

Designing Inspirational User experiences in the interactive presentation software Mentimeter

Master's thesis in Industrial Design Engineering

CHRISTINA GÖTHBERG CLARA NILSSON

DEPARTMENT OF INDUSTRIAL AND MATERIAL SCIENCE DIVISION OF DESIGN AND HUMAN FACTORS

# Designing Inspirational User experiences in the interactive presentation software Mentimeter

CHRISTINA GÖTHBERG & CLARA NILSSON

Department of Industrial and Materials Science Division of design and human factors

**CHALMERS UNIVERSITY OF TECHNOLOGY** 

Göteborg, Sweden 2021

Designing Inspirational User experiences in the interactive presentation software Mentimeter

## **CHRISTINA GÖTHBERG & CLARA NILSSON**

© Christina Göthberg & Clara Nilsson, 2021
Department of Industrial and Materials Science
Division of design and human factors
Chalmers University of Technology
SE-412-96 Göteborg
Sweden
Telephone + 46 (0)31-722 1000

Chalmers digital printing Göteborg, Sweden 2021

**Cover:** The final interface for the inspiration library. Created by Christina Göthberg and Clara Nilsson, 2021. All assets used from Mentimeter (2021) are used with permission from Mentimeter.

**Image rights:** All images from mentimeter.com (2021) are reprinted with permission from Mentimeter. All assets used from Mentimeter (2021) are used with permission from Mentimeter.

# **Acknowledgments**

This Master Thesis includes the exploration and development of Inspirational User experiences for the interactive presentation software Mentimeter. The thesis was performed in a collaboration between Chalmers University of Technology and Mentimeter. It was performed during the spring of 2021 by two students, constitutes 30 ECTS and concludes a two-year master's program within Industrial Design Engineering at the Department of Industrial and Materials Science at Chalmers University of Technology.

We would like to thank the more than 50 user study participants for openly sharing how they relate to and experience inspiration, giving us invaluable feedback on our feature tests and enthusiastically performing evaluations. The contribution of these users has allowed us to create an empirical understanding for inspiration, progress within the development of Inspirational User experiences and challenge our ideas. It has truly been a pleasure to cooperate with Mentimeter and with their open and "go for it" attitude we have reached new heights and been allowed to explore every bit of our creativity. A special thanks go out to Maja Jakobsson and Madeleine Ederyd for their invaluable guidance throughout the whole project. Their trust in us and guidance have both kept us on track but also allowed us to explore ideas that we are passionate about.

Lastly, we would like to thank our supervisor and examiner Cecilia Berlin who has encouraged us to trust our gut. She has been invaluable in our process of concretizing such an abstract topic as inspiration, a great resource and most importantly always attentive to our questions. It has been a pleasure cooperating with Cecilia Berlin.

Thank you.

Christina Göthberg

Clara Nilsson

Designing Inspirational User experiences in the interactive presentation software Mentimeter

## CHRISTINA P. GÖTHBERG & CLARA M. NILSSON

Department of Industrial and Materials Science Division of design and human factors Chalmers University of Technology

## **Abstract**

Mentimeter is an interactive presentation software that aims at creating an engaging experience for every participant. Mentimeter is currently exploring how inspiration can be used to allow users to evolve in their use of the tool and understand the full potential of it. There is limited research available that combines Human-centered design and inspiration. As a result, the thesis aims to explore how to inspire the users of Mentimeter to grasp the software's full potential, to attract and activate them. Additionally, the aim is to deliver guidelines for the design of Inspirational User experiences for Mentimeter and a final inspirational design proposal.

The applied process is an adaptation of *Lean UX* and consists of an initial research phase, six two-week sprints and a final delivery phase. In the initial research phase, the primary purpose is to explore existing research within inspiration and design. The purpose of each sprint is to perform user research, test features and allow for iterative development. Each sprint is initiated by an assumption then follows related ideating, prototyping, learning, iterating & evaluating and finally testing & experimenting. The development is performed with continuous interaction with the users of *Mentimeter*. The primary purpose of the final delivery phase is to derive final personas, final design and guidelines for how to design Inspirational *User experiences*.

The inspirational journey for users usually starts with an intrinsic or extrinsic inspirational source. The inspiration is thereafter stored physically, digitally, or mentally until external and internal factors allow the inspiration to go from the user being inspired by the source to being inspired to take action. The users experience inspiration from a variety of sources depending on their characteristics, but most recurring are by other people and personal development. The findings of the study are concluded in the inspirational guidelines which consist of ten aspects relevant to consider when designing for Inspirational *User experiences*. The guidelines include for example: Maintaining a sense of new or different, show as much of the experience as early as possible and create content that resonates with values or goals. The guidelines are embodied in the final design and results imply that by using the guidelines in designing, the experience of inspiration is increased.

**Keywords:** inspiration, user experience, guidelines, Inspirational User experiences, saas, software as a service, lean UX, human-centered design, user activation

# **Table of content**

01 Introduction	1
1.2 Aim	2
1.3 Objective	2
1.3 Demarcations	2
02 The Product Mentimeter	4
2.1 User perception of Mentimeter	4
2.2 Sources of inspiration in Mentimeter	6
03 Theoretical framework	7
3.1 Research within the field of inspiration	7
3.2 Research within the field of Human-centred design	10
3.3 Combined synthesis of design and Inspiration	14
3.4 Data processing	16
04 Process	17
4.1 Lean UX	17
4.2 Applied process	18
4.3 Product roadmap and focus areas	20
05 Methods	23
5.1 Initial research phase	23
5.2 Ideating	25
5.3 Prototyping	25
5.5 Learning, iterating & evaluating	26
5.6 Testing & experimenting	29
5.7 Final delivery phase	33
06 Result: User findings	34
6.1 The inspired users of Mentimeter	34
6.2 The users' Inspiration journey	35
6.3 Inspiration personas	37
07 Result: Product features & focus areas	41
7.1 Review of original product	42
7.2 New design of the Inspiration page	45
7.3 Ability to preview templates	49
7.4 Extended ability to access templates	54
7.5 Ability to progress and increase competence	56
7.6 Ability to take part in and enjoy a community	59
7.7 Ability to store inspirational content	62
7.8 Ability to find inspirational content	63
7.9 Ability to explore the product through templates	67
7.10 Final evaluation	69

8.1 New design of the inspiration page and the ability to preview 8.2 Ability to store and find inspirational content 76 8.3 Ability to take part in and enjoy a community 78 8.4 Ability to progress and increase competence 79 8.5 Ability to explore the product through templates 81  09 Guidelines for inspiration 82 9.1 Maintain a sense of new or different 9.2 Show as much of the experience as early as possible 9.3 Promote fun 83 9.4 Widen the horizon 84 9.5 Create content that resonates with values or goals 9.6 Design visually pleasing content 9.7 Ensure successful tasks 9.8 Support different inspiration processes 9.9 Promote people getting inspired by people 9.10 Guidelines for inspirational templates 84  10 Discussion 10.1 Designing Inspirational User experiences 10.3 Validity of the process 10.4 Ethical and sustainability considerations 10.5 Future research 90  11 Conclusion 91  References  Appendix  I. Participating users II. Experiment 1 & 1.1 III. Experiment 2 IV. Experiment 3 V Experiment 4				
8.2 Ability to store and find inspirational content  8.3 Ability to take part in and enjoy a community  78 8.4 Ability to progress and increase competence  79 8.5 Ability to explore the product through templates  81  09 Guidelines for inspiration  82 9.1 Maintain a sense of new or different  9.2 Show as much of the experience as early as possible  9.3 Promote fun  83 9.4 Widen the horizon  9.5 Create content that resonates with values or goals  9.6 Design visually pleasing content  9.7 Ensure successful tasks  9.8 Support different inspiration processes  9.9 Promote people getting inspired by people  9.10 Guidelines for inspirational templates  10 Discussion  10.1 Designing Inspirational User experiences  10.3 Validity of the process  10.4 Ethical and sustainability considerations  90  11 Conclusion  81  References  Appendix  I. Participating users II. Experiment 1 & 1.1 III. Experiment 1 III. Experiment 2 IV. Experiment 3	08 Final design	73		
8.3 Ability to take part in and enjoy a community  8.4 Ability to progress and increase competence  79  8.5 Ability to explore the product through templates  81  09 Guidelines for inspiration  82  9.1 Maintain a sense of new or different  9.2 Show as much of the experience as early as possible  9.3 Promote fun  83  9.4 Widen the horizon  9.5 Create content that resonates with values or goals  9.6 Design visually pleasing content  83  9.7 Ensure successful tasks  9.8 Support different inspiration processes  9.9 Promote people getting inspired by people  9.10 Guidelines for inspirational templates  84  10 Discussion  10.1 Designing Inspirational User experiences  10.3 Validity of the process  10.4 Ethical and sustainability considerations  90  10.5 Future research  90  11 Conclusion  References  Appendix  I. Participating users II. Experiment 1 & 1.1  III. Experiment 1  III. Experiment 2  IV. Experiment 3	8.1 New design of the inspiration page and the ability to preview	73		
8.4 Ability to progress and increase competence 8.5 Ability to explore the product through templates  9.1 Maintain a sense of new or different 9.2 Show as much of the experience as early as possible 9.3 Promote fun 83 9.4 Widen the horizon 83 9.5 Create content that resonates with values or goals 9.6 Design visually pleasing content 9.7 Ensure successful tasks 9.8 Support different inspiration processes 9.9 Promote people getting inspired by people 9.10 Guidelines for inspirational templates  10 Discussion 10.1 Designing Inspirational User experiences 10.3 Validity of the process 10.4 Ethical and sustainability considerations 10.5 Future research 90  11 Conclusion 91  References  Appendix  1. Participating users 11. Experiment 1 & 1.1 111. Experiment 2 1V. Experiment 3	8.2 Ability to store and find inspirational content	76		
8.5 Ability to explore the product through templates  9.1 Maintain a sense of new or different 9.2 Show as much of the experience as early as possible 9.3 Promote fun 9.4 Widen the horizon 9.5 Create content that resonates with values or goals 9.6 Design visually pleasing content 9.7 Ensure successful tasks 9.8 Support different inspiration processes 9.9 Promote people getting inspired by people 9.10 Guidelines for inspirational templates  10 Discussion 10.1 Designing Inspirational User experiences 10.3 Validity of the process 10.4 Ethical and sustainability considerations 10.5 Future research 90  11 Conclusion 91  References  Appendix  1. Participating users 11. Experiment 1 & 1.1 111. Experiment 2 1V. Experiment 3	8.3 Ability to take part in and enjoy a community			
8.5 Ability to explore the product through templates  9.1 Maintain a sense of new or different 9.2 Show as much of the experience as early as possible 9.3 Promote fun 9.4 Widen the horizon 9.5 Create content that resonates with values or goals 9.6 Design visually pleasing content 9.7 Ensure successful tasks 9.8 Support different inspiration processes 9.9 Promote people getting inspired by people 9.10 Guidelines for inspirational templates  10 Discussion 10.1 Designing Inspirational User experiences 10.3 Validity of the process 10.4 Ethical and sustainability considerations 10.5 Future research 90  11 Conclusion 91  References  Appendix  1. Participating users 11. Experiment 1 & 1.1 111. Experiment 2 1V. Experiment 3	8.4 Ability to progress and increase competence			
9.1 Maintain a sense of new or different 9.2 Show as much of the experience as early as possible 9.3 Promote fun 9.4 Widen the horizon 9.5 Create content that resonates with values or goals 9.6 Design visually pleasing content 9.7 Ensure successful tasks 9.8 Support different inspiration processes 9.9 Promote people getting inspired by people 9.10 Guidelines for inspirational templates 84  10 Discussion 10.1 Designing Inspirational User experiences 10.3 Validity of the process 10.4 Ethical and sustainability considerations 10.5 Future research 90  11 Conclusion 91  References  Appendix    Participating users   Experiment 1 & 1.1   III. Experiment 2   IV. Experiment 3	· · · ·	81		
9.2 Show as much of the experience as early as possible 9.3 Promote fun 83 9.4 Widen the horizon 83 9.5 Create content that resonates with values or goals 9.6 Design visually pleasing content 83 9.7 Ensure successful tasks 9.8 Support different inspiration processes 83 9.9 Promote people getting inspired by people 9.10 Guidelines for inspirational templates 84  10 Discussion 85 10.1 Designing Inspirational User experiences 10.3 Validity of the process 88 10.4 Ethical and sustainability considerations 90 10.5 Future research 90  11 Conclusion 91  References  Appendix  I. Participating users II. Experiment 1 & 1.1 III. Experiment 2 IV. Experiment 3	09 Guidelines for inspiration	82		
9.3 Promote fun 9.4 Widen the horizon 9.5 Create content that resonates with values or goals 9.5 Create content that resonates with values or goals 9.6 Design visually pleasing content 83 9.6 Design visually pleasing content 83 9.7 Ensure successful tasks 83 9.8 Support different inspiration processes 83 9.9 Promote people getting inspired by people 84 9.10 Guidelines for inspirational templates 85 10.1 Designing Inspirational User experiences 85 10.3 Validity of the process 88 10.4 Ethical and sustainability considerations 90 10.5 Future research 90 11 Conclusion 91 References Appendix    Participating users   Experiment 1 & 1.1	9.1 Maintain a sense of new or different	82		
9.4 Widen the horizon 9.5 Create content that resonates with values or goals 9.6 Design visually pleasing content 83 9.7 Ensure successful tasks 9.8 Support different inspiration processes 9.9 Promote people getting inspired by people 9.10 Guidelines for inspirational templates 84  10 Discussion 85 10.1 Designing Inspirational User experiences 10.3 Validity of the process 88 10.4 Ethical and sustainability considerations 90 10.5 Future research 90  11 Conclusion 91  References  Appendix    Participating users   Experiment 1 & 1.1	9.2 Show as much of the experience as early as possible	82		
9.5 Create content that resonates with values or goals 9.6 Design visually pleasing content 83 9.7 Ensure successful tasks 83 9.8 Support different inspiration processes 83 9.9 Promote people getting inspired by people 9.10 Guidelines for inspirational templates 84  10 Discussion 85 10.1 Designing Inspirational User experiences 10.3 Validity of the process 88 10.4 Ethical and sustainability considerations 10.5 Future research 90  11 Conclusion 91  References  Appendix  I. Participating users II. Experiment 1 & 1.1 III. Experiment 2 IV. Experiment 3	9.3 Promote fun	83		
9.6 Design visually pleasing content 9.7 Ensure successful tasks 9.8 Support different inspiration processes 9.9 Promote people getting inspired by people 9.10 Guidelines for inspirational templates 84  10 Discussion 85 10.1 Designing Inspirational User experiences 10.3 Validity of the process 10.4 Ethical and sustainability considerations 10.5 Future research 90  11 Conclusion 91  References  Appendix  I. Participating users II. Experiment 1 & 1.1 III. Experiment 2 IV. Experiment 3	9.4 Widen the horizon	83		
9.7 Ensure successful tasks 9.8 Support different inspiration processes 83 9.9 Promote people getting inspired by people 9.10 Guidelines for inspirational templates 84  10 Discussion 85 10.1 Designing Inspirational User experiences 10.3 Validity of the process 88 10.4 Ethical and sustainability considerations 90 10.5 Future research 90  11 Conclusion 91  References  Appendix  I. Participating users II. Experiment 1 & 1.1 III. Experiment 2 IV. Experiment 3	9.5 Create content that resonates with values or goals	83		
9.8 Support different inspiration processes 9.9 Promote people getting inspired by people 9.10 Guidelines for inspirational templates 84  10 Discussion 85 10.1 Designing Inspirational User experiences 10.3 Validity of the process 10.4 Ethical and sustainability considerations 10.5 Future research 90  11 Conclusion 91  References  Appendix  I. Participating users II. Experiment 1 & 1.1 III. Experiment 2 IV. Experiment 3	9.6 Design visually pleasing content	83		
9.9 Promote people getting inspired by people 9.10 Guidelines for inspirational templates 84  10 Discussion 10.1 Designing Inspirational User experiences 10.3 Validity of the process 88 10.4 Ethical and sustainability considerations 10.5 Future research 90  11 Conclusion 91  References  Appendix  I. Participating users II. Experiment 1 & 1.1 III. Experiment 2 IV. Experiment 3	9.7 Ensure successful tasks	83		
9.10 Guidelines for inspirational templates 84  10 Discussion 85  10.1 Designing Inspirational User experiences 85 10.3 Validity of the process 88 10.4 Ethical and sustainability considerations 90 10.5 Future research 90  11 Conclusion 91  References  Appendix  I. Participating users II. Experiment 1 & 1.1 III. Experiment 2 IV. Experiment 3	9.8 Support different inspiration processes	83		
10 Discussion 10.1 Designing Inspirational User experiences 10.3 Validity of the process 88 10.4 Ethical and sustainability considerations 90 10.5 Future research 90 11 Conclusion 91 References Appendix    Participating users   Experiment 1 & 1.1   III. Experiment 2   IV. Experiment 3	9.9 Promote people getting inspired by people	84		
10.1 Designing Inspirational User experiences 10.3 Validity of the process 88 10.4 Ethical and sustainability considerations 90 10.5 Future research 90  11 Conclusion 91  References  Appendix  I. Participating users II. Experiment 1 & 1.1 III. Experiment 2 IV. Experiment 3	9.10 Guidelines for inspirational templates	84		
10.3 Validity of the process 10.4 Ethical and sustainability considerations 90 10.5 Future research 90  11 Conclusion 91  References  Appendix  I. Participating users II. Experiment 1 & 1.1 III. Experiment 2 IV. Experiment 3	10 Discussion	85		
10.4 Ethical and sustainability considerations 10.5 Future research 90  11 Conclusion 91  References  Appendix  I. Participating users II. Experiment 1 & 1.1 III. Experiment 2 IV. Experiment 3	10.1 Designing Inspirational User experiences	85		
10.5 Future research  11 Conclusion  References  Appendix  I. Participating users II. Experiment 1 & 1.1 III. Experiment 2 IV. Experiment 3	10.3 Validity of the process	88		
References Appendix  I. Participating users II. Experiment 1 & 1.1 III. Experiment 2 IV. Experiment 3	10.4 Ethical and sustainability considerations	90		
References  Appendix  I. Participating users II. Experiment 1 & 1.1 III. Experiment 2 IV. Experiment 3	10.5 Future research	90		
Appendix  I. Participating users II. Experiment 1 & 1.1 III. Experiment 2 IV. Experiment 3	11 Conclusion	91		
I. Participating users II. Experiment 1 & 1.1 III. Experiment 2 IV. Experiment 3	References			
II. Experiment 1 & 1.1 III. Experiment 2 IV. Experiment 3	Appendix			
III. Experiment 2 IV. Experiment 3	I. Participating users			
IV. Experiment 3	·			
·	·			
	V. Experiment 3 V. Experiment 4			

V. VI.

VII.

VIII. IX.

X.

XI.

XII.

Experiment 5
Experiment 6

Experiment 7
Experiment 8

Final Evaluation

Interview guide

Menti School

# Structure of the paper

#### 01 Introduction

Introduces the topic of the thesis, the objective, the aim and demarcations.

## **02 The product of Mentimeter**

Introduces the product Mentimeter and explains relevant functionality, the user perception of the product and presents some existing sources of inspiration in Mentimeter.

### 03 Theoretical framework

Introduces the applied theoretical framework within two areas: Inspiration and Human-centred design. The chapter is concluded with a synthesis of the interpretation of the interrelationship of inspiration and human-centered design, which serves as a theoretical basis for the thesis.

#### 04 Process

Introduces the process Lean UX, the applied process and its different phases with applied methods. The phases are the Initial research phase, ideating, prototyping, learning, iterating & evaluating, testing & experimenting and final delivery phase. The chapter is concluded with the product roadmap and sources of assumptions building the product roadmap.

## 05 Methods

Introduces the applied methods structured by the phases in the applied process which are: Initial research phase, Ideating, Prototyping, Learning & evaluating, Testing & experimenting and Final delivery phase. Each phase contains several methods and they are presented in the chapter.

### **06 Result: User findings**

The following chapter introduces the result of the user research throughout the project in the form of the inspired users of *Mentimeter*, Inspiration user journey and inspiration personas.

# 07 Result: Product features & focus areas

Introduces the result of the product development throughout the project within the different product areas of focus and product roadmap. The result is related to the product and its characteristics. The development of each product focus is presented based on the result from applicable experiments. The chapter is concluded with the final evaluation.

## 08 Final Design

Introduces the final design together with a summary of supporting data and claims as well as the included features.

#### 09 Guidelines

Introduces guidelines for designing for inspiration in Mentimeter with supporting evidence and related developed features.

## 10 Discussion

Discusses the implications of the results, the validity of the process, ethical considerations for the project and future research.

## 11 Conclusion

Concludes the thesis and presents a summary of the result and significance in the area of inspiration and User experiences.

# 01

# Introduction

The following chapter introduces the topic of the thesis, the objective, the aim and demarcations.

Inspiration has the power to engage people in new experiences, enable exploration of new heights and enhance well-being (Thrash & Elliot, 2010). Inspiration is the foundation of creativity and can promote life satisfaction. Inspiration originates from stimuli, extrinsic or intrinsic and being inspired is a pleasurable state, a state that many enjoy finding themselves in. But the question is, is it possible to create inspiration through *Inspirational User experiences?* In an attempt to answer the question, this master thesis aims to spark inspiration through design and to investigate how to inspire users to attract and activate, from a *User experience* perspective, in the interactive presentation software *Mentimeter*.

Mentimeter is an interactive presentation software that aims at creating an engaging experience for every participant. However, previous user research has shown that many users only view Mentimeter as a complementary tool, rather than a complete presentation tool. As a result, Mentimeter wants to explore inspiration as a way for users to uncover its full potential. The characteristics and importance of inspiration from a psychological perspective have been studied by researchers like Thrash & Elliot (2010). Thrash & Elliot (2014) conceptualize inspiration over time as a process of being inspired by and inspired to, both essential components for inspiration to lead to action. Thrash et, al. (2010) also established that inspiration promotes wellbeing, it facilitates progress towards set goals and creates more efficiency and productivity. Additionally, Milyavskaya (2012) has in her studies seen connections between inspired people and experiencing more gratitude and a sense of purpose in life (Milyavskaya et al., 2012).

The research within *Human-centred design* is extensive, there are several established frameworks such as Hassenzahl's *UX framework* (2005) and *Design for Engagement* (O'Brien and Toms, 2008). *User experience design* is by Hassenzahl's *UX model* defined as creating meaningful experiences through a device. This is accomplished through realizing the user's needs of competence, relatedness, popularity, stimulation, meaning, security and autonomy. Similar to Hassenzahl's UX model is the engagement theory where an engaging *User experience* is characterized by the following: appropriate challenge, positive affect, endurability, aesthetic and sensory appeal, attention, feedback, novelty, interactivity and perceived user control (O'Brien and Toms, 2008).

However, there is little research combining inspiration and *Human-centred design* or *User experience design*. As a result, the thesis explores how to combine Inspiration and *Human-centred design* in designing for *Inspirational User experiences*. The foundation for the thesis is an interpreted combined theory framework for designing *Inspirational User experiences*, extracted from research within the field of *Human-centred design* and the psychology of inspiration. The thesis is executed through a literature review of *User experience design theory* and Inspiration theory, development and testing of design proposals, user research and compilation of final deliverables. The process applied in the development and testing of design proposals follows a *Lean UX* methodology. The final deliverables include a final design proposal for *Mentimeter*, guidelines for how to design for *inspirational User experiences*, inspiration personas and inspiration user journey. The guidelines include aspects such as promoting fun, show as much of the experience as early as possible and create content that resonates with values and goals. The result indicates that through applying the guidelines on *User experience* design it is possible to inspire users to some extent.

## 1.2 Aim

The thesis aims to explore how to inspire the users of *Mentimeter* to understand the full potential of the software to attract and activate the users. Additionally, the aim is to deliver guidelines for the design of inspirational experiences in *Mentimeter* and a final inspirational design proposal to attract and activate users.

# 1.3 Objective

The objective is, by using a *Lean UX* process, to form assumptions on how to inspire users based on literature reviews, user research and testing. The assumptions translated into hypotheses will form design proposals that will be tested in experiments with users. The data from the tests will be analyzed through coding to determine if the assumption is true and if the hypotheses are validated or invalidated. The *Lean UX* process of formulating and validating hypotheses through testing design proposals in arranged experiments is repetitive and continuous. The iterated design proposals and synthesized user research findings will fuel formulation of the final deliverables of the thesis.

## 1.3 Demarcations

The demarcations of the thesis are categorized into aspects related to the user studies, the product itself and the product user journey and the applied definition of inspiration.

## **User studies**

The focus of the project is to inspire the single user, meaning inspiring the individual to pursue *Mentimeter* as a tool for presentations. The majority of the users included in the study have a free account to use *Mentimeter* which entails some limitations of functionality. The other users are active presenters but not users of *Mentimeter*. Due to the dispersed location of the users, user studies are solely performed digitally. The findings related to users presented in the thesis will be based on qualitative data collected through interviews and experiments. The included users are users who have limited experience in the tool and that are assumed to have yet to discover the full potential of *Mentimeter*.

## **Product and user journey**

The focus within the product *Mentimeter* is in-app, meaning when a user is logged in. In terms of the user interaction with *Mentimeter*, the phase before a presentation up until the transition into starting a presentation is included in the thesis. The phase during the presentation and the creation of the presentation in edit mode are excluded, see figure 1.3.1. The transition to ending a presentation as well as the aftermath is included, see figure 1.3.1.

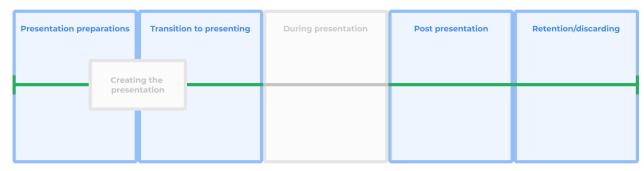


Figure 1.3.1, the different phases of presenting using *Mentimeter*. The light grey areas of the user journey are excluded.

## **Definition of Inspiration in relation to Mentimeter**

Based on the definition of inspiration by Elliot and Thrash (2010) and customer inspiration (Böttger et, al. 2017), inspiration is in this thesis defined as an internal process where the users feel intrinsically motivated to use *Mentimeter* to start presenting or to explore the potential of the tool and extend usage.

# 02

# **The Product Mentimeter**

The following chapter briefly introduces the product *Mentimeter* and explains relevant functionality, the user perception of the product and presents some existing sources of inspiration in *Mentimeter*.

The product of *Mentimeter* consists of a tool that allows users to create and present interactive presentations. The product contains three main parts: a content web, which is accessible through *www.mentimeter.com*, an edit and presentation view which is available by logging in called in-app and a voting web which is accessible through *www.menti.com*. The content web is used to display information about the product and inspire users through blog posts and videos, see figure 2.1. The edit and presentation view is where the user creates presentations, access features and presents. The voting web is for participants to submit their participation. The access to features of the tool depends on the type of plan that the user subscribes to. The available plans are Freemium, basic, Pro, Enterprise and Educational. Once the user is logged in there are some options available in the interface, see figure 2.2. The interface allows the user to browse the presentations and open a new presentation to edit. Once the user chooses to edit or create a new presentation, the user will enter the edit view, see figure 2.3.

# 2.1 User perception of Mentimeter

Since 2014, when *Mentimeter* was founded, the product has continuously evolved. From being solely an interactive tool to offering an extensive and powerful presentation software product. The product *Mentimeter* allows the user to create complete presentations in *Mentimeter* through offering both interactive elements and regular presenting features such as content slides. Still many users only use *Mentimeter* as a secondary software for the interactive part of a presentation, switching between their primary presenting tool and *Mentimeter*. Normally, they incorporate *Mentimeter* in the beginning, middle or end. This might be since they are not aware of the possibilities in *Mentimeter* or do not feel motivated to or confident in exploring the tool. There have also been several indications that users and participants believe that *Mentimeter* is a tool only used for interactivity such as creating word clouds or polls. The reason could be that many users get attracted to *Mentimeter* via participating in a presentation where *Mentimeter* is merely used as an interactive element such as a polling tool. Regardless, the indications that users do not understand the full potential of *Mentimeter* need to be examined.

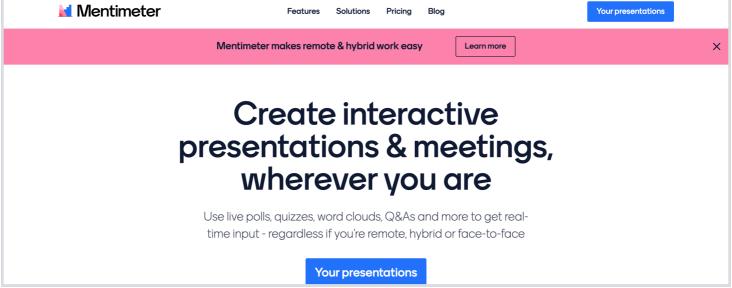


Figure 2.1, landing page for Mentimeter.com. From mentimeter.com (2021). Reprinted with permission from Mentimeter.

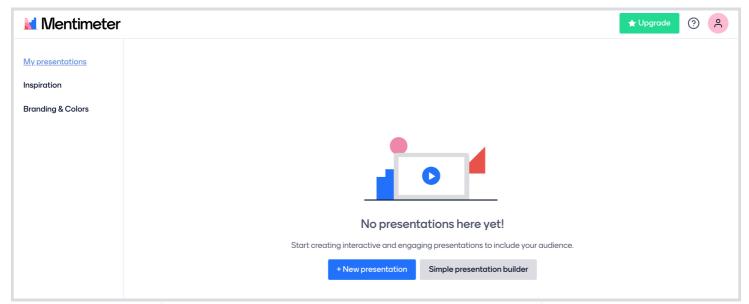


Figure 2.2, logged in view of Mentimeter. From mentimeter.com (2021). Reprinted with permission from Mentimeter.

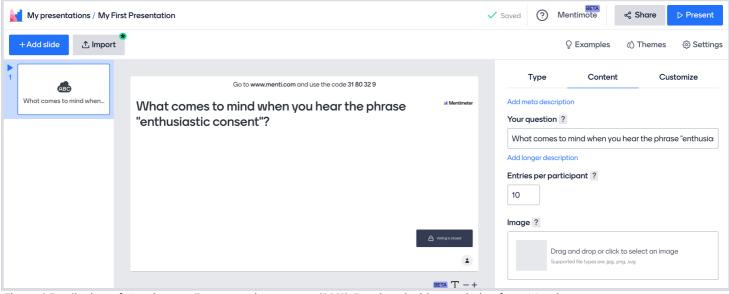


Figure 2.3, edit view of Mentimeter. From mentimeter.com (2021). Reprinted with permission from Mentimeter.

