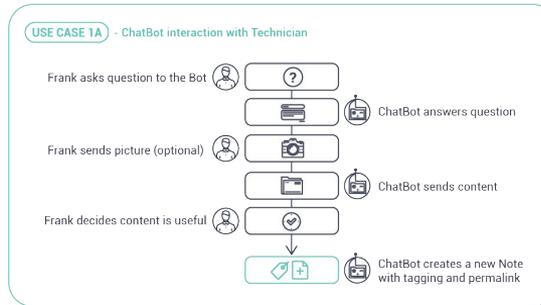
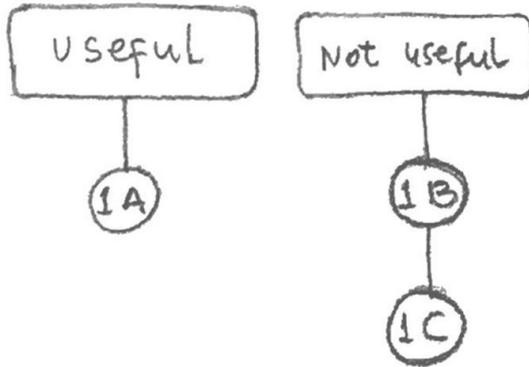
## Interaction between Bot and user:

The Bot sends documentation and links about the faulty device and then asks if the provided information is Useful or Not Useful



# Providing feedback on the experience

## Scene 6

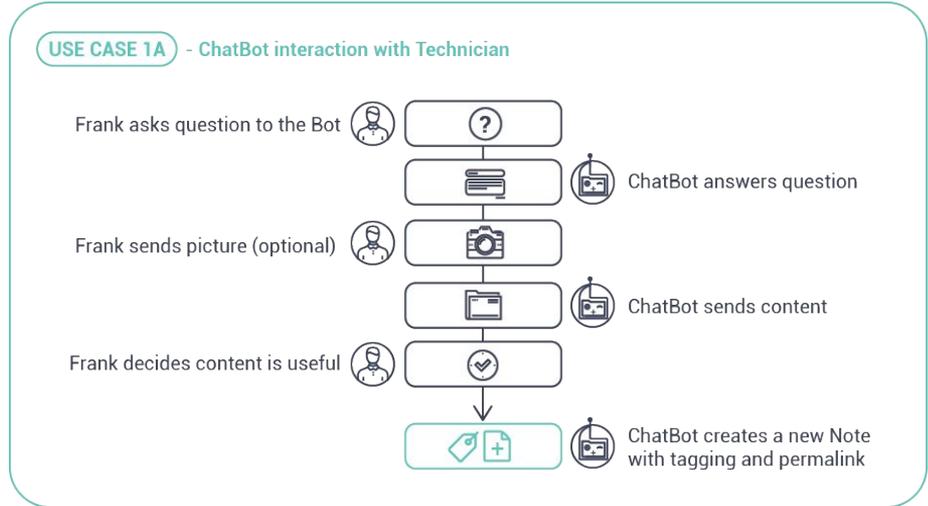
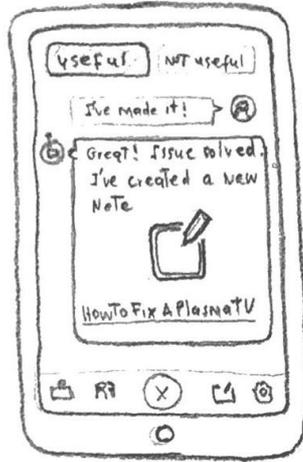


### 03 Use Cases:

- Useful: Use Case 1A
- Not useful: - Use Case 1B and 1C

# Sharing experiences & tacit knowledge

Scene 6

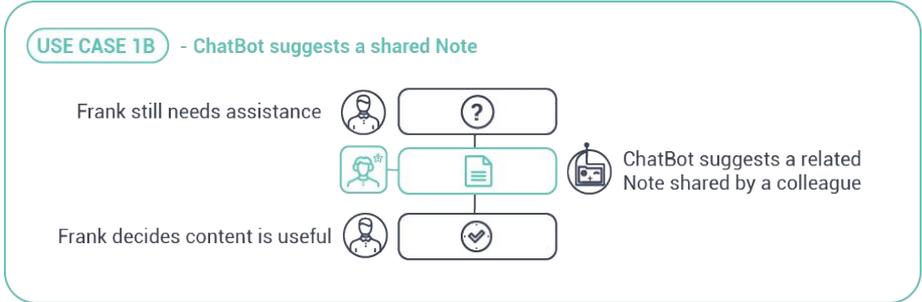
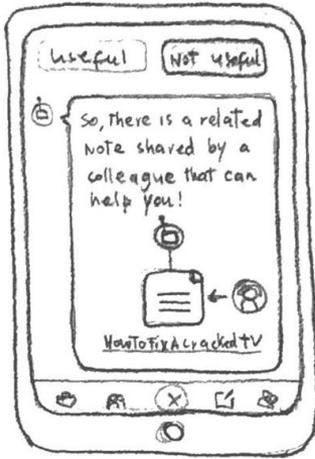


## Use Case 1A: Chatbot interaction with Technician

The Bot suggests saving the conversation as a Note with tagging and permalink

# Scene 8 + Use Case 1B

Scene 7



## Use Case 1B: Chatbot suggests a Note

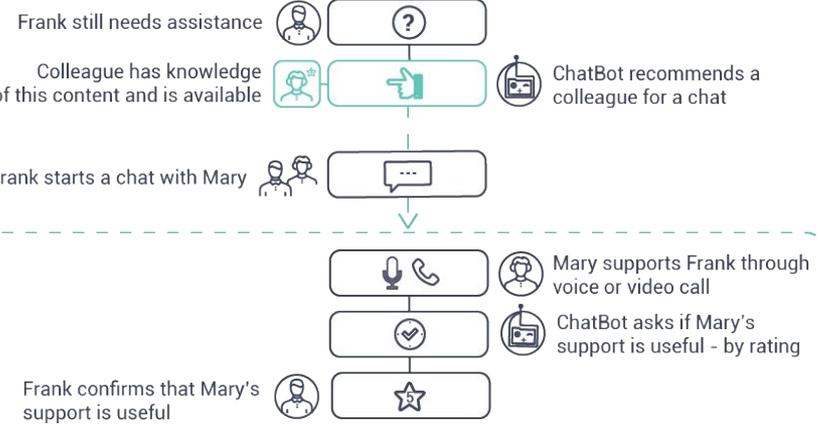
Chatbot suggests a related Note shared by a colleague

# Expert recommendation

Scene 8



## USE CASE 1C - ChatBot recommends a colleague

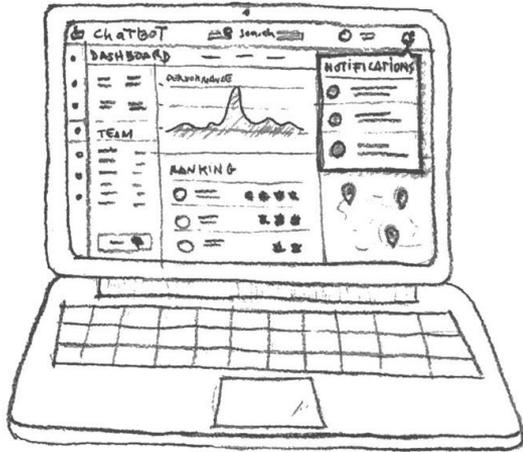


## Use Case 1C: Chatbot recommends an Expert

The Chatbot recommends that Frank should contact Mary, a colleague who has expertise on the faulty device, for a chat (text, voice or video call)

# Gaining strategic insight

Scene 9



## Use Case 1D: Manager Dashboard

As Field Operations Manager, Mick gains key insights into the performance of his team and the impact of [Chatbot] on overall performance

