

What would you like to hear?

### Finding features for an artificial intelligence driven DJ

This research aims to help Awaves, a software start-up developing a web-app for their artificial intelligence (AI) driven DJ, get closer to a product they can launch onto the market.

At the start of this project, Awaves had a first beta version of their play app. The beta had limited functionality. The user could play music mixed by the AI as a party host, or join a room as a guest. All users can vote on what DJ is playing, each DJ representing a different genre. At the start of this project, only two DJs were available. A wireframe displaying the working of the beta can be seen in Figure 1.

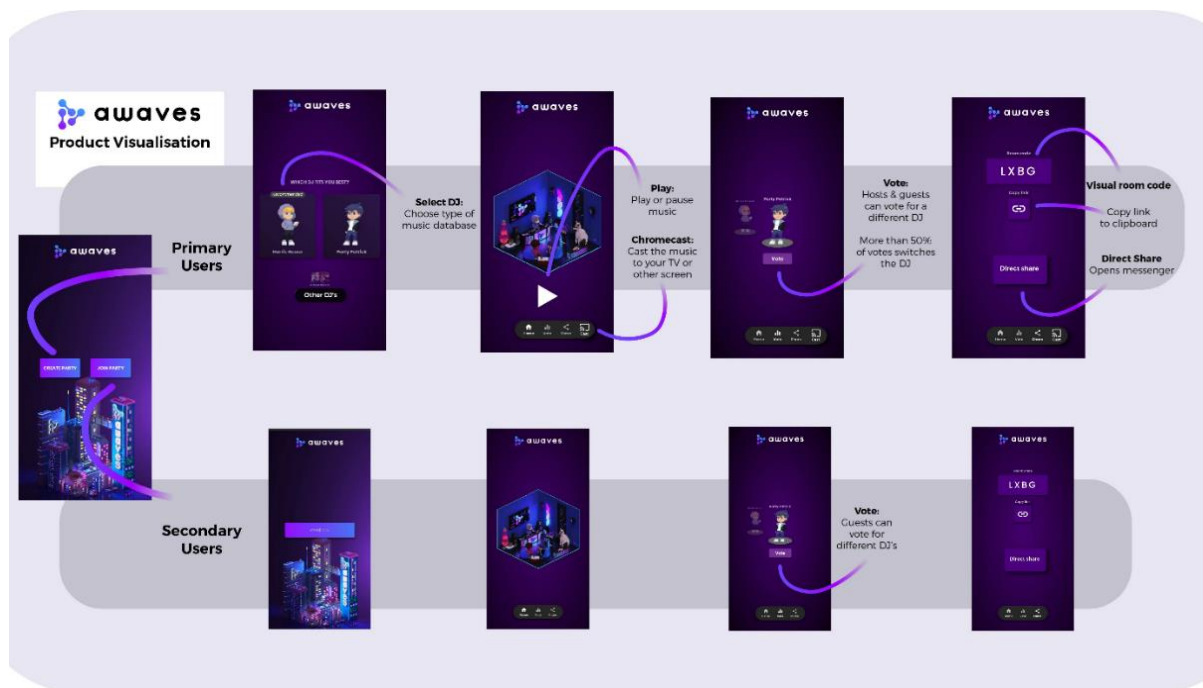


Figure 1: Wireframe of the user flow of the Awaves beta. Primary users (hosts) and secondary users (guests) follow a different flow to end up in a party.

Awaves currently is still in development, as the beta is not considered a finished product yet. Even when they reach the point where they want to launch their product, they think their product needs more features to fulfil the wants and needs of their target users. This means Awaves' product is not yet at Product Market Fit. Awaves does have ideas about what features bring them closer to Product Market Fit, but they are unsure if their ideas are the ideal solution to the problems of their target audience.

Multiple methods on approaching PMF were used to develop these features. The PMF pyramid (Olson 2017) (Figure 2) and the Viability, Feasibility, and Usability/Desireability framework (VFUD) (Dennehy, Kasraian, O'Raghallaigh, Conboy 2016) (Figure 3). These methods guided the further steps taken throughout the project.

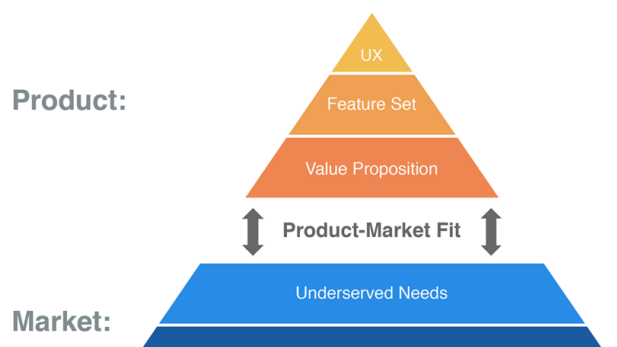


Figure 2: Olson's (2017) pyramid for product market fit. PMF is the key that fits the product to the market, or the other way around. Closing this gap means finding, or approaching PMF.

The VFUD was used stepping in at the middle of the flow, as Awaves' has already developed a MVP and concluded it is not yet at PMF. The goal is to deliver an advice on what features should and can be included in the product to get closer to PMF.

First, the target group and the competition were analysed. Next, by use of interviews and user tests, problem definitions for Awaves' product (their underserved needs) and value propositions for the to be developed features were defined. Then three features were designed to give more control over the music playing to the user, these were prototyped and finally the prototype was tested with the target group to check for any problems with the developed features.

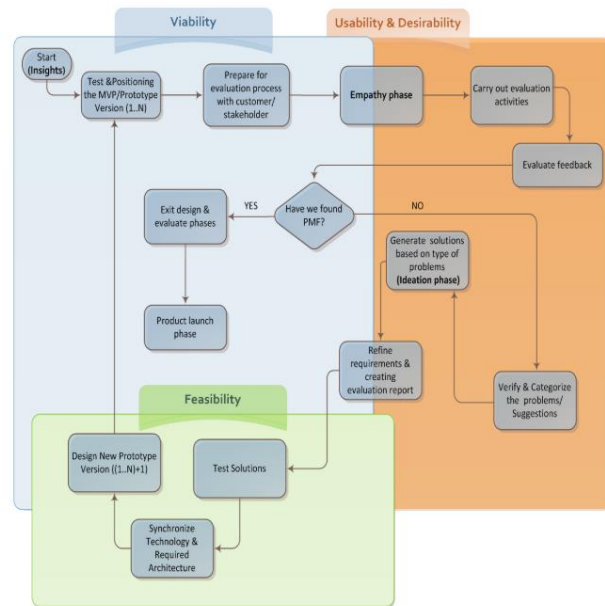


Figure 3: Dennehy, Kasraian, O'Raghallaigh, Conboy (2016) VFUD.

This validation, together with knowledge gained on legal and technical constraints, concluded into an advice to Awaves on what features to implement into their product to get closer to PMF. One of the features was deemed very successful at bringing Awaves' product closer to PMF and technical feasibility, but legally impossible to implement in the near future. Another feature was deemed quite successful at bringing Awaves' product closer to PMF, is technically feasible and legally possible to implement. The final feature needs more development to bring Awaves' product to PMF, is technically less feasible and has legal implementation issues as well.

## References

Dennehy, D., Kasraian, L., Raghallaigh, P. O., & Conboy, K. (2016). Product market fit frameworks for lean product development. *R&D Management Conference, July*, 1–11.

Olsen, D. (2017). *The Playbook for Achieving Product-Market Fit*. Mind the Product.  
<https://www.mindtheproduct.com/the-playbook-for-achieving-product-market-fit/>