## 2.2 Sources of inspiration in Mentimeter

There are several sources of inspiration in *Mentimeter*. There are inspiration sources external to *Mentimeter*, but also native sources produced by *Mentimeter*. Native sources of inspiration are present in the content web and in-app. *Mentimeter* also produces content for social media. Within the content web, blog posts, videos and displays of features are the primary sources of inspiration. Within the in-app, a tab for inspiration is available where there are templates. Templates are example presentations developed by *Mentimeter* showing different question types, layouts and features. In edit-view, there are example slides available. The example slides are examples of slides with different kinds of questions and layouts. Being inspired to present is not only limited to using the product and consuming its content. Being inspired to use the product for a presentation can occur anytime. As a participant of a presentation, the participation might stimulate inspiration. As a potential presenter, inspiration might stem from co-workers, an event, tips from rhetorics and a pub quiz.

# 03

## Theoretical framework

The following chapter introduces the applied theoretical framework within two areas: Inspiration and Human-centred design. The chapter is concluded with a synthesis of the interpretation of the interrelationship of inspiration and Human-centred design, which serves as a theoretical basis for the thesis.

# 3.1 Research within the field of inspiration

Inspiration is an intrinsically motivating response to a stimulus that happens in authentic experiences (Thrash & Elliot, 2004). Inspiration can occur unintentionally when you least expect it but can also be the result of striving towards an achievement. Inspiration is defined according to the *Tripartite conceptualization* which distinguishes the state of inspiration from other psychological states. The *Tripartite conceptualization* also defines the core characteristics of inspiration, which are *transcendence*, *evocation* and *motivation* (Thrash & Elliot, 2004). *Transcendence* refers to having gained awareness of new or better possibilities. *Evocation* refers to random spontaneous inspiration without intention. Both *transcendence* and *evocation* rely on an outer stimulus to promote inspiration. The final aspect *motivation* refers to striving to transmit or actualize an idea or vision (Thrash & Elliot, 2004).

Component process conceptualization is used to describe the process of being inspired over time (Thrash et al., 2014). The conceptualization consists of two processes which are: being *inspired by* and being *inspired to*. Being *inspired by* means that the person based on an insight leads naturally to the process of being *inspired to*. Being inspired refers to a desire to pursue or transmit something. Being *inspired by* is attributed to inspiration of *evocation* or *transcendence* while being *inspired to* is attributed inspiration of *motivation*. For a complete episode of inspiration, both being *inspired by* and being *inspired to* is required (Thrash & Elliot, 2004).

## Why inspiration matters

Inspiration is important from a *User experience* perspective because it promotes wellbeing, facilitates progress towards set goals, is the foundation of creativity and increases efficiency and productivity (Thrash & Elliot, 2010). Furthermore, inspiration seems to promote pleasure-oriented and self-actualized wellbeing. More concretely inspiration seems to promote positive affect and life satisfaction which both are important aspects of well-being (Thrash & Elliot, 2010). Milyavskaya et al. (2012) have in their studies on goal achievement and inspiration seen connections between inspired people and experiencing more gratitude and a sense of purpose in life (Milyavskaya et al., 2012). Additionally, inspiration seems to be closely related to personal goal achievement where more inspired persons are more likely to fulfill their goals. It seems to be that inspired individuals set inspiring goals that are reachable to them. Milyavskaya et al. (2012) seemed to see a pattern where

more inspired individuals set inspired goals that created an inspired goal achievement process, where these two built on each other to create a positive loop (Milyavskaya et al., 2012). Trait inspiration is closely linked to self-reported creativity in daily life and people tend to be more creative on days where they are more inspired (Thrash & Elliot, 2003). Inspiration facilitates productivity because inspired people have a clear vision of what to do and how to execute it as well as feeling motivated to act. For example, writers who are inspired produce more text in shorter periods, with fewer pauses to think, than the uninspired ones (Thrash & Elliot, 2014). However, as inspiration is a result of the user's relation to and the object itself and both are of equal importance to inspiration, it is challenging to promote it intentionally (Thrash et al., 2014).

According to Izogo & Mpinganjira (2020), hedonic content shows a greater inspirational effect than utilitarian content. Furthermore, visuals inspire more than 75% of consumers to purchase. By 2020, an estimation of around 50% of consumer searches were estimated to be executed through voice or image search functions. These statistics show the importance of visual communication with the customer. Additionally, consumers' purchase behaviors are becoming increasingly more spontaneous and emotionally influenced as consumers looking for ideas and solutions rather than mere products. Consequently, this leaves room for inspirational material to influence buying behavior. As well, customer inspiration seems to lead to more loyal customers with an increased amount of purchase created by positive affect and customer delight from customer inspiration (Böttger et al., 2017).

## **Prerequisites for inspiration**

Inspiration is a complex matter, partly because there is no way of deciding when it is going to happen. You can not decide if someone is going to be inspired, at least not fully. Although, studies are showing that there are prerequisites for inspiration as well as personality traits or behaviors that are closely related to a higher level of inspiration (Thrash & Elliot, 2004). Personal qualities that seem to correlate with inspiration are absorption in what the individual does, optimism and pursuit (Trash & Elliot, 2010). The foundation for being inspired is being open to influencers that facilitate being inspired by and being able to be motivated which facilitates being inspired to. Openness to new experiences positively correlates with being more inspired in general in daily life. Openness to possible influencers is essential for an individual to be inspired. As well as being open to new experiences, openness towards new possibilities supports the inspiration process (Thrash & Elliot, 2004). To be able to be motivated the individual must have some kind of intrinsic motivation, self-determination and preferably work-mastery motivation. To have an approach temperament instead of avoidance facilitates the aspect of being inspired to do and to find inner motivation (Thrash & Elliot, 2004). The approach temperament can be divided into three personality dimensions: extraversion, positive emotionality and the behavioral activation system. Extraversion is linked to experiencing positive emotions, positive emotionality is linked to experiencing positive emotions and a generally positive outlook on life whereas the behavioral activation system is a motivational system that generates an approach behavior as well as positive affect (McCrae & Costa, 1987).

## **Customer inspiration**

Customer inspiration is a model first introduced in 2017 by Böttger et al. that aims at bridging the gap between inspiration and marketing literature. The model defines Customer inspiration as a temporary motivational state from being subject to a source of inspiration to be motivated to pursue a consumption-related goal. The model proposed focuses on customers being inspired to achieve consumption-related goals like engaging with a brand, purchasing, or donating. The research is based on the Component process conceptualization as well as the Tripartite Conceptualization of inspiration (Thrash et al., 2014), introduced earlier in this chapter.

The model, see figure 3.1.1, consists of antecedents, *Customer inspiration* and consequences. Antecedents consist of *Source Characteristics* and *Individual Characteristics* which depend on the source of inspiration and the characteristics of the customer (Böttger et al., 2017). According to Böttger et al. (2017), inspiring content shares the characteristics of appealing to the imagination and leveraging approach motivation. Customer inspiration consists of the *Component process conceptualization* of being *inspired by* and *inspired to*, and they are together the necessary components to generate inspiration. The initiating step of being inspired relates to identifying new ideas (Thrash & Elliot, 2004) as well as increased awareness of possibilities (Thrash & Elliot, 2004). The state of being *inspired to* is a motivational state where the customer is motivated to pursue the new idea. *Customer inspiration* will elicit *behavioral, emotional* and *attitudinal consequences*. The *behavioral consequences* include effects on the behavior of the individual. The *emotional consequences* include positive affect, joy and other emotional experiences. Finally, the *attitudinal consequences* include effects on the customers' attitude toward the product.

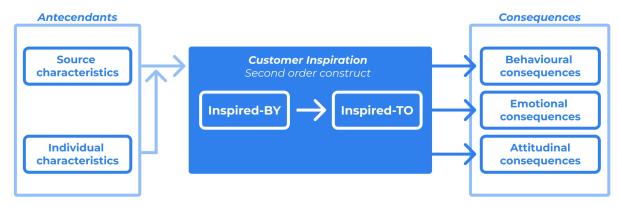


Figure 3.1.1, Customer Inspiration model adapted from Böttger et al., 2017.

# 3.2 Research within the field of Human-centred design

The synthesized research within Human-centred design includes *METUX*, Hassenzahl's *UX design*, *Design for engagement, Design for emotion, UX over time* and usability.

### **METUX**

An emerging field within *User experience design* is using technologies for positive change, which is referred to as *positive technology* (Gaggioli et al., 2019). The field of research is dominated by two streams, the first focuses on scientific understanding of how to contribute to people's wellbeing and happiness while the other focuses on the importance of values and ethical concerns as a part of *Human-Computer interaction* (Gaggioli et al., 2019). One *positive technology* framework is *METUX*, based on psychological research, intending to design experiences for wellbeing. The framework is used in iterative design and evaluation optimized for engagement, motivation and wellbeing (Peters et al., 2018). The psychological basis for *METUX* includes aspects of *Self Determination Theory*, *SDT*, which has been proven to mediate wellbeing. *SDT* constitutes well-being as an individual's *autonomy*, *competence* and *relatedness*. *Autonomy* refers to a sense of willingness and acting according to their personality and values. Furthermore, *competence* refers to the user feeling able, competent and effective to perform a task. Finally, *relatedness* refers to a sense of belonging. (Peters et al., 2018)

Designs that do not demand actions from users and that allow for personalization enhances *autonomy*, see table 3.2.1. *Autonomy* can also be supported by removing obstacles that hinder users to pursue a goal or aspiration fluently. As *autonomy* refers to acting with willingness according to their values, educational or behavior-changing technologies might help enhance the users' *autonomy*. Factors that are known to increase the sense of *competence* are for example positive feedback and opportunities for learning, which can be achieved through novelty and for example introducing new features, see table 3.2.1. Moderating level of difficulty has also been shown to increase the sense of *competence*. To foster *relatedness* through design it has to be genuine and meaningful. Authentic representation of oneself is also important to increase the sense of *relatedness*, see table 3.2.1. (Peters et al., 2018)

Table 3.2.1, psychological need and supporting characteristics to design for METUX (Peters et al., 2018).

Psychological need	Supporting characteristics			
Autonomy	<ul> <li>Meaningful choices and alignment with personal values</li> <li>Clear rationale</li> <li>Ability to personalize and a sense of ownership</li> <li>Absence of pressure</li> <li>Goal choice and choice of strategy</li> </ul>			
Relatedness	<ul> <li>Opportunities for supporting others and being supported</li> <li>A sense of warmth and goodwill</li> <li>Chances to contribute</li> <li>Opportunities for gratitude and appreciation</li> <li>Support for empathy</li> <li>Saliency of social pressure</li> </ul>			
Competence	<ul> <li>Usable and accessible</li> <li>Positive feedback and informational rewards</li> <li>Appropriate challenge and rewards based on effort</li> <li>Forgiving of mistakes</li> <li>Dynamic difficulty and adapting to growth</li> </ul>			

## Hassenzahl's UX Design

User experience design is today a well-known concept and something applied in most product development processes. According to Hassenzahl (2010) User experience design, UX, is about creating meaningful, although immensely subjective, experiences through devices. UX is a sub-category of experience design that is tied to interactive devices. Hasenzahl (2010) divides User experience into three different categories the What, How and Why level. The What level describes what the user is doing through a device and is typically tied to a product genre or technology, for example making a phone call. The How level describes how the user interacts with a product. This is tied to how the actual object is operated, for example pressing buttons to make a phone call. The Why level describes why the person uses a product, the motive behind it (Interaction Design Foundation, 2014). The way that Hassenzahl categorizes needs fulfilled through devices stems from the Self Determination Theory. The needs are categorized into the following: competence, relatedness, popularity, stimulation, meaning and security or autonomy (Hassenzahl et al., 2010). Each need is presented in table 3.2.2.

Table 3.2.2, category of human needs in *User experience* (Hassenzahl et al, 2010).

Need	Description
Competence	Feeling that you are very capable and effective in your actions rather than feeling incompetent or ineffective.
Relatedness	Feeling a sense of belonging and intimacy with people related to you.
Stimulation	Feeling that you get plenty of enjoyment
Popularity	Feeling that you are liked, respected, and have influence over others rather than feeling like a person whose advice or opinions nobody is interested in.
Meaning	Feeling that you are developing your best potential and making life meaningful rather than feeling stagnant and that life does not have much meaning.
Security or autonomy	Feeling a security in having a structured life with routines and habits.

## **Design for Engagement**

User engagement with technology is how invested, emotionally attached and mesmerized a person is by an experience of product interaction. An engaging experience is characterized by appropriate challenge, positive affect, endurability, aesthetic and sensory appeal, attention, feedback, novelty, interactivity and perceived user control (O'Brien and Toms, 2008). Recent studies indicate that engagement is a process with four stages: point of engagement, period of sustained engagement, disengagement and reengagement. The point of engagement is what starts the engagement process. Aesthetics, interface layout and pleasant visuals are likely to start engagement, but social aspects or specific goals are also possible engagement catalysts. In the period of sustained engagement; feedback, appropriate originality and creativity of information and features are important aspects. As well, user control, the number of stimuli and appropriate challenge play an important role in sustaining engagement. To conclude, the final aspects of sustained engagement are interactivity with the technology and an understanding of the system as well as social interaction. Disengagement happens due to both internal and external reasons. Internal reasons can be lack of time, social aspects, or loss of interest. External reasons are related to the usability of the interaction, lack of enough stimuli in the task as well as distractions and interruptions. Reengagement happens due to past positive experiences in the interaction. More specifically past learnings, feedback, appropriate challenge, the experience of having fun and being in control, rewards of past success, convenience, or incentives (O'Brien and Toms, 2008).

## **Design for Emotion**

Designing for emotion assumes the notion that design triggers emotional responses. However understanding the relationship between design and emotion has triggered research in the area (Van Gorp & Adams, 2012). User emotional experiences affect decision making, level of motivation, behavior and perception of the product or service (Van Gorp & Adams, 2012). Emotion can be both conscious and unconscious and be triggered by design. In an attempt to map the process of appraisal of emotion on design Desmet (2002) derived a model of product emotions. Emotional responses arise from the combination of product encounters and the user's concerns, values or motifs, see figure 3.2.1, (Desmet, 2002).

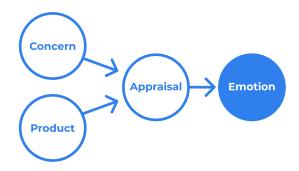


Figure 3.2.1, the process of appraisal of emotion on design, adapted from Desmet (2002).

#### **Attention and Behavior on Emotion**

The emotional effect impacts how users behave and how intensely they focus their attention (Van Gorp & Adams, 2012). Emotions will impact the perception of the product throughout the process of usage. The current emotional state will impact the perception of the product or experience and the emotions during usage will impact future usage of the product (Van Gorp & Adams, 2012). Within attention, if the attention is voluntary the user will experience pleasure and if the attention is involuntary the user will experience emotions of unpleasantry. Arousal impacts attention, as the level increases the focus shifts towards the arousing stimuli, which increases attention. Low levels of arousal will lower attention (Van Gorp & Adams, 2012). Emotion is also strongly linked to behavior which is defined by the two dimensions intention and motivation. Intention dictates how users direct their voluntary attention and to pursue an intentional task, motivation is required.

## **Model for Design for Emotion**

To determine the relationship between design and emotion, several models have been derived from various authors. These models include *Levels of emotional processing* (Norman, 2004), *Types of user benefits* (Jordan, 2000) and *Products as objects, agents and events* (Desmet, 2002). *Level of emotional processing* (Norman, 2004) specifies different levels at which humans process emotions. These include the *visceral level, behavioral level* and *reflective level. Types of user benefits* derived by Jordan (2000) specified the types of benefits a product can give users. These include *hedonic benefits, practical benefits* and *emotional benefits. Products as objects, agents and events* developed by Desmet (2002) evaluate a product with the user's concern.

### **UX** over time

When evaluating users' experiences with products it is important to consider the relationship that evolves between the user and the product (Kujala et al., 2011). Karapanos (2010) argues that memories of product experiences are important parts of a product experience over time since memories, no matter how true, impact the way we will interact with products and re-engage with them. For example, it is not only the experience of a product's features and usability that accounts for the experience but social aspects such as how others experience your product. The experience of a product can be moderately subjective and therefore is it possible that one individual's experiences of a product can mirror another person's perception of the product. Hassenzahl's (2005) hedonic aspects for example, aesthetics and stimulation improve the attractiveness of a product over time. As well, the usability of a product and how the user identifies with it seems to be more important with time. Technical difficulties affect the *User experience* more negatively over time as the users seem to be increasingly dissatisfied due to longer durations of errors. Furthermore, negative experiences of a product are affected by comparison to other brands of the same product (Kujala et al, 2011).

## **Usability and Design Principles**

In 1994 Nielsen developed 10 usability heuristics that are used as guidelines in designing products with high usability. The 10 heuristics are presented in table 3.2.3.

Table 3.2.3, 10 usability heuristics (Nielsen, 1994).

Usability heuristic	Explanation
Visibility of system	The user should always be aware of what is going on which is enabled through feedback. If a user can predict interactions, trust towards the product and the brand will emerge.
Match between system and the real world	The language used in the product should be familiar to the user and it should also follow conventions of the real world. Using well-known words and phrases will make it easier for the user to learn to navigate the interface.
User control and freedom	Users should be able to easily escape unwanted actions as errors often occur frequently. Being able to exit or undo an action creates a sense of freedom and confidence.
Consistency and standards	Use the same words for the same actions, always. Users should not have to wonder if different things mean the same thing. Having different words for the same action increases the cognitive load.
Error prevention	Preventing errors could be asking the user to confirm an action. However, some errors are slips caused by inattention and others are mistakes that are caused by mismatches.
Recognition rather than recall	Make information and elements visible. The required elements to interact with the product should be visible to reduce the cognitive load.
Flexibility and efficiency of use	Allow for expert users to use shortcuts or configure the interface based on their use case. The reason is to make the interaction much less consuming.
Aesthetic and minimalist design	Every unit in an interface competes for attention. Therefore, reducing the interface to only the necessary is ideal. Offering functionality to support the primary goals of the users will maximize the relative visibility.
Help users recognize, diagnose, and recover from errors	Errors should be displayed in common language and both include complicated codes.
Help and documentation	Ideally, the system needs no additional resources to navigate through it. However, offering sufficient help and documentation is important to help some users complete their tasks.

Another principle for designing for high usability is Norman's *The Seven Stages of Action: Seven fundamental design principles*. The design principles stem from a set of investigating questions related to a separate user or product interaction stage. The product design should give all the information to answer these questions. The information can be divided into helping the user understand what to do, *feedforward*, and the information that helps the user understand what is going on *feedback*. *Feedforward* and *feedback* are represented in the seven design principles presented in table 3.2.4 (Norman, 2013).

Table 3.2.4, Seven fundamental design principles (Norman, 2013)

Design principle	Explanation
Discoverability	The design allows the user to understand the status and what actions they can take.
Feedback	The design gives the user clear and understandable responses.
Conceptual model	The design creates an understandable conceptual model.
Affordances	The design provides affordances to take appropriate actions.
Signifiers	The design uses signifiers to provide discoverability and feedback.
Mappings	The design's layout provides good mapping.
Constraints	The design has appropriate constraints to facilitate understanding of the product.

# 3.3 Combined synthesis of design and Inspiration

Based on the research within the areas of Inspiration and *Human-Centered Design*, an interpretive framework is derived. The framework is a representation of the interpretation of the relation between inspiration and design and an attempt to bridge the gap between them. The framework, see figure 3.3.1, is based on the model for *Customer inspiration* developed by Böttger et al. in 2017 and the applied psychological definition of inspiration by Thrash et al. (2014). The interpretation is also presented with *Mentimeter* and users, see figure 3.3.1.

A full episode of inspiration consists of being *inspired by* and being *inspired to*, therefore, assessing both states is deemed as key. *Inspired by* can occur through *evocation* or *transcendence*. In the case of *Mentimeter*, *evocation* means revealing new possibilities and *transcendence* is intrinsic motivation to pursue the product. Inspiration stems from being motivated to take action and use the product.

To be *inspired by*, theories within design such as *Design for Engagement* and *Design for emotion* have been explored. *Design for Engagement* is relevant due to its focus on creating user engagement, which ultimately is the goal of inspiring users. *Hassenzahl's User Experience* serves as a baseline for designing *User experiences*. To be *inspired to*, concepts like *METUX* and *Design for Engagement* have been explored. *METUX* aims to create positive change for users through technology representing motivation, engagement, thriving *UX* which could support the users in being inspired. As the relation to the object or product is just as important as the individual's characteristics, *Usability* is relevant.

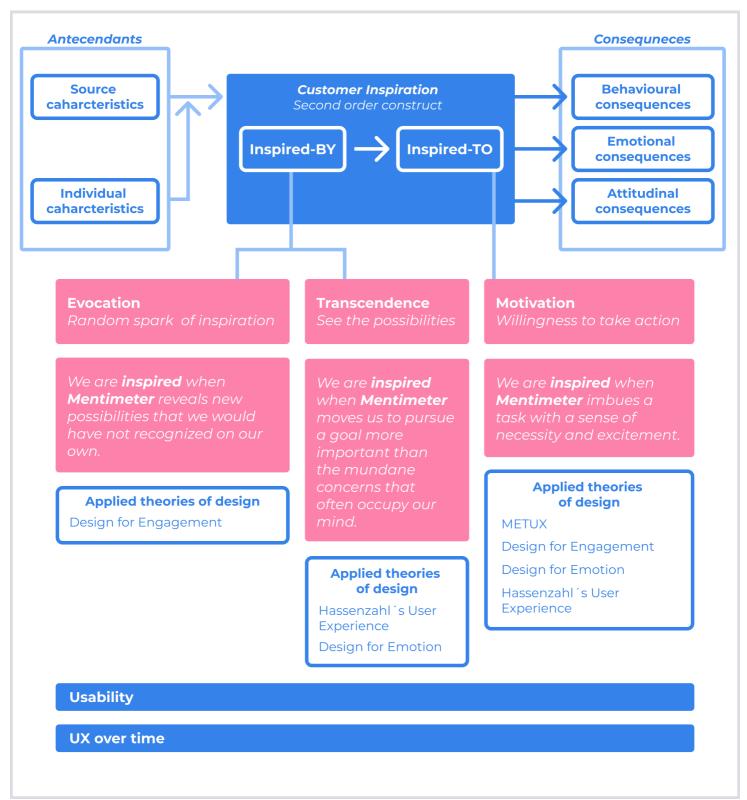


Figure 3.3.1, representation of the interpretation of the interrelation between inspiration and design.

## 3.4 Data processing

To assess the aim and the resulting assumptions, data is collected from users. The data is primarily qualitative, although partly quantitative, through asking users to quantitatively evaluate aspects tested. The gathered data is analyzed and used to drive product development (Savarit, 2020). Qualitative data is used to explore and understand the users' needs and how the design will progress. It is also a useful tool in understanding quantitative data. Quantitative data does to a larger extent support qualitative findings. They quantify these and answer less complex questions and hypotheses (Rogers, 2019). In the thesis, quantitative data is only used as a complement to qualitative. Therefore, the findings presented will reflect that.

## The truth curve and user test participant quantity

To evaluate the credibility of the data from an experiment a truth curve can be used, see figure 3.4.1. The truth curve is a curve explaining the relationship between the type of product representation and the accuracy of the data gathered from the test in which the representation was tested (Gothelf & Seiden, 2016). Conversation offers the furthest from reality or truth, while the prototype and live product will generate more accurate data, see figure 3.4.1.

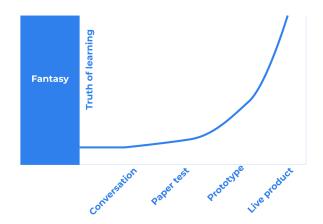


Figure 3.4.1, truth curve adapted from Gothelf & Seiden (2016).

To establish the optimal amount of identical user tests performed on different users Nielsen (2000) created a rule of thumb, see figure 3.4.2. According to Nielsen (2000) after five user tests, 80% of the usability errors are discovered. From an impact versus effort perspective Nielsen (2000) recommends having 15 users perform three different tests on iterated designs to get the most out of them.

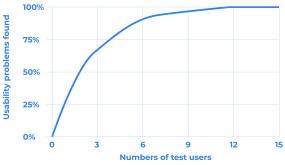


Figure 3.4.2, a graph of the percentage of discovered usability problems from a given number of user tests adapted from Nielsen (2000).

# 04

## **Process**

The following chapter introduces the process Lean UX, the applied process and its different phases with applied methods. The phases are Initial research phase, ideating, prototyping, learning, iterating & evaluating, testing & experimenting and final delivery phase. The chapter is concluded with the product roadmap and sources of assumptions building the product roadmap.

## 4.1 Lean UX

Lean UX is a process introduced by Gothelf & Seiden in 2012 influenced by product development in the software industry. The process used for product development in the software industry is usually some variety of agile. Agile is built on four principles which are: Interactions between individuals over process and tools, working software over documentation, customer collaboration over contract negotiation and responding to change over following a plan (Gothelf & Seiden, 2016). Traditionally industrial designers follow a so-called waterfall process, where each phase is determined by the result of the previous one. This leaves little room for iterating once one phase is realized and another introduced. In software development, on the other hand, there is no need to follow a waterfall process since excessive cost for manufacturing is removed. As a result, Lean UX emerged (Gothelf & Seiden, 2016).

Lean UX is built on design thinking and agile processes as well as the idea that design is evolving. Lean UX focuses on frequent delivery. SaaS designers do not thrive in working in a linear process like the waterfall structure. When applying Lean UX, the designer treats every design as a proposed hypothesis that needs to be validated as efficiently as possible, instead of a finished product or an indefensible solution. The approach of Lean UX is problem-focused and outcome-focused instead of feature and output-focused. The process aims to remove waste in the shape of non-necessary work and focus on continuous user-centred research (Gothelf & Seiden, 2016).

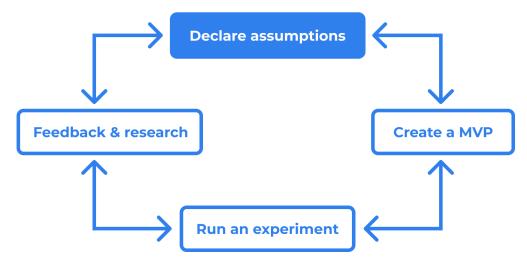


Figure 4.1.1, the iteration cycle in Lean UX adapted from Gothelf & Seiden, 2016.

The process begins with a clear need or assumption, that is translated into a hypothesis. When the hypothesis has been formulated some kind of *minimal valuable product*, *MVP*, or *user story* is built to test the hypothesis. The tested hypothesis will then be iterated based on the outcome and learnings of the experiment. The iterative process is a cycle that consists of four steps: declare assumption, create an *MVP*, run experiment, as well as, feedback and research, see figure 4.1.1. A cycle is two to four weeks long and is called a sprint. The first step of initiating a *Lean UX* sprint is to declare assumptions. Thereafter, these are either researched or visualized in an *MVP*, which then is subjected to an experiment. These cycles are repeated to work towards the outcome.

# 4.2 Applied process

Lean UX consists of timeboxed sprints where declaring assumptions, creating MVPs, running experiments, collecting feedback and performing research are recurring components. The applied process is structured similarly, with an introduction phase of four weeks followed by six sprints of two weeks each and thereafter a delivery phase of four weeks, see figure 4.2.1. In every sprint the five activities ideating, prototyping, testing & experimenting, learning, as well as, iterating & evaluating are performed, however not chronologically rather simultaneously.



Figure 4.2.1, distribution of time over the initial research phase, six different sprints and a final delivery phase. One square represents one working week in time.

## Initial research phase

The purpose of the initial phase is to create an understanding of already existing data related to the scope, perform a literature review, define the scope of the project and determine ways of working. The methods performed in the introduction phase are literature review, benchmark and recruitment of users.

## **Sprint**

Each sprint is initiated by an assumption then follows related ideating, prototyping, learning, iterating & evaluating and finally testing & experimenting, see figure 4.2.2.

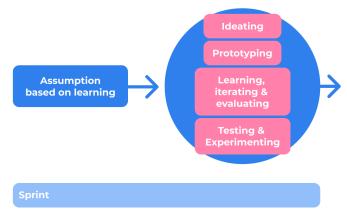


Figure 4.2.2, an assumption initiates the sprint which leads to performing the tasks in the different phases.

What each phase in the sprint includes is presented in table 4.2.1.

Table 4.2.1, the purpose of each phase and applied methods in a sprint.

Phase	Purpose and applied methods
Ideating	The purpose of ideating is to identify possible solutions that could be used to test the assumption. In the phase, the methods Brainstorming and Worst Possible idea are applied.
Prototyping	The purpose of the phase is to embody the ideas through creating prototypes and wireframes. In the phase, the methods Inspiration Proto Personas and Prototyping are applied.
Learning, iterating & evaluating	The purpose of the phase is to further understand the users and the product from a user's perspective as well as analyzing results from the test. Within the phase, the methods user journey, coding, interview, iteration, usability checklist, measuring levels of inspiration, TENS interface scale and measuring experience of inspiration are used.
Testing & experimenting	The purpose of the phase is to understand the implications of each idea. The idea is derived from a hypothesis and a hypothesis statement. The methods applied are Assumption and hypothesis statement and measurement, as well as, CARE experiments.

## Final delivery phase

The final phase is final delivery which purpose is to derive final design proposals, personas and guidelines. In the phase, the following methods are applied: final user evaluation, formulation of guidelines and deriving final personas and user journey.

## 4.3 Product roadmap and focus areas

The product roadmap is presented in figure 4.3.1, for each phase or sprint, there has been specific product or feature focuses. The product roadmap excludes the Initial research phase and the final delivery phase. The product focuses that have been explored during the project are Review of original product, New design to the inspiration page, Ability to preview templates, Extended ability to access templates, Ability to progress and increase competence, Ability to take part in a community, Ability to store inspirational content, Ability to find inspirational content and ability to explore the product through templates, see figure 4.3.1. Every focus is fueled by learnings derived from assumptions. These assumptions are derived from theoretical research and insights about the product or users. The focus areas and the assumptions they are derived from are presented in this section.



Figure 4.3.1, product roadmap providing an overview of the focus areas..

## **Review of original product**

Preconditions for customer inspiration consist of *Source Characteristics* and *Individual Characteristics* which depend on the source of inspiration and the characteristics of the customer (Böttger et al., 2017). This means that the characteristics of the product are important to enable inspiration. Usability (Nielsen, 1994) has the potential to increase trust towards the brand and the product. With these findings, the assumption is that increased usability will enable users to be inspired to use the product. To assess the assumption a usability review is performed. The result of the usability review is presented in chapter 7.1.

