

Team Tokyo

Marketing Requirements Document (MRD) “DigiChef”

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Intro

A specialized AI device to assist you in the kitchen with recipe ideas and instructions. Users can watch videos or follow a traditional written recipe while communicating with the DigiChef with their voice.

The grocery ordering and delivery app Instacart will be integrated into the product so users can order any ingredients or groceries they need through the DigiChef.

DigiChef will connect to the user's wifi network for searching the internet for recipes. Users will have the option to download and save their favorite recipes for future use on the DigiChef. If the user loses their internet connection, these recipes and videos will still be available.

It will run on a rechargeable battery so there will be no cords to restrict its placement.



This is a rough idea of what the DigiChef will look like. It will be a relatively small figure with a chef's hat that holds the screen for the user. When it's interacting with the user the eyes and smile will light up.

Revenue or Cost Focus

As stated by the market research team, the product will focus on supporting both quality cost-reduction and revenue generated design processes.

The product's main appeal is its consolidation of favorable cooking features into one object at an inexpensive price. The customer does not have to spend more money to purchase an alternative AI device with unnecessary features. Learning how to cook becomes more accessible with a product at a lower price range.

The product differentiates itself from other AI software by combining preferable aspects of other AI devices; DigiChef produces the optimal cooking experience through one product. The product may be viewed as an important investment for those interested in learning how to cook. Currently, AI software that teaches users how to cook is expensive, further discouraging user investment.

Desire to Innovate

DigiChef will be designed partially using a renovation design process with a main focus on innovation. There are a lot of existing AI devices on the market, however, none of them are specialized for hands-free kitchen usage.

The design team will need to create a brand new physical product integrated with AI technology that is highly interactive and responsive to users' needs in the moment. They will also need to integrate the Instacart app so users can easily purchase ingredients or regular groceries.

Length of Time Horizon

The stakeholders of DigiChef are aiming for a beta test over the summer, so the aim for the launch is summer of 2021.

The set-back schedule for the design, development, manufacturing and delivery of DigiChef is as follows:

- Design Process: April 2021
- Prototype Development and Manufacturing: May 2021
- Delivery of the first prototype: June 2021

Design Schedule Detail

Activity	Timeframe
Design Research	March 2021
User & Domain Analysis (U&DA) Complete	March 23, 2021

Development of Requirements and Context Scenarios	March 18, 2021
Development of Framework and Design Language	April 1, 2021
Form & Behavior Specification (F&BS)	April 15, 2021
Detailed Design Development	May 2021
Delivery of final design and presentation	Early May 2021

Understanding of the Problem

DigiChef allows people without much experience in the kitchen to feel inspired and able to start learning, and would benefit from assistance finding and completing recipes and ordering ingredients.

While current devices such as Alexa and Google Home can be useful for shopping and basic searches on the web, they are difficult to communicate with during cooking. They do not have screens, cooking videos, or a virtual assistant to guide you while you are cooking. Because cooking is a very hands-on activity, trying to work with multiple applications scattered across different devices can make the process more difficult than it should be. Our product not only focuses on interactive-friendliness while cooking, but also enables the user to utilize all of the handy cooking applications in one place.

Willingness to Invest

Because DigiChef does not rely on any new technology and simply brings together existing features, much of the expenses will go into the design process. This is necessary to ensure that all of the existing applications and features work together very naturally and easy-to-use for consumers. In addition, while this product will be useful to all consumers, it will not be seen as a necessity by all. This means that the product will initially be targeted towards the leisured class, making the physical style and aesthetics an important aspect as well.

Risk Factors

The design team's main focus will be to create a "friction free" product; if the design is not in every way fluent users may be discouraged from purchasing the cheaper product and opt to invest in more expensive AI options that include additional features. If not designed to optimal usage, the DigiChef may be viewed as just an addition to the "invasive" array of household AI devices.