### USE CASE 1D - Manager's notifications

Mick is updating the information in the system



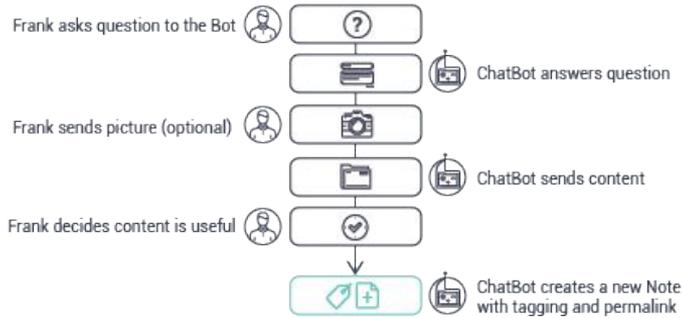
Mick is analysing the ChatBot and Team performance



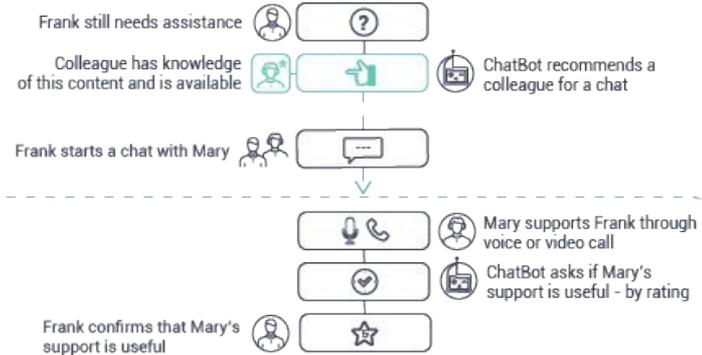
ChatBot sends notifications to the Manager

# Use Cases Overview

## USE CASE 1A - ChatBot interaction with Technician



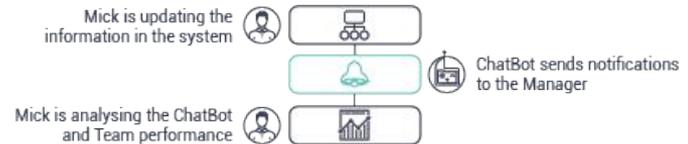
## USE CASE 1C - ChatBot recommends a colleague



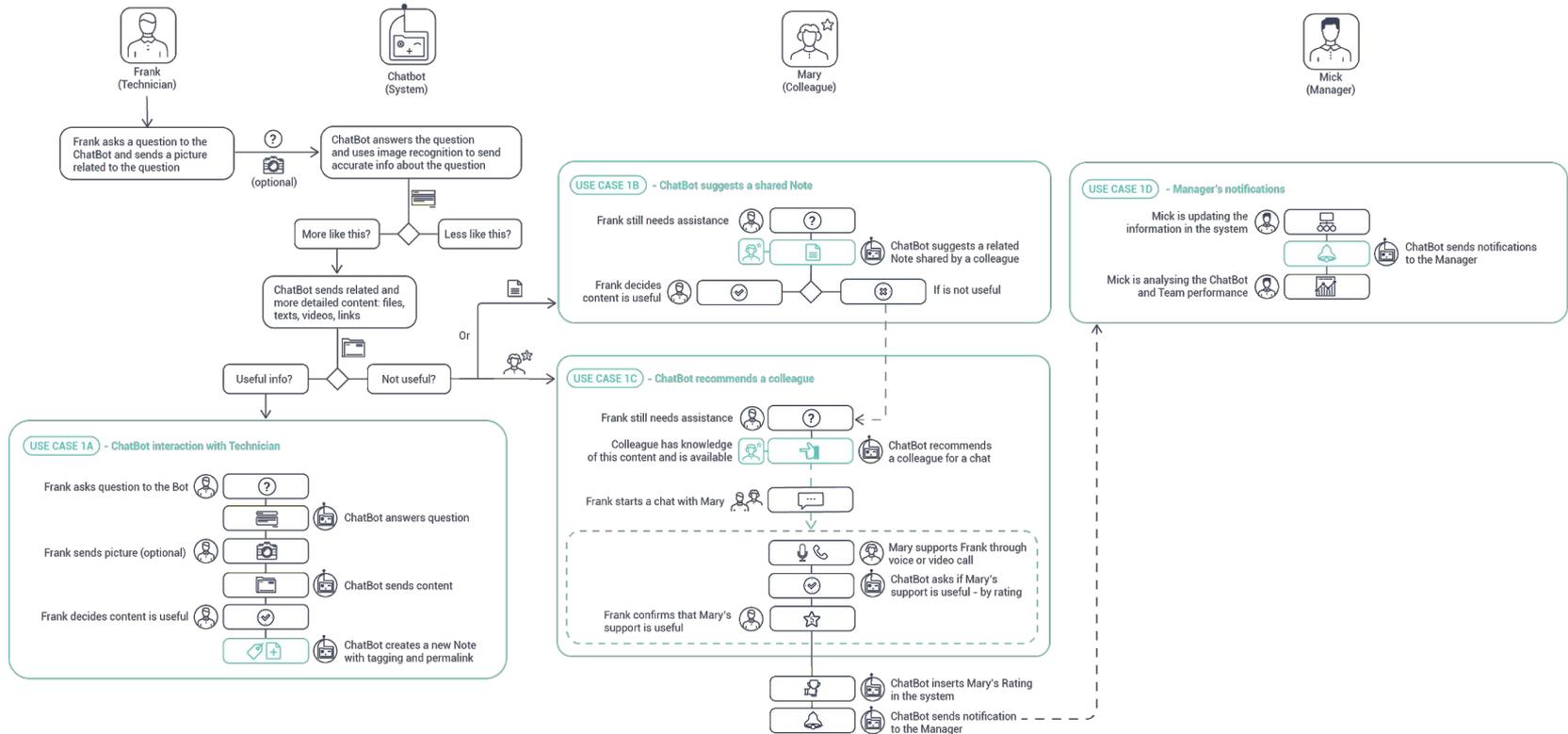
## USE CASE 1B - ChatBot suggests a shared Note



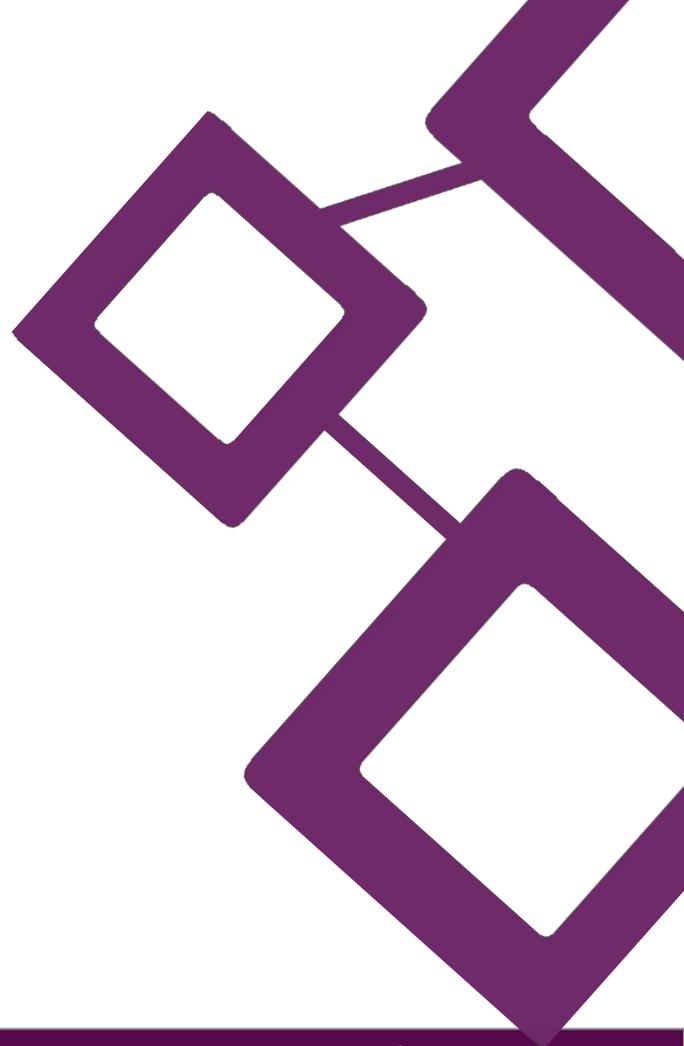
## USE CASE 1D - Manager's notifications