## New design of the Inspiration page

Discovering new possibilities is a component of being inspired (Thrash and Elliot, 2004). Aesthetically pleasing and fun content improves inspiration (O'Brien and Toms, 2008). As a result of these findings the following assumptions have been made: offering different types of content such as videos, blog posts and templates will enable users to discover new possibilities. As well as using aesthetically pleasing visuals to showcase the inspirational content will enable inspiration. To assess the assumptions the layout of the inspiration page was redesigned and tested. The result is presented in chapter 7.2.

## Ability to preview templates

Inspired people have a clear vision of what to do and how to execute it as well as feeling motivated to act (Thrash and Elliot, 2014). As a result, the following assumption is made: facilitating the creation of vision through preview will allow for users to be inspired to use the product. To assess the assumption the feature was designed and tested. The result is presented in chapter 7.3.

## **Extended ability to access templates**

According to Norman, (2013), *discoverability* allows for a user to understand what actions are possible at any point in the interaction. Only if an action is discoverable, a user can engage with it. Therefore, the assumption is that increasing the discoverability, by increasing its hierarchy, will allow for users to engage with templates and become inspired to use *Mentimeter*. To assess the assumption the feature was developed and tested. The result is presented in chapter 7.4.

## Ability to progress and increase competence

Work-mastery motivation is one of the important prerequisites for being inspired (Thrash and Elliot, 2004). Additionally, Milyavskaya et al. (2012) seemed to see a pattern where more inspired individuals set inspired goals that created an inspired goal achievement process, where these two built on each other to create a positive loop. Furthermore, Hassenzahl (2010) explained the important need of user feeling competence in designing an enjoyable experience. These needs relate to the importance of feeling capable and competent in performing a task as well as the importance of excelling in skills. With these findings, the following assumption was made: allowing users to progress and develop competence will enable inspiration to use the product. The assumption is assessed through feature testing and the result is presented in chapter 7.5.

## Ability to take part in and enjoy a community

Being open to and exposed to new experiences supports the inspiration process (Thrash & Elliot, 2004). Furthermore Hassenzahl (2010) presents *relatedness* as one of the most important aspects in designing great *User experiences* and Gaggioli et al. (2019) have shown relatedness to be a prerequisite for wellbeing. The assumption is that learning and interacting with other users will increase a sense of belonging and wellbeing and introduce the user to new possibilities. This will, according to the assumption, increase the inspiration to use the tool. The assumption is assessed through developing features and testing them. The result is presented in chapter 7.6.

## Ability to store inspirational content

The framework *METUX* aims at designing for wellbeing based on *Self Determination Theory* (Peters et al., 2018). Within *Self Determination Theory* enabling a sense of *autonomy* is important. *Autonomy* can be enabled by offering a clear rationale, allowing for choices that align with personal values and the ability to personalize. The need for *autonomy* in great *User experiences* is also supported by Hassenzahl (2010). With these findings, the assumption is that offering the ability to store and personalize a collection of content will allow the user to feel in control of their inspirational process. The assumption is assessed through developing and testing features. The result is presented in chapter 7.7.

## Ability to find inspirational content

Discoverability assists the user in identifying possibilities and finding actions (Norman, 2013). Enabling high discoverability will assist the user in navigating the interface (Norman 2013). Furthermore, users get inspired by aesthetically pleasing visuals (O'Brien and Toms, 2008). Therefore the assumption is that if it is possible to find appropriate content, by function and by visuals, the user is more likely to engage with it. The assumption is assessed through developing and testing features. The result is presented in chapter 7.8.

## Ability to explore the product through templates

One of Norman's (2013) design principles is regarding *conceptual models* which incorporate a simple model of how something works which allows the user to feel in control of the product and identify potential use cases. Based on Norman's *conceptual model* and the collected qualitative data, the assumption is made that if the template allows the user to explore the product, they will feel more inspired to apply it to their use cases. The assumption is assessed through developing and testing features. The result is presented in chapter 7.9.

# 05

## **Methods**

The following chapter introduces the applied methods structured by the phases in the applied process which are: Initial research phase, Ideating, Prototyping, Learning & evaluating, Testing & experimenting and Final delivery phase. Each phase contains several methods and they are presented in the chapter.

# 5.1 Initial research phase

The methods used in the introduction phase are used at the beginning of the process to lay a foundation for the thesis. The applied methods are literature review, benchmark and recruitment of users.

## **Benchmarking**

Benchmarking is the process of comparing a key performance to the standard or to another company or product on the market (Mercadal, 2020). Benchmarking is a natural step in all design processes and will help in finding inspiration and learning from others on the market. The benchmark is performed on the following companies: *Sli.do, Kahoot!, Ahaslides, Wooclap, Powerpoint* and *Prezi* as these are established companies providing presentation software products within the *SaaS* industry. The benchmarking consists of exploring the products, attempting to understand their functionality and how the companies introduce their full product and inspire their users. Both the product and related inspirational content is explored based on *METUX* (Peters et al., 2018) to get an understanding of how the competitors make the users thrive in the *User experience*. The benchmarking serves as inspiration for further development of the thesis.

## Literature review

A literature review is a systematic process of searching for research within a specific discipline (Snyder, 2019). Areas that are reviewed are user engagement, usability, Human-centered design, User experience and inspiration. The databases included in the user research are Google Scholar and the library database of Chalmers University of Technology. Search words include but are not limited to variations and combinations of User engagement, Inspiration, Inspirational User Experience, User Experience, Design for habits, Design for community and Design for collaboration. The included literature is synthesized to derive the core of their claims. The synthesized research is used to formulate initial assumptions and fuel ideas. The literature is screened according to the following:

- Published in the field of design, psychology or marketing
- The presented material should be tested in an empirical or case study.
- The publication should be the current or still relevant within the area of research.

### **Recruitment of users**

The users are primarily recruited from the existing user base of *Mentimeter*. The first step of recruitment is to send an email to users who meet certain criteria, the criteria are:

- Users with a free *Mentimeter* account that have signed up to *Mentimeter* within one to three months.
- At least one active presentation, meaning a presentation that has at least one slide and has gotten two votes from different devices.
- A maximum count of two held presentations

These users are identified through *Mentimeters* database and sent an email, see figure 5.1.1. The email contains a link to a survey where the users can submit their interest and are asked to fill in additional information about themselves. The survey asks for name, location, email, proficiency in English, how many presentations they have held, if they have any thoughts about inspiration and if they approve of recording the interview or experiment. Out of the users who submitted their interest, some were invited to schedule an appointment for an experiment or interview. The users were selected based on the following criteria: maximum held four presentations, able to share their thoughts in English and approved recording of experiment or interview.



Figure 5.1.1, the process of contacting users for participating in the study.

In the invitation to schedule an appointment a link was available for the users to choose a suitable time slot of 60 minutes. Once confirmed the users received a preparatory email containing more information about the interview or experiment.

The email asking users to submit their interest is sent two times. The first email was sent to approximately 28 000 users and yielded 91 responses. The second email was sent to approximately 43 000 users and yielded 100 responses. The email asking users to schedule an appointment is sent continuously to fill the need. For each sprint, some of the users from the screening are contacted via email to participate. In gratitude for their participation, the users are incentivized with a six months *Mentimeter* pro upgrade.

## Recruitment of non-users for final evaluation

The recruitment process for non-users included posting, an invitation to the user study together with a link to a survey for submitting interest, in Facebook groups. The Facebook groups were different kinds of international groups for presenters like speakers, teachers and trainers. The participants were incentivized with either a gift card or a six months *Mentimeter* pro upgrade.

## 5.2 Ideating

The methods used in the ideation phase are used to ideate on possible design solutions for the deliverables. The methods are Brainstorming and Worst possible idea.

## **Brainstorming**

In a brainstorming session, the team jointly ideates to come up with ideas. The ambient should be accepting of all kinds of impossible ideas and avoid criticism (Friis Dam, 2019). To fuel creativity, during each session, a mediating object is used. The mediating objects include for example Hassenzahl's *UX model* (Hassenzahl, 2005), *Model of User Engagement* (O'Brien and Toms, 2008), *METUX Model* (Peters et al., 2018), and the *Model of Persuasive Technology* (Fogg et al., 2007). The characteristics of each model are assessed separately in timed sessions of brainstorming. As an example, the *Model of User Engagement* includes for example appropriate challenge and feedback (O'Brien and Toms, 2008). The session goal is to produce ten ideas for each one of the characteristics within a timeframe. The participants have seven to ten minutes on each characteristic before moving on to the next one. Brainstorming is performed continuously and as an initiator to every sprint.

## Worst possible idea

Negative brainstorming is an inverted version of brainstorming. Instead of solving the problem, the problem should be made worse. Once these negative ideas are collected, choose one and do the same thing to that one, hence solving the original problem (Murphy, 2019). Worst possible idea is a very similar method where the teammates brainstorm around how to solve the problem in the worst way ever (Friis Dam, 2019). Worst possible idea is performed continuously and as an initiator to every sprint.

# 5.3 Prototyping

The methods used in the prototyping phase are used to facilitate communication with stakeholders such as the users or *Mentimeter*. The methods are Prototyping and Inspiration proto personas.

## **Prototyping**

Prototyping is a way of replicating a product or concept. A prototype can be many different things depending on what the learning purpose of the prototype is. The complexity of a prototype varies from rough sketches to fully functional prototypes (Ericson et al., 2016). To create prototypes or *MVPs* the design tool *Figma* is used. *Figma* allows for the creation of clickable prototypes and visualizations of solutions. For more quick simple testing of ideas, prototypes are produced through sketches, in papers and similar.

## Inspiration proto personas

Traditionally, the purpose of the personas is to facilitate empathy for the user and are based on extensive research. Proto Personas, on the other hand, begin with assumptions that are then subject to validation or invalidation based on research. Proto Personas are based on the best guess and are usually structured around the following information: sketch and name, behavioral demographic information, pain points, needs and potential solutions (Gothelf & Seiden, 2016).

The method is adapted to suit the purpose of the thesis and is therefore called Inspiration proto personas. Inspiration proto persona is an adapted version of proto personas and represents the user's inspiration characteristics. The inspiration proto personas are based on user research and have been used as starting points, evolving as the thesis progresses.

# 5.5 Learning, iterating & evaluating

The purpose of the phase is to take into account different types of data, allow for iteration and understanding of the data and the users. The methods used are user journey, coding, interview, iteration, usability checklist, measuring levels of inspiration, TENS interface and measuring experience of inspiration.

## **User journey**

User journeys are created to represent a series of steps that a user might take in interacting with the product to perform a certain action. They are primarily used to demonstrate two things: how users currently interact with the product as well as potential interaction patterns. They can both be used to describe the current state and a vision and assists in understanding the user behavior (Ericson et al., 2016). For the thesis, the method is adapted to inspiration. Meaning that the method is used to understand the users' inspirational journey.

## Coding

Coding is an analysis method that is based on synthesizing data, preferably into a few words that capture the essence of it. It also allows for simultaneous coding, where more than one code is used on the same data. The codes that relate to each other can then be made into categories, and hence coding makes it possible to categorize the essence of big collections of qualitative data (Saldana, 2015).

## **Interview**

To understand and conceptualize sources of inspiration of the participants, the method interview is used. The interviews are qualitative and semi-structured (Hanington & Martin, 2012), meaning that they are based on and follow an interview guide, see Appendix XI, but the interviewer asks follow up and probing questions to reach more in-depth answers from the interviewee (Jamshed, 2014). The interview guide includes questions like: Where do you find inspiration? What inspires you to pursue something? How do you get inspired when creating a presentation?

The method interview is used in two formats: an extensive interview and an interview as a complement to an experiment to contextualize. The extensive interview includes around 20 questions and lasts about 60 minutes. The interview as a complement is used at the beginning of an experiment to get an understanding of the user. Both of the interviews are performed using a web-based software called *Zoom*.

### **Iteration**

To iterate the design is to redo steps in a non-linear process. Iteration is necessary for design processes due to the uncertain nature of the projects and their purpose to guarantee user satisfaction. In the *Lean UX* process, the iterations are frequent and typically aligned with starting a new sprint. The iterations are carried out whilst exploring the design space and will be retained when the deliverables are due (Ericson et al., 2016).

## **Usability checklist**

To ensure design proposals with high usability, a usability checklist has been used. The checklist used is the NN groups 10 Usability Heuristics for User Interface Design, table 3.2.3 (Nielsen, 2020). The list is applied by reviewing the interface based on each item on the list. The list helps identify flaws in the usability of the interface.

## Measuring levels of inspiration

To determine the users' level of inspiration the *Inspiration Scale* (Thrash & Elliot, 2003) is applied to create an *inspirational profile*. The *Inspiration Scale* was developed by Thrash & Elliot (2003) to measure inspiration, see table 5.5.1. The statements in the scale are constructed to examine the dynamic of inspiration. The scale assesses the intensity and the frequency of inspiration for a given individual. Intensity refers to how strongly someone is inspired and frequency refers to how often someone is inspired. The reason for determining an *inspirational profile* is to determine how receptive the user is to external influences (Thrash & Elliot, 2003). High scores represent openness, the ability to be inspired and being receptive to external influences, while low scores imply the opposite.

Table 5.5.1, scales for measuring the level of inspiration, adapted from Inspiration Scale (Thrash & Elliot, 2003).

Statement	How often does this happen	How deeply or strongly
I experience inspiration	Assessing frequency, scale of 1-7. 1=never and 7=very often.	Assessing strength, scale of 1-7. 1=not at all and 7=very deeply or strongly.
Something I encounter or experience inspires me		
I am inspired to do something		
I feel inspired		

The *Inspirational Scale* statements are rated through a *Mentimeter*. The responses are then discussed to convey the context of each rating. For simplicity, the scales are separated by frequency and intensity.

## **TENS Interface**

TENS Interface Scale assesses users' experience from an SDT perspective (Peters et al., 2018). The questionnaire is generated from other domains within SDT theory and is structured around competence, autonomy and relatedness, the latter is optional. TENS Interface is used to assess wellbeing in using technology and is created as a method of evaluation for METUX (Peters et al., 2018). The questions are responded to by using a Likert scale where 1 equal Do Not Agree and 5 equals Strongly Agree. The questionnaire contains 15 questions, five for each category.

The method is not used as a survey, rather as a mediating object for stimulating reflection, the most appropriate questions concerning the aim and objective are chosen. Relatedness is excluded. The included questions for each category are presented in table 5.5.2.

Table 5.5.2, psychological need and corresponding evaluative statements and scale.

Competence	Scale	Autonomy	Scale
I feel confident in my ability to use the interface.	Likert scale where 1 equals Do Not Agree and 5 equals Strongly Agree	The interface provides me with useful options and choices.	Likert scale where 1 equals Do Not Agree
Learning how to use the interface was difficult.		I can get the interface to do what I want it to.	and 5 equals Strongly Agree
I found the interface and controls confusing.		The interface feels controlling.	

## Measuring experience of inspiration - Customer Inspiration Scale

To measure the experience of inspiration from a feature test an evaluation adapted from the concept of *Customer Inspiration* is used (Böttger et al., 2017). The scale developed by Böttger et al. (2017) is purposed to better understand consumer-related behavior and assess how motivated a consumer is to pursue a goal, see table 5.5.3.

Table 5.5.3, Customer Inspiration Scale adapted from Böttger et al. (2017))

Inspired by	Scale	Inspired to	Scale
My imagination was stimulated	Scale of 1 to 5, were 1= Strongly disagree and 5= Strongly agree,	I was inspired to buy something	Scale of 1 to 5, were 1= Strongly disagree and 5= Strongly agree,
I was intrigued by a new idea		I felt a desire to buy something	
I unexpectedly and spontaneously got new ideas		My interest to buy something was increased	
My horizon was broadened		I was motivated to buy something	
I discovered something new		I felt an urge to buy something	

For the study, the scale developed by Böttger et al., (2017) is adjusted to measure the level of inspiration from a specific experience. As the purpose of the experience is not to induce a behavior leading to purchase but rather to get more invested in the product the statements are edited, see table 5.5.4. For simplicity, the number of statements are also reduced. The scales are presented in *Mentimeter* allowing the user to evaluate their experience and submit the response. The scales are primarily used for comparative analysis and as mediating objects to stimulate reflection.

Table 5.5.4, adapted scales used in the experiments to evaluate the experience of inspiration separated by being inspired by and to.

Inspired by	Scale	Inspired to	Scale
My imagination was stimulated	Scale of 1 to 5, were 1= Strongly disagree and 5= Strongly agree,	I was inspired to do something	Scale of 1 to 5,
I unexpectedly and spontaneously got new ideas		My interest to do something was increased	Strongly disagree and 5= Strongly
I discovered something new		I was motivated to do something	agree,

# 5.6 Testing & experimenting

The methods used in the test phase assist the construction of and evaluation of hypotheses. The methods are Assumption and hypothesis statement and measurement and CARE experiments.

## Assumption and hypothesis statement and measurement

Each sprint focuses on one or a few assumptions. These assumptions are formed based on findings from existing research or the thesis user research. The assumptions for each sprint are developed into hypotheses. The format of structuring the hypothesis to be tested is as statements, see figure 5.6.1, (Gothelf & Seiden, 2016).



Figure 5.6.1, hypothesis statement formulation adapted from Gothelf & Seiden (2016).

The *hypothesis statement* synthesizes and clarifies the assumptions and makes it possible to test the assumptions (Gothelf & Seiden, 2016). The *Hypothesis statement* reduces bias as the metrics are already defined. This allows for an assumption to be tested objectively. *Hypothesis statements* are what will guide the work (Gothelf & Seiden, 2016). Therefore they are essential when working according to a *Lean UX* process.

After establishing a hypothesis in each sprint the hypothesis will be tested through various experiments and user research. To measure if the hypothesis is true or false various measurements will be needed. The measurements can be both quantitative and qualitative data (Gothelf & Seiden, 2016). The measurements work as a guide and support for the team in making design decisions and in the project progress to exhilarate the user's experience of a product (Gothelf & Seiden, 2016). Before the experiment is conducted in a sprint relevant measurements will be decided.

### The experiment structure

The structure of the experiments is an adaptation of *CARE* experiment structure developed by Pettersson (2018) to elicit *User experience* in early design phases. *CARE* stands for Conceptualize, Act, Reflect and Express which are the different stages in the experiment structure (Pettersson, 2018).

### The structure

The general experiment structure has the following chronological order: introduction, initial interview, several feature tests and final discussion, see figure 5.6.2. The experiments are led by the authors, during the tests referred to as test leaders. The adaptation of the experiment regards the way the experiment is conceptualized and how the *User experience* is expressed. For the experiment, the participant and the authors used their computers and communicated with the test via *Zoom*. The test

leaders are showing an interactive presentation using *Mentimeter* in which the user is guided through the experiment and is evaluating the experiences. The participant shares the screen during part of the test and during the remainder, the test leaders share the screen.

### Conceptualization and interview

Before the test begins the user is given a background to the experiment and introduced to the agenda of the session. Thereafter they are interviewed about inspiration and *Mentimeter*. After the discussion, the user connects to a *Mentimeter* presentation on their smartphone to rate the statements in the *inspiration scale*. The scores are used as a mediating object to discuss inspiration with the participant. The score does also create an *inspirational profile* to help understand how the user views inspiration. Before exploring the prototype the experience is *Conceptualized* to fit the real user context (Pettersson, 2018). The user's experiment context is close to the real *User experience* of making a presentation since the user is sitting at home by their computer during the experiment. To further increase the effectiveness of the experiment the users are given a scenario.

### **Action test**

After conceptualizing the users are ready to *Act* (Pettersson, 2018). The users are asked to perform a certain task or given a scenario whilst sharing their screen and talking out loud about their experience. To test the prototype or original product the user gets a link to a prototype in the *Zoom* chat or is asked to go to *mentimeter.com*. When appropriate the user is directed or asked questions.

### Reflection and evaluation scales

The *Reflection* should involve some generative method to facilitate *Expression* (Pettersson, 2018). The reflection is facilitated by the use of the *Customer inspiration scale*, and/or by the *TENS interface scale*. The participant rates the statements through *Mentimeter's* scale feature in the presentation and therefore the results are shared instantly with the authors who can discuss the scores with the participant. For some experiments, additional questions to facilitate reflection are prepared beforehand.

### **Expression and discussion**

After *Reflecting* the user *Expresses* the experience. According to the *CARE* structure, the user should express the experience in different ways (Pettersson, 2018). However, the *CARE* structure is modified and the expression is merely verbal with the reflection scales acting as a mediating object. After the test, a final discussion is held where the user has the opportunity to share feedback as well as ask questions about the test or *Mentimeter* in general.

## **Experiment roadmap**

The roadmap contains the different areas of focus and the different features assessed in the eight experiments. In the experiments, nine features are tested, figure 5.6.3. In review of the original product, two user journeys and one inspiration user journey are observed, see figure 5.6.3. Each experiment has had between four to seven participants, see figure 5.6.3. Further details about the individual experiment methods are presented in Appendix II to Appendix IX.

# **General Experiment structure**

### Introduction to the experiment and test agenda

#### **Questions**

## **Initial interview questions**

- To get some kind of context, please tell me what you work with. So your responsibilities, your industry, context etc?
- · What inspired you to get a Mentimeter account/start using Mentimeter?
- · Have you used/How many times have you used Mentimeter

#### Questions

- · What's your thoughts on these scores?
- · Where do you find inspiration?
- · Do you look for it?
- · Does it happen unintentionally?
- Do you remember any time you have been inspired to do something differently and went through with it? (for example starting recycling)
- Do you have an idea what in general that inspires you, for example in your profession or in any hobby you have or so?

## Discussion and evaluation of Inspiration statements through a Menti presentation

### Feature test 1

Discussion and evaluation of Feature 1 through inspiration and/or tense scale in Menti

Feature test X

Discussion and evaluation of Feature X through inspiration and/or tense scale in Menti

Final discussion about the experiment experience and question session

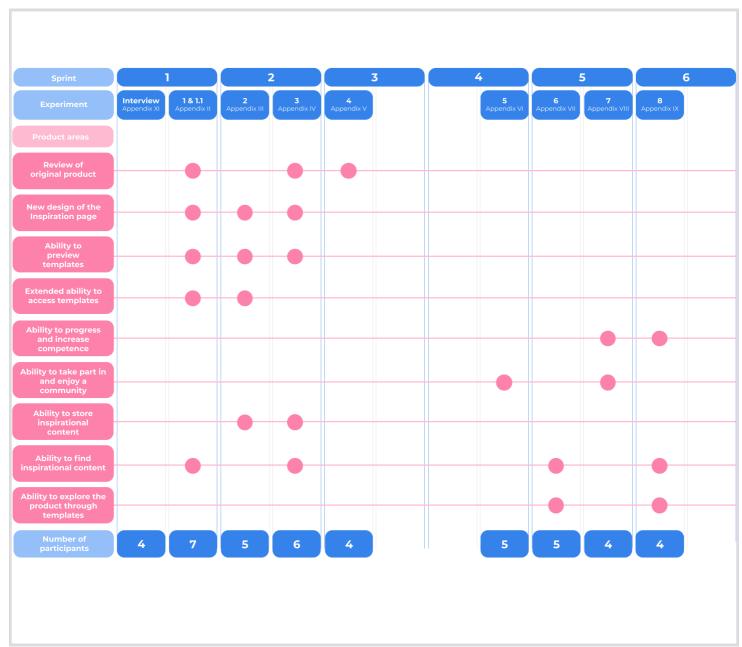


Figure 5.6.3, Experiment road map with appendix references. The references to the appendix is where a more detailed guide of each experiment is available, Appendix II to Appendix IX.

# 5.7 Final delivery phase

The methods used in the delivery phase are used to facilitate the final delivery of the thesis. The activities performed are final evaluation, formulation of guidelines and deriving final personas and inspiration user journeys.

### Final evaluation

The final evaluation follows the general experiment structure, but excludes the inspiration scales, see figure 5.7.1 and has an extended interview, see Appendix X. The final evaluation focuses on the final delivery and evaluation of the final design proposal.



Figure 5.7.1, final evaluation experiment structure.

## Formulation of guidelines

The qualitative data from the user tests are synthesized and claims of what infuses inspiration are identified. These claims are then translated into guidelines aiming at supporting the process of designing experiences that facilitates inspiration or *inspirational User experiences*.

## Inspiration personas and inspiration user journey

Deriving final personas are based on the method of Proto personas, the difference is that the final personas contain only confirmed assumptions. The process of confirming the assumptions consists of analyzing user research data and deriving the core of the users' relation to and experience of inspiration. The final personas contain several characteristics that are deemed helpful in understanding the users, their relation to inspiration and guide product development. In creating the inspiration journey, the method user journey is used. The same set of data as in the creation of final personas is used. The steps of the journey are synthesized and derived into common themes to visualize the process for how the users of *Mentimeter* get inspired.

# 06

# **Result: User findings**

The following chapter introduces the result of the user research throughout the project in the form of the inspired users of *Mentimeter*, Inspiration user journey and inspiration personas.

# 6.1 The inspired users of Mentimeter

During the experiments, the users have been asked to evaluate their *inspirational profile*. A total of 40 users have evaluated their *inspirational profile*, which excludes the users who participated in the interview and final evaluation. The users were asked to evaluate several statements about inspiration based on frequency and intensity, see table 6.1.1 and 6.1.2. The scale for assessing the users' experiences ranges from 1 to 7. For frequency 1 equals never and 7 equals very often, for intensity 1 equals not at all and 7 equals very deeply and very strongly. When assessing how often the users experience inspiration the mean is 6 out of 7 and the average is 5.74, see table 6.1.1, this could indicate that the users of *Mentimeter* included in the study often experience inspiration. In comparison, the depth of the experience of inspiration seems to be lower, see table 6.1.2, this could indicate that the users are frequently exposed to opportunities to be inspired but that they do not always affect them as much.

Table 6.1.1, Assessing frequency, how often the users experience the different statements. Includes 40 users and presents mean and average, adapted from Inspiration Scale (Thrash & Elliot, 2003)

	I experience inspiration	Something I encounter or experience inspires me	I am inspired to do something	I feel inspired
Mean	6	5.5	6	5
Average	5.74	5.585	5.64	5.465

Table 6.1.2, Assessing strength, how strongly the users experience the different statements. Includes 40 users and presents mean and average, adapted from Inspiration Scale (Thrash & Elliot, 2003)

	l experience inspiration	Something I encounter or experience inspires me	I am inspired to do something	I feel inspired
Mean	5.5	5	5	556
Average	5.185	4.96	5.11	5.635

Across all of the statements, see table 6.1.1 and 6.1.2, both average and mean show agreement with the statements. The users do overall have frequent episodes of inspiration that affect them rather deeply.

# 6.2 The users' Inspiration journey

The inspiration journey for the users in *Mentimeter* has been studied throughout to create an understanding of their inspirational process. The inspiration journey has explicitly been studied in experiment 5 and the collective findings are presented in the following section.

To facilitate inspiration the user needs intrinsic motivation, for example wanting yourself and others to be proud of you, wanting to be a good person, or wanting to excel in a specific area The inspirational journey, see figure 6.2.1, usually starts with an intrinsic or extrinsic inspirational source. The inspiration is thereafter stored physically, digitally, or mentally until external and internal factors allow the inspiration to go from inspiration to action. The time from being *inspired by, Time 0*, to being *inspired to, Time X*, is usually not a linear process but rather an ongoing, cumulative process with little sources of inspiration adding up to action.

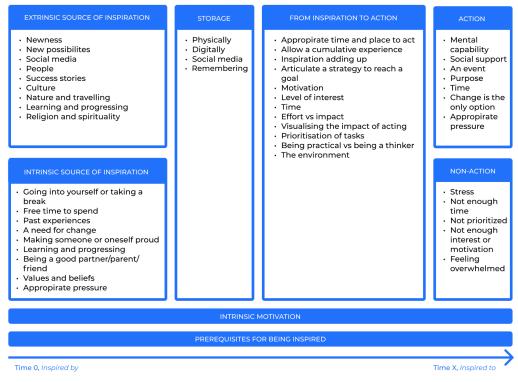


Figure 6.2.1, the users' inspiration journey.

### Being inspired by - sources of inspiration

The results from the user findings indicated clear patterns of intrinsic and extrinsic inspirational sources. Extrinsic inspiration tends to be more articulate than intrinsic inspiration. However, both sources seem important for people to consider themselves inspired.

### **Extrinsic inspiration**

The sources of extrinsic inspiration vary, two of the most frequently articulated are being inspired by other people and experiencing or seeing something new or extraordinary. Common for these two sources is that people tend to be inspired by different kinds of people. The same goes for being inspired by something new or unusual, many users express that they get inspired by new experiences and things in a wide variety of contexts. Users are most commonly inspired by people that resonate with their values, thought leaders, or relatives. They are both inspired by the actions of others and

their ideas. For example, people can be inspired by success stories and other people overcoming struggles. This is closely related to learning and developing which is another source of inspiration. Users can both be inspired to progress and be inspired by their own or others' progress. When being inspired in professional life the most frequent source of inspiration is progress.

Less common but still frequent inspirational sources are culture like art, films, music, podcasts and movies, embodied through taking action in for example producing music and being exposed to culture. Culture inspires due to the feeling it awakens, never before seen cultural expressions, admiring the creator of the cultural expression and due to amusement. Nature and traveling are other sources of inspiration. Nature seems to inspire due to its beauty and calmness which awakens feelings and leaves space for being inspired. Traveling exposes the user to new experiences and gives the user a break from the ordinary which seems to facilitate inspiration. A few users have mentioned spirituality and religion as sources of inspiration. Both being inspired by other people in their religious proximity but also being inspired by spirituality itself and by acting according to their values. Finally, social media has been mentioned as a source of inspiration. Social media commonly seems to act as a way of finding inspiration rather than being inspirational in itself.

### Intrinsic inspiration

Many intrinsic inspirational sources seem to resonate with the users' values or goals. For example, wanting people around them to be proud of them and wanting to be proud of themselves. Closely related is the wish to excel within a certain area or as a person. Users frequently mention being inspired when taking a break like going offline into nature, driving alone, taking a shower, or napping. By pausing the user lets the inspiration come to them, for example through remembering an experience. Generally, having free time facilitates inspiration. However, needing change or being appropriately pressured can be a source of inspiration.

