

KOMODO

WOMEN'S FOOTBALL: USING VOICE ASSISTANTS TO EDUCATE AND INSPIRE

Giving a Voice to Women's Football through
the power of voice assistant technology,

— **WORK BOOK**
DESIGN SPRINT



WHAT’S IN THIS WHITEPAPER

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Estimated reading time: 23 mins

01 — ABOUT US

WHY LISTEN TO US?

We build experiences that engage your audience – whatever approach that takes, we'll make it work for you.

Voice assistants – Voice User Interfaces (VUI) – are almost old hat now. What was promised as a revolution is an everyday mainstay, with Amazon's Alexa and Apple's Siri part of our daily device interaction. KOMODO is a creative product studio: we take these everyday experiences and transform them into exciting, engaging products your audience wants to use, and that drive commercial revenue.

In this workbook we look at how voice-assistant technology can be used beyond shopping lists and alarms. Our team loves grasping the wider context of new tech – but we never implement it 'just because it's cool'. Every idea comes from a user-focused approach. When you work with us we actively challenge your ideas to refine them into more revenue-boosting results – and in VUIs, we're not just visual designers but competent technical developers too.



KOMODO digital studio.

01 — ABOUT US

All of our product ideas come from a user-focused approach. If you work with us, we'll guide you through our structured process to define success and see whether VUI or other technologies are right for you:

01

UNDERSTAND

We'll gather the data needed to understand who your users are and what they want.

02

DEFINE

We'll define the project through the understanding we've gained, setting scope through real, justified needs.

03

IDEATE

We'll come up with creative ideas to solve your user needs – some of which may include VUI.

04

CREATE

We'll get to work, creating the product to a defined timescale.

05

REFLECT

Our work is never really finished – we'll iterate and update as required to help your product succeed.

02 — EDUCATE & INSPIRE

WOMEN'S FOOTBALL: USING VOICE ASSISTANTS TO EDUCATE & INSPIRE

FIFA released a hackathon competition, 'Give Voice to Football', to explore innovative ways to integrate voice assistants with women's football events and data.

This came in response to the sharply rising use of voice assistants – Alexa, Siri and Google Assistant – and the heightened awareness of women's football driven by the FIFA Women's World Cup 2019.

We were inspired to integrate the technology and the sport – to educate a younger female demographic about women's football, and inspire the next generation.

THE BRIEF — GIVE VOICE TO FOOTBALL

Our team distinctly remember watching their first World Cups as children – the excitement and magic that can spark a deep-rooted passion for football.

The same can't yet be said of women's football – not for lack of drama, but because it isn't as popular or as much a social norm as the men's game, a divide that stems from the school playground.



02 — EDUCATE & INSPIRE

THE PLAYGROUND DIVIDE

A recent Independent article revealed damning statistics about children's playground activity, and the sexism that shapes it from a young age.

"Boys are telling girls that football is a boys' game and that they can't play," said the FA's Rachel Pavlou. "Girls are picking up on the fact that this isn't for them."

By age 10, 95% of boys will be playing some form of football – compared to only 41% of girls the same age.

THE INDEPENDENT

Only 65% of those currently playing girls' or women's football in England started before they were 10. Men's football's overwhelming cultural presence leaves many children thinking football is a boys' sport.

The FA Women's Super League, founded in 2010, is the female equivalent of the Premier League – and things are changing: average WSL attendance grew from 900 to over 3,000 by 2019–20.

95%

of boys play some form of football by the age of 10.

41%

of girls the same age — the playground divide.

THE RISE OF VOICE ASSISTANTS

Voice-assistant technology is a rapidly growing market, fully adopted by the UK. In 2018, 9.5 million people used a smart speaker; where 20% of UK respondents had one in 2019, 50% owned one by 2021.

TechCrunch once forecast 8 billion devices by 2023 – a year too ambitious. Actual figures put it around 4.2 billion in 2020, expected to hit 8.2 billion by 2024. Smart TVs are tipped as one of the fastest-growing voice categories.

Women's football is the fastest-growing participation sport among girls in the UK. I believe it can be the first female team sport to break into the mainstream.

KELLY SIMMONS — FA DIRECTOR OF WOMEN'S FOOTBALL

Almost 20 million UK adults own a smart speaker – roughly 38.2% of the population (voicebot.ai).

Amazon Echo leads by far with 77% market share, followed by Google Home (17%) and Apple HomePod (10%) – Statista. When we first wrote this in 2017, a quarter of UK homes had a smart assistant; now over half do.