# High-Level Use Cases Scenario of the entire system



# Branding



# Bot Personality

Conversational experiences have to be personal. Personality creates a deeper understanding of the Bot's end goal, and how it will communicate through:

- Choice of language, way of written, mood and style
- Avatar / Bot appearance / Backgrounds
- Gender / Name
- Tone of voice
- Bot Personas for different “topics”: training / learning or support for employees

# ChatBot Naming

Need to come up with a snappy name that will help to generate immediate interest from organisations so that they want to know more. Ideally it should convey the purpose of the project (performance support chatbot for field engineers)

- CorpBot
- Workhelp
- TaskBot
- HelpBot
- HeliBot
- AshBot
- Troubleshoot
- AssistBot
- AskMe
- PerformanceBot
- TechBot
- Rob Ott
- Rob Otto
- Botto
- NoteBot
- StarBot
- UseBot
- SupporBot
- SuperBot

e.g. Botto the Performance Bot

# ChatBot Visual Identity - Logo



# ChatBot Visual Identity



# botto

THE PERFORMANCE BOT

## LOGO CONCEPT

---

- TV
- Letter 'b' from Bot
- Folder
- Gear
- Plus

## TYPOGRAPHY

---

Logo: Cantarell

User Interface:

- Ubuntu
- Roboto

## COLOURS

---

 Blue #1796fd

 Green #4fd2c2

 Dark #394357

## ICONS

---



# Visual Identity: testing fonts for decision



botto

THE PERFORMANCE BOT

font: ubuntu



botto

THE PERFORMANCE BOT

font: roboto



botto

THE PERFORMANCE BOT

font: cantarell

Testing 3 fonts for the logo:

---

Ubuntu  
Roboto  
Cantarell

OPTION 2

---



Botto

The Performance Bot



Hi there,  
How can I help you?



Hi there,  
How can I help you?

... any doubt?

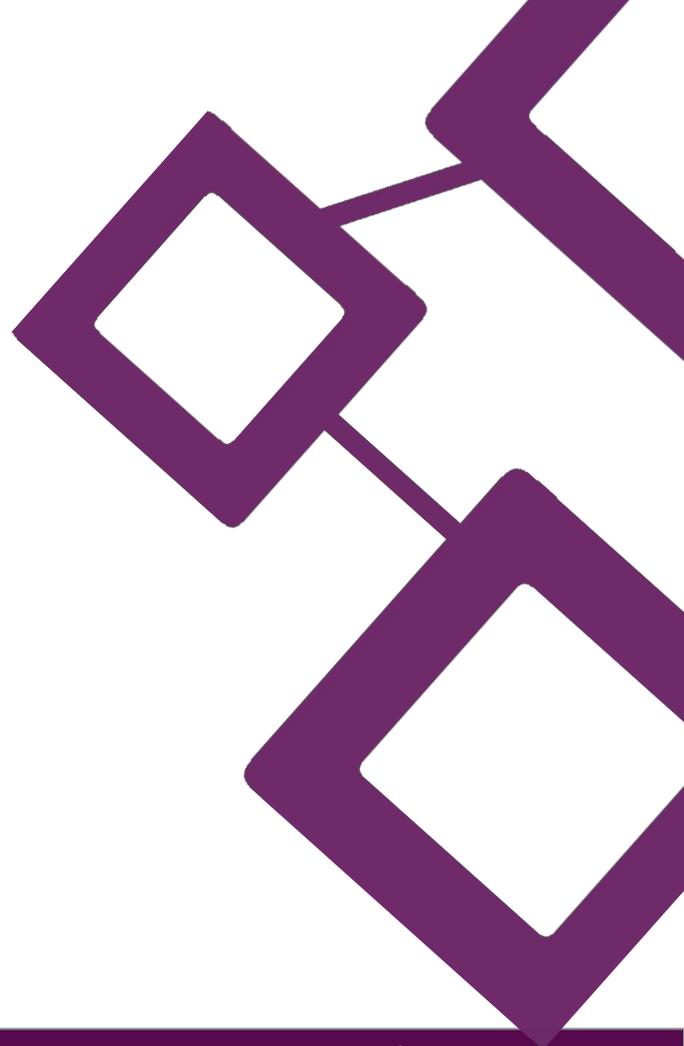


Hi there,  
How can I help you?

... any doubt?

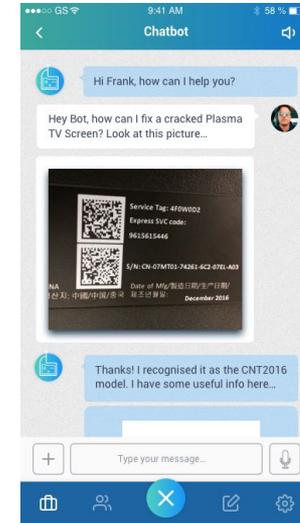
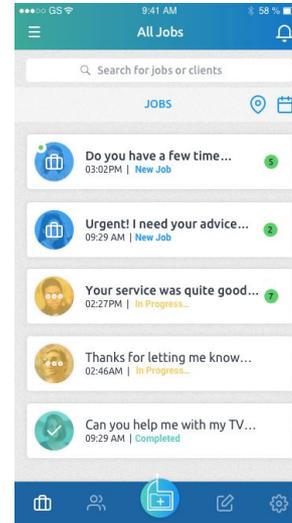
So, let's go to the  
User Experience

# User Experience

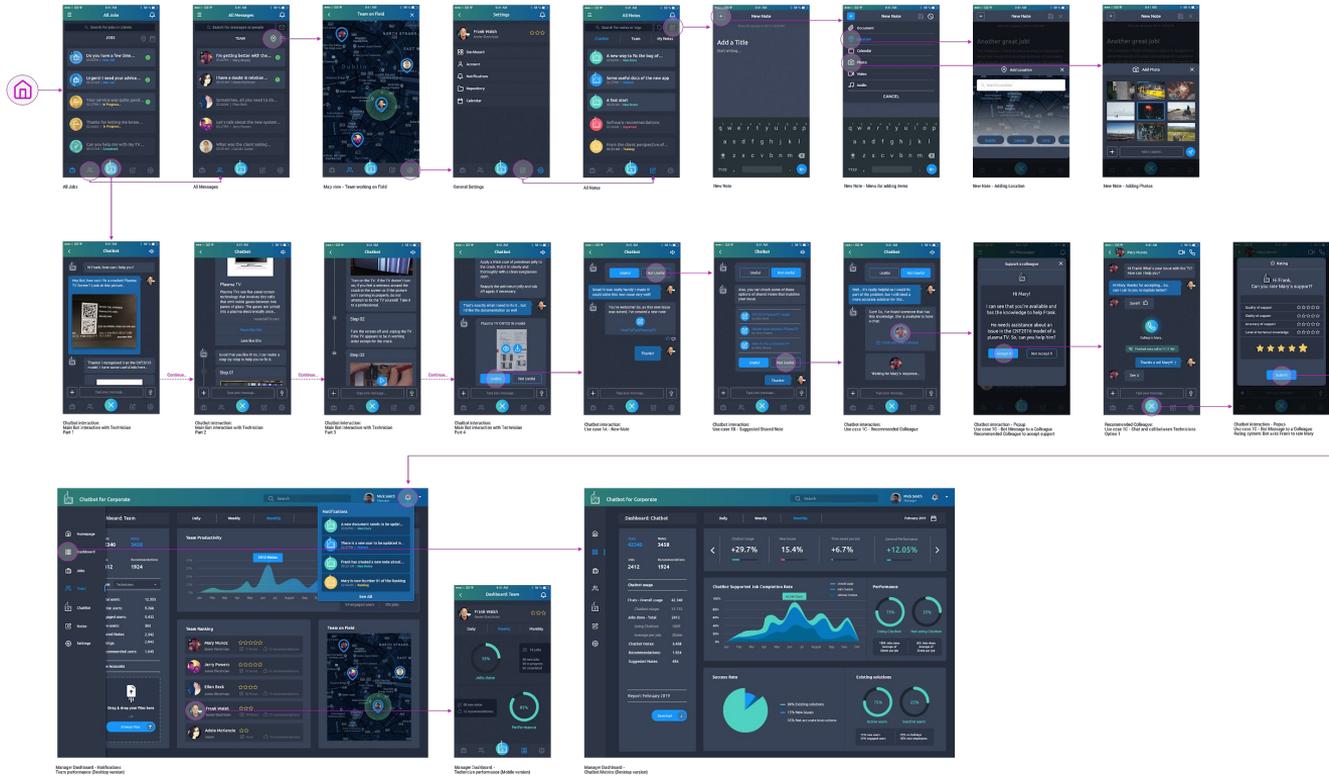


# User Interfaces – Visual Identity

There are 2 options for the user interface: Dark and Light versions. Particularly for this use scenario, the choice of the dark user interface is based on sustainability, as the technicians are working on the field and need to save energy.