### The journey from being inspired by something to being inspired to act

To experience a whole period of inspiration the user has to go from being *inspired by* to being *inspired to*. The journey usually takes time, the action is rarely immediate after being *inspired by*. Therefore, inspiration is stored in different ways until an appropriate moment arises. Some users store their inspirational content digitally in for example files, or mobile applications, or physically by for example writing it down. Some users save inspirational content on *Social media*, for example on *Pinterest* or *Instagram*. To go from being *inspired by* to being *inspired to* the user must see the possibilities. The inspiration can be a cumulative experience or many sources of inspiration that together enable action. The user must experience that the effort versus the impact is advantageous, meaning that the motivation or interest of action is higher than the time consumption or effort for acting.

### Being inspired to take action

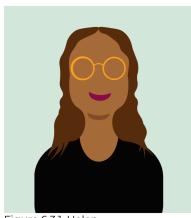
A majority of users have expressed that being inspired often varies in-depth, but commonly the motivation or interest to act on the inspiration is lower than the experience of inspiration. The most common reason for this is time constraints. Constraints related to time are being stressed, feeling overwhelmed, or not having the mental capacity for being inspired. Users have found themselves in positions when there is no option but to find inspiration, which facilitates action. To act on inspiration there is also a need for social support. There have been cases that show no matter the time constraint and full schedules people can be inspired to act if they have enough motivation and interest to do so.

# 6.3 Inspiration personas

The personas that are derived from the 44 interviews or experiments are Helen, Brian, Ina and Carl. The personas are supposed to be a supplement to the general inspiration guidelines in understanding how to design inspirational *User experiences* for *Mentimeter*.

## Helen - on the quest for the best

Helen is an ambitious person constantly trying to evolve professionally and improve her performance, see figure 6.3.1. She is always attentive to her environment, searching for new technology that could support her on the quest. Helen knows that the best is out there and that keeping up with best practices and new releases is the best way to stay up to date. She views personal development and change as constants in her life. She manages a demanding job and cares a lot for her family and friends. If there was a way to get more than 24 hours per day, she would go for it. As a solution to this, Helen realized early in her career to focus energy on the most Figure 6.3.1, Helen. impactful aspects of her work. She is also conscious to always express the purpose of all her actions to double-check that she is



efficient. She views skilled presenting as important and is intrigued by the idea of becoming a highly skilled and effective presenter. Helen searches for inspiration regularly and uses her professional network to get inspired. She trusts proven innovative solutions, reports and best practices. More details about Helen are presented in table 6.3.1 and 6.3.2

Table 6.3.1, user quotes for users with similar characteristics as the persona Helen.

process. What new tools I want to	"I feel inspired because I know there is always room for improvement" - User 5.5	"On a regular basis I do read up on articles from McKinsey or Harvard Business" - User 1.5
-----------------------------------	--	--

Table 6.3.2, description of Helen's characteristics.

Goals	Source of inspiration	Frustration & barriers	
<ul><li>Excelling professionally</li><li>Promote change</li><li>Increasing efficiency of decision making</li></ul>	<ul><li>Professional Network</li><li>Best practices</li><li>Thought leaders</li></ul>	<ul> <li>Pressed for time</li> <li>Getting everyone comfortable with change</li> <li>Prioritize influences in life</li> </ul>	
Priorities and values	Needs	Opportunities for Mentimeter	
<ul><li>Impact versus effort</li><li>Performance</li><li>Delivering beyond expectations</li></ul>	<ul><li>Awareness of efficiency</li><li>Certified quality</li><li>Little time consumption</li></ul>	<ul> <li>Providing content that speaks to skilled users</li> <li>Facilitating really fast and effortless processes</li> </ul>	
Seeing the possibilities	Level of inspiration	Openness	
Low ()()()()()()( <b>0</b> )()()()() High	Low ()()()()()()()( <b>0</b> )()()() High	Low ()()()()()()( <b>0</b> )()()()() High	

## Brian - always reliant

Brian is not at the forefront waiting for the next big thing to arrive, he truly trusts his colleagues and the environment to guide him in professional development, see figure 6.3.2. He realized a few years ago that merely using cluttered *PowerPoint* slides doesn't cut it anymore and he started his journey towards improving his presentation skills. He got inspiration from colleagues to start the journey, but it has not been straightforward as Brian wants to learn step by step. He takes pride in knowing that he cares about the participants and values his learning about presenting. He is fascinated by very skilled people and thinks it is good to catch up with what is out there now and then. Brian surrounds himself with like-minded people and engages in sharing sessions where he gets personal



Figure 6.3.2, Brian.

recommendations for tools that he could use. That is how he encountered *Mentimeter*. Occasionally Brian browses for inspiration online and when he does he usually watches videos. Brian finds inspiration from others' recommendations, for example, he listens to advice from his colleagues. More details about Brian are presented in table 6.3.3 and 6.3.4.

Table 6.3.3 user quotes for users with similar characteristics as the persona Brian.

"I am a person who is really making small steps, I would like to grow knowledge step by step" -User 7.4

"I want to do something, putting things into action feels important. I used *Mentimeter* because I have done similar things but analogically before and because my colleague likes it and I trust her. I was able to see that is would be useful for me" - User 3.2 "I do take action at a later point of time. The gap can be longer, you can be inspired, to take action right away or a year after" - User 7.1

Table 6.3.4, description of Brian's characteristics

Table 0.5.4, description of briaris characteristics.					
Goals	Source of inspiration	Frustrations & barriers			
<ul> <li>Avoid boring presentations</li> <li>Focus on content</li> <li>Not being the last to change</li> <li>Collect input</li> </ul>	<ul><li>Colleagues and family</li><li>Books</li><li>Conferences</li><li>Youtube</li></ul>	Overwhelmed by the available information			
Priorities and values	Needs	Opportunities for Mentimeter			
<ul><li>Create enjoyable experiences</li><li>Learn a skill</li></ul>	<ul> <li>Guidance in how to learn</li> <li>Trust in being socially accepted</li> </ul>	<ul> <li>Allowing to learn step by step</li> <li>Facilitate for participants to sign up to <i>Mentimeter</i></li> <li>Facilitate sharing presentations</li> </ul>			
Seeing the possibilities	Level of inspiration	Openness			
Low ()()()()()( <b>0</b> )()()()()() High	Low ()()()( <b>0</b> )()()()()()() High	Low ()()()()() <b>()</b> ()()()()() High			

## Ina - with the world as her inspirational arena

Ina relies on the environment to guide her, she is open to any source of inspiration and finds great comfort in not knowing what will inspire her next, see figure 6.3.3. She is not afraid to embark on a journey of inspiration, actually, she really enjoys it. She has a great appreciation for many things in life and realizes that creativity is an important part of her life. She has organized her life so that inspiration comes to her, from friends, family, at work and during her spare time. Ina works in a non-profit organization or similar that truly resonates with her purpose and values. When she is not working she spends her time with other tasks that bring her joy, which could be anything from coaching the local football team, writing a book, or trying to do self-sufficient gardening. She finds



Figure 6.3.3, Ina.

inspiration in almost anything, she believes being open to new experiences is key. Usually, she finds herself getting inspiration from shutting off and taking a break for example through yoga or being in nature. More details about Ina are presented in table 6.3.5 and 6.3.6.

Table 6.3.5 user quotes for users with similar characteristics as the persona Ina.

"I love people, I love places, I love design, technology, architecture, change, a departure from the known in a moral and ethical sense" - User 4.4 "I feel like I can change the world, I work for a public school, I feel like I can contribute to something bigger than myself" - User 1.1.2 "I think I do not look for inspiration. I tend to get inspired by people in everyday life...little things jump on me and inspire me" - User 5.2

Table 6.3.6, description of Ina's characteristics.

Goals	Source of inspiration	Frustrations & barriers	
<ul> <li>Create memorable experiences</li> <li>Exploring</li> <li>Allowing for creativity</li> <li>Having fun</li> </ul>	<ul> <li>People demonstrating resilience and overcoming adversities</li> <li>Taking a break or meditating</li> <li>Experiences</li> <li>Social media</li> </ul>	<ul> <li>Not being able to realize every single inspiration</li> <li>Not being able to engage people that are not as inspired</li> </ul>	
Priorities and values	Needs	Opportunities for Mentimeter	
<ul><li>Creativity</li><li>Connect with people</li><li>Adventure, big or small</li><li>Fun</li></ul>	<ul> <li>Help with organizing and prioritizing inspiration</li> <li>Support creativity and inspiration</li> </ul>	<ul> <li>Providing visually stimulating content</li> <li>Showing new and out-of-the-box use cases for Mentimeter</li> <li>Creating fun content</li> </ul>	
Seeing the possibilities	Level of inspiration	Openness	
Low ()()()()()()()()()( <b>0</b> )() High	Low ()()()()()()()()()()( <b>0</b> ) High	Low ()()()()()()()()()()( <b>©</b> ) High	

## **Carl - the caring facilitator**

Carl works in learning and development, see figure 6.3.4. He cares about the experience of the participants and strives to create memorable moments. He has realized that to learn you need to have fun and actively participate. He thinks that *Mentimeter* is a really important tool to enable just that. Carl believes that everyone is capable of learning. He speaks of people's skills as superpowers and he loves to listen to someone talking about what they are passionate about. His core value is inclusion and that is why he got excited about *Mentimeter*. Carl also recognizes that he needs to be exposed to inspiration to inspire and that is why he enjoys consuming arts of different forms. Carl gets inspired by people in his proximity and finds ways to apply it to his profession. He also regularly listens to



Figure 6.3.4, Carl.

the participants to see if they have new ideas. He usually finds himself inspired after spending time in nature, watching a movie, or listening to music. More details about Carl are presented in table 6.3.7 and 6.3.8.

Table 6.3.7 user quotes for users with similar characteristics as the persona Carl.

"We all have our skill sets and I call
them superpowers. I try to inspire
others, therefore it is important to
be on the other side as well of
being inspired" - User 4.2

"I want them to feel happy about class and remember it well" - User "I am driven by improving experiences for people I am working with" - User 6.1

Table 6.3.8, description of Carl's characteristics.

Goals	Source of inspiration	Frustrations & barriers	
<ul> <li>Inspiring people to learn</li> <li>Have participators stick to the presentation</li> <li>Understand the audience</li> <li>Introduce a sense of fun</li> </ul>	<ul><li>Reading</li><li>Art</li><li>Colleagues</li><li>Nature</li></ul>	<ul> <li>Worried about the experience of the participants</li> <li>Not being digitally savvy</li> <li>Pressed schedule</li> </ul>	
Priorities and values	Finding inspiration	Opportunities for Mentimeter	
<ul> <li>Comply with participant needs</li> <li>Get everyone onboard</li> <li>Inclusion</li> </ul>	Promote inclusion	<ul> <li>Extend ways to include</li> <li>Providing content for skill development</li> <li>Creating content exclusively for teachers</li> <li>Creating content tailored to different learning processes</li> </ul>	
Seeing the possibilities	Level of inspiration	Openness	
Low ()()()()()()( <b>0</b> )()()()() High	$ Low ()()()()()()()()()()()() High \\ Low ()()()()()()()()()()() High \\$		

# 07

# **Result: Product features & focus areas**

The following chapter introduces the result of the product development throughout the project within the different product areas of focus and product roadmap. The result is related to the product and its characteristics. The development of each product focus is presented based on the result from applicable experiments. The chapter is concluded with the final evaluation.

Assumptions based on combined theoretical claims or insights from user research are the source of the different focus areas building the product roadmap. The source assumptions have fueled further development and iterations of each feature. The features have been tested several times in different experiments and the source assumptions are presented as an overview in table 7.1.

Table 7.1, an overview of source assumption for each focus area building the product roadmap presented per feature and corresponding inclusion in experiments.

Assumption	Feature	Tested in
Increased usability will enable users to be inspired to use the product.	Review of original product	Experiment 1, Observation 3, Experiment 4
Offering different types of content will enable users to discover new possibilities and using aesthetically pleasing visuals to showcase the inspirational content will enable inspiration.	New design of the inspiration page	Experiment 1, 1.1, 2 and 3
Facilitating the creation of visualizing the experience of presenting through a preview will allow for users to be inspired to use the product	Ability to preview templates	Experiment 1, 1.1, 2 and 3
Increasing the discoverability, by increasing its hierarchy, will allow for users to engage with templates and become inspired to use Mentimeter	Extended ability to access templates	Experiment 1, 1.1 and 2
Allowing users to progress and develop competence will enable inspiration to use the product.	Ability to progress and increase competence	Experiment 7 and 8
Increasing the sense of community within the product will enhance well-being which in turn will generate more motivated and inspired users.	Ability to take part in and enjoy a community	Experiment 5 and 7
Offering the ability to store and personalize a collection of content will allow the user to feel in control of their inspirational process.	Ability to store inspirational content	Experiment 3
If it is possible to find appropriate content, by function and by visuals, the user is more likely to engage with it.	Ability to find inspirational content	Experiment 3, 6 and 8
If the template allows the user to explore the product, they will feel more inspired to apply it to their use cases.	Ability to explore the product through templates	Experiment 4, 6 and 8

# 7.1 Review of original product

The focus area *review of the original product* has been a part of experiments 1, 3 and 4. The assumptions and hypotheses driving the development of the feature are presented in table 7.1.1. A more detailed description of the result of each assumption and hypothesis is presented in the following section for experiments 1, 3 and 4.

Table 7.1.1, Presentation of the assumptions, their sources, when it is tested, the tested hypothesis and brief result for the focus area Review of original product.

Assumption	Source	Tested in	Hypothesis	Result	Action
The assumption is that users are not able to find inspiration in-app.	Usability heuristics (Nielsen, 1994), Importance of source characteristi cs (Böttger et al., 2017)	Experiment 1	We believe the assumption is true when a majority of users struggle to find it.	Users struggled to find inspiration.	Renaming confusing buttons.
The assumption is that changing the names of buttons could increase the understanding of the interface	Experiment 1	Experiment 3	We believe the assumption is true when users express correct interpretations of alternative names but wrong on current words.	Users struggled with understanding the word inspiration, but also the alternative words.	Iteration of experimen t to understan d the full user journey
That users are comfortable navigating in creating a presentation but have not explored other available pages	Experiment 3	Experiment 4	We believe the assumption is true when users express that they have not engaged with the inspiration previously and struggle with finding it.	Users were not comfortable navigating the inspiration page.	Complete analysis of the experimen ts.

### **Experiment 1 and 3**

The assumption is that users are not able to find inspiration. The original in-app start page and inspirational page of *Mentimeter* was prototyped using *Figma*, see figure 7.1.1 and 7.1.2. On the left side of the interface, the user can access the pages My presentations, Inspiration and Branding & colors. In the interface the user is also able to access their presentations by searching or clicking on them, access advanced features for each presentation, create new presentations and organize their presentations using folders. However, the advanced functionality is not available in the prototype. Five users were asked to explore the in-app mode and look for inspiration in experiment 1. A majority of the users needed assistance to find the page. The users generally liked big thumbnails, being able to read about the content and seeing different ways of using Mentimeter and its features. As a result of experiment 1 the assumption that changing names of buttons could increase the understanding of the interface, was tested in experiment 3. To explore the understanding of the interface, the users explained what they expected from some buttons in the in-app interface of *Mentimeter*. The experiment was performed by six users and showed that users had a quite good understanding of the interface. The buttons Inspiration and Example slides were partly misinterpreted. Regarding inspiration, users expressed that they were not sure of the content and one user thought it would be other presentations.

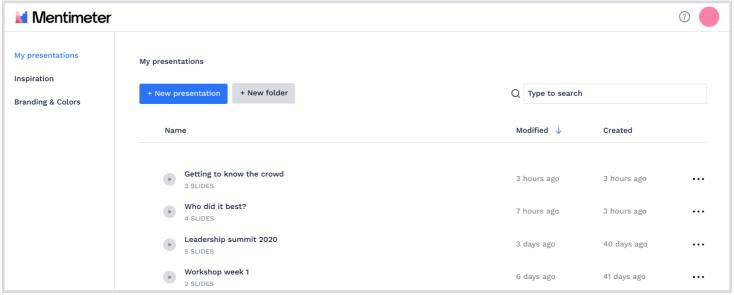


Figure 7.1.1, prototype of the original interface for the in-app start page. All assets from Mentimeter (2021), used with permission.

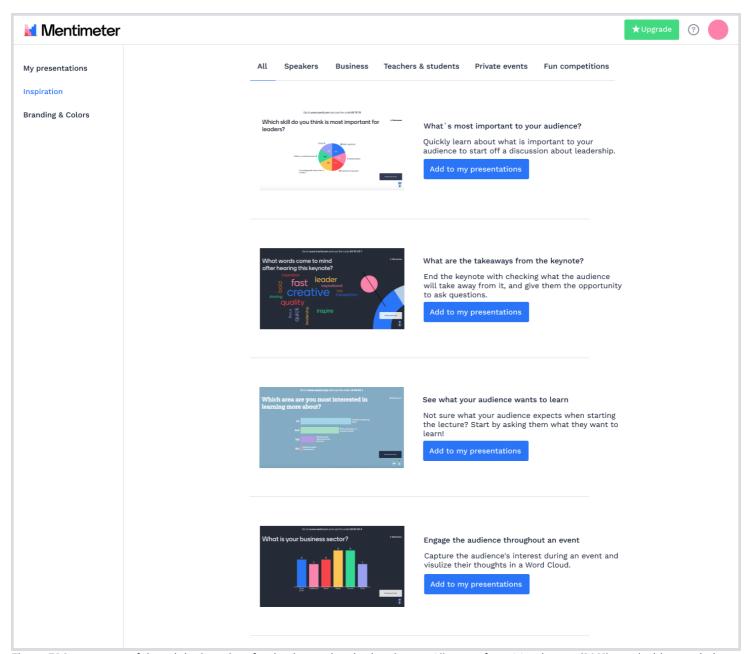


Figure 7.1.2, prototype of the original product for the in-app inspirational page. All assets from Mentimeter (2021), used with permission.

## **Experiment 4**

Building on the previous result the assumption is that users are comfortable navigating in creating a presentation but have not explored other available pages. To explore the current use of the product, the users were asked to complete tasks in *Mentimeter*. The two tasks were to *recreate a presentation that they had held previously* and to *find templates*. Four users performed the observational test. In the first observation, users felt confident in performing the tasks. They felt as if they had control over the interface rather than the opposite, see table 7.1.2.

In the second observation, none of the users who performed the test had previously engaged with templates. Out of four users, one user was able to find it without guidance, the others needed information on how to find it. As users opened up a template, three users expressed that it was not what they expected. These users expected more visually appealing templates, including graphic elements and more design. Two users expressed that being inspired feels like a time-consuming and mentally draining process. Meaning that they do not view it as a shortcut to get ideas, but a more sophisticated process that will entail mental work. Two users expressed that the interface felt somewhat controlling, see table 7.1.2.

Table 7.1.2, mean and average results from the evaluation of the second task to *find templates* using the TENS-scale presented.

	I feel confident in my ability to use the interface.	Learning how to use the interface was difficult.	I found the interface and controls confusing.	The technology provides me with useful options and choices.	I can get the interface to do the things I want it to.	The interface feels controlling.
Mean	2.5	2.5	2.5	4	3	2
Average	3	2	2	4	3	2

# 7.2 New design of the Inspiration page

The focus area new design of the inspiration page has been a part of experiments 1, 1.1, 2 and 3. The assumptions and hypotheses driving the development of the feature are presented in table 7.2.1. A more detailed description of the result of each assumption and hypothesis is presented in the following section for experiments 1, 1.1, 2 and 3.

Table 7.2.1, Presentation of the assumptions, their sources, when it is tested, the tested hypothesis and brief result for the focus area New design of the inspiration page.

Assumption	Source	Tested in	Hypothesis	Result	Action
Offering different types of content will enable users to discover new possibilities and using aesthetically pleasing visuals to showcase the inspirational content will enable inspiration.	Discover possibilities ( Elliot and Thrash, 2004), aesthetically pleasing visuals (O'Brien and Toms, 2008)	Experiment 1, Experiment 1.1	We believe the assumption is true when the users voluntarily express appreciation for the types of content.	The gathering of different kinds of content was relatively appreciated especially instructive how-to videos	Iteration of design to suit the user comments and to include moving aspects.
Users get inspired when the silo is reduced by introducing movement in the content.	Aesthetically pleasing visuals (O'Brien and Toms, 2008)	Experiment 2	We believe the assumption is true when the users express appreciation for the animations.	Users appreciate seeing how the templates would work in use. Some users prefer visuals while others prefer written content.	Iteration of design to allow users to access different types of questions.
An inspiration start page would offer flexibility for different preferences and enable inspiration	Law of proximity (Soegaard, 2020)	Experiment 3	We believe the assumption is true when users express appreciation for the page.	The users understood the prototype but the start page seemed to be hindering the engagement with the content.	Complete analysis of the experiments.

### **Experiment 1 and 1.1**

The prototype of the inspiration page includes different types of content such as templates, example slides and videos, see figure 7.2.1. The assumption is that offering different types of content will enable users to discover new possibilities and using aesthetically pleasing visuals to showcase the inspirational content will enable inspiration. The content is accessible by scrolling horizontally. When hovering on the first template the ability to go through the slide and add it to the users presentation appeared.

Five users were asked to explore the in-app mode and look for inspiration for experiment 1. For experiment 1.1 two users explored the prototype, the iterated prototype in experiment 1.1 included the ability to preview. As the changes in experiment 1.1 do not directly relate to the focus area the result of experiment 1 and 1.1 is presented collectively. The users found the horizontal scroll a bit difficult to navigate. The gathering of different kinds of content was relatively appreciated, especially instructive how-to videos. Some users liked pictures of people, colors and less silo.

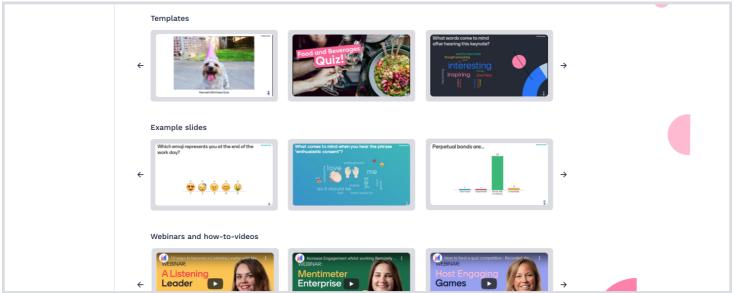


Figure 7.2.1, prototype of the new design of the inspiration page. All assets from Mentimeter (2021), used with permission.

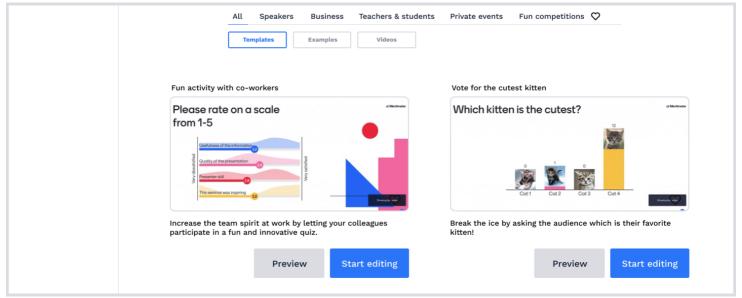


Figure 7.2.2, prototype of the structured layout for the new design of the inspiration page. All assets from Mentimeter (2021), used with permission.

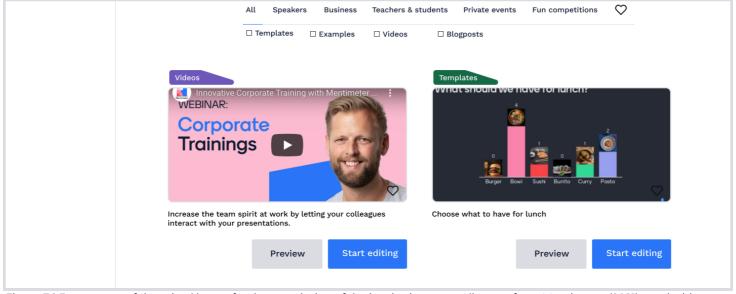


Figure 7.2.3, prototype of the mixed layout for the new design of the inspiration page. All assets from Mentimeter (2021), used with permission.

The users expressed their experience of inspiration using scales and statements, see table 7.2.2. The users felt that their imagination was stimulated by the experience and all users felt somewhat motivated to do something after going through the task, see table 7.2.2.

Table 7.2.2, mean and average results from evaluating the experience using the customer inspiration scale by rating the statements on a scale of 1 to 5.1 being strongly disagree and 5 being strongly agree.

		I unexpectedly and spontaneously got new ideas	something	to do	My interest to do something was increased	motivated to
Mean	5	4	4	4	5	5
Average	4.28	3.863	3.86	4.28	4.57	4.57

## **Experiment 2**

The layout page was iterated in experiment 2 according to findings that suggested that the users appreciated seeing different kinds of content on the inspiration page. The assumption is that users get inspired when the silo is reduced by introducing gifs of templates with test votes and users get inspired by written content. Two versions of the layout were tested, the first one where they were structured into separate pages without blog posts, see figure 7.2.2 and one included templates, examples, videos and blog posts in a mixed structure, see figure 7.2.3.

The layouts were tested by five users in experiment 2. The majority of the users appreciated the moving thumbnails and being able to see what a presentation would look like in use. The users expressed their experience of the structured page using inspiration scales, see table 7.2.3.

Table 7.2.3, mean and average results from evaluating the experience of the structured page using the customer inspiration scale by rating the statements on a scale of 1 to 5.1 being strongly disagree and 5 being strongly agree.

	My imagination was stimulated	I unexpectedly and spontaneously got new ideas	I discovered something new	I was inspired to do something	My interest to do something was increased	I was motivated to do something
Mean	4	3	4	3	4	3
Average	3.4	3.4	3.6	3.2	3.6	3

The users appreciated the larger thumbnails, seeing the inspirational material clear and efficiently and were mostly inspired by seeing different ways of using *Mentimeter*, table 7.2.4. Users mention time as a constraint for acting on a spark of inspiration and a user mentions it is hard to distinguish what in the layout was grouped with what. The users were somewhat divided between preferring a mixed and structured inspirational page layout. Some users described wanting the ability to filter the inspiration content after what type of questions they had.

Table 7.2.4, mean and average results from evaluating the experience of the mixed layout using the customer inspiration scale by rating the statements on a scale of 1 to 5.1 being strongly disagree and 5 being strongly agree.

	My imagination was stimulated	I unexpectedly and spontaneously got new ideas	I discovered something new	I was inspired to do something	My interest to do something was increased	I was motivated to do something
Mean	4	3	4	4	3	3
Average	3.8	3	3.6	3.2	3.4	3.2

## **Experiment 3**

After feedback from the users in experiment 2, the layout was iterated, creating interaction boxes, to support clarity and efficiency according to the law of proximity (Soegaard, 2020). Since the users were divided in preferring a structured or mixed inspirational page the layout was iterated and an inspiration start page was constructed. The assumption is that the inspiration start page would offer flexibility for different preferences and enable inspiration. On this page, the user could see three thumbnails each of templates, examples and videos, see figure 7.2.5. To see more material the user had to go into one of the content pages. The interaction box contains a thumbnail, a color-coded and named content tag, a like button in the shape of a heart, hashtags containing what question types the template contains and a preview and edit option.

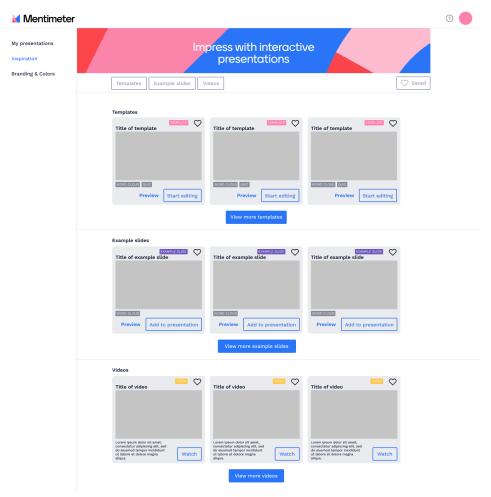


Figure 7.2.5, prototype of the inspiration start page. All assets from Mentimeter (2021), used with permission.

Experiment 3 had six participants. The primary purpose of the experiment was not to assess the layout and therefore the result is limited. The users had no issue understanding the layout but the prototype was quite primitive due to the lack of thumbnails with images and therefore further definition and feedback on the layout was needed.

# 7.3 Ability to preview templates

The feature ability preview templates have been a part of experiment 1, 1.1, 2 and 3. The assumptions and hypotheses driving the development of the feature are presented in table 7.3.1. A more detailed description of the result of each assumption and hypothesis is presented in the following section for experiments 1, 1.1, 2 and 3.

Table 7.3.1, Presentation of the assumptions, their sources, when it is tested, the tested hypothesis and brief result for the feature ability to preview templates.

Assumption	Source	Tested in	Hypothesis	Result	Action
Facilitating the creation of vision through preview will allow for users to be inspired to use the product	Inspired people have a clear vision (Thrash and Elliot, 2014)	Experiment 1, experiment 1.1	We believe the assumption is true when the users evaluate the experience as inspiring and express new ideas.	Previews are highly appreciated by the users.	Preview design is iterated to facilitate participant view.
The users will experience inspiration differently depending on the type of preview	Experiment 1 and experiment 1.1	Experiment 2	We believe the assumption is true when the users express comparative statements.	Users appreciated the test votes but preferred the participant view where they could try to vote themselves.	The design is iterated to combine the different preview options.
The users would experience inspiration from a combined preview with the ability to see test votes and vote themselves through participant view	Experiment 2	Experiment 3	We believe the assumption is true when the users can understand the interface and express that they are inspired and why.	Mixed results. Some users did not understand the participant's view. More people preferred the test votes over the participant view.	Complete analysis of the experiments.

### **Experiment 1 and 1.1**

The assumption facilitating the creation of vision through preview will allow for users to be inspired to use the product is assessed through experiments 1 and 1.1. The prototype used in experiment 1, see figure 7.3.1 and 7.3.2, offers functionality that allows the user to toggle between slides, both in the thumbnail view and in an enlarged view. The slides that the user was allowed to toggle between were static images of each slide shown with test votes. However, in the prototype, only one of the displayed templates had the option of preview. In experiment 1.1, additional ability to preview was added with the assumption that extended ability to preview will further facilitate the creation of visualizations. As many users expressed that the preview allowed for visualization of how they could use it in their context, the hierarchy of preview was also increased. In experiment 1 five users were asked to explore the prototype mode and look for inspiration. The users were asked to express their thoughts as they explored the prototype. The users were positive about big thumbnails as in the original version of the inspiration page. The users were coherently really positive about previews because it gave them a better picture of the *Mentimeter* product and the templates. Users expressed previews as a vital component of the product to get an understanding of what Mentimeter can do. A majority of the users also expressed that being able to play with the template initiated thoughts like "How can I apply this to my context?". In experiment 1.1 two users tested the prototype and the result did not deviate from the result in experiment 1.