8.2bn

voice-assistant devices expected worldwide by 2024 – up from 4.2 billion in 2020.

03 — INFORMATIVE VOICE ASSISTANTS

USING INFORMATIVE VOICE ASSISTANTS TO KEEP THE CONVERSATION ALIVE

Using a voice assistant's instant knowledge, connected with FIFA's APIs, allows easily accessible data on women's football events.

The current API data includes information about the players, coaches, stadiums and matches within the FIFA Women's World Cup – and was available across other events too, presenting wide access to compelling data.

Letting younger children converse with a voice assistant and access this information is an intuitive, simple way for them to learn more about women's football – with an emphasis on keeping them informed after the World Cup ends. The aim is to 'keep the conversation about women's football alive'.



Women's football - USA national women's team.

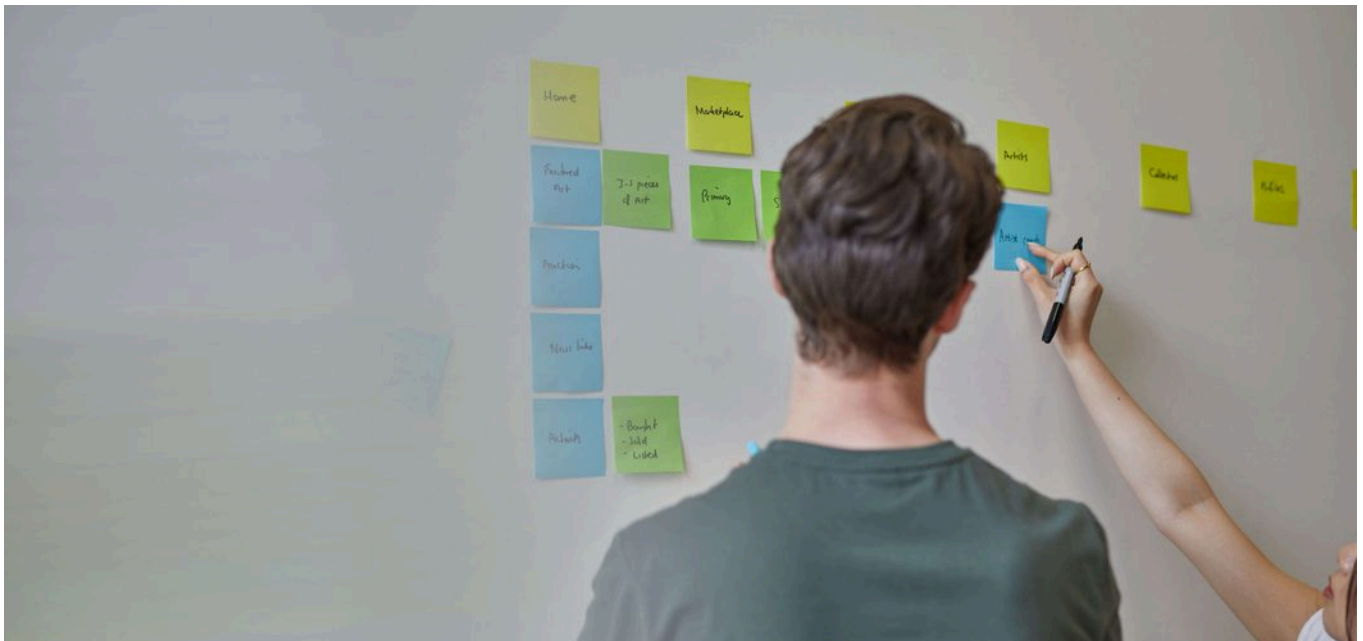
03 — INFORMATIVE VOICE ASSISTANTS

A Natural Conversation

Each answer the voice assistant gives leads to another string of conversational events – rather than a single response with no path forward. This avoids ending the conversation after each answer, allowing a more natural, informative discussion around women's football.

The Demographic

The focus is young females aged 8–12 onwards who are starting to take an interest in football, with a second audience of young males to help break stereotypes. Using FIFA Women's World Cup data as a starting point, users can go on to learn about the FA Women's Super League and future tournaments – keeping each event topical and building awareness of the women's game.



Children learning about women's football via voice.

04 — DESIGN PROCESS

EXPLORING THE PROCESS OF DESIGNING FOR VUI

This was the first time we'd designed a VUI experience, so we wanted to understand the best process for designing a skill for a voice assistant.

Designing a VUI differs radically from a screen-based interface – there's an extra layer of complexity in how a person interacts with it. There's very little control over how a user interacts, especially conversationally: any question can be asked at any point, and the conversation can shift to something entirely different in an instant.