# UI Overview



# Field Support App

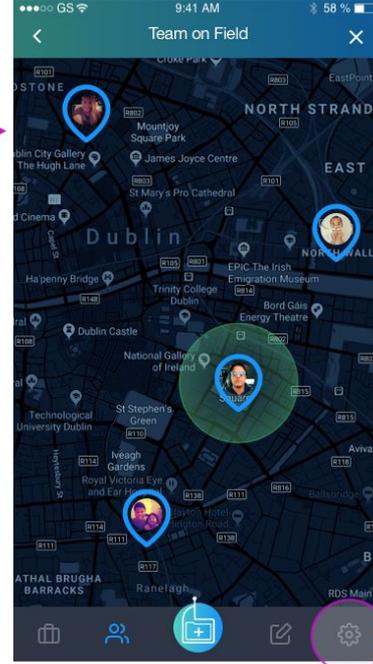
# Field Support App - Chatbot



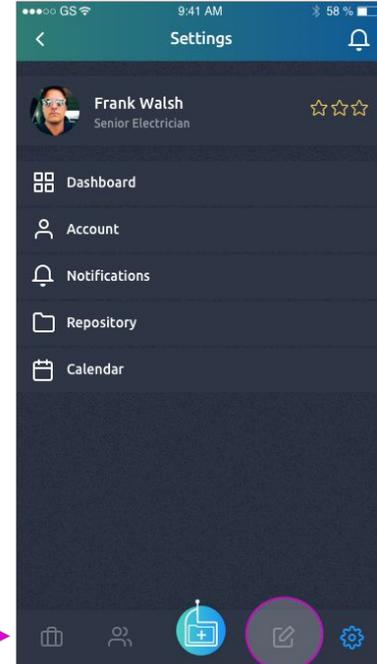
All Jobs



All Messages



Map view - Team working on Field



General Settings

# Interactive Prototype

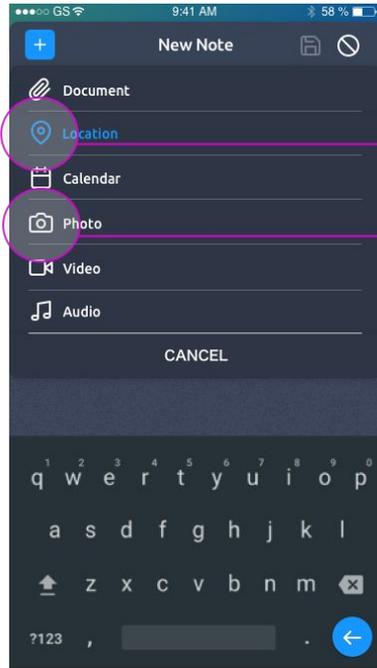
Features  
Testing...



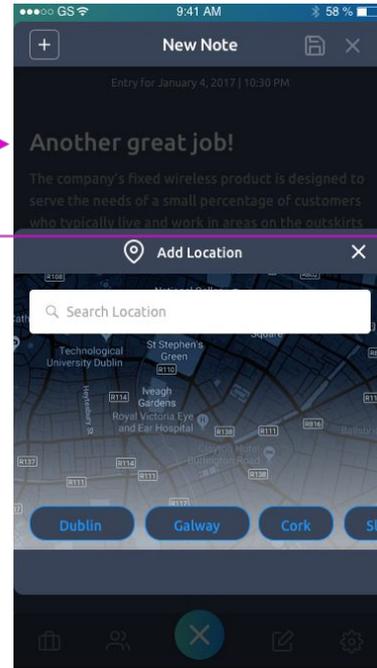
# Field Support App - Notes



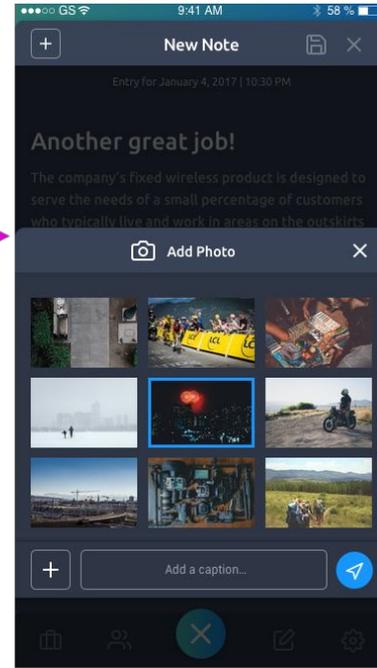
All Notes



New Note - Menu for adding items



New Note - Adding Location

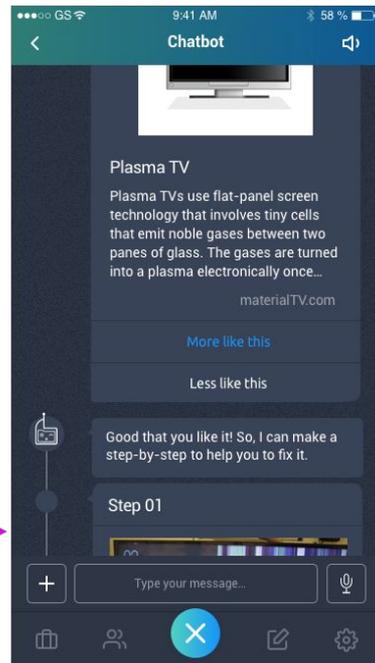


New Note - Adding Photos

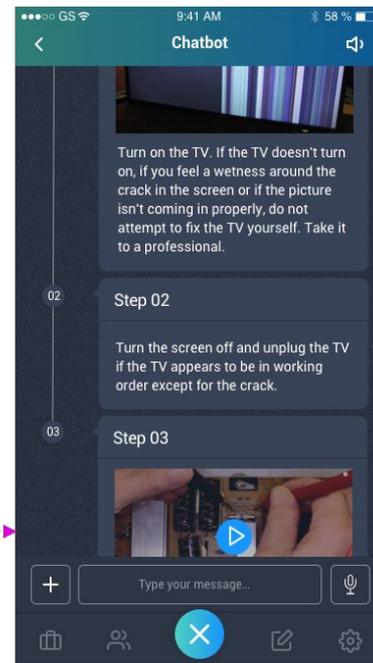
# Field Support App – ChatBot Interaction



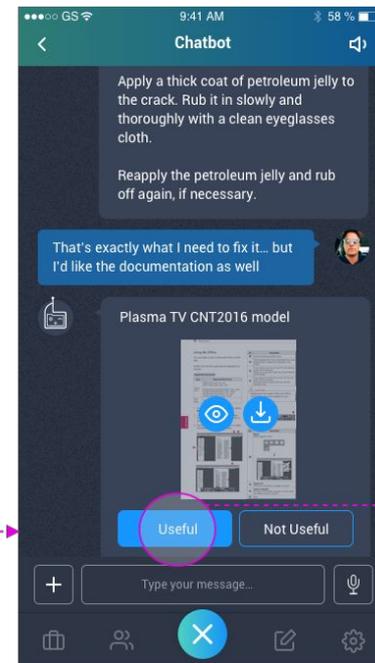
Chatbot interaction:  
Main Bot interaction with Technician  
Part 1