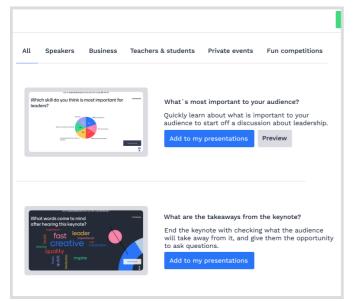


Figure 7.3.1, Prototype of templates with preview. All assets from Mentimeter (2021), used with permission.

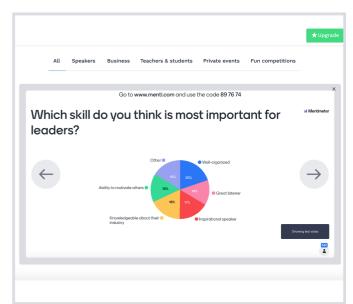


Figure 7.3.2, Prototype of preview. All assets from Mentimeter (2021), used with permission.

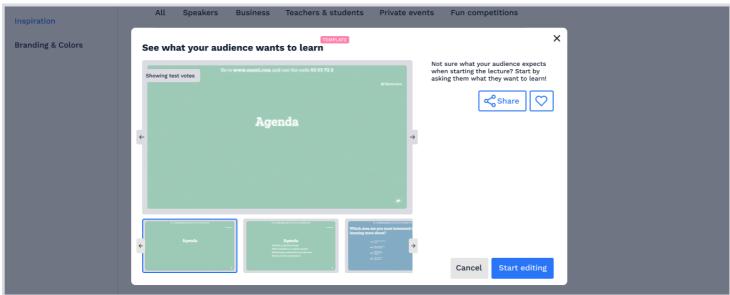


Figure 7.3.3, prototype for preview with test votes. All assets from Mentimeter (2021), used with permission.

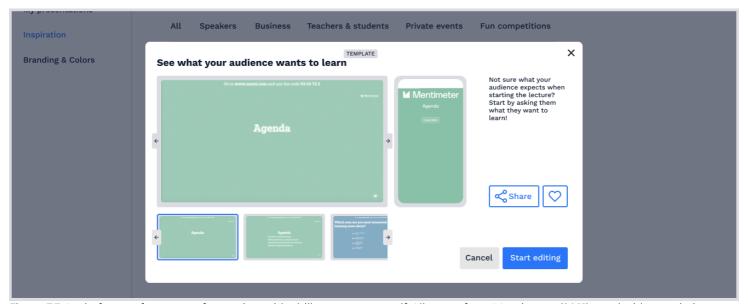


Figure 7.3.4, wireframe of prototype for preview with ability to vote yourself. All assets from Mentimeter (2021), used with permission.

The users expressed their experience of inspiration using scales, see table 7.3.2. The result of the expression was coherent with the qualitative data that was collected as a majority of the users felt both motivated to do something and discovered something new, see table 7.3.2.

Table 7.3.2, mean and average results from evaluating the experience using the customer inspiration scale by rating the statements on a scale of 1 to 5.1 being strongly disagree and 5 being strongly agree, experiment 1 and 1.1 combined.

	My imagination was stimulated	I unexpectedly and spontaneously got new ideas	something	to do	My interest to do something was increased	motivated to
Mean	4	4	4	4	5	4
Average	3.67	4	4.33	4	4.67	4

### **Experiment 2**

As users appreciated the feature of being able to preview, it was further developed. In experiment 2, two versions of previews were tested: preview with test votes and preview with ability to vote yourself. The assumption is that the users will experience inspiration differently depending on the type of preview. Test votes is a feature already developed by *Mentimeter* which is available when a user starts presenting. The feature visualizes the movement that occurs when participants submit votes. The preview with test votes, see figure 7.3.3, allows the user to toggle between slides, using both the arrows in the larger image as well as the bar underneath which allows for navigation through the arrows as well as clicking on a desired slide. Each slide has movement incorporated to visualize the graphic features of *Mentimeter* of incoming votes. Preview with the ability to vote yourself, see figure 7.3.4, the user can submit votes through the smaller screen to the left, which is supposed to embody a participant view. The users will see the result on the larger screen to the left as votes are submitted. Both prototypes offer buttons such as cancel, start editing, share, like and close, however, this functionality is not included in the prototype.

Five users tested both prototypes and were asked to express their thoughts. Regarding Preview with test votes, see figure 7.3.3, users appreciated seeing the movement of the votes coming in. They expressed that seeing the movement created a vision of how the participant would react to presenting using *Mentimeter*. Regarding preview with the ability to vote yourself, see figure 7.3.4, many users expressed that the size of the participant view was too small. The users also expressed confusion as to whether it was a small view of the presentation or the actual participant view which caused hesitation in the interaction with the interface. However, as the users realized the functionality they appreciated the feature. The reason for appreciation was that the users said that they had to test the presentation manually before otherwise.

The users were asked to compare the two prototypes after the completion of the two tests. The result of the comparison is shown in table 7.3.3 and the users were allowed to choose one or the other, both or neither. In the question: which one did you prefer? All the users answered Preview vote yourself. The reasons for this are that they did get a better idea of what they have to ask their participants to do as well as they did not need to test themselves before presenting. The answers to the questions: Which one stimulated your imagination? And, which one motivated you to do something? The result is conflicting. The reason is that seeing the movement of many incoming votes allows the user to visualize what it is like to present and collect feedback from participants. However in the last question: which one gave you a better picture of what *Mentimeter* is? A majority of users responded

to the preview vote yourself and this is since it makes the presenter comfortable in what the experience of participating will be like.

Table 7.3.3, comparison between the two types of preview: vote yourself and test votes. Presented with the amount of users preferring a certain version, out of the total 5 users.

	Which one did you prefer?		Which one motivated you to do something?	Which one gave you a better picture of what <i>Mentimeter</i> is?
Both	1	3	3	0
Vote yourself	4	2	2	4
Test votes	0	0	0	1

## **Experiment 3**

As a result of experiment 3, the prototype was further developed. The assumption is that the users would experience inspiration from a combined preview with the ability to see test votes and vote themselves through participant view. The feature to preview with test votes and preview with the ability to vote yourself was combined into one, see figure 7.3.5. As the users struggled to identify the right image as a participant view, a descriptive text was added, see figure 7.3.5. To offer additional help, a description of the two different types of preview was added, see figure 7.3.5. When a user hovers the question mark the message shows up, see figure 7.3.6 and 7.3.7.

Six users tested the prototype, they were asked to perform specific tasks and express their thoughts. Participant view was consistently appreciated, however, the users did not consider it a necessity. Despite the added descriptive text, some users struggled to understand that they were able to vote by clicking on the screen. Some users were not able to understand the concept of participant view. Users were able to understand that the big image in the prototype was the presentation as well as navigate between different slides. A majority of them were able to turn on test votes and understand the difference between the two versions of previews. The synthesised results are presented in table 7.3.4.

Table 7.3.4, mean and average results from the evaluation of the tasks using the TENS-scale presented.

	I feel confident in my ability to use the interface.	how to use the interface	interface and controls	provides me with useful options and	the things I want	The interface feels controlling.
Mean	3.5	2.5	2.5	4.5	3	2
Average	3.67	2.33	2.67	1.17	3.33	1.83

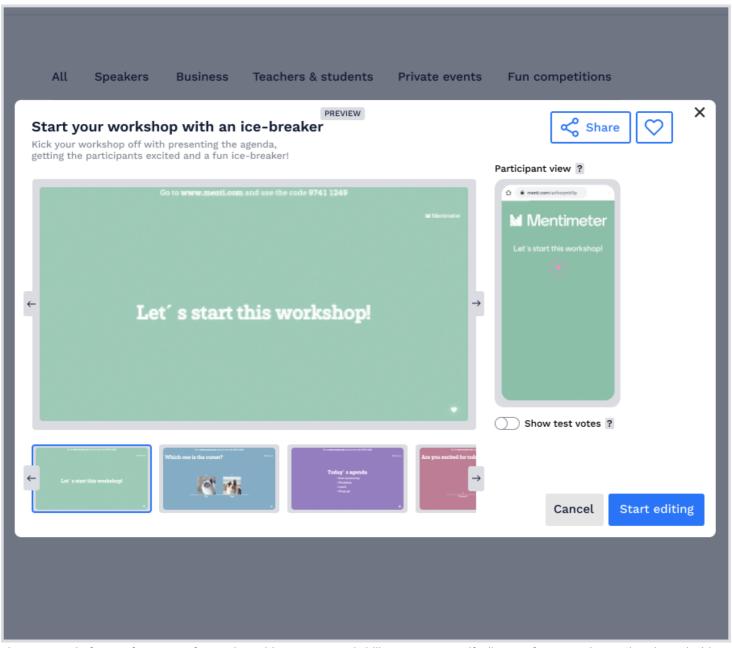


Figure 7.3.5, wireframe of prototype for preview with test votes and ability to vote yourself. All assets from Mentimeter (2021), used with permission.

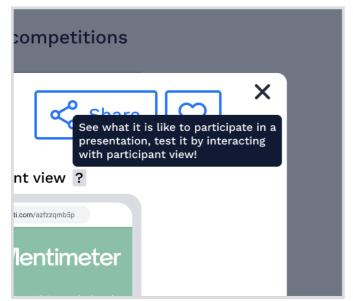


Figure 7.3.6, messages displayed when the user hovers the question mark aimed at helping the user. All assets from Mentimeter (2021), used with permission.

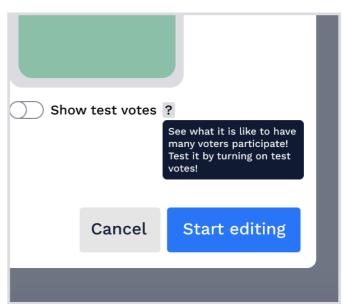


Figure 7.3.7, messages displayed when the user hovers the question mark aimed at helping the user. All assets from Mentimeter (2021), used with permission.

# 7.4 Extended ability to access templates

The feature extended ability to access templates has been a part of experiments 1, 1.1 and 2. The assumptions and hypotheses driving the development of the feature are presented in table 7.4.1. A more detailed description of the result of each assumption and hypothesis is presented in the following section for experiments 1, 1.1 and 2.

Table 7.4.1, Presentation of the assumptions, their sources, when it is tested, the tested hypothesis and brief result for the feature extended ability to access templates.

Assumption	Source	Tested in	Hypothesis	Result	Action
Increasing the discoverability, by increasing its hierarchy, will allow for users to engage with templates and become inspired to use <i>Mentimeter</i>	Discovera bility (Norman, 2013)	Experime nt 1, Experime nt 1.1	We believe the assumption is true when users engage with it without hesitation.	Users did not notice the shortcut to templates, Experiment 1. Users did immediately notice and a few used the shortcut. One user mentioned it being forced on her, Experiment 1.1.	Iteration adding more attention to the feature.
The shortcut to templates need to be highlighted to be noticed, yet not forced on the user	Result experime nt 1.1	Experime nt 2	We believe the assumption is true when users engage with it without hesitation.	The shortcut was merely noticed.	Complete analysis of the experiments.

## Experiment 1 and 1.1

To increase the discoverability of templates they were added to the in-app start page. The interface offers access to templates on the start page in-app. The assumption is that increasing the discoverability, by increasing its hierarchy, will allow for users to engage with templates and become inspired to use *Mentimeter*. When a user hovers over the template more information is offered and a brief preview of the template is available, allowing the user to go through the slides. The user is also able to add the presentation in the interface. There are two ways to reach the inspiration page, by clicking on the button inspiration to the left and the button below the displayed templates called more inspiration, see figure 7.4.1.

In experiment 1 the feature was unnoticed during the test by all five users. As a result of limited attention, in experiment 1.1, to the add template on the start page in-app, the feature was enhanced by adding color, see figure 7.4.1. The prototype has similar functionality as the first iteration. In experiment 1.1 users found the inspiration page easily when the templates were highlighted on the *My presentation* page. One user mentioned that it was annoying to have the templates on the page and mentioned it feeling in the way and being forced on her.

### **Experiment 2**

As a result of experiment 1, the element to reach inspiration was redesigned, see figure 7.4.2. The assessed assumption was that the shortcut to templates needs to be highlighted to be noticed, yet not forced on the user. The element of several templates was replaced by a graphic image and a button, see figure 7.4.2. Five users tested the interface, however, little attention was directed towards the element. Which could indicate that the increased hierarchy of accessing the inspiration page has not been successful.

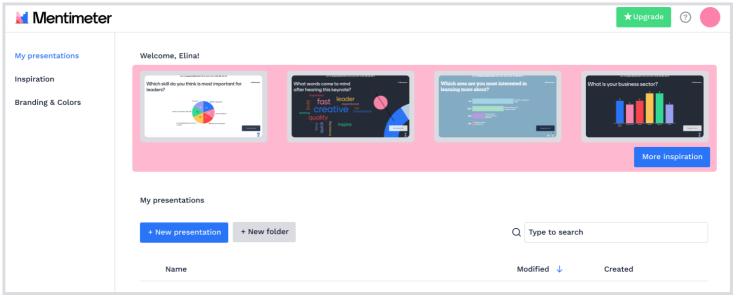


Figure 7.4.1, prototype for templates on the in-app start page with an added banner of color, for experiment 1.1. All assets from Mentimeter (2021), used with permission.

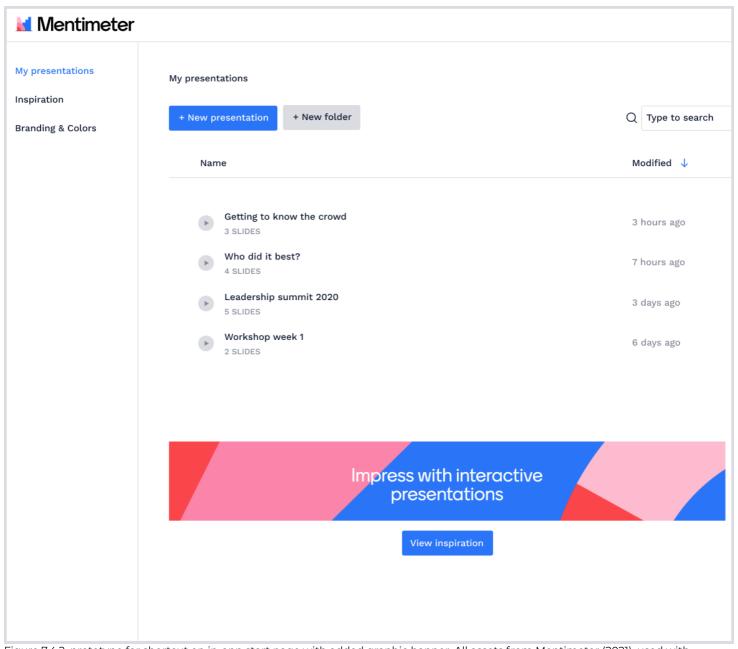


Figure 7.4.2, prototype for shortcut on in-app start page with added graphic banner. All assets from Mentimeter (2021), used with permission.

# 7.5 Ability to progress and increase competence

The feature ability to progress and increase competence has been a part of experiments 7 and 8. The assumptions driving the development of the feature are presented in table 7.5.1. A more detailed description of the result of each assumption and hypothesis is presented in the following section for experiments 7 and 8.

Table 7.5.1, Presentation of the assumptions, their sources, when it is tested, the tested hypothesis and brief result for the ability to progress and increase competence.

Assumption	Source	Tested in	Hypothesis	Result	Action
Allowing users to progress and develop competence will enable inspiration to use the product.	Goal achievement process (Milyavskaya et al., 2012), User's need for competence (Hassenzahl, 2010) Work-mastery motivation (Thrash & Elliot, 2004)	Experiment 7	We believe the assumption is true when the users express that they have gotten new ideas or are intrigued to learn more.	Users were inspired to pursue learnings and felt exposed to new possibilities. They also appreciated using Mentimeter to learn. They felt that the interface was a bit crowded and the level of difficulty was too low to give new ideas.	Iterations on the progress page to increase usability. Increased the level of difficulty in learning Mentimeter through Mentimeter.
Increasing the level of difficulty and increasing the visual clarity of the progress page would put ease on initiating inspiration for the users	Experiment 7	Experiment 8	We believe the assumption is true when the users express that they have gotten new ideas or are intrigued to learn more.	Users appreciated learning by doing but would have wanted a timer displaying time consumption.	Iterations according to results. Complete analysis of the experiments.

## **Experiment 7**

The assumption is that allowing users to progress and develop competence will enable inspiration to use the product. To embody this assumption two ideas were developed. The first idea was to visualize the progress and allow for the discovery of different learnings. The second idea was to use the product *Mentimeter* to learn about the product.

### Visualizing progress

To visualize the progress of different learnings for the user a prototype was created. The prototype has three topics to learn about which each has four steps. Once a step is completed the step turns green, see figure 7.5.1. For each task within a topic, there were several steps to complete with resources to provide insights within the task, see figure 7.5.2.

Four users participated in experiment 7 and they were asked to explore what they could learn in *Mentimeter*. Three out of four users expressed that they were stimulated by the page and that they enjoyed finding out what they could learn in *Mentimeter*. One user expressed that these learnings could also be beneficial in other situations other than using *Mentimeter* which motivated them to engage with it. Three out of four users expressed that they got a wider view of the possibilities in *Mentimeter* and appreciated the different things they could learn. One user expressed that they could develop their skills faster using the progress page.

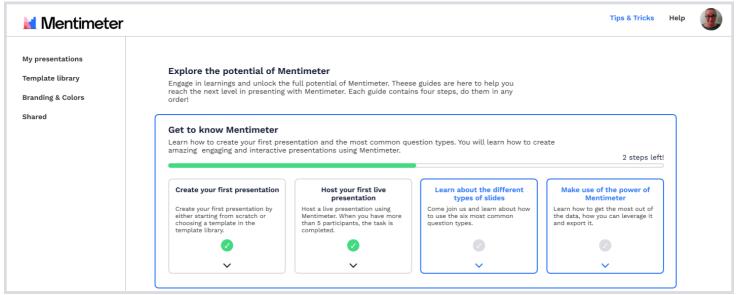


Figure 7.5.1, prototype of the progress page visualizing the different topics to learn about available, only first level. All assets from Mentimeter (2021), used with permission.

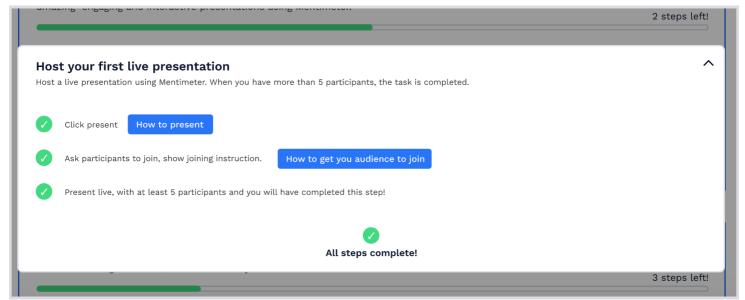


Figure 7.5.2, prototype of the different steps to complete a task in the process of learning. All assets from Mentimeter (2021), used with permission.

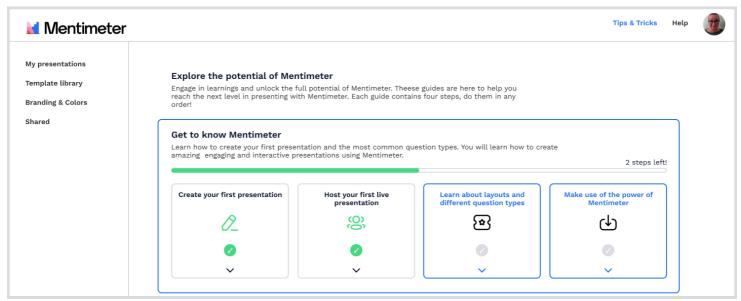


Figure 7.5.3, prototype of the progress page visualizing the different topics to learn about available with a reduced amount of text. Only the first level. All assets from Mentimeter (2021), used with permission.

When asked to rate the level of inspiration from the experience the users expressed a quite high level of inspiration, see table 7.5.2.

Table 7.5.2, mean and average results from evaluating the experience of the progress page using the customer inspiration scale by rating the statements on a scale of 1 to 5.1 being strongly disagree and 5 being strongly agree.

	My imagination was stimulated	I unexpectedly and spontaneously got new ideas		I was inspired to do something	My interest to do something was increased	motivated to
Mean	3	4	4	4	4	5
Average	3	3.67	4.33	4	4	3.67

### **Using Mentimeter to learn Mentimeter**

For evaluating if using *Mentimeter* to learn about how to use the product a presentation with interactive features using *Mentimeter* was developed. The presentation explained the most common question types of *Mentimeter* and leveraged a sense of humor to engage further.

The users were asked to silently go through the presentation and evaluate their experience. Four users performed the task. Three out of four users liked the feature and appreciated the ability to interact with the product to learn it in a simple and fast way. Three out of four users also liked the different features used in the presentation as well as the visual content, such as images and gifs. Two users expressed the level of learning as being too elementary, however, they were still entertained by it. One user also expressed that the experience brought an understanding of the experience of a participator in a presentation. When evaluating how inspired the users were by the experience all users expressed that their interest to do something was increased, that they were motivated to do something and inspired to do something, see table 7.5.3.

Table 7.5.3, mean and average results from evaluating the experience using the customer inspiration scale by rating the statements on a scale of 1 to 5.1 being strongly disagree and 5 being strongly agree.

	My imagination was stimulated	I unexpectedly and spontaneously got new ideas	I discovered something new	I was inspired to do something	My interest to do something was increased	motivated to
Mean	3.5	4	3.5	3.5	4	4
Average	3.25	3.25	3.25	3.75	4.25	3.75

## **Experiment 8**

As a result of experiment 7, the idea was iterated. The iteration consisted of increasing the level of difficulty of the *Mentimeter* presentation to learn the product and reducing the amount of text in the different tasks. The assumption was that increasing the level of difficulty and increasing the visual clarity of the progress page would put an ease in initiating inspiration for the users. In the prototype for visualizing progress, the descriptive text has been replaced with symbols, see figure 7.5.3. The interaction pattern follows the same as the prototype in experiment 7.

Four users were asked to find out where they could learn about layouts and customization and engage with the learning. All users understood the purpose of the page and expressed that they were inspired by seeing new things. Three out of four users appreciated learning by doing and they also got new

ideas from engaging with the presentation in terms of the specific topic. User 8.1 would have appreciated getting an estimation of how long it would take to complete the learning, this user also thought that the three levels should have been better explained. The majority of the users understood the progression of the three levels, the first being basic, the second being intermediate and the last being advanced. When the users were asked to rate the experience all users agreed that they got new ideas from it, see table 7.5.4. three users stated that they discovered something new.

Table 7.5.4, mean and average results from evaluating the experience using the customer inspiration scale by rating the statements on a scale of 1 to 5.1 being strongly disagree and 5 being strongly agree.

	My imagination was stimulated	, , ,				
Mean	3.5	4	3.5	3	4	3
Average	3.25	3.5	4	3	4	3.25

# 7.6 Ability to take part in and enjoy a community

The feature ability to take part in and enjoy a community has been a part of experiments 5 and 7. The assumptions driving the development of the feature are presented in table 7.6.1. A more detailed description of the result of each assumption and hypothesis is presented in the following section for experiments 5 and 7.

Table 7.6.1, Presentation of the assumptions, their sources, when it is tested, the tested hypothesis and brief result for the focus area Ability to take part in and enjoy a community.

Assumption	Source	Tested in	Hypothesis	Result	Action
Learning and interacting with other users will increase a sense of belonging and wellbeing and introduce the user to new possibilities which will increase the inspiration to use the tool.	METUX (Gaggioli et al., 2019), Relatedness (Hassenzahl, 2010), Identifying new ideas (Thrash & Elliot, 2004) Interviews, Experiment 1-5	Experiment 5, Experiment 7	We believe the assumption is true when users express value in being able to take part in a community	Users do understand the feature and claim to use similar features and would use the community features.	Iteration to only include parts of the features and complete analysis of the experiments.

## **Experiment 5**

The idea of using a community as a source for inspiration is based on interviews and experiments 1-5 where the results show that practically all participants get inspired by other people. The assumption is that learning and interacting with other users will increase a sense of belonging and wellbeing and introduce the user to new possibilities. According to the assumption, this will generate more motivated and inspired users. The idea tested was for all *Mentimeter* users to be able to upload templates made in *Mentimeter*. The templates were shown under a community category on the Explore presentation's page, see figure 7.6.1. The user can share a community profile, of themselves where they can write a short introduction and upload a profile picture. On the community profile, the user's uploaded templates are gathered.

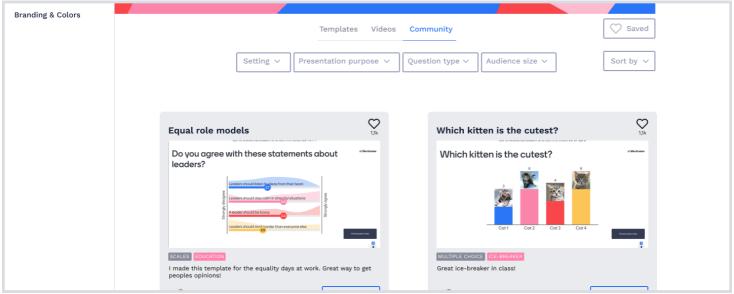


Figure 7.6.1, prototype of the first iteration for the community being able to share templates. All assets from Mentimeter (2021), used with permission.

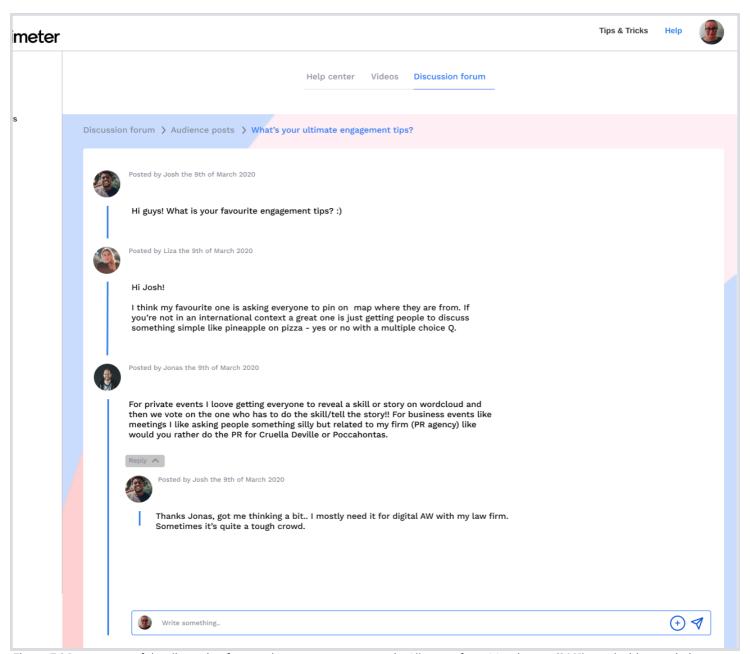


Figure 7.6.2, prototype of the discussion forum when a user enters a topic. All assets from Mentimeter (2021), used with permission.

All five participating users understood the purpose of and how to interact with the community page. The feedback on the community page was quite neutral with the user's claiming they use similar features and that they would use the feature on the *Mentimeter* page to look at what other users have done. When the users were asked to evaluate the experience almost all agreed that they were motivated to do something, see table 7.6.2.

Table 7.6.2, mean and average results from evaluating the experience using the customer inspiration scale by rating the statements on a scale of 1 to 5.1 being strongly disagree and 5 being strongly agree.

		I unexpectedly and spontaneously got new ideas	something	to do .	My interest to do something was increased	motivated to
Mean	3	3	5	4	4	5
Average	2.8	2.6	3.8	3.8	4.2	4.4

## **Experiment 7**

The assumption is that being able to learn and interact with other users will increase a sense of belonging and introduce new ideas and therefore inspire to use the tool. The prototype tested in experiment 7 was a development of the Help Center. The Help Center was extended by adding functionality that allowed users to interact with each other and ask questions. It is structured by topics and if a user chooses a topic, a screen allowing them to interact appears, see figure 7.6.2.

In experiment 7 four users participated and they were asked to find help from other users of *Mentimeter* on a specific question. While interacting, a majority of the users had trouble finding the page. Three out of four users expressed that they want to improve their skills and saw potential in a discussion forum. One user expressed that they could use the forum to learn more about presenting and *Mentimeter*. However, a majority expressed that they do not actively contribute to a forum but that they sometimes interact with them to find answers to their questions. When rating the level of inspiration from the experience, the users seemed to experience a quite high level of inspiration, see table 7.6.3. The main reason for this is that the users discovered new topics that they previously had not seen before but also because they saw an opportunity to excel in a skill.

Table 7.6.3, mean and average results from evaluating the experience using the customer inspiration scale by rating the statements on a scale of 1 to 5.1 being strongly disagree and 5 being strongly agree.

	My imagination was stimulated	I unexpectedly and spontaneously got new ideas	I discovered something new	I was inspired to do something	3	I was motivated to do something
Mean	4	4	4	4	4	4
Average	4	3.67	3.33	4	3.67	3.33

# 7.7 Ability to store inspirational content

The feature ability to store inspirational content has been a part of experiments 2 and 3. The assumptions driving the development of the feature are presented in table 7.7.1. A more detailed description of the result of each assumption and hypothesis is presented in the following section for experiments 2 and 3.

Table 7.7.1, Presentation of the assumptions, their sources, when it is tested, the tested hypothesis and brief result for the focus area ability to store inspirational content.

Assumption	Source	Tested in	Hypothesis	Result	Action
Offering the ability to store and personalize a collection of content will allow the user to feel in control of their inspirational process.	METUX (Peters et al., 2018), the prerequisite of inspiration (Elliot and Thrash, 2010) Autonomy (Hassenzahl, 2010)	Experiment 2, Experiment 3	We believe the assumption is true when users express appreciation for the feature.	Users claim they would use the feature and that they use similar features in other software.	Iterations to increase usability. Complete analysis of the experiments.

## **Experiment 2 and 3**

The assumption tested in experiments 2 and 3 is Offering the ability to store and personalize a collection of content will allow for the user to feel in control of their inspirational process. The store or like symbol is a heart, in alignment with the usability law continuity with the world. The page where the liked content is gathered is located on the right side of the filters on the horizontal filter menu. The templates are stored by clicking the same heart symbol but on the downright corner of the thumbnails, a feature that was not prototyped, see figure 7.7.1 and 7.7.2.



