

# User research plan for the Bakery App

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## Study 1: Semi-Structured Interview

### Background

I am a baker and tech guy who worked for several artisan bakeries in different

countries in the last 20 years. During that time I learned the "pitfalls" in artisan baking

and the need for technical support to overcome these. In my last job, my Boss asked

me to digitize our business, mainly the production processes. Although this task has

not been finished yet, I want to use part of that knowledge to create a business

framework for an artisan bakery franchise concept (WeHaveBread.com) to help

small artisan bakeries to operate their business efficiently. This framework aims to

offer standardized but also highly individualised solutions for workflows in artisan

bakeries. It shall help establishing and running a small bakery with a minimum of

capitalization.

This is a study of the possibility of designing a mobile app called *HandMeBake* as a

vital part of the WeHaveBread.com concept to support baker in their daily workflows.

The future app will have different functionalities, like recipe administration, SOP

development, production planning, etc. But with this study I focus on the (probably most annoying) tasks in every bakery: the cleaning and hygiene processes in the

bakery kitchen.

## Research Goal

I want to learn how bakery staff can be motivated to finish the daily, weekly, monthly,

etc. cleaning chores. I would like to find ways to do this in a more collaborative way.

I want to learn more why specific cleaning tasks are postponed, while others are finished in time. How the staff coordinates who is doing which task and how to help

them to decrease the level of annoyance.

- Learn as much as possible for designing a simple, intuitive and functional mobile

app interface for storing what has been cleaned, when, how and by who.

- Learn more about how the staff is doing the cleaning tasks, how motivated they are and in which circumstances the chores are not finished
- Use the collected data for reports addressing stakeholders (e.g.: hygiene inspectors)

## Research Questions

- [Needs] Organization, Input & Output *What are the guidelines, standards and outcome of the cleaning task?*
  - Is there a Checklist?
  - What are the cleaning intervals?
- How can we ensure that cleaning will be collaborative, e.g.: everybody is committed to do his/her part (supervised or older baker should not simply delegate it to younger baker)?
- How can big cleaning chores (like annually cleaning of the oven) be distributed over more than one shift by sharing the task?
  - What happens if something wasn't cleaned?
- [Behaviors] Process *How is the cleaning process organized?*
  - How do they decide what should be when cleaned?
  - When are they cleaning (during work, at the end of the shift?)
  - How do they document the results?
- [Behaviors] Acceptance *Will baker accept an app to document their cleaning chores?*

- How must the app be designed to facilitate the documentation?
- How can the app motivate them?

**Method & Recruiting** I conduct 20-30 min  
semi-structured telephone interviews to collect in-depth

qualitative data from at least 3 employees in a  
bakery:

- Master baker (supervised position)
- Baker
- Apprentice
- Kitchen  
aids

and at least 1 person who is in charge/controls/supervises the  
bakery:

- Store manager
- Owner
- General Manager

To recruit participants, I will send text messages to my former colleagues to ask for  
a

tele- phone  
interview.

## **Script**

### **Introduction**

My name is  
Naveen.Thankyou  
verymuch for  
participating in this study.  
The research we are  
carrying out is to enable  
to build a product that  
would serve as a  
digital-enabled bake. It is  
an app(mobile or web)  
through which bakers  
and customers can  
collaborate and make the  
bake digitalised.I would  
love you to have 30mins  
interview with you.During  
the interview you can  
pursue at time to ask a  
question and feel free to  
share your views.Do you  
have any questions  
before we start?

do you mind if i recorded this session to us as a reference when carrying out analysis?The recording would only be used within my team to complete the app development.

### **Warm-up Questions**

- These are crazy times right now. How is the situation at your work during the

Corona- Virus pandemic?

**[Rationale: want to know about the participants work]**

- Did you change the workflows because of the pandemic? Did you change the

hygiene checklists

**?[Rationale: want to know about participant**

ts work  
flow]

## Bakers

- Do you like cleaning the bakery?