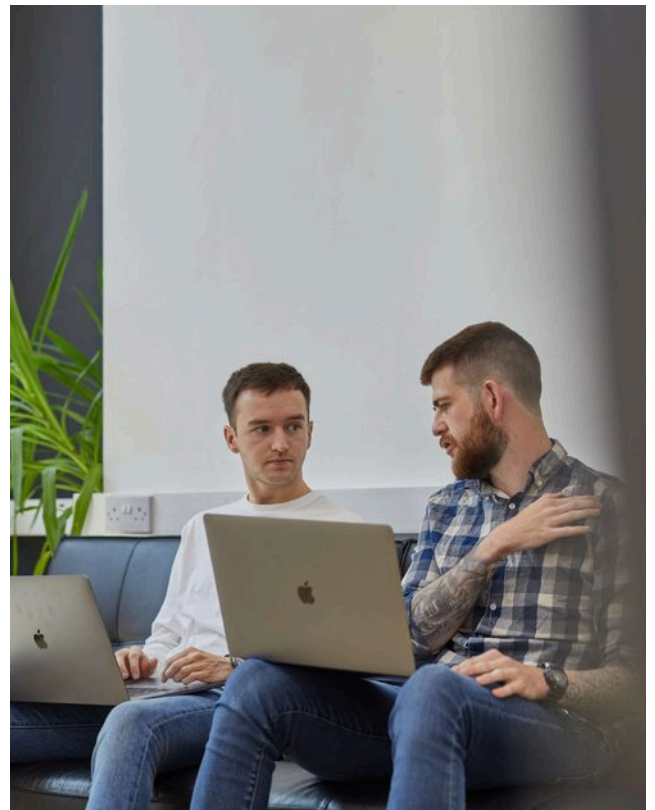
With a website or app, the user begins a flow the designer constructed, with a specific entry point and a set number of options at each step. A VUI is different: the user controls their own entry point – often something the designer hasn't considered – and there's no control over how they interact after a response, or how their tone, clarity and volume affect engagement and error handling.

User Personas

The first stage was to define the people engaging with the VUI – the basis of all UX-led projects. We focused on children around 8–12, predominantly female, with an interest in football. Each persona was based on real examples from media coverage. Building personas for children was new: factors like salary and occupation were non-factors, so the journey had to be reconsidered around a child's needs, wants and behaviours.

User Journeys & Empathy Maps

In a revolution-based project with no existing product, you map journeys through the proposed product and use persona work to understand needs. This helped identify where a voice assistant would benefit the user. Once journeys were finalised, an empathy map helped us understand a user's feelings – and the more detailed the persona, the fewer assumptions we had to make.



Testing out flows with users.