Figure 7.7.1, prototype of the heart symbol to save inspirational content for experiment 2. All assets from Mentimeter (2021), used with permission.

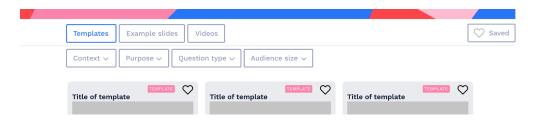


Figure 7.7.2, prototype of the iterated save button for experiment 3. All assets from Mentimeter (2021), used with permission.

Experiment 2 was conducted by five users. Users mentioned using the save feature in other software and claimed that they would use the save function if available. However, due to lack of voluntary attention, the feature needs to be further explored. Experiment 3 was conducted by six users. The experiment indicated that all users understood the save feature and how to use it, and a few users mentioned that they use similar features in other programs and would use it in *Mentimeter* if it was available.

# 7.8 Ability to find inspirational content

The feature Ability to find inspirational content has been a part of experiments 1, 1.1, 3, 6 and 8. The assumptions driving the development of the feature are presented in table 7.8.1. A more detailed description of the result of each assumption and hypothesis is presented in the following section for experiments 1, 1.1, 3, 6 and 8.

Table 7.8.1, Presentation of the assumptions, their sources, when it is tested, the tested hypothesis and brief result for the feature ability to find inspirational content.

Assumption	Source	Tested in	Hypothesis	Result	Action
If it is possible to find appropriate content, by function and by visuals, the user is more likely to engage with it.	Discoverabili ty (Norman, 2013), design for engagemen t (O'Brien and Toms, 2008)	Experiment 1 and 1.1, Experiment 3	We believe the assumption is true when the users use the filters and feel in control.	When performing the tasks, the users did under their tasks understand how to interact with the filters. They expressed that they felt confident in the task.	Ideation of new ways to allow users to find inspirational content and iteration of design.
Allowing users to find templates based on visuals would increase the inspiration to engage with them and the product.	Interviews and experiment 1, 1.1, 2, 3, 4, 5	Experiment 6	We believe the assumption is true when the users experience increased inspiration as a result.	When interacting with the prototype all of the participants expressed that they were drawn to the mood boards, however, it seemed time-consuming and intrusive.	Iteration of the visual filter.
With a less intrusive filter, users will still be able to experience visual inspiration but without feeling overwhelmed and as a result, engage with the product	Experiment 6	Experiment 8	We believe the assumption is true when the users experience increased inspiration as a result.	A majority of the users appreciate being able to filter based on mood or colors.	Complete analysis of the experiments.

### Experiment 1, 1.1 and 3

Experiments 1, 1.1 and 3 tested the assumption that if it is possible to find appropriate content, by function, the user is more likely to engage with it. To facilitate finding appropriate content filters are created in the prototype. Experiment 1 tested filters, see figure 7.8.1 and 7.8.2. Experiment 3 tested two versions of the filtering functionality, see figure 7.8.3 and 7.8.4. The versions differ in how the users select templates, for example slides, or videos. In one version the option is hidden in a filter called "Content", see figure 7.8.4, and in the other version, the choices are visible above, see figure 7.8.3. To further limit the selection of templates, by clicking on a filter, additional choices are available, see figure 7.8.5, functionality which is identical for the two prototypes.

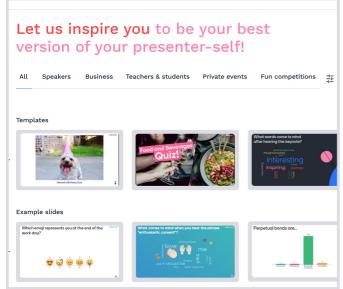


Figure 7.8.1, prototype of the options to filter for experiment 1 & 1.1. All assets from Mentimeter (2021), used with permission.

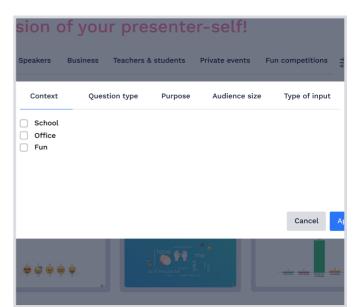


Figure 7.8.2, prototype of the filters for experiments 1 & 1.1. All assets from Mentimeter (2021), used with permission.

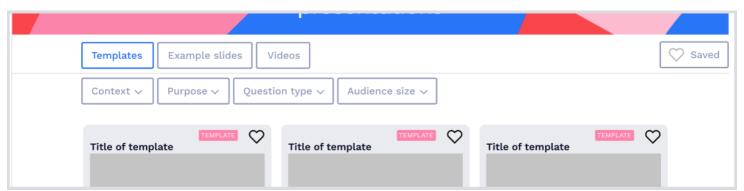


Figure 7.8.3, wireframe of filters for templates, example slides and videos, version A for experiment 3. All assets from Mentimeter (2021), used with permission.

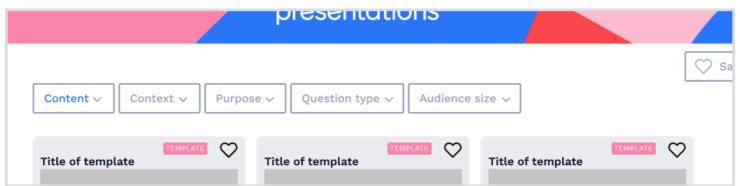


Figure 7.8.4, wireframe of filters for templates, example slides and videos, version B for experiment 3. All assets from Mentimeter (2021), used with permission.

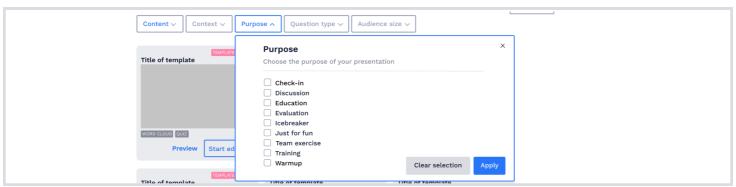


Figure 7.8.5, prototype of engaging with the filter question type for experiment 3. All assets from Mentimeter (2021), used with permission.

Seven users participated in experiments 1 and 1.1, however as the users were only asked to explore the inspirational content of the prototype and not directly the filtering options, no user engaged with it. Six users participated in experiment 3 and they were asked to explain every word of the filters both related to templates and videos. After that they were asked to perform a task that required filtering, three users tested version A and two users tested version B. The users expressed what they would expect from each filter and no user was able to understand the filter "Content". However, a majority of users did not interact with the filter content as they had already reached the desired type of content through other ways.

## **Experiment 6**

Derived from the previous experiments and users choosing templates based on visual characteristics, the assumption that allowing users to find templates based on visuals would increase the inspiration to engage with them and the product. The idea was that based on mood boards, the user would get appropriate template suggestions. The prototype tested in experiment 6 consisted of six different mood boards within three themes which are minimalist, nature and joy, see figure 7.8.6. For each theme, the user could choose between two different color palettes. For every palette and mood board, the user got three suggestions of templates.

The users were asked to find inspiration for a template using the prototype and five users participated. When interacting with the prototype all of the participants expressed that they were drawn to the mood boards. Two users expressed that they would use the mood boards if they were not pressed for time. A majority of the users also expressed that they think it is a great way to start the process of creating a presentation because it stimulates ideation. Two users said that they felt slightly overwhelmed by the images and felt like it might be a time-consuming activity. When the users were asked to rate the level of inspiration, a majority of the users were quite inspired, see table 7.8.2.

Table 7.8.2, mean and average results per user from evaluating the experience using the customer inspiration scale by rating the statements on a scale of 1 to 5.1 being strongly disagree and 5 being strongly agree.

	My imagination was stimulated	I unexpectedly and spontaneously got new ideas	_	to do	3	I was motivated to do something
Mean	4.5	3	2	3.5	3.5	3.5
Average	4	3.25	2.5	3.75	3.25	3.75

### **Experiment 8**

As some users in experiment 6 expressed that the moodboards felt overwhelming and time-consuming, the idea was iterated so that it is an additional filter for finding templates. The assumption is that the users will still be able to experience visual inspiration but without feeling overwhelmed and as a result engage with the product. The prototype tested in experiment 8 has a filter called Design & color which allows the user to choose a theme and color palette for the templates they would like to engage with. The visual filter that appears when the user clicks on Design & color has the same mood boards and color palettes as in experiment 6, see figure 7.8.7.

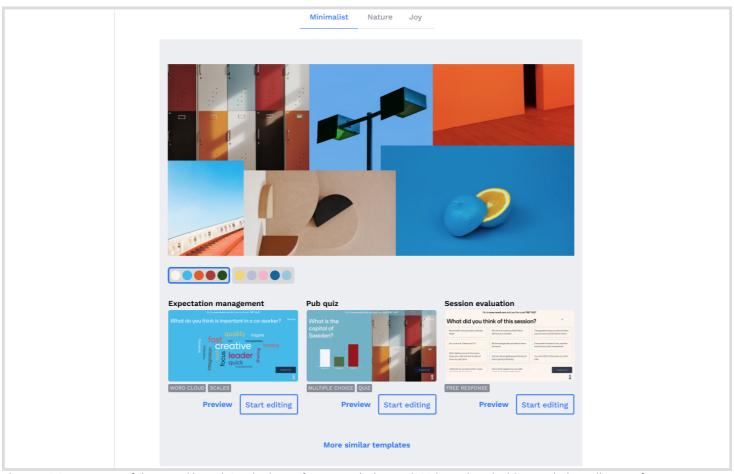


Figure 7.8.6, prototype of the mood board. Stock photos from Unsplash.com (2021), reprinted with permission. All assets from Mentimeter (2021), used with permission.

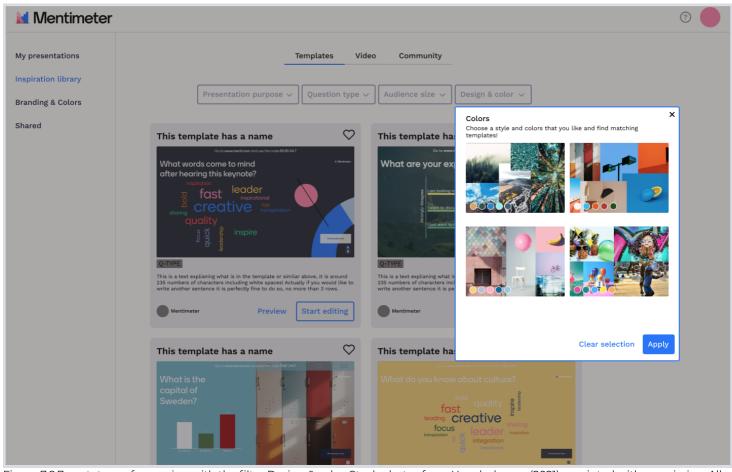


Figure 7.8.7, prototype of engaging with the filter Design & color. Stock photos from Unsplash.com (2021), reprinted with permission. All assets from Mentimeter (2021), used with permission.

The users were asked to filter templates based on a color scheme and vibe they liked and explain why. Four users participated and a majority of the users appreciate being able to filter based on mood or colors. All users believe that colors and design play a big role in creating a presentation and being able to have different color schemes for different presentations is important. All users pay attention to what is in the slide and its design and one user expressed that visual clarity is important. When asked to rate the experience, all users agreed that their imagination was stimulated and that they got new ideas, see table 7.8.3. However, they were not as motivated to do something.

Table 7.8.3, mean and average results from evaluating the experience using the customer inspiration scale by rating the statements on a scale of 1 to 5.1 being strongly disagree and 5 being strongly agree.

	My imagination was stimulated	I unexpectedly and spontaneously got new ideas	I discovered something new	I was inspired to do something	My interest to do something was increased	I was motivated to do something
Mean	4	4	5	4.5	4	3
Average	4	4	4.25	4.25	4	3.5

## 7.9 Ability to explore the product through templates

The feature ability to explore the product through templates has been a part of experiments 6 and 8. The assumptions driving the development of the feature are presented in table 7.9.1. A more detailed description of the result of each assumption and hypothesis is presented in the following section for previous findings, experiments 6 and 8.

Table 7.9.1, Presentation of the assumptions, their sources, when it is tested, the tested hypothesis and brief result for the ability to explore the product through templates.

Assumption	Source	Tested in	Hypothesis	Result	Action
If the template allows the user to explore the product, they will feel more inspired to apply it to their use cases.	Experime nt 1, 2, 4 and 5	Experim ent 6	We believe the assumption is true when the users express specific wants.	The users seem to like templates with colors and pictures that give the audience some kind of stimuli without being overwhelming.	The results are analysed and templates are designed according to feedback.
Based on users' feedback, there is a perfect template that generates inspiration.	Experime nt 6	Experim ent 8	We believe the assumption is true when the users express specific wants.	The result indicates that color- and design-preferences vary which indicates a need for using different designs and color schemes when designing inspiring templates.	Complete analysis of the experiments.

### **Experiment 6**

Experiment 1,2,4,5 showcased templates as being the main source of inspiration in *Mentimeter*. Therefore, experiment 6 investigated what type of templates the users find inspiring or non-inspiring to lay a foundation for the development of inspiring templates. The tested assumption is if the template allows the user to explore the product, they will feel more inspired to apply it to their use cases. The users were asked to browse the templates of the *Mentimeter* in-app page and chose two to compare. Also, the user was asked to prepare a presentation or slide that they liked. Five users conducted the experiment and the results were somewhat scattered but showed clear indications on

clear and structured templates with a clear message and prioritizing data and a message before text is appreciated. The users seem to like templates with colors and pictures that give the audience some kind of stimuli without being overwhelming.

## **Experiment 8**

Experiment 6 indicated that clear and structured templates with a focus on visual stimuli and clear messages rather than a lot of information are desired. Furthermore, the users seem to like visually stimulating templates with the appropriate use of colors and pictures. The assumption is that based on users' feedback, there are templates that generate inspiration. Therefore six different templates were designed to follow these principles. The templates were incorporated into a prototype of an Inspiration page where the users could see the six templates and preview them, see figure 7.9.1.

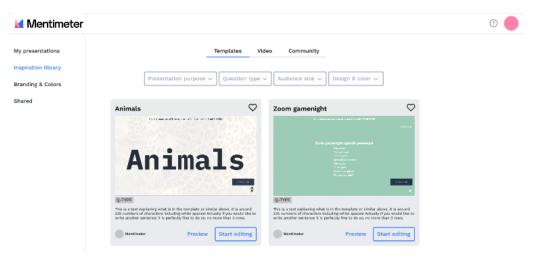


Figure 7.9.1, prototype of template page with preview, only showing two out of the six templates. All assets from Mentimeter (2021), used with permission.

Four participants did the test and the results indicated that the users appreciated templates with little text, clear font and general visual clarity. Furthermore, new ways of using the question types, new examples of topics and content, as well as, innovative layouts spark interest and inspiration. As seen in other experiments, some users are not interested in viewing templates unrelated to their field, which indicates a need for different types of content and layouts that attracts different kinds of users. Regarding the different layouts, the result indicates that color- and design- preferences vary which indicates a need for using different designs and color schemes when designing inspiring templates. However, the users expressed being inspired by seeing different content and use cases as well as understanding how to use the layout, font and color options to customize their presentations. When the users were asked to evaluate the experience a majority felt inspired in general, see table 7.9.2.

Table 7.9.2, mean and average results from evaluating the experience using the customer inspiration scale by rating the statements on a scale of 1 to 5.1 being strongly disagree and 5 being strongly agree.

	My imagination was stimulated	I unexpectedly and spontaneously got new ideas	I discovered something new	I was inspired to do something	My interest to do something was increased	I was motivated to do something
Mean	4	4.5	5	4	3	4
Average	4	4	4	4	3.25	3.25

## 7.10 Final evaluation

The purpose of the final evaluation is to allow users to explore the product without creating a presentation and assess whether areas outside of that can spark inspiration. In the final evaluation, all assumptions presented in table 7.10.1 are assessed.

Table 7.10.1, Presentation of the assumptions, the feature, their sources and the tested hypothesis and brief result for the final evaluation.

Assumption	Feature	Source	Hypothesis
Allowing users to explore templates will facilitate the creation of a vision and plans for how to use the product.	Ability to preview templates, Extended ability to access templates, Ability to explore the product through templates	Interviews, Experiment 3, Experiment 2, Experiment 8	We believe the assumption is true when the users verbalize their new ideas.
Understanding the progress will motivate users to start learning more about <i>Mentimeter</i>	Ability to progress and increase competence,	Experiment 7, Experiment 8	We believe the assumption is true when the users explain their appreciation for progression and how they would go about it.
The connection between users will feel like there is a way to learn from others	Ability to take part in and enjoy a community,	Interviews, Experiment 5, Experiment 7	We believe the assumption is true when the users talk about other users as a resource.
Enhanced usability will make users feel confident in navigating the interface	New design of the Inspiration page, Ability to store and find inspirational content	Experiment 3, Experiment 8, Experiment 2	We believe the assumption is true when the users feel confident navigating the interface.

The final evaluation tested a final design, combining several of the developed features. The prototype contains a start page, see figure 7.10.1, inspiration page, see figure 7.10.2, with previews and progress page, see figure 7.10.3. The prototype does not allow the user to go into edit mode, shared, branding and colors, or to create a new folder. The filters in the inspiration library could be shown but not applied. For the progress page, see figure 7.10.3, only some of the tasks could be shown. The learning experience called Menti school is not directly connected to the prototype as intended in a completely developed design.

The final evaluation was performed by users and non-users of *Mentimeter*, a total of four users and five non-users performed the evaluation. The main difference between users and non-users was that the users seem to understand all parts of the design to a somewhat larger extent than the non-users. However, most participants understood all parts of the design and mentioned getting an increased interest in using *Mentimeter*, finding new inspiration and getting new ideas for how to apply *Mentimeter* in their context. The most crucial finding is that many of the participants realised that *Menimeter* is a presentation tool, rather than only an interactive presentation tool for voting and word clouds. They realised that *Mentimeter* allows them to create aesthetically pleasing, comprehensible and fun presentations.

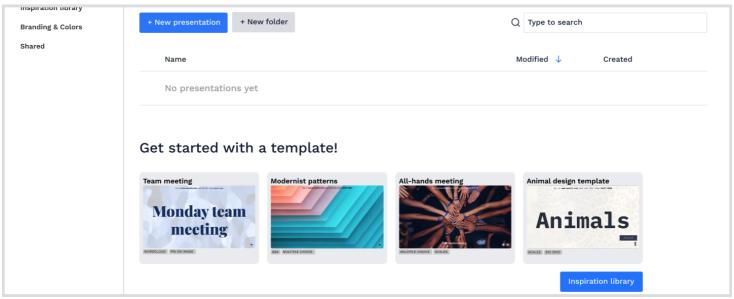


Figure 7.10.1, logged in interface of prototype. All assets from Mentimeter (2021), used with permission.

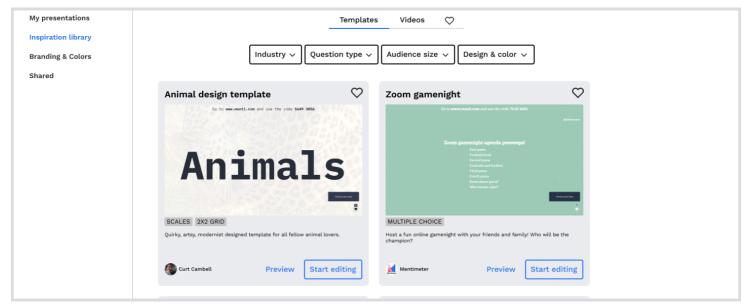


Figure 7.10.2, inspiration library of prototype. All assets from Mentimeter (2021), used with permission.

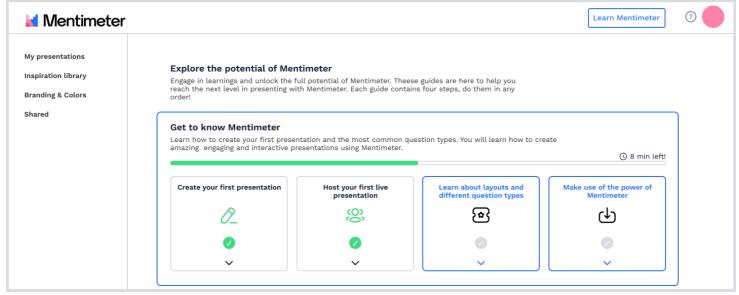


Figure 7.10.3, progress page of prototype. All assets from Mentimeter (2021), used with permission.

The users were asked specifically about each feature if they did not voluntarily engage with them and the result is presented in a table, see table 7.10.2. In general, the users understood the features, see table 7.10.2.

Table 7.10.2, qualitative findings for each feature from the final evaluation.

Feature	Qualitative findings
New design of the inspiration page and the ability to preview content	The inspiration page and the preview allows the users to understand the potentials of <i>Mentimeter</i> through showing what a presentation would look like. All participants understood the page and preview and maneuvered them easily.
Ability to store and find inspirational content	All participants understood the features and many users mentioned using similar features in other softwares.
Ability to take part in and enjoy a community	Most of the users seem to enjoy being able to use other people's templates since it will give a larger variety of templates for them to choose from.
Ability to progress and increase competence	All users understood the page, some explored new features through the page and others thought the page would support their learning.
Ability to explore the product through templates	Through the templates, users seem to get a wider understanding of Mentimeter as a presentation software rather than only a voting tool.

When asked to rate the willingness to use *Mentimeter* before the exploration of the prototype, the users were already determined to keep using the product, see table 7.10.3. They rated their willingness high before and after using the prototype. Still, some users expressed that they realized that *Mentimeter* could be applied on more areas than what they thought before exploring. The difference between before exploration and after is greater for the non-users, see table 7.10.3, and as user f3 expressed, "...20 minutes ago I just thought that Mentimeter was a code that you can share and do polls. That was Mentimeter to me. Now it is like another tool to do presentations and share presentations..." - User f3. The difference in willingness between before and after free exploration of the prototype for non-users was bigger. Before the non-users rated their willingness to 4.6 and after to 7.2, see table 7.10.3.

Table 7.10.3, rating willingness to use *Mentimeter* before exploration of the prototype and after exploration. Rating on a scale of 1 to 10, 1 being not willing and 10 being very willing.

	Before	After
Mean, users	10	10
Average, users	9.75	9.75
Mean, non-users	4	7
Average non-users	4.6	7.2

The users were also asked to rate their experience of inspiration after completing the test, including the learning experience using *Mentimeter*, see table 7.10.4. In general, the users and non-user imagination was stimulated and their interest to do something increased, see table 7.10.4.

Table 7.10.4, mean and average results for users and non-users from evaluating the experience using the customer inspiration scale by rating the statements on a scale of 1 to 5.1 being strongly disagree and 5 being strongly agree.

	My imagination was stimulated	I unexpectedly and spontaneously got new ideas		I was inspired to do something	My interest to do something was increased	I was motivated to do something
Mean, users	5	3	5	4.5	5	5
Average, users	4.75	3.25	4.25	4.25	4.75	5
Mean, non-users	5	4	4	4	4	4
Average, non-users	4.4	3.4	3.8	4.2	4.2	3.6

When assessing the usability of the interface, both users and non-users felt confident in their ability to use the interface and did not find the interface confusing, see table 7.10.5. However, the users and non-users were unsure whether they could get the interface to do the things they want it to and that is mainly due to the fact that the prototype was limited in functionality and they could not explore everything, see table 7.10.5.

Table 7.10.5, mean and average results for users and non-users from the evaluation of the tasks using the TENS-scale presented.

	I feel confident in my ability to use the interface.	interface was	interface and controls	The technology provides me with useful options and choices.	interface to do	The interface feels controlling.
Mean, users	4	2.5	1.5	4.5	3.5	2
Average, users	4	2.5	2	4.5	3.5	2
Mean, non-users	5	1	2	4	3.5	2
Average, non-users	4.6	1.8	1.8	4.25	3.25	2.2

# 08

# Final design

The following chapter introduces the final design together with a summary of supporting data and claims as well as the included features.

# 8.1 New design of the inspiration page and the ability to preview

O'Brien and Toms (2008) claim that aesthetically pleasing visuals increase engagement, at the same time Thrash and Elliot (2004) have proven that discovering new possibilities leads to inspiration. Therefore a new design of the inspiration page with mixed content with both templates and videos is created to increase the focus on thumbnails and visuals. Elliot and Thrash (2014) also state that inspired people have a clear vision of how to use their inspiration, therefore a preview was designed to support the visualization. The preview allows the user to go through the template before editing it. Discoverability (Nielsen, 1994) is important in allowing the user to discover the full product. Therefore the discoverability of the inspiration page was explored, creating a preview of templates on the inspiration page and a shortcut on the *My presentation* page.

The data collected in the experiments and the final evaluation generally agree with the theoretical claims. Users do appreciate access to different types of content, especially videos and templates. They also appreciate the information associated with the different types of content, for example, the tags of question types and the length of the video. The access to different types of content has also allowed the users to explore the product as well as facilitated visualization. The preview has allowed the users to further explore the product in detail, it has generated the emergence of ideas and initiated journeys of applying the product in their context. Furthermore, data shows that users had issues finding the inspiration page in the original product and that the shortcut on *My presentation* page was successful assisting the users into the page.

The final design contains a layout that has informative boxes with thumbnails allowing the user to access the templates, see figure 8.1.1 and videos, see figure 8.1.2, as well as preview them, see figure 8.1.3. The boxes also include tags of the types of questions included in the template, the name and picture of the creator of the template and the ability to like the content, see figure 8.1.1. The preview allows the user to open the template in edit mode, like and go through the template on the arrows or by clicking the thumbnails. The preview has the ability to show test votes, showing test votes. A few thumbnails are available with a shortcut on the *My presentation* page for users with no active presentations to help users to get started, see figure 8.1.4. As well, the *Inspiration library* page has a horizontal menu that allows the users to switch between the page for templates, videos and liked content.

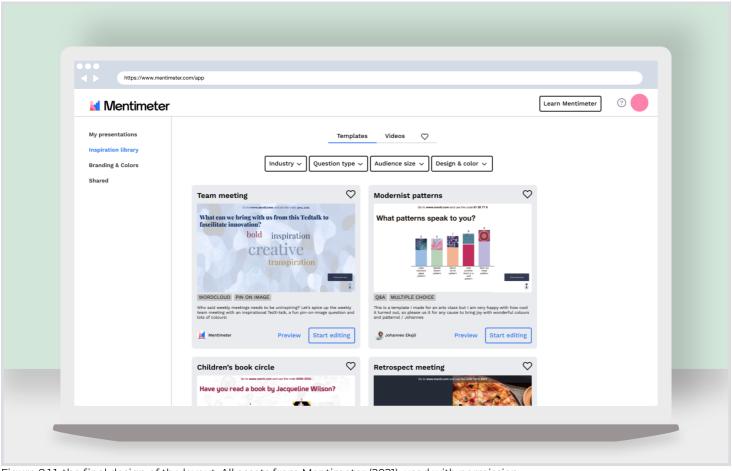


Figure 8.1.1, the final design of the layout. All assets from Mentimeter (2021), used with permission.

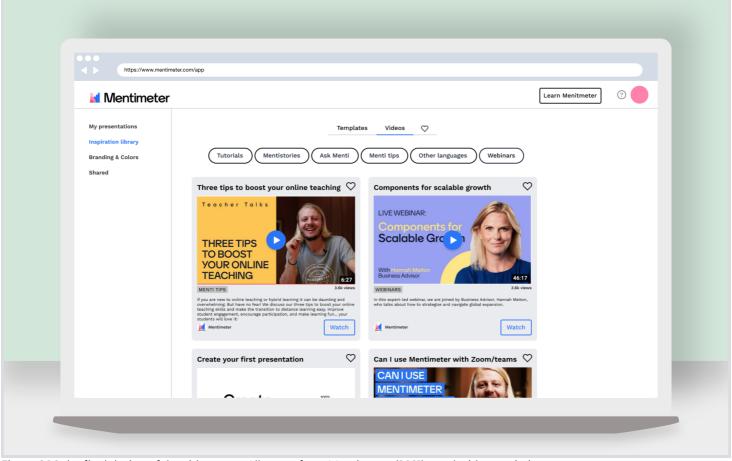


Figure 8.1.2 the final design of the video page. All assets from Mentimeter (2021), used with permission.

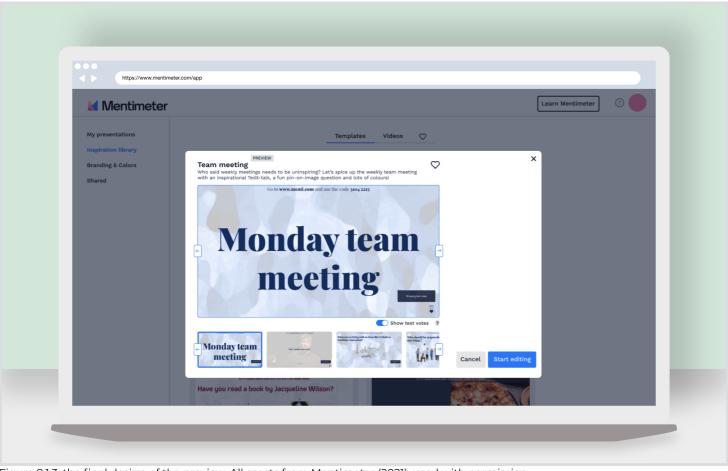


Figure 8.1.3, the final design of the preview. All assets from Mentimeter (2021), used with permission.

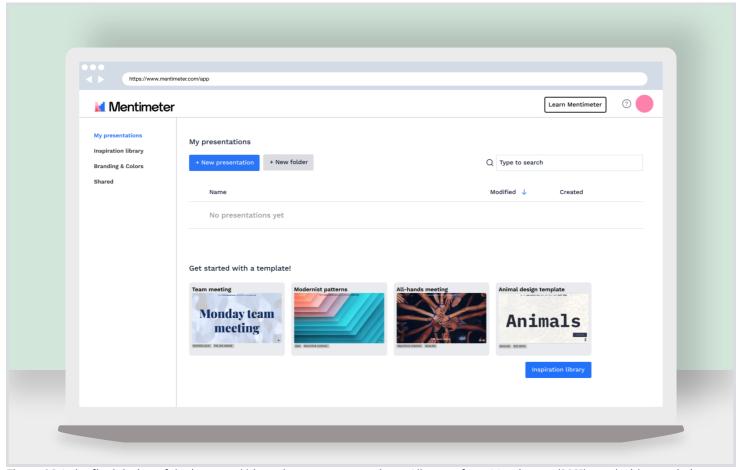


Figure 8.1.4, the final design of the increased hierarchy to access templates. All assets from Mentimeter (2021), used with permission.