- When do you usually clean?**[Rationale: Want to have about the bakers works]**

- Beginning of my shift
- End of my shift
- During my shift whenever I have time
- Depends - always different

- Do you have a cleaning checklist?**[Rationale: Want to know about the process done by the bakers]**

- Yes

- No

- Just some kind of a rough framework/guideline
- Can you give a rough estimate about how long your cleaning tasks take (e.g. 10 min- utes, 30 minutes)? **[Rationale: Want to know the bakers timings and information or work they do]**

- <5 min % of all tasks
- 5-10 min % of all tasks
- 10-30 min % of all tasks
- 30-60 min % of all tasks
- How do you decide if your cleaning task is finished?
- Are you satisfied with how your colleagues cleaning the bakery?
  - if not: explain why not / give me examples
- Do you use your smartphone during work?

**[Rationale: want to know about the bakers devices using in their work]**

- Yes

- No

- What type of smartphone do you have? **[Rationale: want to know about the platform the bakers using]**

- iOS

- Android

- Other



- How often do you use your smartphone during an average shift?
- Can you describe how you use your smartphone? Do you use it with one hand - and if: which hand (left/right) or do you use it with two hands?

- Are you right- or left-hander?

- right

- left

- Let's imagine you have an app on your iPhone which assists you with your cleaning tasks. For example, it let you document the results or suggests what needs to be cleaned next, can give you tips for cleaning, etc. It also helps to collaborate between the bakers when it comes to cleaning: one baker can start a cleaning task, another baker can finish it. And every baker can see how much every baker was involved into cleaning. What do you think about such an

app?  
1.

## **Management**

- Are you satisfied with how your kitchen staff is doing the cleaning?

- yes

- No, because

- Would you say that your kitchen staff collaborates when it comes to cleaning, e.g. they work together, discuss the cleaning schedule? Or would you say, its more a hierarchy where one baker advises the others?

- Do you have a checklist for cleaning?

- yes
- no, why not?
- Do you remember the last hygiene inspection?
  - no
  - yes --> can you tell me more about it?
- How do you define a positive outcome of finished cleaning tasks?
- How do you store/document finished cleaning tasks?
- *if not stored digitally* --> Have you ever thought about storing this information digitally?
- same as Question 12 for bakers

## Wrap-up

Thank you so much for sharing your experience and insights. Your answers will help me to build an app to support you during your valuable work. If you have any additional thoughts and comments, I would love to hear about them at any time. I can be reached at [naveenkrishna10001@gmail.com](mailto:naveenkrishna10001@gmail.com). [HYPERLINK "naveen:krish@me.com"](mailto:naveen:krish@me.com)

[HYPERLINK "naveen:krish@me.com"](mailto:naveen:krish@me.com) [HYPERLINK "naveen:krish@me.com"](mailto:naveen:krish@me.com) Hope you have a

wonderful day.

## Timeline

- Design proposal: End of May, 2020
- Recruiting: End of May, 2020
- Sessions: May 5-7, 2020

## Methodologie

### S

**Literature research/laws, regulations, company guidelines:** This would happen in

any case, so I am putting this here by default. I am revisiting bakery and kitchen

handbooks, company standards or guidelines (if any) and make myself familiar with

the law, food regulations about hygiene in the food industry.

**User Interviews:** Both specific, as well as open-ended questions, will be

asked to understand the baking personnels work flow: who they are, and how they decide

when, how, and what to clean. Ask them to describe how satisfied they are with the

hygiene standards, how they fulfill their cleaning chores, how they collaborate, and

what happens if a colleague does not complete his/her chores?

## Study 2:

## Survey

Cleaning Process and app acceptance

## Background

In the previous study I found out that all bakers use their smartphone during work. I

got some indications that bakers use their mobile phone most of the time with one

hand and usually with their non-dominant hand. Cleaning work are mostly less collaborative, less-liked and neglected tasks. The manage-

ment would appreciate a digital solution to store the cleaning outcome.