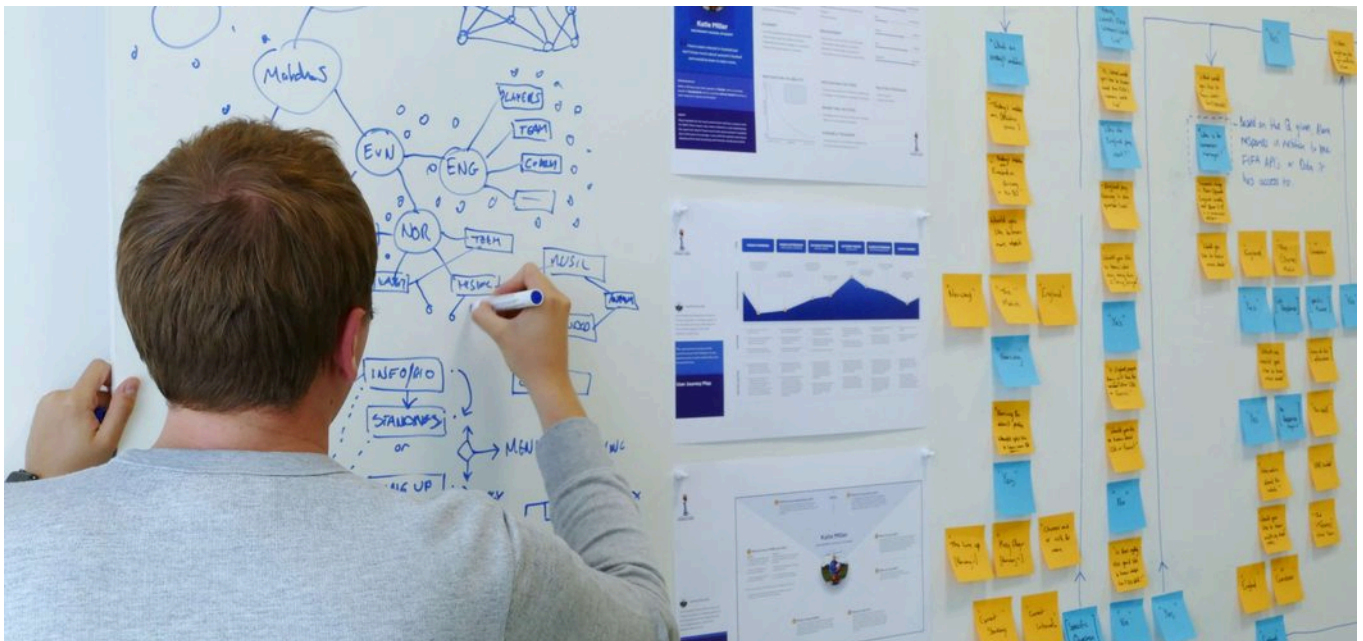
04 — DESIGN PROCESS

Scenario Mapping

After identifying users, their needs and frustrations, we mapped a relevant scenario. Voice devices are often stationary, and the environment changes by time of day – so several categories factor in:

Who – someone, or a group, using a VUI.
Social context – at home, at school, in a car?
Emotional state – inquisitive, tired, task-focused?
Brand / character – who is the user talking to?
Tone of voice – peppy, sensitive, teacher-like?
Device(s) – Amazon Echo, Google Home, Apple HomePod?

Once established, we considered the questions each person might ask – “Which players play for England?”, “Who scored in the Japan v Scotland match?”, “Who has the most caps for England?”. This bank of questions expands as user tests are carried out. Since they’re based on assumptions of what a user might ask, we ran role-playing sessions in the form of a post-it note script to understand how users actually interact.



Building user system dialogue maps for VUI user flow.

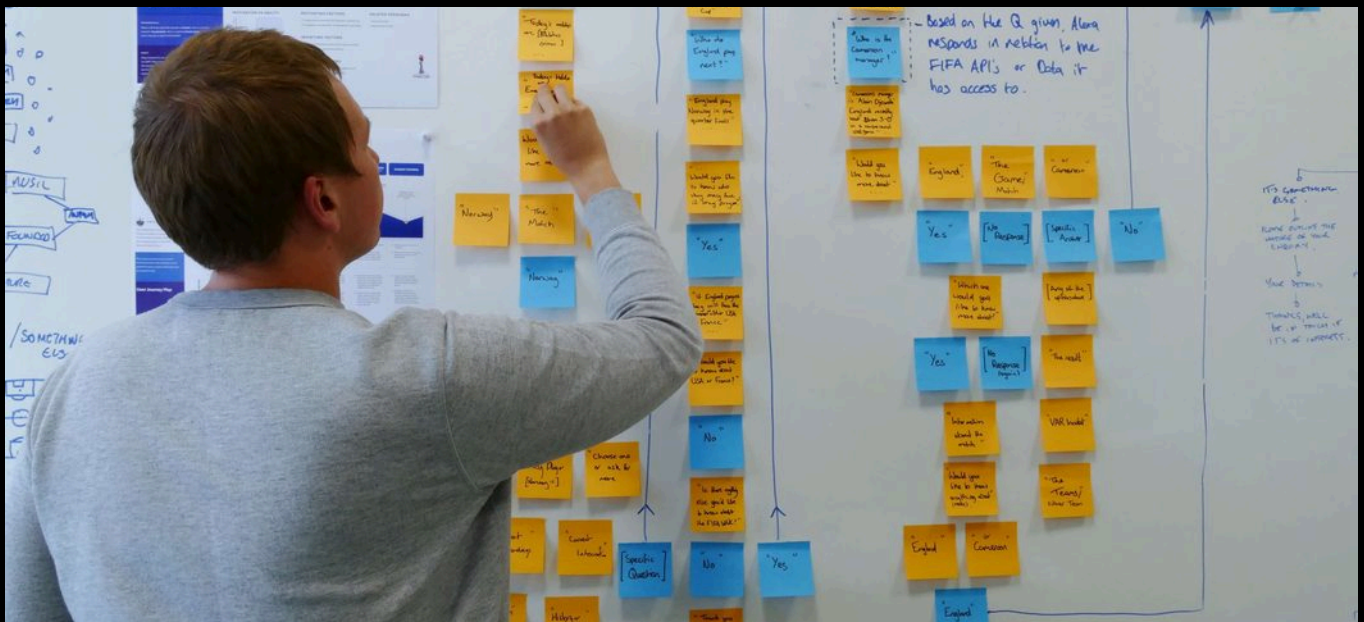
05 — TESTING

USING POST-IT NOTE SCRIPTS TO USER TEST THE EXPERIENCE

Embracing a quick, iterative workflow means conversational strings can be changed and amended immediately to better suit the user.