## 8.2 Ability to store and find inspirational content

To support the whole inspiration process the ability to find and store inspirational content, by function and visual, is essential. Discoverability, the ability to find a certain feature, is an important aspect of usability (Norman, 2013). Therefore the name of the inspiration page is assessed since data shows that the users do not understand the title *inspiration*. Additionally, the ability to filter content based on function was explored. O'Brien and Toms (2008) have disclosed the relation between aesthethically pleasing visuals and engagement, therefore also visual filters were explored. To facilitate a longer inspirational process the ability to store inspirational content was developed through liking inspirational material and gathering the liked material in one place. This is supported by Hassenzahl (2010) and Peters et al. (2018) that has shown that personalization and autonomy are the main needs in creating meaningful *User experiences*, and allows the user to feel in control.

The data collected in the experiments and final evaluation agree with the theoretical claims to some extent. The ability to store inspirational content has unfortunately not been possible to test in a natural context, which means that the conclusions rely on what users have verbally expressed about it. Still, the users have been appreciative of the feature and referenced other softwares where they used it. Filtering content, both based on content and design, has been continuously appreciated. Many users have expressed appreciation for filters in stressed moments. To access the page with inspirational material, the page is renamed to *Inspiration Library*, as it better reflects the content of the page, which also has been shown in the experiments and final evaluation.

With the theoretical claim and the collected data, the final design contains drop down menu filters that allow the user to filter based on *Industry, Question type, Audience size* and *Design & color*, see figure 8.2.1. *Design & color* filters the templates through different style mood boards with colour palettes. The page for inspirational content is called *Inspiration library* and the user has the ability to store inspirational content through liking it by clicking on the heart symbol on the thumbnails, see figure 8.2.1. The users find the liked content on the liked page symbolized by a heart on the horizontal inspiration material menu, see figure 8.2.2.

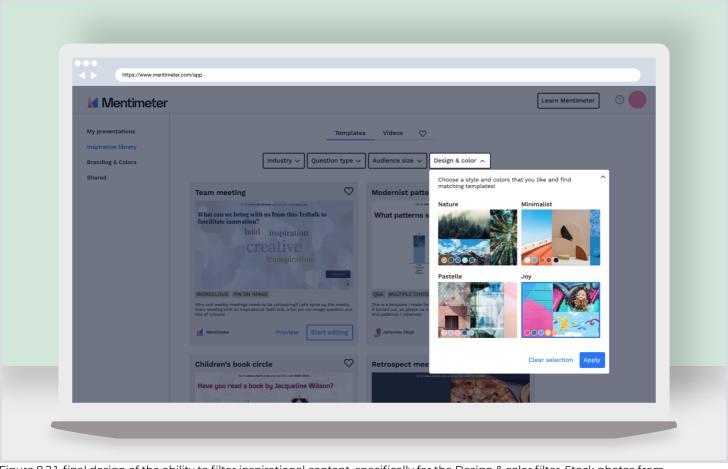


Figure 8.2.1, final design of the ability to filter inspirational content, specifically for the Design & color filter. Stock photos from Unsplash.com (2021), reprinted with permission. All assets from Mentimeter (2021), used with permission.

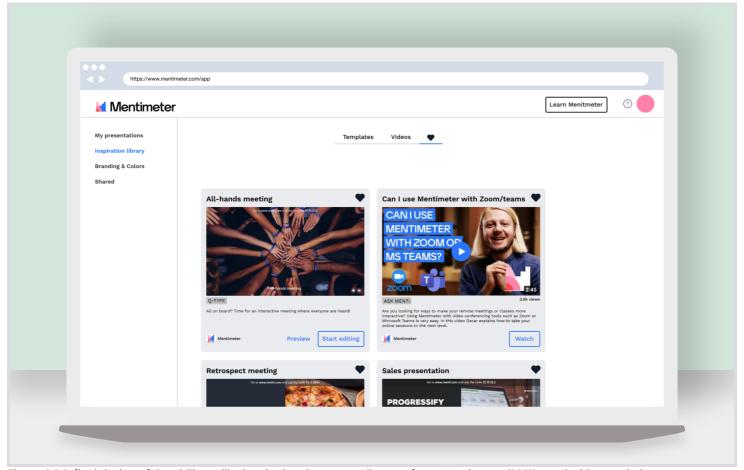


Figure 8.2.2, final design of the ability to like inspirational content. All assets from Mentimeter (2021), used with permission.

## 8.3 Ability to take part in and enjoy a community

Hassenzahl (2010) and Gaggioli et al. (2019) declares that relatedness is one of the most important human needs that should be catered for in *User experiences*. Being exposed to new possibilities also facilitates inspiration (Thrash & Elliot, 2004). As a result, attempts to create a community were explored.

The data collected in the experiments and final evaluation agree with the theoretical claim as the most common inspirational source are people. Being able to share templates with other users was appreciated as it inspired users to see what others created using the product. Being able to discuss through a forum was not as appreciated.

With the theoretical claims and the findings from the collected data, the final design includes the ability to share templates with other users of *Mentimeter*. The possibility to share the template on the inspiration page is suggested to be an option in the already existing sharing menu where the user can share the template with for example colleagues or friends. The creator of the template will be presented with a name and a profile picture on the thumbnail, see figure 8.3.1.

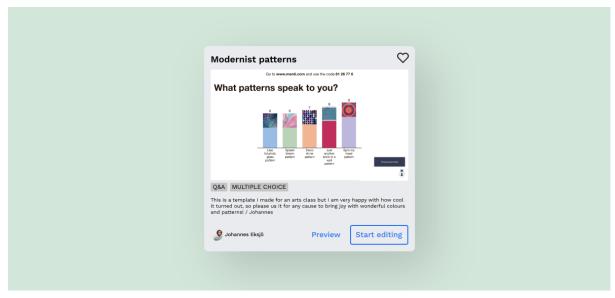


Figure 8.3.1, final design of the ability to share templates. All assets from Mentimeter (2021), used with permission.

# 8.4 Ability to progress and increase competence

One of the prerequisites for being inspired is work-mastery motivation (Thrash & Elliot, 2004). As well, competence is one of the main needs to cater for developing great *User experiences* according to Hassenzahl (2010). Furthermore, goal achievement is an important part of being inspired (Milyavskaya et al, 2012).

Data from the experiments and the final evaluation indicated that visualization of the progress with access to learning assets increased inspiration. The reason is that exposure to available features and allowing the user to learn and develop was encouraging and motivating. Many users thought it was fun and stimulating to learn about *Mentimeter* using *Mentimeter*. Users referred to this as a way of learning by doing, which some stated is the optimal way of learning. *Menti school* especially focuses on fun, silly and innovative content which was vastly appreciated by the users. The progress page also has time consumption information due to facilitating an update on how long time it takes to complete tasks, which users appreciated.

With the theoretical claims and qualitative findings, the final design contains a progress page called *Learn Mentimeter*. It contains access to three levels each with four tasks that contain links to material helping the user to develop. The material is a combination of using *Mentimeter* to learn *Mentimeter* called *Menti school*, articles and videos and is reached through a drop down menu. After completing a step, see figure 8.4.1 or task, see figure 8.4.2 the step or task receives a green checkbox. Once all steps are done the task turns from blue to green to mark the completion. Above the task a progress bar indicated with green fill and time how far the user has gotten in the learning process. *Menti school*, see Appendix XII, is a suggestion on creating different informative and fun presentations the user can go through by themselves to quickly and easily learn about the features of *Mentimeter*.

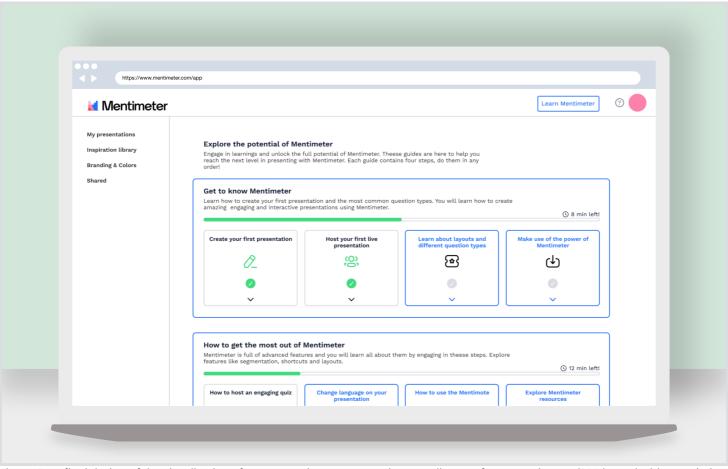


Figure 8.4.1, final design of the visualization of progress using Learn Mentimeter. All assets from Mentimeter (2021), used with permission.

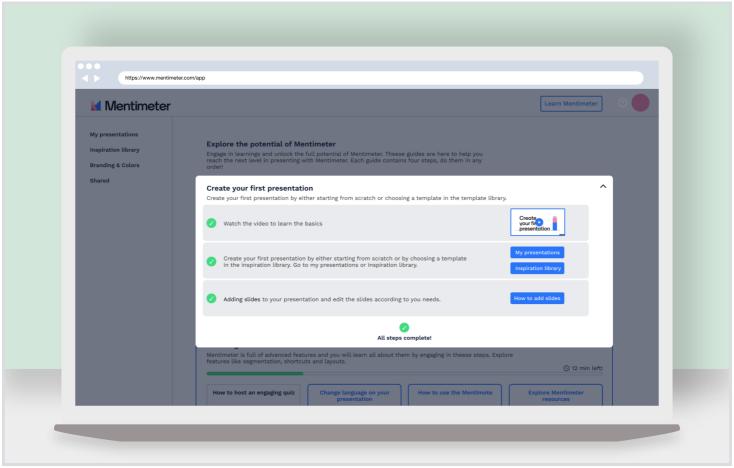


Figure 8.4.2, final design of the visualization of progress using Learn Mentimeter in detail, showing a set of tasks. All assets from Mentimeter (2021), used with permission.

## 8.5 Ability to explore the product through templates

A *Conceptual model* incorporates a comprehensible model of how something works which allows the user to feel in control of the product and identify potential use cases (Norman, 2013). To explore this the templates are designed after feedback from users.

The experiments and final evaluation agree with the theoretical claims. The experiments clearly stated that the templates and their previews were one of the main sources for inspiration.

With the theoretical claims and qualitative findings, the final design contains templates, designed in accordance with the *Guidelines for inspirational templates*, further explained in chapter nine. One example of a template designed according to the guidelines is presented in figure 8.5.2.

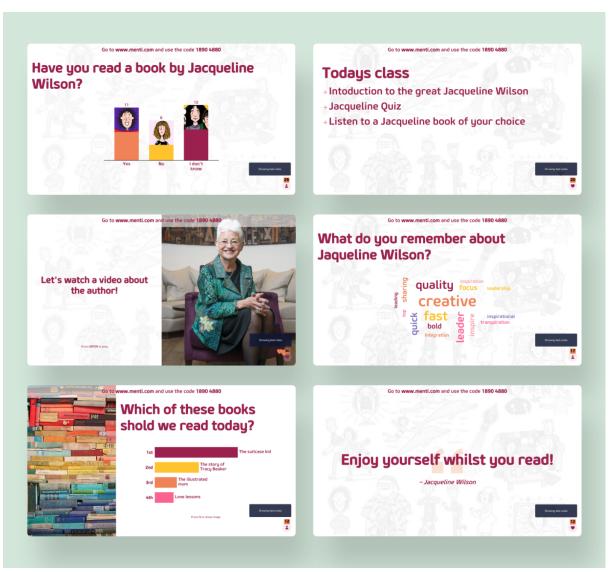


Figure 8.5.2, final design proposal of a template, showing a set of slides. All assets from Mentimeter (2021), used with permission.

# 09

# **Guidelines for inspiration**

The following chapter introduces guidelines for designing for inspiration in *Mentimeter* with supporting evidence and related developed features.

The guidelines are created to facilitate designing for inspiration and include ten aspects relevant to consider. The guidelines aim at generating *Inspirational User experiences*, *IUX*, for the product *Mentimeter*. The guidelines include: maintain a sense of new or different, show as much of the experience as possible, promote fun, widen the horizon, create content that resonates with values and goals, design visually pleasing content, ensure successful tasks, support different inspiration processes, promote people getting inspired by people and guidelines for inspirational templates.

## 9.1 Maintain a sense of new or different

Maintaining a sense of new or different is about ensuring that the user is not bored or feels like they have seen it all. The road of discovery should be continuous and offer new or different perceptions of use cases. New does not necessarily mean new in the sense of new feature releases, but rather innovative or fun ways of using the tool. For example, different ways to combine colors, a new way of displaying the results, or new presentation technique tips. The important aspect is to keep it new or different to the user, something that varies depending on their experience in the tool. Discovery is a key component in being inspired. Being able to discover new or different things will enable the user to interact with the tool with inspiration. To embody the guideline the *ability to take part in and enjoy a community* has been developed.

# 9.2 Show as much of the experience as early as possible

Showing as much of the experience as early as possible facilitates visualization. Being able to visualize applications of the tool in the user's context is what could ultimately motivate them to adopt it. It is about making the user understand the potential value of using the product as early as possible, to get a glimpse of what the experience could be like. To embody the guideline the feature ability to *preview templates* has been designed.

## 9.3 Promote fun

Promoting fun introduces a relief from a serious context through comic relief. When having fun, a sense of time can disappear and the idea is that if it is fun or will bring fun, the user will enjoy engaging with the tool. Fun is also about the unexpected and quirky. The guideline to promote fun has been a part of the focus area *ability to explore the product through templates* and the *ability to progress and increase competence*.

## 9.4 Widen the horizon

Understanding the potential of the tool, your skills and development is the core of widening the horizon. Widen the horizon is also about helping the users understand how they can apply the tool in their context. Showing the possibilities and allowing for the discovery of the tool has the potential to motivate the user. The features explored within widen the horizon are: *extended ability to access templates* and *ability to progress and increase competence*.

## 9.5 Create content that resonates with values or goals

Providing content that resonates with the users' values and goals is about creating a sense of meaning. It is about finding content that the user identifies with, content that truly speaks to the values and goals of the users. These values and goals differ between every individual but there are common characteristics. The feature that has been explored within the guideline is the *ability to find inspirational content*. To facilitate content that resonates with values and goals *the ability to explore the product through templates* has been developed.

## 9.6 Design visually pleasing content

Visually pleasing design concerns presentations looking good and appropriate in front of the audience. This includes having structured presentations with clear goals. The content should be easily interpreted by both the presenter and the audience. Aesthetically pleasing visuals can increase engagement with the software, in other words, it could increase the activation of users in *Mentimeter*. The *new design of the inspiration page* and the *ability to explore the product through templates* are designed to support the guideline.

## 9.7 Ensure successful tasks

To be able to experience inspiration, the user has to be able to successfully interact with the product in accordance with usability- and *User experience* guidelines. The users want to feel capable and successful because it leaves space to be creative. Ensuring successful tasks can be done by enhancing the usability. In particular, the *new design of the inspiration page* is designed to support the guideline usability.

## 9.8 Support different inspiration processes

Users have different inspiration processes as shown in the user's inspiration journey, see chapter 6.2. Some users go directly from inspiration to action while others need some time to find where that piece of inspiration fits. The user has to feel a sense of autonomy to support the users' creativity and

introduce a sense of exploration. Time is one of the most mentioned constraints for inspiration for the users, as a result, it is of importance to facilitate fast processes as well as slower, cumulative processes where the user stores the inspiration before acting on it. To embody the guideline and support different processes the features *Ability to find inspirational content* and *Ability to store inspirational content* has been explored.

## 9.9 Promote people getting inspired by people

Even though *Mentimeter* is a software product, the users do want to feel connected to the humans using and creating it. Introducing humanizing features or aspects to *Mentimeter* will allow users to feel connected and embark on a journey to be inspired by someone. The *ability to take part in and enjoy a community* supports this guideline through facilitating for the users to share and use each other's templates, and through the templates inspire each other.

## 9.10 Guidelines for inspirational templates

These guidelines are specially developed for the *ability to explore the product through templates*, see table 9.10.1.

Table 9.10.1, guidelines for inspiration templates and corresponding supporting claims and explanations.

Guideline	Explanation
Facilitate user adaptation and customization	User studies have shown that most users tailor templates to their purpose and needs. The customization can be visual as color adaptation, company branding and following organizational design guidelines or it can be content adaptation aspects. Therefore, for the users to be inspired and use templates they need to be able to customize them to fit their own needs.
Ensure clarity and readability	The foundation for an inspirational template lies in a clear and readable template. This means not having a lot of text, preferably three to five attention points or sources of information. This allows for the presentation to be easily digestible for the audience and for a more easy-to-follow presentation.
Establish templates with an engaging story and a main takeaway	Many users expressed using <i>Mentimeter</i> to connect with their audience through interaction. Rather than having information heavy templates, many users preferred something that got the audience reflecting, for example, a picture, moving content like the visualized data, or a gif. Some users expressed having a planned main takeaway or a story to be presented through the presentation, which is something inspiring templates should support.
Use appropriate colors and visual stimuli	The visual aspects of the templates seem to be as important as the content to attract and inspire users. Pictures and the use of appropriate colors is appreciated. Black or white backgrounds can be inspiring but when overused users seem to view them as uninspiring. For thumbnails, it is recommended to use images that include the unique features of <i>Mentimeter</i> .
Maintain a sense of new or different	Users seem to be inspired by newness. Users are inspired by templates showing them content, structures, topics, design or layouts they have not seen before. Therefore, inspirational templates need to manifest different ways of using the <i>Mentimeter</i> product through making use of the different features and staying up to date with new, innovative content.

# 10

## **Discussion**

The following chapter discusses the implications of the results, the validity of the process, ethical considerations for the project and future research.

## 10.1 Designing Inspirational User experiences

Inspiration increases productivity and promotes wellbeing and creativity (Elliot and Thrash, 2010) and it helps the users achieve set goals (Milyavskaya et al., 2012). Therefore, being able to design *Inspirational user experiences, IUX*, could be beneficial for the users of the product. As well, inspired customers have shown to be more loyal and higher purchase rate (Böttger et al., 2014) which indicated that *IUX* would not only be beneficial to the customer but to the company providing the product.

The results indicate that, although inspiration is difficult to produce and control (Elliot, Thrash, 2003), through designing by using the guidelines to create *Inspirational User experiences, IUX*, inspiration might be possible to induce to some extent. Although designers cannot control exactly what will and will not inspire the users of their product, they might be able to follow the guidelines proposed by the authors to inspire their users. Throughout the experiments, users have referenced the emergence of ideas from performing a task in a prototype. They have been excited to embark on a journey to learn more about *Mentimeter* and to reap its benefits. These qualitative findings support the claim that designing experiences for inspiration is possible. What also seems possible is to design *User experiences* that inspire users to explore the full potential of the product. The guidelines are developed to facilitate inspiration that allows uses to be activated and to explore the full potential of *Mentimeter*. Based on qualitative findings throughout the thesis, many users have referenced the fact that they now want to engage more with the product rather than less.

## The guidelines in application

The guidelines proposed by the authors to design Inspirational *User experiences*, *IUX*, are developed for and in the context of *Mentimeter*. The guidelines have not been tested on any other product or context, however, the guidelines are created to appeal to the user's full inspirational journey. This means that any inspiring aspects of the life of the users have been considered, including for example what inspires them to learn a new skill, cook a certain dish or pursue the career they are currently pursuing. Including every aspect of an individual's inspirational pattern might indicate that the guidelines could be applicable in a more general context, on other products and industries.

## User perception of the product

As previously explained, many users believe that *Mentimeter* is just a tool for asking questions and engaging the audience, not necessarily a presentation tool that allows for different types of content. The study aims at making users understand the full potential of the tool, which by following the guidelines proposed seems to be true. Most effective seems to be exploring the product through templates since the templates show different features of the product including content slides with different layouts and themes. For non-users that did not know at all what *Mentimeter* is, *learning Mentimeter through Mentimeter*, was the most efficient way of showing the full product. The reason being that *learning Mentimeter through Mentimeter* lets the user try the extensive product of *Mentimeter*.

## Can Inspirational User experiences be designed?

To design for inspiration and test the user's gained inspiration in one given moment is not the same as saying that a certain design or material will increase inspiration and willingness to use the product in a longer timeframe. However, through the study, there have been clear indications that designs generate more or less inspiration and that there are some general patterns in what can create inspiration, which is summarized in the inspirational guidelines.

In the area of designing for *Inspirational User experiences* there is very limited research, the applied theoretical framework is interpreted by the authors. The synthesis or interpretation was developed into a model that combines the theory of inspiration and *User experience* design. The synthesized research included findings from current and influential frameworks from the two disciplines. This adapted model acted as a foundation and fueled the initial assumptions on how to design inspirational material. Essentially, the interpretation of the theory did set the initial direction of the development. Due to the interpretation, the combined synthesis of the two areas could most likely have flaws, if this proves to be true, there is also reason to believe that the result of the thesis would be affected.

## Relating the guidelines of IUX with existing UX theory

The guidelines which constitute a part of the result can be compared to the Category of human needs in *User experience design* developed by Hassenzahl (2010). Some of the developed guidelines resonate similar aspects as Hassenzahl (2010), see table 10.1.1. Ensuring successful tasks, creating content that resonates with values and goals, getting inspired by people, promoting fun and widening the horizon are all aspects that are somewhat reflected in the model developed by Hassenzahl (2010).

Table 10.1.1, Category of human needs in *User experience* (Hassenzahl et al., 2010) with a potential corresponding guideline from the inspiration *User experiences*.

Category of huma 2010)	an needs in <i>User experienc</i> e (Hassenzahl et al.,	Potentially applicable guideline of Inspirational <i>User experiences</i>	
Need	Description		
Competence	Feeling that you are very capable and effective in your actions rather than feeling incompetent or ineffective.	Ensure successful tasks	
Relatedness	Feeling a sense of belonging and intimacy with people related to you.	<ul> <li>Create content that resonates with values or goal</li> <li>People get inspired by people</li> </ul>	
Stimulation	Feeling that you get plenty of enjoyment	Promote fun	
Popularity	Feeling that you are liked, respected, and have influence over others rather than feeling like a person whose advice or opinions nobody is interested in.	• N/A	
Meaning	Feeling that you are developing your best potential and making life meaningful rather than feeling stagnant and that life does not have much meaning.	Widen the horizon	
Security or autonomy	Feeling security in having a structured life with routines and habits.	• N/A	

There are aspects of *IUX* not reflected in the model by Hassenzahl (2010). These aspects include maintaining a sense of new or different, showing as much of the experience as early as possible, designing visually pleasing content and supporting different inspiration processes. The guidelines from IUX that are not related to the model (Hassenzahl, 2010) are primarily about being exposed to new things and facilitation of visualization as well as considering the inspirational process of every individual. The guidelines not included in the model are more specific to inspiration, inviting users to experience inspiration. The relation between the guidelines proposed by the authors and the model (Hassezahl, 2010) suggests that there is an opportunity to explore the space of generating inspiration from a *User experience* perspective.

#### The final design

The final design embodies the guidelines, however, the guidelines are not specific to features, rather to a characteristic of an experience. As a result there might be additional features providing the same experience. Throughout the experiments, the most distinctly appreciated feature is the preview of the templates on the inspiration page. This might be due to the fact that the preview gives the users an idea of what the experience of presenting with *Mentimeter* would be like. Another reason might be

that the system resonates with the real world (Nielsen, 1994). Other potential solutions could be to visualize using moving content, such as videos or similar.

The storing of inspirational material has not been evaluated naturally. However, *Mentimeter* offers the ability to add templates to the *My presentation* page today on the *inspiration page* and there are no indications that having the ability to store the material would not be used or appreciated. Although, the claim that storing material facilitates inspiration can be questioned as it has not been tested appropriately. Filters are partly developed to promote a fast process from being *inspired by* to being *inspired to* in accordance with Thrash and Elliot (2004). Something that could have been explored further is if the filters could be designed in a way to further encourage this fast process. Furthermore, there are reasons to believe the filters would be used since many participants clicked the filters and verbally expressed a desire to use them, however since the features weren't fully developed the actions were not observable and therefore not confirmed.

There were clear indications that users would appreciate using other users' templates. However, there were not as clear indications that users will share their templates with other users. Therefore, there is a need to further investigate how to design the product and share alternatives in a way that promotes the sharing of templates. The feature is developed from the idea that people get inspired by people, maybe other ways of generating a community could be explored, such as conferences with users. The experiments showed that it was challenging for users to describe what kind of templates inspired them. Therefore, the guidelines on how to design for inspirational templates were partly based on interpretations and observations of the users. Nevertheless, the templates designed after the guidelines did to a much larger extent evoke inspiration and reactions of any kind, mostly positive, from the users. Through further testing of templates more distinctive guidelines on how to design for inspirational templates could be established.

## 10.3 Validity of the process

When assessing the validity of the process there are several aspects to consider including applying the process *Lean UX*, user experiment to collect data, the experience of an experiment and the sample of participants.

#### Lean UX as a process

The applied process is *Lean UX*, it promotes short iterative cycles with every step of the design process. The process has also allowed for iterations and incremental development as well as increased user involvement. As inspiration and *User experience* together have not been researched, having an incremental iterative development process has proven to be efficient. The reason for its efficiency is that it allows for small changes but continuous tests with users. The alternative process would be linear, but in an unfamiliar environment, learning step by step is preferred. The thesis also suggests that it is possible to combine a *Lean UX* process with digital product development. This could be advantageous and broaden the perspective on how to conduct research related to *User experience*. The *Lean UX* methodology allows for regular user inputs throughout the process which might be suitable for *User experience* research within digital product development.

#### User experiments to collect data

For each experiment, four to six users have been included. According to Nielsen (2000), five users are enough to find 80% of the usability errors and he recommends testing different ideas with fewer users rather than one idea with more users. The choice to aim at five users per test is a result of consideration between width and depth of the result and being able to test a wider range of ideas and therefore being able to deliver a wider understanding for inspiration. Additionally, as inspiration is a rather vague and intangible internal human process, testing more ideas rather than few were deemed appropriate. However, when only including five users per test, there needs to be a humble approach to some details of the results.

Many tasks that the users performed were initiated by a scenario or a description of a task. The reason for having tasks or scenarios was to get data on appropriate aspects of the prototype but also to guide the user in feeling comfortable during the test. The drawback of inducing a task or scenario is that it takes away the natural aspect of the product interaction and could affect the results. To reduce the effect, the authors looked for concrete evidence supporting the claim of a user. Concrete evidence being for example their past experiences with other products, their habits, or ideas that emerge in the moment. Collecting data in a more natural setting could have been possible by larger quantitative testing, like A/B testing.

## The experience of an experiment

Many users had fun while participating and felt handpicked in deciding the future for *Mentimeter*. Having fun while doing a test might cause bias and reduce objectiveness in accordance with the model for Design for emotion (Van Gorp & Adams, 2012). One concern is that it could be hard for the participants to distinguish how inspired they were by a single feature from the experience of the experiment as a whole. Therefore they might have rated their level of inspiration too high and therefore create partly exaggerated results. Some users were also rewarded with a rather high-value subscription of *Mentimeter*, this meant that they were not only there to give feedback and participate, but also for personal gains. Almost all of the inexperienced users of *Mentimeter* were positive towards the product. They had already formed an initial relationship with the product and were very open to the product. This means that some results might be too positive or biased by their emotional bond to it.

Throughout the experiments, the users' level of inspiration was assessed using a variant of the customer inspiration scale (Böttger et. al, 2017). The scale contains statements about inspiration which many users found hard to evaluate. This was due to the similarity in the statements rated in the evaluation, which made some users confused. But as the scale was primarily used as a mediating object, the confusion is not deemed to majorly affect the result.

#### The sample of participants

40 users have participated in experiments, four users in interviews and finally four users and five non-users in the final evaluation, which gives a total of 53 participants. The users have been from anywhere in the world and had different purposes of using *Mentimeter*, for more details see Appendix I. These users have all voluntarily submitted their interest in participating. As they all submitted their interest, there might be an initial motivator and positive idea of *Mentimeter*, which influenced the result. The majority of users have been positive towards the test and the result of their experience of

inspiration might be influenced by that. If the participants were collected on a more random basis, not knowing what type of product they would be testing, the result might have been different. The result might have been more critical and not shown as clear patterns of inspiration as seen in the study.

## 10.4 Ethical and sustainability considerations

In designing for digital products there are several aspects to consider including incentives for participation and collection of data. These aspects are both relevant to consider in the progression of the thesis.

## The economic incentive for participation

The ethical aspects of the incentive could be questioned. Both the aspect of an economic incentive but also having the economic incentive as an upgrade of the examined product. Giving economic incentives may cause participants to lose their objectiveness and try to please the researchers. Economic incentives may also risk the voluntary aspects of participation (Head, 2009). Giving users an upgraded subscription to their account may also make them involuntarily more dependent on a product. An important note to make is that the targeted users have not been in vulnerable situations or forced by the economic incentive. The participation has been voluntary. Incentivizing the users by giving them an upgraded subscription is deemed to be beneficial to both *Mentimeter* and the users. Additionally, Hinderer Sova and Nielsen (2003), claim that giving the tested product as an incentive can be suitable when the user has an interest in the product. The economic value can be questioned since the participants use their time to participate in the experiment. Although the value of the incentive is higher than the payment for one working hour it could still be more sufficient with a monetary incentive (Hinderer Sova & Nielson, 2003). Furthermore, most users used *Mentimeter* in a professional context and could therefore count the participation as part of their working hours.

#### **Collection of data**

The thesis has followed *Chalmers University of Technology's* guidelines for data collection, handling and storage. However, there are still risks with handling personal data such as the data flow, storing of data and backups. For example, data can be hacked or in other ways misused (Cilliers & Viljoen, 2021). The authors have aimed to only collect necessary data and delete data continuously as well as avoiding collecting and storing sensitive data.

## 10.5 Future research

According to the limitation of the thesis, the different ideas and design proposals are derived from a relatively small user group. This means that the results are indications of what is the case. Validating or invalidating the claims on a larger scale is, therefore, necessary to assess how generally the guidelines, the inspirational personas and the inspiration user journey are true. The number of users participating in the experiments should be increased and the quality of the product representation should be increased per the *Truth curve*, (Gothelf & Seiden, 2016). As the result suggests, it is to some extent possible to design for *Inspirational User experiences*, given the benefits of inspiration, deriving the findings into a more universal model could have the potential to enable more inspired users. A general set of guidelines or a model supporting the design of *IUX* might be beneficial to several industries, especially for digital products as competition tightens.

# 11

## **Conclusion**

The following chapter concludes the thesis and presents a summary of the result and significance in the area of inspiration and *User experiences*.