Chatbot interaction:  
Main Bot interaction with Technician  
Part 2

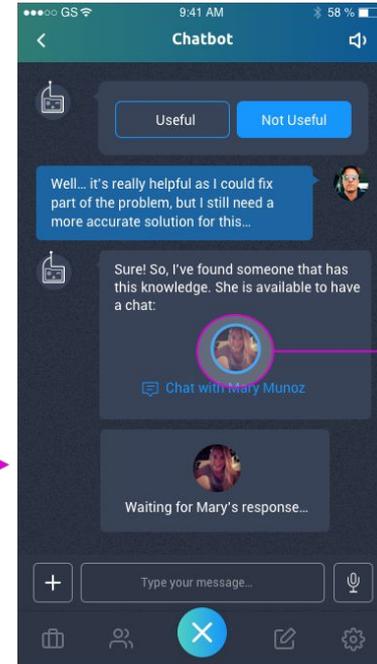
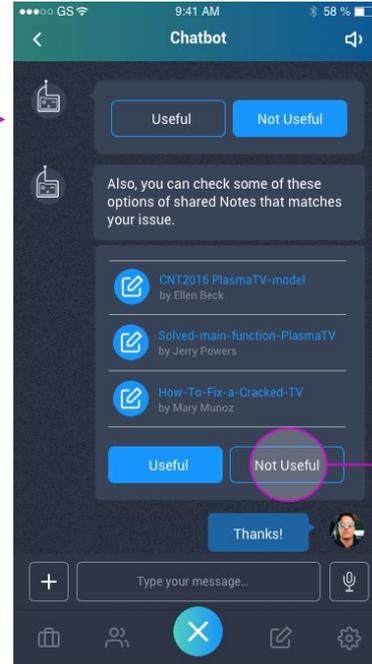
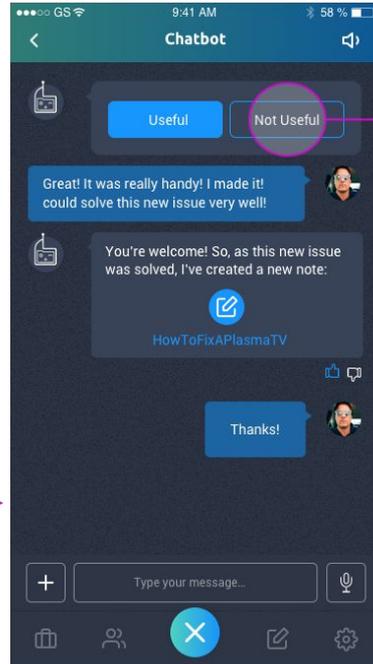
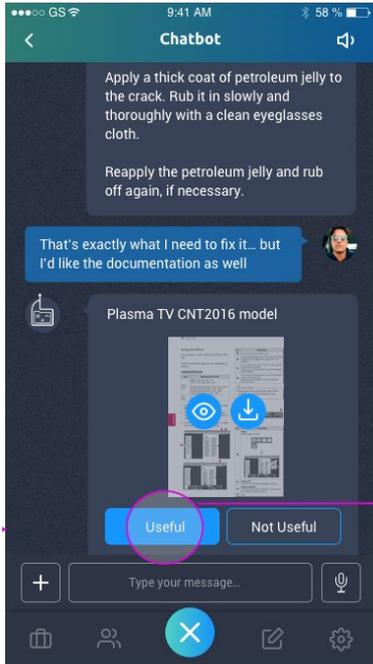


Chatbot interaction:  
Main Bot interaction with Technician  
Part 3

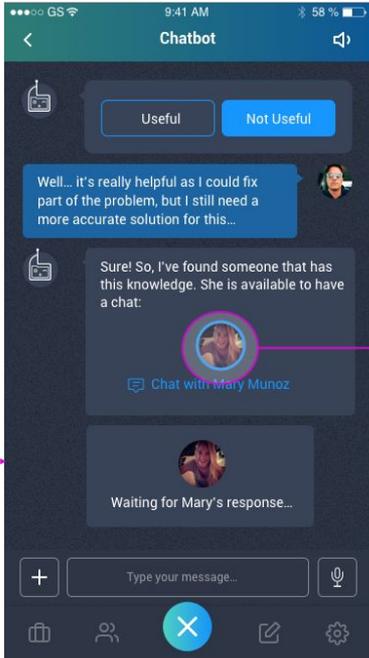


Chatbot interaction:  
Main Bot interaction with Technician  
Part 4

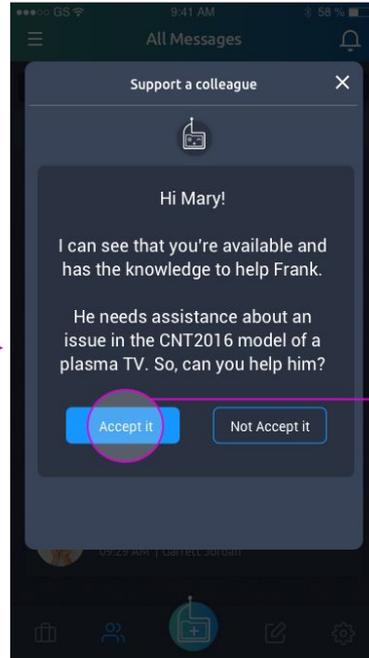
# Field Support App – Use Cases 1A, 1B, 1C



# Field Support App – Expert Recommendation



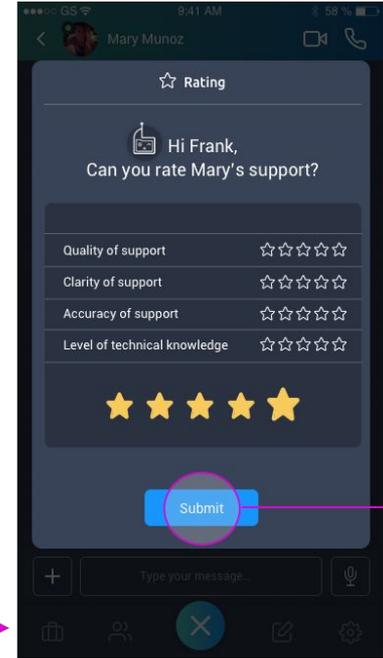
Chatbot interaction:  
Use case 1C - Recommended Colleague



Chatbot interaction - Popup  
Use case 1C - Bot Message to a Colleague  
Recommended Colleague to accept support



Recommended Colleague:  
Use case 1C - Chat and call between Technicians  
Option 1



Chatbot interaction - Popup  
Use case 1C - Bot Message to a Colleague  
Rating system: Bot asks Frank to rate Mary

# Manager Dashboard

# Manager Dashboard: Team

## Use Case 1D:

- Notifications
- Team Productivity
- Team Progress
- Team Ranking
- Team on Field: Map
- Team user's engagement
- Team New Accounts
- Reports

Chatbot for Corporate

Search

Mick Smith  
Manager

Notifications

- A new document needs to be updated...  
03:02PM | [New Docs](#)
- There is a new user to be updated in...  
02:27PM | [Related](#)
- Frank has created a new note about...  
09:29 AM | [New Notes](#)
- Mary is now Number 01 of the Ranking  
02:46AM | [Ranking](#)