When defining a user flow for a website or app, you have a good idea which route a user may take – they're limited by the options on screen. With a VUI you have very little control over how a user interacts. There's always a user flow, but it isn't as apparent as a website; on the other hand, a user can quickly find what they need just by asking a question.

We originally created a bank of questions predicting what a user might ask, plus an introduction and starting point. Once the skill opens, Alexa introduces herself and asks, "What would you like to know about the FIFA Women's World Cup?" Since responses differ from user to user, a rough script on post-it notes lets you imitate Alexa's responses while figuring out what a user may ask – and iterate quickly.



Post-it note script role-play session.

A QUICK, ITERATIVE WORKFLOW

A set of post-it notes containing each available response lets you build a wide variety of conversation strings, connecting them depending on what's asked. We added the user's response in one colour and Alexa's in another.

This forms a user flow between the voice assistant and the user, helping you consider where to go next. It gives a feel for what works, how a conversation develops, and how to return to the original topic so other areas can be explored.

Colour-coded sticky notes mean you can easily see if there are parts of a flow where the machine is saying too much, or asking too many questions.

A conversation about a specific event can branch into different areas – the success of certain teams, an overview of players, a stadium's capacity, or past results.

We had to design the VUI to avoid conversational loops: a user stuck in a loop with no way out leads to frustration, and would immediately cause them to stop interacting with the VUI.

PROTOTYPING CONVERSATIONS WITH DIALOGUE FLOWS

A dialogue flow is a script that illustrates the back-and-forth conversation between the user and the voice assistant.

By recreating the post-it note scripts in a digital dialogue-flow map, you can finalise which keywords or trigger words lead to which interactions – and see where the conversation may branch off.

A dialogue flow is like a prototype. It can be depicted as an illustration, or built using prototyping apps.

Keeping the dialogue boxes for the user and the voice assistant in strongly contrasting colours makes both points of engagement easier to follow.

Some responses are variable by date and time – group stages, match results, standings – so it's almost impossible to map out every instance of the dialogue map fully.

Test Extensively

The scale of a dialogue map can be vast – the sheer number of inputs, conversation strings and tangents makes it impossible to map fully. User testing and role-playing as much as possible is key to considering every interaction, rather than assuming how a user will behave. Each user interacts differently, and testing extensively is the only way to consider every outcome.

Future Focus & Direction

After forming dialogue flows from the post-it sessions, we focused on an isolated section to expand – a scenario where a user asks about a match result or upcoming game. Traditionally Alexa would give the date, place, time and opponent, then end. Favours conversational strings, Alexa instead offers the information and asks whether the user wants to know about Team 1, Team 2 or the match – each answer linking to more detail.



A digital dialogue with VUI.

06 — PROTOTYPE

OFFER NO MORE THAN THREE OPTIONS

BBC's Voice + AI team produced a resource, 'How to design a voice experience', from making the BBC Kids Skill. A key principle: offer no more than three options at any point.

Rather than voicing each option, splitting them into pairs proved more manageable – with the option to hear about other pairs if the user showed little interest in the first two.

Providing three or fewer options: “We’ve got five games – how about Go Jetters or Waffle the Wonder Dog? Choose one or ask for more.” Users process the information more easily.

BBC GEL

The user can always ask for something else, or choose to stop – navigating to different topics or ending the session. The idea is to engage as much as possible without being overbearing.

As the prototype evolves, users could learn football facts and educational facts about the countries these teams come from. Next, we’d refine it into a working build – Adobe’s Sayspring makes it easy to create a working VUI for Amazon and Google devices.

IN CLOSING

A PROPOSITION TO HELP YOU ENGAGE WITH NEW TECHNOLOGIES

Our team are actively engaged in investigating and implementing new digital technologies – we embraced VUIs, AR and VR when they were still ‘fringe’. But we don’t implement systems for the fun of it; it’s about the right tool for the right job. Whether you fit Refinement (good → great), Reboot (start again) or Revolution (a brand-new product), we’ll understand your users and commercial goals, then build a product that drives revenue using whatever technology is required.

GET IN TOUCH