Throughout the thesis, the key question assessed is whether it is possible to induce inspiration through design. To answer this, the thesis aims to explore how to inspire the users of *Mentimeter* to grasp the full potential of the product and to attract and activate them. The results of the thesis include guidelines for how to design for *Inspirational User experiences*, *IUX*, qualitative understanding of the users through inspirational personas, an understanding of the users' process of inspiration in an inspirational user journey and a final design proposal that embodies the guidelines.

The thesis investigates the combination of inspiration and *User experience*, an area with limited research. Previous theoretical claims within inspiration state that inspiration is challenging to promote intentionally as it is a result of the user's relation to and the object itself and both are of equal importance to inspiration (Thrash et al., 2014). Still the results indicate that by following the proposed guidelines, the users of *Mentimeter* will become more inspired. The findings support that by designing *Inspirational User experiences* users will be provided with a new perspective of the product *Mentimeter*, inspiring them to interact with the product and include their participants in ways.

Inspiration seems to promote positive affect and life satisfaction which both are important aspects of well-being (Thrash & Elliot, 2010). With the benefits of inspiration with *User experience design* which aims at creating meaningful *User experiences* through devices (Hassenzahl, 2010), there might be an opportunity to explore the area of *Inspirational User experiences* further. The benefits of such exploration are potentially increasing user satisfaction, their level of inspiration and their commitment to the product, not only for the user but also for the business providing the product. The guidelines proposed in the thesis are the first attempt to reap the benefits of inspiration, a first attempt that hopefully inspires other designers to spark inspiration in users!

## References

- Böttger, T., Rudolph, T., Evanschitzky, H., & Pfrang, T. (2017). Customer Inspiration: Conceptualization, Scale Development, and Validation. *Journal of Marketing*, 81(6), 116–131. https://doi.org/10.1509/jm.15.0007
- Cilliers, L., & Viljoen, K. (2021). A framework of ethical issues to consider when conducting internet-based research. *SA Journal of Information Management*, 23(1), a1215. doi:https://doi.org/10.4102/sajim.v23i1.1215
- Desmet, P. M. A. (2002). Designing emotions. s.n.
- Ericson, Å., Törlind, P. & Wikberg, Å., (2016). Design: Process och Metod (12th ed.). Studentlitteratur AB.
- Friis Dam, R., Yu Siang, T. (2019). *Introduction to the Essential Ideation Techniques which are the Heart of Design Thinking*. Interaction design foundation. Retrieved from: https://www.interaction-design.org/literature/article/introduction-to-the-essential-ideation-techniques-which-are-the-heart-of-design-thinking
- Fogg, B., Danielson, D., & Cuellar, G. (2007). Motivating, Influencing, and Persuading Users. Sears, A., Jacko, J., A. (Eds.), Human-Computer Interaction Fundamentals (133-146). CRC Press. https://doi.org/10.1201/9781410615862.ch7
- Gaggioli, A., Villani, D., Serino, S., Banos, R., & Botella, C. (2019). Editorial: Positive Technology: Designing E-experiences for Positive Change. *Frontiers in Psychology*, (10), 1–5. https://doi.org/10.3389/fpsyg.2019.01571
- Gothelf, J., & Seiden, J. (2016). *Lean UX: Designing Great Products with Agile Teams* (2nd ed.). O'Reilly Media.
- Hanington, B. & Martin, B. (2012). *Universal Methods of Design : 100 Ways to Explore Complex Problems, Develop Innovative Strategies, and Deliver Effective Design Solutions*. Quarto Publishing Group.
- Hassenzahl, M. (2005). *The thing and I: understanding the relationship between user and product*, Blythe, M.A., Overbeeke, K., Monk, A.F., Wright, P.C., (Eds.), *Funology: From usability to enjoyment* (31-42). Springer Netherlands.
- Hassenzahl, M., Diefenbach, S., & Göritz, A. (2010). Needs, affect, and interactive products Facets of user experience. *Interacting with Computers*, 22(5), 353–362. https://doi.org/10.1016/j.intcom.2010.04.002
- Head, E. (2009). The ethics and implications of paying participants in qualitative research. *International Journal of Social Research Methodology*, 12(4), 335–344. https://doi.org/10.1080/13645570802246724
- Hinderer Sova D., & Nielsen, J. (2003). 234 Tips and Tricks for Recruiting Users as Participants in Usability Studies. Nielsen Norman Group. Retrieved from: http://www.nngroup.com/reports/how-to-recruit-participants-usability-studies/
- Interaction design foundation. *The Encyclopedia of Human-Computer Interaction* (2nd ed). (2014). Interaction design foundation. 2014.
- Izogo, E. E., & Mpinganjira, M. (2020). Behavioral consequences of customer inspiration: the role of social media inspirational content and cultural orientation. *Journal of Research in Interactive Marketing*, 14(4), 431–459. https://doi.org/10.1108/jrim-09-2019-0145
- Jamshed, S. (2014). Qualitative Research Method-Interviewing and Observation, *Journal of Basic and Clinical Pharmacy*, 5(4), 87-88. https://doi.org/10.4103/0976-0105.141942
- Jordan, P. W. (2000). *Designing Pleasurable Products: An Introduction to the New Human Factors* (1st ed.). CRC Press.
- Karapanos, E., Zimmerman, J., Forlizzi, J., Martens, J.B. (2010). Measuring the dynamics of remembered experience over time. *Interacting with Computers*, 22 (5), 328–335.
- Kujala, S., Roto, V., Väänänen-Vainio-Mattila, K., Karapanos, E., & Sinnelä, A. (2011). UX Curve: A method for evaluating long-term user experience. *Interacting with Computers*, 23(5), 473–483. https://doi.org/10.1016/j.intcom.2011.06.005

- McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52(1), 81–90. https://doi.org/10.1037/0022-3514.52.1.81
- Mercadal, T. (2020). Benchmarking. Salem Press Encyclopedia.
- Milyavskaya, M., Ianakieva, I., Foxen-Craft, E., Colantuoni, A., & Koestner, R. (2012). Inspired to get there: The effects of trait and goal inspiration on goal progress. *Personality and Individual Differences*, 52(1), 56–60. https://doi.org/10.1016/j.paid.2011.08.031
- Murphy, A. (2019). *7 ideation techniques to supercharge your next workshop*. UX Collective. Retrieved from: https://uxdesign.cc/7-ideation-techniques-to-supercharge-your-next-workshop-d03ed4eee914
- Nielsen, J. (1994), *10 Usability Heuristics for User Interface Design*. The Nielsen Norman group. Retrieved from: https://www.nngroup.com/articles/ten-usability-heuristics/
- Nielsen, J. (2000). *Why You Only Need to Test with 5 Users*. Nielsen Norman Group. Retrieved from: https://www.nngroup.com/articles/why-you-only-need-to-test-with-5-users/
- Norman, D. A. (2004). Emotional Design. Adfo Books.
- Norman, D. (2013). The Design of Everyday Things (Revised ed.). Basic Books.
- O'Brien, H. L., & Toms, E. G. (2008). What is user engagement? A conceptual framework for defining user engagement with technology. *Journal of the American Society for Information Science and Technology*, 59(6), 938–955. https://doi.org/10.1002/asi.20801
- Peters, D., Calvo, R. A., & Ryan, R. M. (2018). Designing for Motivation, Engagement and Wellbeing in Digital Experience. *Frontiers in Psychology*, 9, 1–15. https://doi.org/10.3389/fpsyg.2018.00797
- Pettersson, I. (2018). *Eliciting User Experience Information in Early Design Phases: The CARE Approach to In-Vehicle UX* [Doctoral dissertation, Chalmers University of Technology].
- Rogers, D. (2019). *Qualitative and quantitative user research*. Uxdesign.cc. Retrieved from: https://uxdesign.cc/qualitative-and-quantitative-user-research-31b148a8d69c
- Saldana, J. (2015). *The Coding Manual for Qualitative Researchers* (3rd ed.). SAGE Publications Ltd. https://doi.org/10.1108/qrom-08-2016-1408
- Savarit, E. (2020). Practical User Research. Apress. https://doi.org/10.1007/978-1-4842-5596-4
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. Journal of Business Research, 104, 333–339. https://doi.org/10.1016/j.jbusres.2019.07.039
- Soegaard, M. (2020). Laws of Proximity, Uniform Connectedness, and Continuation Gestalt Principles (2). Interaction design foundation. Retrieved from:

  https://www.interaction-design.org/literature/article/laws-of-proximity-uniform-connectedness-and-continuation-gestalt-principles-2
- Thrash, T. M., & Elliot, A. J. (2003). Inspiration as a psychological construct. *Journal of Personality and Social Psychology*, 84(4), 871–889. https://doi.org/10.1037/0022-3514.84.4.871
- Thrash, T. M., & Elliot, A. J. (2004). Inspiration: Core Characteristics, Component Processes, Antecedents, and Function. *Journal of Personality and Social Psychology*, 87(6), 957–973. https://doi.org/10.1037/0022-3514.87.6.957
- Thrash, T. M., & Elliot, A. J. (2010). Approach and Avoidance Temperament as Basic Dimensions of Personality. *Journal of Personality*, 78(3), 865–906. https://doi.org/10.1111/j.1467-6494.2010.00636.x
- Thrash, T. M., Moldovan, E. G., Oleynick, V. C., & Maruskin, L. A. (2014). The Psychology of Inspiration. *Social and Personality Psychology Compass*, 8(9), 495–510. https://doi.org/10.1111/spc3.12127
- Van Gorp, V. T., & Adams, E. (2012). *Design for Emotion* (1st ed.). Elsevier Inc. https://doi.org/10.1016/B978-0-12-386531-1.00001-6

# **Appendix I - Participating users**

The participants in the experiments as presented in table I.1.

Table I.1, participants of the interviews and experiments. Final ev. Equals Final evaluation.

User	Experience of Mentimeter	Participation	Location	Purpose of use
А	0 times	Interview 1	Australia	For educational purposes
В	0 times	Interview 1	Czech Republic	Marketing
С	1 time	Interview 1	Belgium	For use in public speaking or conferences
D	1 time	Interview 1	United States	For educational purposes
1.1	2 times	Experiment 1	Canada	For training and development purposes within organizations
1.2	2 times	Experiment 1	United States	For educational purposes
1.3	2 times	Experiment 1	Canada	For training and development purposes within organizations
1.4	2 times	Experiment 1	Israel	For educational purposes
1.5	2 times	Experiment 1	India	Getting a group consensus, within business meetings
1.1.1	2 times	Experiment 1.1	United States	For use in public speaking or conferences
1.1.2	1 time	Experiment 1.1	Colombia	For educational purposes
2.1	1 time	Experiment 2	France	For use with your clients as a consultant
2.2	3 times	Experiment 2	Sweden	For use in public speaking or conferences
2.3	3 times	Experiment 2	United Kingdom	For educational purposes
2.4	Participant	Experiment 2	Sweden	Only participated
2.5	2 times	Experiment 2	Canada	For educational purposes
3.1	1 time	Experiment 3	United States	For educational purposes
3.2	2 times	Experiment 3	United Kingdom	For training and development purposes within organizations
3.3	Participant	Experiment 3	United States	For training and development purposes within organizations
3.4	2 times	Experiment 3	Germany	Business use cases
3.5	2 times	Experiment 3	Canada	In house office presentations
3.6	3 times	Experiment 3	Guatemala	For educational purposes
4.1	3 times	Observation 4	South Korea	For use in public speaking or conferences
4.2	3 times	Observation 4	United States	For training and development purposes within organizations
4.3	4 times	Observation 4	Germany	For training and development purposes within

				organizations
4.4	4 times	Observation 4	United Kingdom	For educational purposes
5.1	1 time	Experiment 5	United Kingdom	For private use, such as special occasions
5.2	2 times	Experiment 5	Singapore	For use with your clients as a consultant
5.3	2 times	Experiment 5	Poland	For educational purposes
5.4	2 times	Experiment 5	Philippines	For training and development purposes within organizations
5.5	2 times	Experiment 5	United States	For use in public speaking or conferences
6.1	1 time	Experiment 6	United Kingdom	For use with your clients as a consultant
6.2	2 times	Experiment 6	United Kingdom	For engagement purposes in all staff meetings
6.3	2 times	Experiment 6	Germany	For use in public speaking or conferences
6.4	2 times	Experiment 6	Germany	For training and development purposes within organizations
6.5	1 time	Experiment 6	United States	For use with your clients as a consultant
7.1	3 times	Experiment 7	India	For use with your clients as a consultant
7.2	1 time	Experiment 7	Sri Lanka	For educational purposes
7.3	2 times	Experiment 7	Germany	For training and development purposes within organizations
7.4	2 times	Experiment 7	Poland	For use with your clients as a consultant
8.1	2 times	Experiment 8	United States	For educational purposes
8.2	2 times	Experiment 8	Bangladesh	For use in public speaking or conferences
8.3	2 times	Experiment 8	Austria	For use in public speaking or conferences
8.4	4 times	Experiment 8	Netherlands	For use in public speaking or conferences
Fl	Never used	Final ev.	Finland	Not applicable
F2	Never used	Final ev.	Sweden	Not applicable
F3	Never used	Final ev.	Chile	Not applicable
F4	3 times	Final ev.	Spain	For educational purposes
F5	3 times	Final ev.	Brazil	For educational purposes
F6	Never used	Final ev.	Sweden	Not applicable
F7	Never used	Final ev.	Chile	Not applicable
F8	4 times	Final ev.	Spain	For educational purposes
F9	3 times	Final ev.	United States	For educational purposes

# **Appendix II - Experiment 1 and 1.1**

Experiment 1 and 1.1 follows the general experiment structure. The experiment tests two new versions of *Mentimeter's* inspiration page and one replica of the current inspiration page. The structure of the experiment is presented in figure II.1.



Figure II.1, the structure of Experiment 1 and 1.1.

#### **Feature tests**

The feature test is the same for all three feature tests in Experiment 1. The user is introduced to a scenario: You are going to make your next presentations but do not have a finished presentation to copy, you are looking for inspiration in Mentimeter. After the user has completed the task the user experience is discussed and evaluated with the use of the Customer inspiration scale, as a mediating object.

# **Appendix III - Experiment 2**

Experiment 2 follows the general experiment structure. The experiment tests two new versions of the *Mentimeter* inspiration page and one replica of the current inspiration page. The structure of the experiment is presented in figure III.1.



Figure III.1, the structure of Experiment 2.

#### Feature test 1 & 2

The feature test is the same for Feature test 1 and Feature test 2 in Experiment 1. The user is introduced to a scenario: You are going to make a presentation but you feel a bit uninspired. Please look for inspiration on the inspiration page on the website. After the user has completed the task the user experience is discussed and evaluated with the use of the Customer inspiration scale, as a mediating object.

#### A/B test - Preview with and without phone view

For the A/B test, the participant is introduced to the following task: We are investigating how to design previews of templates. Therefore we will send you two links with two different versions of a template preview design. We want you to look at them, interact with them, evaluate them one after the other whilst sharing your screen. After the user has completed the task the user experience is discussed and evaluated. The two different previews are compared through a multiple-choice bar chart, as a mediating object.

# **Appendix IV - Experiment 3**

Experiment 3 follows the general experiment structure. The experiment focuses on pivoting design and usability evaluation. Therefore the users are not assisted with the tasks at all during the tests. This experiment includes evaluation of phrasings through discussion. The structure of the experiment is presented in figure IV.1.

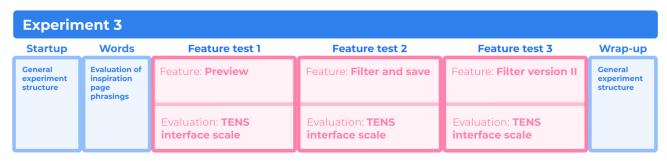


Figure IV.1, the structure of Experiment 3.

#### Word evaluation

The users evaluate the choice of inspirational material phrasings in the prototype. The understanding and choice of phrasings are discussed.

#### Feature test 1 - Preview

The user is asked to perform the following tasks:

- Preview the presentation "start your workshop with an icebreaker".
- Then we want you to describe everything you see in the prototype.
- Now we want you to vote on the presentation as if you were a participant.
- Now see how the presentation looks with more votes.

After the user has completed the task the user experience is discussed and evaluated with the use of the TENS interface scale as a mediating object.

#### Word evaluation

The users evaluate the choice of filter phrasings on the inspiration page in the prototype. The understanding and choice of phrasings are discussed.

#### Feature test 2 - Filter and save

The user is introduced to a scenario: You are hosting a business meeting where you want a presentation with a word cloud. Find this template through filtering and save the template to your favorites. Before you start you will see a picture of the prototype in the presentation: please describe everything you see on the picture and describe what you think it is. After the user has completed the task the user experience is discussed and evaluated with the use of the TENS interface scale, as a mediating object.

#### Feature test 3 - Filter version II

The user is introduced to a scenario: You want some inspiration for You are hosting a business meeting where you want inspiration of different templates of presentations to have a discussion. Find these templates through filtering. After the user has completed the task the user experience is discussed and evaluated with the use of the TENS interface scale, as a mediating object.

# **Appendix V - Experiment 4**

Experiment 4 follows the general experiment structure. The experiment is an observation test of the *Mentimeter* webpage and in-app mode to understand the user journey of the users and their use of and understanding of templates. The structure of the experiment is presented in figure V.1.

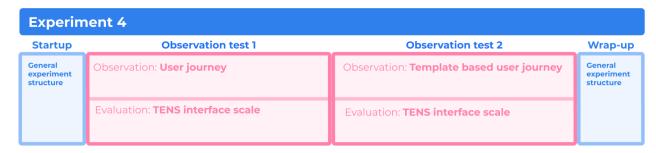


Figure V.1, the structure of Experiment 4.

#### **Observation - User journey**

The task for the journey is to describe the last time you used *Mentimeter* and the different steps you took in setting up and holding the presentation, including using an external presentation software if you use one. After the user has gone through the steps, they are asked to redo the steps they did last time when they created and held a presentation. The users are asked to start after they have made a presentation in the external source and go to *Mentimeter* and continue there, including creating the slides. The users are then asked to present the presentation to the test leaders, both external sources and *Mentimeter*. The task is then evaluated with a discussion about the journey and TENS interface scale.

#### **Observation - Template-based user journey**

The users are asked to go to *mentimeter.com* and create a presentation based on a template. The users perform the task and the feature test is concluded with a discussion and evaluation using the TENS interface scale.

# **Appendix VI - Experiment 5**

Experiment 5 follows the general experiment structure. The experiment focuses on pivoting and understanding the need for certain design features as well as understanding the user journey and the user's inspiration journey. The structure of the experiment is presented in figure VI.1.

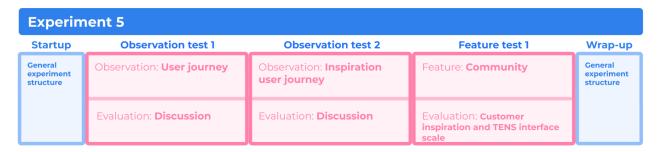


Figure VI.1, the structure of Experiment 5.

#### **Observation - User journey**

The user is asked to perform the same task as in Observation - User Journey in experiment 4 After the user has completed the task the following questions are asked: Is this your common way of doing it? And if you need any type of help right now, what would you do?

### **Observation - Inspiration user journey**

The user is introduced to a scenario: Imagine that you are about to hold a presentation similar to the one you just created but feel like you are lacking inspiration. Please show us how you would find inspiration for the presentation. Any means are allowed, offline and online. After the user has completed the task the user is asked the following questions:

- Do you ever look for inspiration for a presentation?
- How would you find inspiration for a presentation like the one you just did?
- How do you use the inspiration?
- How would you share inspiration with others?

#### Feature test - Community

The user is introduced to a scenario: This time you are once again looking for inspiration for a presentation, but solely in Mentimeter. Please look for inspiration for a presentation in Mentimeter. After the user has completed the task the user experience is discussed and evaluated with the use of the Customer inspiration scale, as a mediating object.

# **Appendix VII - Experiment 6**

Experiment 6 follows the general experiment structure. The experiment focuses on pivoting and understanding the need for certain design features and to get a deeper understanding of the user's perceptions of the available templates and presentation software templates in general. The participant is asked to prepare a presentation or slide they like to bring to the experiment. The structure of the experiment is presented in figure VII.1.

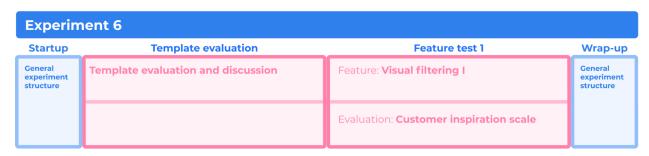


Figure VII.1, the structure of Experiment 6.

#### Template evaluation and discussion

The user is asked to go to the *Mentimeter* inspiration page. Thereafter the inspiration page and its templates are discussed through the following questions:

- What do you think these are?
- If you were to look for a template, what would you look for?
- Which of these templates do you prefer/don't like?
- What types of templates do you find inspiring?
- What types of templates do you find useful?

Thereafter the user is asked to choose two templates and compare them. The user is asked the following questions:

- Is this what you expect from a template?
- Which one do you find most inspiring?
- Which one do you find most useful?
- What aspects of the template do you appreciate the most? Ex colors, pictures, questions, the structure.

Finally, the participant is asked to present a prepared template the user finds visually pleasing and the template's visual aspects are discussed.

#### Feature test - Visual filtering I

The user is introduced to a scenario: You are making a presentation that needs to be visually pleasing, please look for templates that suit your requirements. After the user has completed the task the user experience is discussed and evaluated with the use of the Customer inspiration scale, as a mediating object.

# **Appendix VIII - Experiment 7**

Experiment 7 follows the general experiment structure. The experiment focuses on understanding how different kinds of learning can facilitate inspiration and affect the users' will to use *Mentimeter*. The structure of the experiment is presented in figure IIX.1.

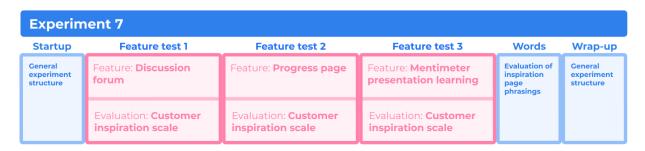


Figure IIX.1, the structure of Experiment 7

#### Feature test 1 - Discussion forum

The user is asked to perform the following task: *Get help from other Menti users to engage your audience*. After the user has completed the task the user experience is discussed and evaluated with the use of the Customer inspiration scale, as a mediating object.

#### Feature test 2 - Progress page

The user is asked to perform the following task: *Find out what you can learn in Mentimeter*. After the user has completed the task the user experience is discussed and evaluated with the use of the Customer inspiration scale, as a mediating object.

#### Feature test 3 - Mentimeter presentation learning

The user is asked to perform the following task: Now you are going to learn about different question types of Mentimeter through a Mentimeter. You are going to go through the presentation yourself and then we will discuss and evaluate this way of learning afterward. After the user has completed the task the user experience is discussed and evaluated with the use of the Customer inspiration scale, as a mediating object.

# **Appendix IX - Experiment 8**

Experiment 8 follows the general experiment structure. The experiment focuses on understanding how different kinds of learning and visual filtering can facilitate inspiration and affect the users' will to use *Mentimeter*. The structure of the experiment is presented in figure IX.1.



Figure IX.1, the structure of Experiment 8.

## Feature test 1 - Progress page and Mentimeter presentation learning

The user is asked to perform the following task: Find out what you can learn in Mentimeter and learn about customization and layouts. After the user has completed the task the user experience is discussed and evaluated with the use of the Customer inspiration scale, as a mediating object.

#### Feature test 2 - Visual filtering II

The user is asked to perform the following task: Filter to find templates with a color scheme and vibe you like and find inspiring. After the user has completed the task the user experience is discussed and evaluated with the use of the Customer inspiration scale, as a mediating object.

### Feature test 3 - Templates

The user is asked to perform the following task: *Preview the templates you find intriguing and tell us why.* After the user has completed the task the user experience is discussed and evaluated with the use of the Customer inspiration scale, as a mediating object.

# **Appendix X - Final evaluation**

The final evaluation follows the general experiment structure except for using another Startup phase, with no inspiration scales and a more extensive initial interview. Furthermore, both final design tests one and two are tested with the *Customer inspiration scale* and the *TENSE Scale* at the same time to discuss and rate the whole experience of the final design proposal. The structure of the experiment is presented in figure X.1.



Figure X.1, the structure of the final evaluation.

#### Initial interview Mentimeter non-user

- To get some kind of context, please tell me what you work with. So your responsibilities, your industry, context, etc?
- How do you present today?
- What presentation tool do you use today?
- What are your struggles?
- What is your view on what *Mentimeter* is and what it can be used for?
- Do you have a plan to use *Mentimeter* in one of your upcoming presentations this year?
  - To what presentation?
- How willing are you to use *Mentimeter* for one of your upcoming presentations this year from 1-10, 1 being not willing, 10 being very willing?
- How often do you find yourself being inspired by something a regular week?
  - o Intrinsic/extrinsic?
  - How often does the inspiration lead to action?

#### **Initial interview Mentimeter user**

- To get some kind of context, please tell me what you work with. So your responsibilities, your industry, context, etc?
- What inspired you to get a *Mentimeter* account/start using *Mentimeter*?
- Have you used/How many times have you used Mentimeter
- What has kept you from presenting?/What made you get over the threshold and present using new software?
- What is your view on what *Mentimeter* is and what it can be used for?
- Do you have a plan to use *Mentimeter* in one of your upcoming presentations this year?
- To what presentation?
- How willing are you to use *Mentimeter* for one of your upcoming presentations this year from 1-10, 1 being not willing, 10 being very willing?

- How often do you find yourself being inspired by something a regular week?
- Intrinsic/extrinsic?
- How often does the inspiration lead to action?

### Final design test 1, in-app

The final evaluation part 1 is an observation followed by a discussion. The user is asked to perform the following task: *Explore the prototype of Mentimeter in-app and talk out loud*. After the user has completed the task the observation is finalized with the following questions being asked:

- What is your view on what *Mentimeter* is and what it can be used for?
- Do you have a plan to use *Mentimeter* in one of your upcoming presentations this year?
- To what presentation?
- How willing are you to use *Mentimeter* for one of your upcoming presentations this year from 1-10, 1 being not willing, 10 being very willing?

After the questions have been answered the prototype is discussed openly whilst the user shares their screen whilst they explore.

### Final design test 2, learning Mentimeter through a Menti

The user takes part in an interactive learning *Mentimeter* presentation and afterward Final design tests, one and two are evaluated with the *TENSE scale* and *Customer inspiration scale* as a mediating object.

# **Appendix XI - Interview guide**

## Information about the participant

Name Profession Location

## Introductions and formalities

- Introductions
- Purpose
- Interview agenda
- Incentive
- Questions
- Information about data handling and recording

# Interview questions

- To get some kind of context, please tell me what you work with. So your responsibilities, your industry, context etc?
- Tell us about the last time you learned a new skill and incorporated it into your work?
  - How was that experience?
  - How did you go about it?
  - What inspired you to pursue it?
- What helps you get something done?
- Do you remember any time you have been inspired to do something different and went through with it? (for example, starting recycling)
- Do you have an idea of what in general inspires you, for example in your profession or in any hobby you have or so?
- Where do you find inspiration?
  - o Do you look for it?
  - o Does it happen unintentionally?
- Which web-based software do you find inspires you the most and why?
- What inspired you to get a *Mentimeter* account/start using *Mentimeter*?
- What presentation software do you use today?
  - What works well/ does not work as well
- On what occasion do you present today?
  - What are the difficulties when you present?
  - What are the needs?
- Have you used/How many times have you used *Mentimeter* 
  - What has kept you from presenting?/What made you get over the threshold and present using new software?
- Do you know how to find inspiration in *Mentimeter*?
- What are your thoughts on templates and guides to help you in *Mentimeter*?
  - Have you used templates?

- Have you ever used any other interactive software?
  - What made you get over the threshold and present using the new software?
- Could you please walk us through the last time you did a presentation?
- Now Can you think of any time when you planned and held a great presentation, could you please walk us through that.
  - Why did it end up being a great experience for you?
- And at last Can you think of any time when you planned and held a not-so-great presentation, could you walk us through that?
  - Why did it end up being something you remember as a "bad" experience?
- What/who inspires you to do presentations the way you do them? (For example someone at work, a great lecturer you once had or any famous presenter like Steve Jobs)
- What/who is your inspirational source to how your presentation is visually designed? (For example Pinterest, templates, or someone you know who does beautiful presentations)
- What could inspire you to get over the threshold and hold interactive presentations or in general change the way you present?
- If you were the designer of presentation software. How would you design it to make it 100 perfect for you? Your absolute dream version.
- Do you have any final thoughts about *Mentimeter* that you would like to share?

## Finalizing the interview

- Questions and final thoughts
- Extending gratitude and appreciation
- Information about incentive

# **Appendix XII - Menti school**

An example of Menti school aiming at teaching the basic questions, see figure XII.1.

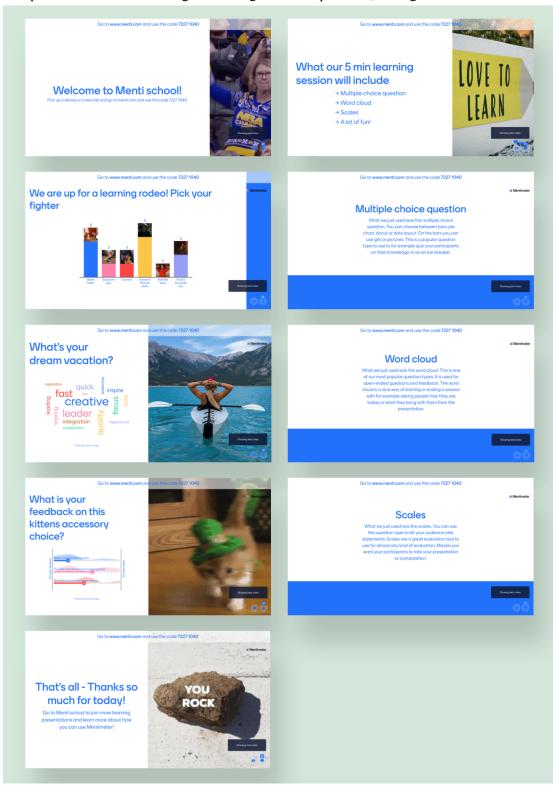


Figure XII.1, a sample of Menti school for users learning the most frequently used questions.

DEPARTMENT OF INDUSTRIAL AND MATERIAL SCIENCE
CHALMERS UNIVERSITY OF TECHNOLOGY

Gothenburg, Sweden 2021 www.chalmers.se