See All

54 engaged users | 292 jobs

Dashboard: Team

Homepage

Dashboard

Jobs

Team

ChatBot

Notes

Settings

Team Productivity

2412 Notes

Team Ranking

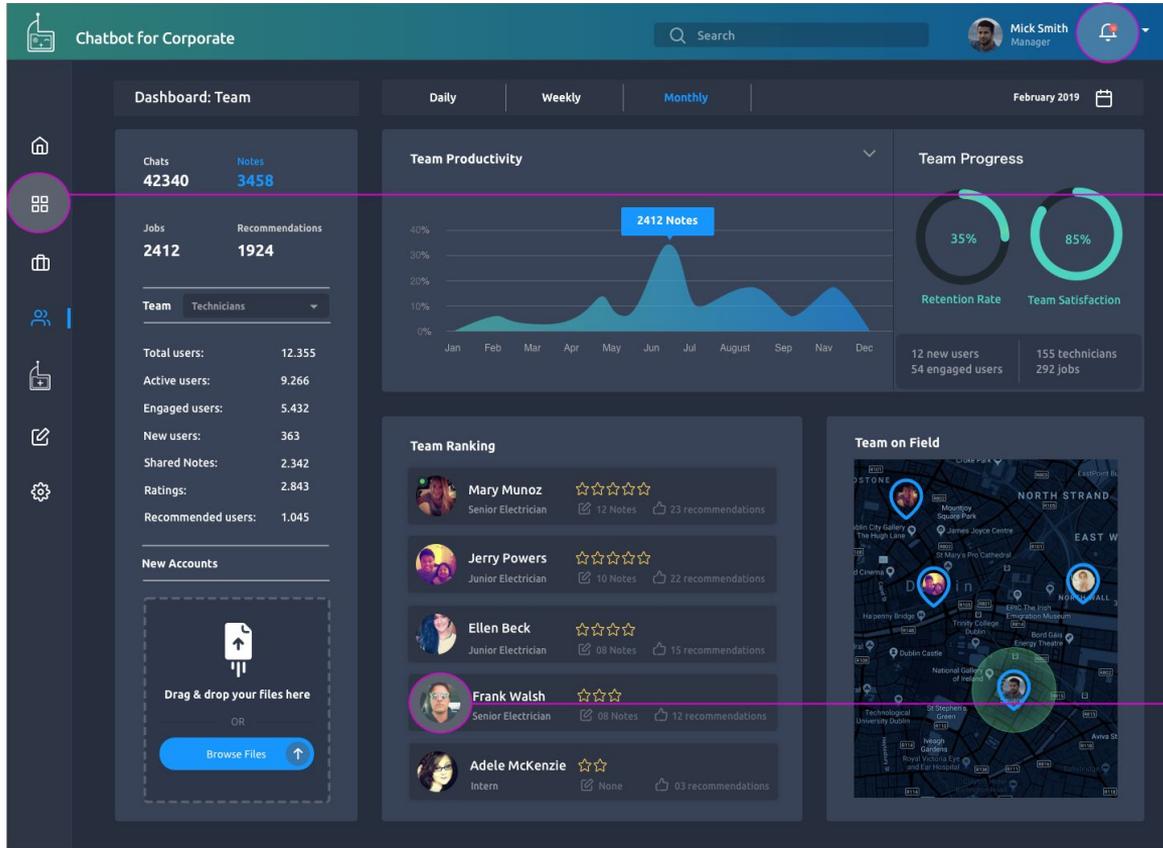
- Mary Munoz  
Senior Electrician  
12 Notes | 23 recommendations
- Jerry Powers  
Junior Electrician  
10 Notes | 22 recommendations
- Ellen Beck  
Junior Electrician  
08 Notes | 15 recommendations
- Frank Walsh  
Senior Electrician  
08 Notes | 12 recommendations
- Adele McKenzie  
Intern  
None | 03 recommendations

Team on Field

Drag & drop your files here

Browse Files

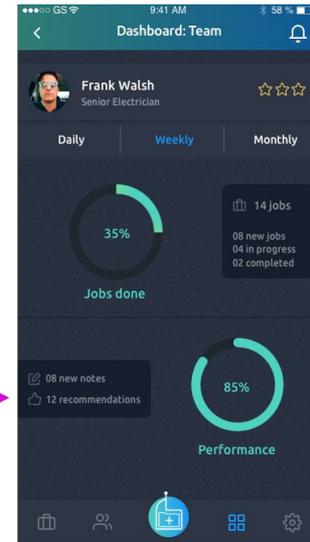
Manager Dashboard - Notifications  
Team performance (Desktop version)



Manager Dashboard - Notifications  
Team performance (Desktop version)

# Manager Dashboard:

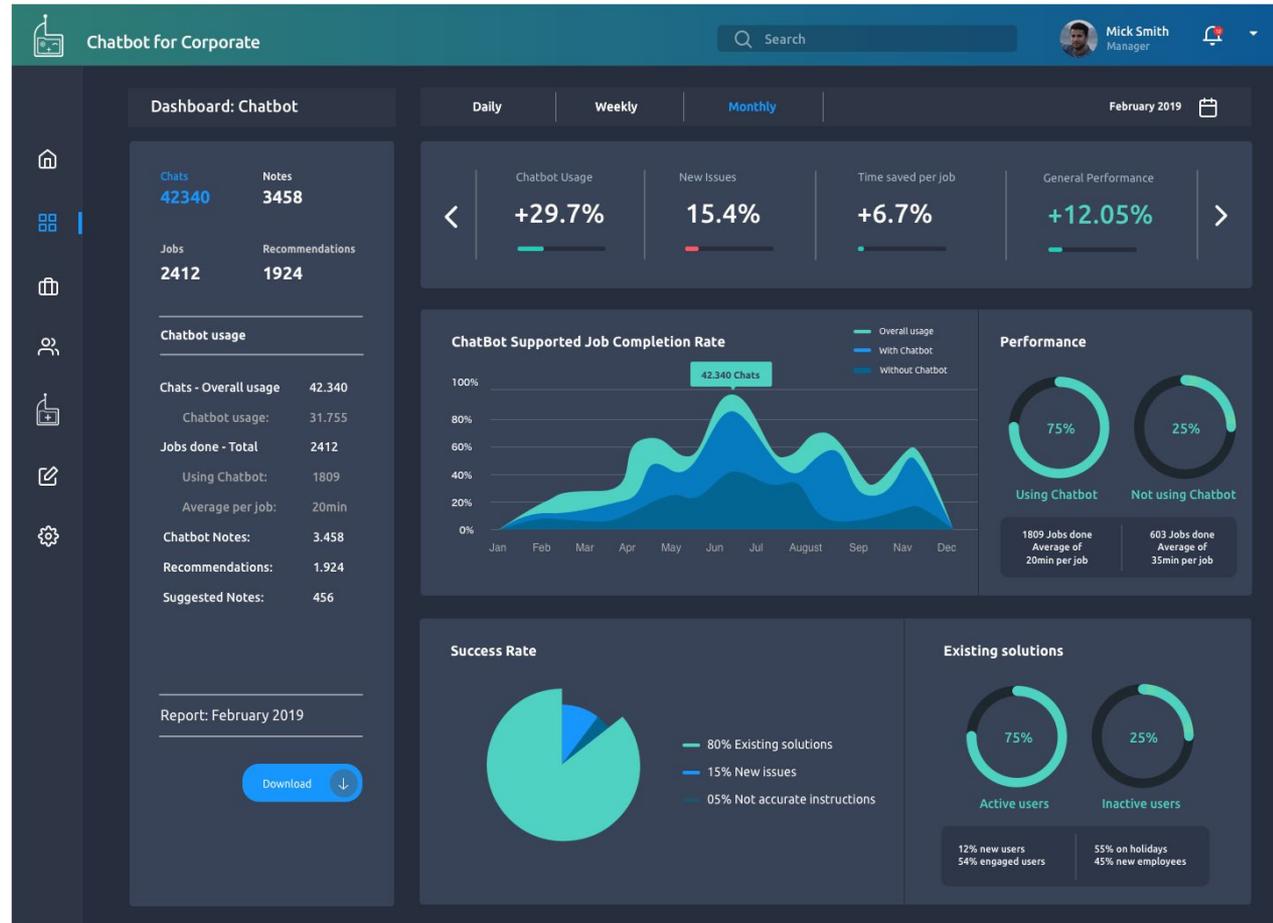
- Desktop
- Mobile version



Manager Dashboard -  
Technician performance (Mobile version)