## Research Goal

*see Research Goals in Study*

## <sup>1</sup> Research

## Questions

*see Research Questions in Study 1*

## Survey Questions

## Cleaning Work

• Do you like cleaning the bakery? **[Do bakers have a routine of cleaning]**

- yes

- no

- 

depends

• When do you usually clean? **[Do bakers set out time for their work]**

- Beginning of my shift

- End of my shift

- During my shift whenever I have time

- Depends - always different

• Do you have a cleaning checklist? **[Do bakers have clear procedure process]**

- 

Yes

- No

- Just some kind of a rough framework/guideline

- Did it ever happen that one of your colleagues did not finish his/her cleaning task and your had to finish it? **[Do bakers check out time to collaborate with other bakers]**

- no, never

- yes --> how many times in the last 30 days :

- Can you give a rough estimate about how long your cleaning tasks take (e.g. 10 min- utes, 30 minutes)? **[How much time need for finishing the task]**

- <5 min % of all tasks

- 5-10 min % of all tasks

- 10-30 min % of all tasks

- 30-60 min % of all tasks

## Smartphone Use

- For what do you use your smartphone during work?  
**[Assuming what kind of work they do in mobiles in work time]**

- calculating

- researching recipes

- other:

- What type of smartphone do you

have? **[What platform does the bakers use]**

- iOS
- Android
- Other

## **App Acceptance**

Let's imagine you have an app on your iPhone which assists you with your cleaning

tasks. For example, it let you document the results or suggests what needs to be cleaned next,

can give you tips for cleaning, etc. It also helps to collaborate between the bakers

when it comes to cleaning: one baker can start a cleaning task, another baker can

finish it. And every baker can see how much every baker was involved into cleaning.

- What is your general feeling about using such an app? (Check all that applies.)
  - "this sound like an useful app"
  - "I don't like to be monitored in this way"
  - "such an app would lead to more fairness when it comes to

cleaning"

- "it's unfair: baker who are more experienced and are quicker with their

baking will have more time for cleaning"

- "the result will be: my boss will use that information to increase our workload"
- I'm not confident that such an app will work properly
- Stupid! An app for cleaning is totally useless.

- In the following table are some possible functionalities of such an app. Please evaluate every feature.

	Not necessary	Nice to have	don't know
Must			I don't know
Have			
Must		Picture-taking of cleaned item	
Should		List of tasks with subtasks and checkbox when finished	
Have		Automatic evaluation of cleaning results	
		Menu with cleaning tasks and due times	
		cleaning task can be sorted by different criteria (e.g.: how urgent, cleaning time, ongoing, etc.)	
	I don't know	Personal statistic of cleaning results (only visible for user)	
		Personal statistic of cleaning results (visible for all user)	
		adding new cleaning items/tasks	

- The app will let you document your result by taking a picture of what you cleaned. How useful do you think this idea is?

- useful



- not useful --> why not?
- One possible functionality of this app would be to evaluate the picture of your cleaning with a "perfect-cleaning-result" and gives the user an evaluation (like 90% perfectly cleaned). How do like this idea?
  - "I strongly dislike it" - "I dislike it" - "I don't care" - " I like it" - "I very like it"
  - If you disliked or strongly disliked it, can you tell my why?
- For larger cleaning tasks (like monthly oven cleaning) the app lets you spread the task into sub tasks which can be checked separately (and documented with picture). Cleaning tasks can then be spread over more than one work shift (one baker starts the cleaning, the other baker finishes it). How do like this idea?
  - "I strongly dislike it" - "I dislike it" - "I don't care" - " I like it" - "I very like it"
  - If you disliked or strongly disliked it, can you tell my why?

## Demographics

- How many years have you been working as a baker?
  - years

- What is your profession? (Check what applies)

- Master Baker

- Baker

- Cook

- Kitchen Aid

- no formal profession

- What is your age? [ Assumption: People in different age groups might have different smartphone usage pattern.]

- Under 18

- b. 18–25

- c. 26–35

- d. 36–65

- e. Above 65

- In how many different bakeries/kitchen have you been worked so far?

-

- Gender (*Int: don't ask fill out yourself*)

- male

- 

- female

## Method & Recruiting

- 

Screening:

- kitchen staff (master bakers, bakers, kitchen aid, etc.) working in a bakery
    - with less than 10 employees in the kitchen
  - cleaning must be done (at least partially) by the bakery staff
- Collect data from at least 30 bakers according to this quota plan (
  - left-handed: 1-2-3-4-5
  - female:  
1-2-3-4-5-6-7-8
  - older than 50:  
1-2-3-4-5
- Test survey questions with 5 volunteers recruited among my former colleagues