About Talking Mats
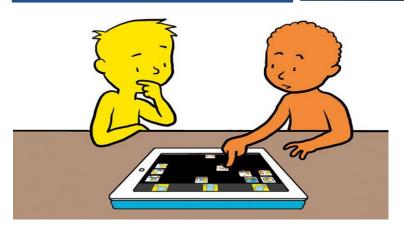
Talking Mats Limited is a social enterprise whose vision is to improve the lives of people with communication difficulties by increasing their capacity to communicate effectively about things that matter to them.

Their innovative, award-winning communication tool is based on extensive research and was designed by Speech and Language Therapists.
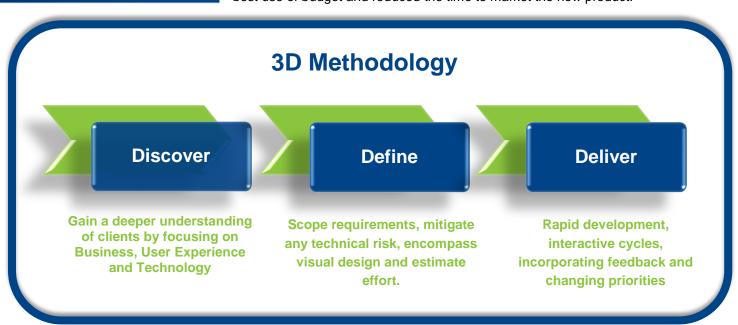
The Challenge

The challenge was taking the existing physical Talking Mats tool and building a digital application suitable for multiple platforms, while maintaining the core ethos of the tool. A significant amount of academic research went into creating the physical product and those principles had to be present in a digital version. The applications had to be extremely intuitive to use and enable better conversations for people with communication difficulties.

The aim was to create 3 digital versions; a browser based version for laptop users and a tablet version for iPad users and Android users. Each application would connect to a cloud server, allowing users to log in from any device, and the tablet versions would allow offline working through syncing with the cloud when a connection was available. There was a requirement to set up a multi-tiered subscription based user account system to match the intended charging model for the digital app.

Our Process

Arum's approach was to totally immerse ourselves in the Talking Mats business to understand their goals, ethos and objectives. We took time to learn how the Talking Mats ecosystem worked and how they wanted to engage with their customers.

By applying our **3D Methodology** we were able to break down the deliverables into phases allowing the key building blocks to be delivered first. This also allowed the best use of budget and reduced the time to market the new product.

3D Methodology

Discover

Gain a deeper understanding of clients by focusing on Business, User Experience and Technology

Define

Scope requirements, mitigate any technical risk, encompass visual design and estimate effort.

Deliver

Rapid development, interactive cycles, incorporating feedback and changing priorities

Discover

In 'Discovery' we identified Talking Mats' overall aims with the project and what they were trying to achieve. First we found out the process that a typical user would go through and what their motivations would be for using the Digital Talking Mats application.
We then discovered that the majority of sessions would require 2 users working with a mat simultaneously - the 'Facilitator' who was administering the mat and the 'Thinker' who was interacting with the mat itself.

Research carried out by Talking Mats indicated that certain factors could reduce the effectiveness of the process. We needed to adhere to the findings of their research to ensure the application was successful for the user.

In the 'Technical Discovery' phase we covered the targeted user environments, laptops, iPads and Android Tablets. We also covered the offline aspects, cloud server requirements and billing systems to ensure the Talking Mats team knew the possibilities before deciding on how to allocate the time and effort.

Define

In the 'Define' phase we created a story anthology out of the requirements gathered during the Discover phase. This anthology, broken down into functional areas, gave Talking Mats a full outline of where they wanted to go with the Digital Talking Mats application and how we would achieve it. Areas of potential risk were highlighted as well as listing the key stories that had to be carried out for the project to be a success (using the MoSCoW rating system).

A proof of concept application was also built to show the key concepts within the application, such as the interactive mat canvas. This helped to mitigate potential risks and highlight any challenges in the key areas. Talking Mats were then able to select the functionality to be developed in an order that would deliver the greatest business benefits within the shortest timeframe.

Deliver

After gathering requirements, we built a minimum viable release application. From there we built out to encompass all of the phase 1 requirements. Using our agile **3D Methodology** enabled Talking Mats to have regular site of the application on their iPads and feedback throughout the build process, allowing them to continually refine and develop the product.

Working with an application that needed to be extremely intuitive and user focused, it was only until users saw the application that the real potential could be understood. This resulted in new ideas and functionality being added to the story anthology and our agile development process was then able to accommodate these changing requirements without impacting on project delivery or budget.

The Outcome

Working with the Talking Mats team we created a successful application that runs on multiple platforms and really does change the lives of its users. We are extremely proud of the work that we've done with Talking Mats, not just in our clever use of the latest technologies to convert a physical tool into a digital application, but also in the fact that it has been so well received by the people who use it every day.

The application has gone through several phases and releases, and has now won the category of "Most Impressive Third Sector Digitally Enabled Service" at the People Driven Digital Health Awards.

"Arum's robust 3D methodology, enthusiasm and technical skills were fundamental in completing the project. They have helped give people with communication difficulties a voice, and we value the continuous support that they showed throughout this mission."

Lois Cameron, CEO @ Talking Mats

About Arum

Arum is specialist consultancy that delivers bespoke software solutions that put user experience front and centre. Arum has extensive experience of working across all levels of organisations creating solutions which utilise technology as an enabler rather than a blocker. Arum build solutions that allow users to consume services across multiple platforms and technologies.

We can support organisations at every stage of the development lifecycle from discovery to delivery and beyond.

We also help organisations refresh and update existing applications to improve efficiency and user experience.