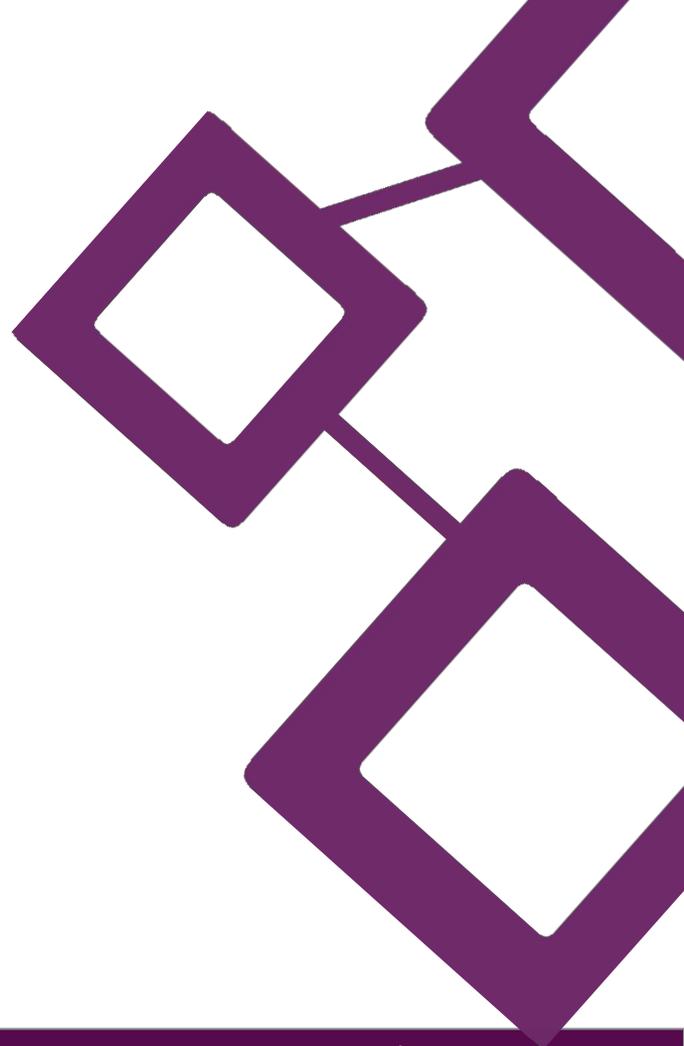
# Manager Dashboard: ChatBot Metrics

- ChatBot usage
- New Issues
- Time saved per Job
- ChatBot performance
- ChatBot supported Job Completion Rate
- Success Rate
- Reports



Manager Dashboard -  
Chatbot Metrics (Desktop version)

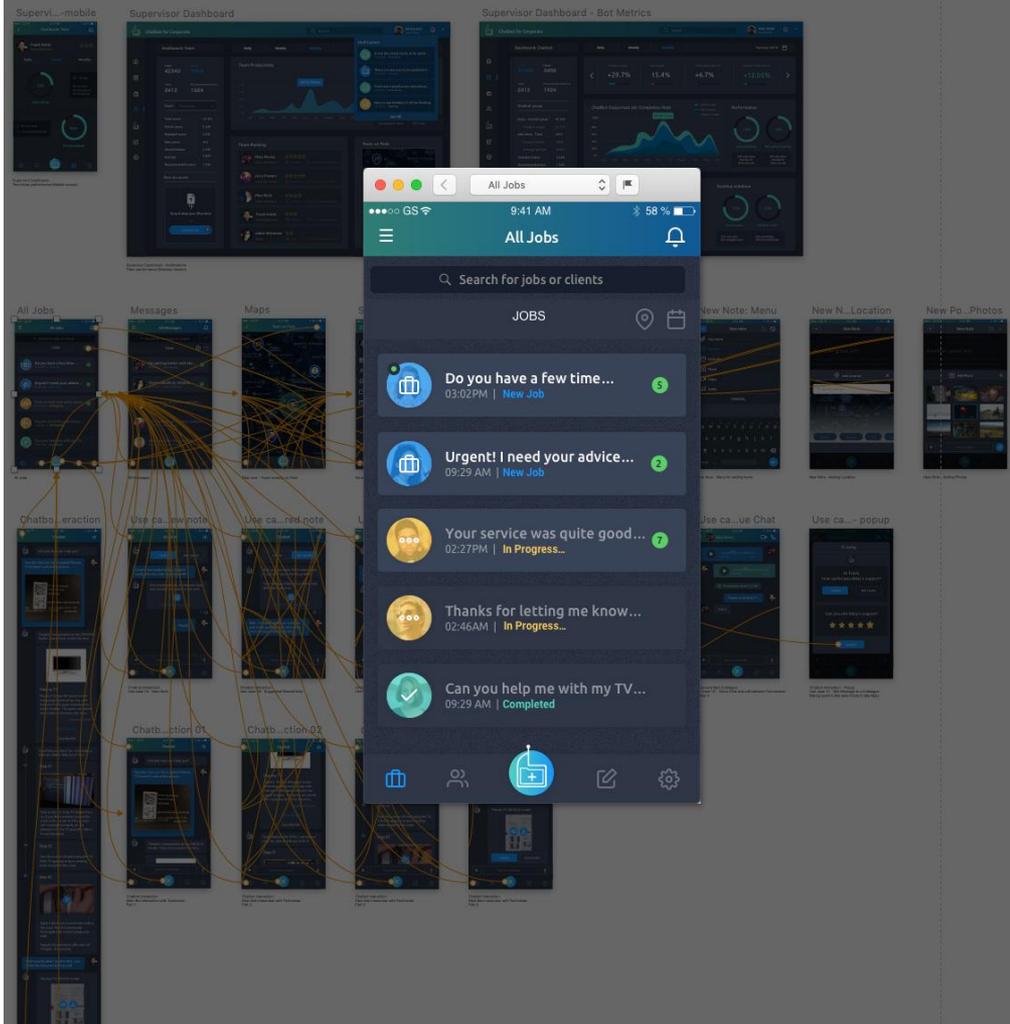
# Demonstration



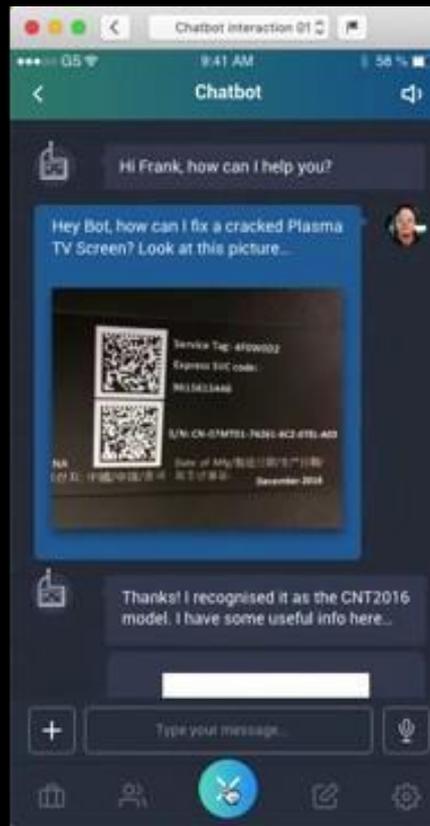
# Interactive Prototype

Video of user interaction with clickable prototype

<https://drive.google.com/drive/u/0/folders/13X8x8vdOso6aEamIbR0PoEE5kkQOKg6j>

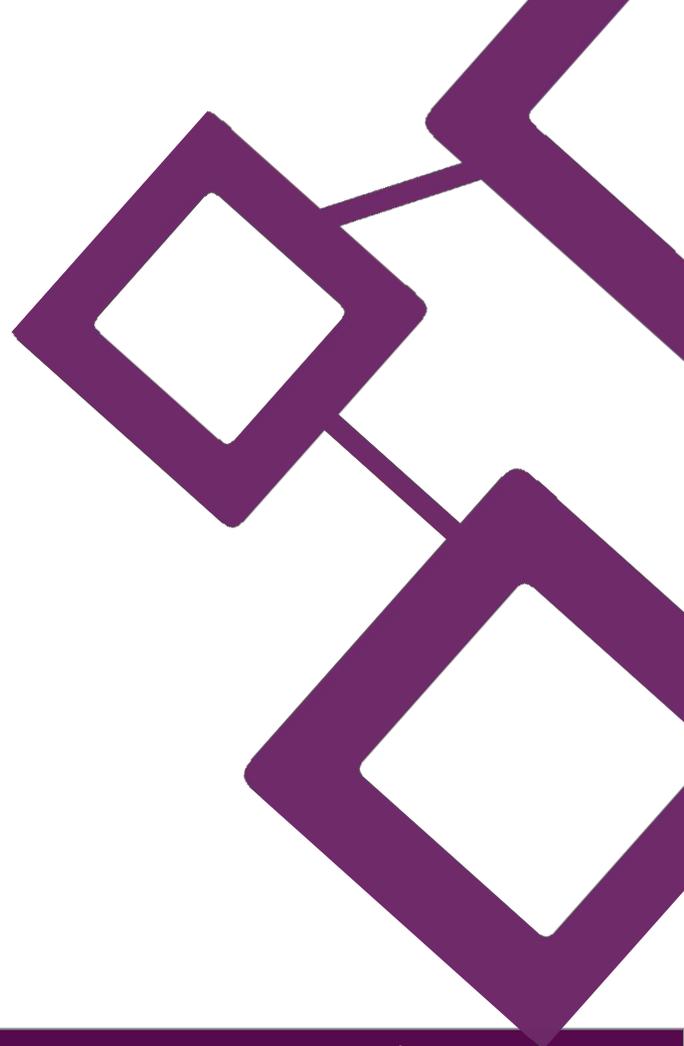


# Interactive Prototype

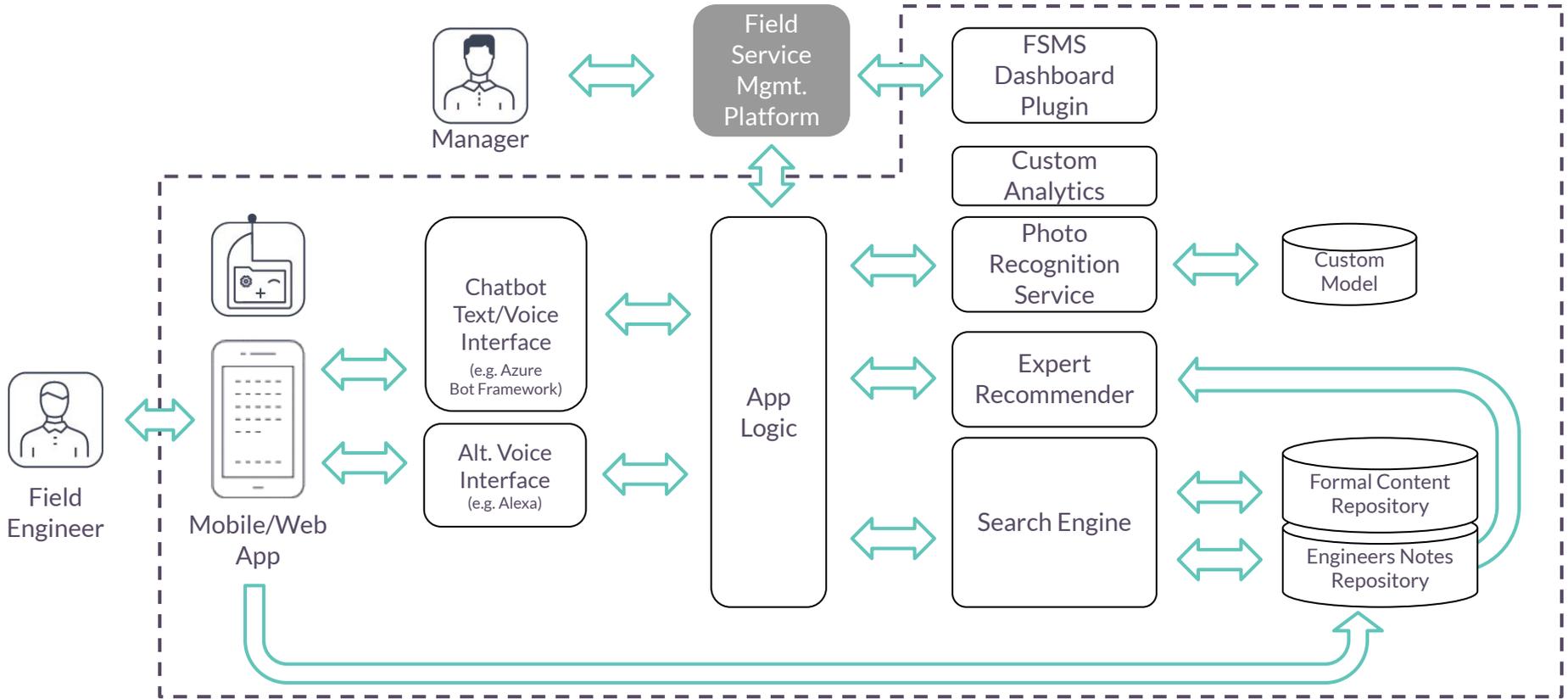


<https://drive.google.com/drive/u/0/folders/13X8x8vdOso6aEamIbR0PoEE5kkQOKg6j>

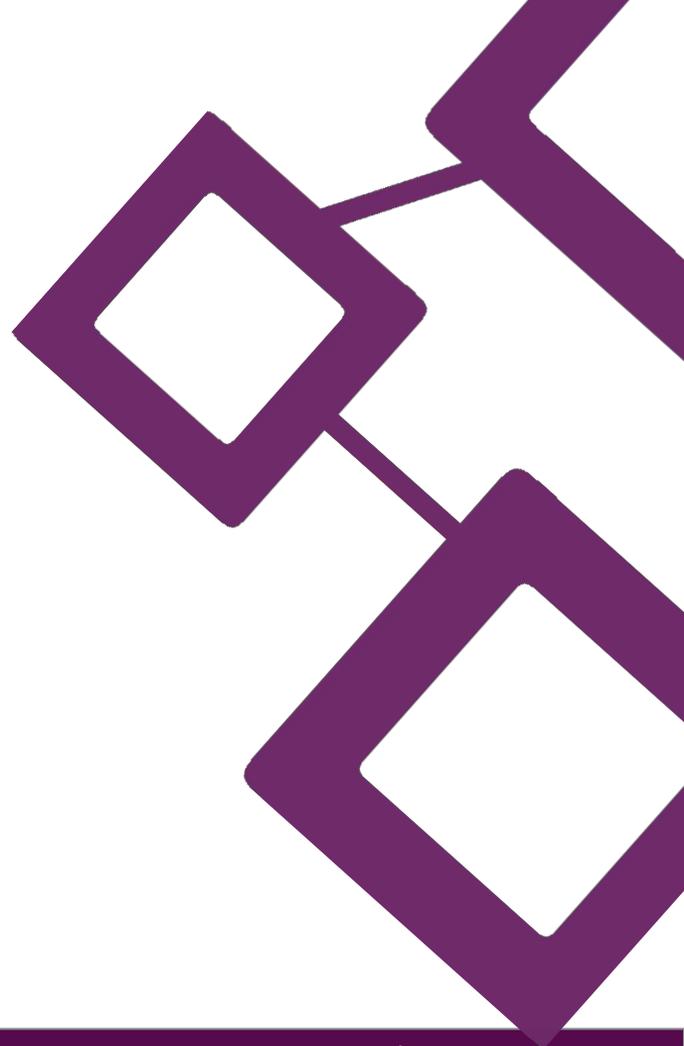
# Technical Solution



# Technical Architecture



# Next Steps



## Phase 2 Projects

### Stage A

#### Team

- Learning Science
- Innovation Services

### Stage B

#### Team

- Learning Science
- User Experience
- Technology
- Innovation Services

Get out of the building

Customer/Problem

Solution

Validate Customer-Problem Fit

Validate Problem-Solution Fit

#### Tools

- Buyer Personas
- Jobs to be done
- Value proposition Canvas
- Problem validation

#### Tools

- Mock-ups
- Wireframes
- Prototypes
- Validation experiments

## Next Steps

- Present work to industry champions
- Customer Validation
  - Identify organisations that align with use case



Coláiste na Tríonóide, Baile Átha Cliath  
Trinity College Dublin

Ollscoil Átha Cliath | The University of Dublin



[www.learnovatecentre.org](http://www.learnovatecentre.org)