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Designing for the Modern Music Consumer - Onboarding and Loyalty Building of New Users to a Music Streaming Service

Lina Linnea Aspen

Designing for the modern music consumer – onboarding and loyalty building of new users to a music streaming service

Å designe for den moderne musikkonsument – onboarding og lojalitetsbygging av nye brukere til en musikkstrømmetjeneste

by Lina Aspen, Department of Design,
The Norwegian University of Science and Technology,
2017.02.13

Preface

The master thesis concerns user onboarding and loyalty building to a music streaming service. It has been conducted at the Department of Design at the Norwegian University of Science and Technology, and has been carried out by Lina Aspen during the fall of 2016/2017.

The project was conducted in partnership with Tidal where I met with two supervisors through out the project. The assignment was developed in cooperation with them, where we agreed that an explorative nature of the project would be feasable and beneficial for both parties. The project was managed by me, while the supervisors shared their knowledge and input.

My goal with the project was to develop further skills within digital user experience design and behavior design, and a desire to work with an existing consumer product. Based on personal interest in the domain of music and technology, Tidal presented an appealing case to dive into.

I would like to thank the seven participants partaking in the user study - your commitment and feedback was priceless. Additional gratitude goes to all the participants taking part in the usability testing of prototypes during the project. A special thanks to Anders Herning and Snorre Seim from Tidal for their involvement in the project and for answering my endless stream of questions. Another thanks to Trond Are Øritsland at the Department of Design for supervising and all the great discussions that emerged throughout the project. At last I wish to thank Alv Skogstad Aamo, Aase Aspen, Jonas Asheim, Olle Løstegaard, and Martin Skarbø Sangolt for feedback and assistance.

Abstract

GOAL

The topic for the thesis is user onboarding and loyalty building of new users to Tidal through exploration of alternative solutions to today's product. The goal is to assist new users in quickly being able to navigate the service effortlessly, while aiming to create user engagement resulting in the users fully adopting the service. Loyalty building is explored through designing for users' emotions and behavioral patterns related to music services, by creating a solution that forms habits and stores value for the user.

METHOD

I have made use of principles from both interaction and service design, while designing for user experience, with emphasis on qualitative research to comprehend users daily routines and emotions linked to listening to and discovering music. I have conducted semi-structured interviews, a longitudinal user study, literature reviews and benchmarking of music services and onboarding processes. I applied prinsciples from behavioral and emotional design to explore how a digital service can be designed to form habits and user engagement. Concepts were developed through a solution driven iterative process with user involved prototyping, inspired by Lean UX principles.

FINDINGS

The user research revealed complex user habits related to listening to and discovering music in everyday life. Additionally I gained insights on the emotional aspects music have on personal levels. Related to adopting Tidal as a new user, the user study disclosed challenges related to navigation of the service, and lack of supporting users behavioral patterns of discovering music and listen to music instantly. The conceptual phase therefore addressed exploration of a more intuitive service structure and improved onboarding approaches. Additionally I focused on how Tidal could assist users in discovering music through developing initiatives to form habits and make the user invest in the product.

RESULT

The project resulted in a redesign of the music player with a new structure, new onboarding process and behavioral elements to form habits of finding new music. Additionally, a new website was designed to propose a shift towards product visibility to help new users quicker grasp the concept of Tidal.

Sammendrag

MÅL

Tema for masteroppgaven er *onboarding* og lojalitetsbygging av nye brukere til Tidal gjennom å utforske alternative løsninger til dagens produkt. Målet er å legge til rette for at nye brukere raskt klarer å anvende tjenesten problemfritt, og samtidig skape engasjement hos brukeren for at de skal fullt ut adoptere tjenesten. Lojalitetsbygging utforskers gjennom å designe for følelser og atferd ved å utvikle en løsning som danner brukervaner og akkumulerer verdi for brukeren.

METODE

Jeg har tatt i bruk prinsipper fra interaksjons- og tjenestedesign for å designe for brukeropplevelse, med vektlegging av kvalitativt innsiktsarbeid for å skape en forståelse av brukerens daglige rutiner og følelser knyttet til å høre på og å finne musikk. Jeg har gjennomført semistrukturerte intervjuer, et langtgående brukerstudie, litteratursøk og *benchmarking* av musikktjenester og onboardingprosesser. Jeg anvendte *behavioral* design og *emotional* design for å utforske hvordan en digital tjeneste kan utformes for å danne vaner og skape engasjement hos brukeren. Konsepter ble utviklet gjennom en løsningsorientert iterativ prosess med prototyping og brukerinnvolvering inspirert av prinsipper fra *Lean UX*.

INNSIKT

Brukerinnsikten viste komplekse vaner relatert til å høre på og å finne ny musikk i hverdagen. Jeg opparbeidet i tillegg innsikter knyttet til emosjonelle aspekter ved musikk på personlige plan. I tilknytning problemstillingen å adoptere Tidal som en ny bruker, viste brukerstudien utfordringer relatert til navigasjon av tjenesten, samt manglede støtte rundt brukermønstre knyttet til å oppdage ny musikk og å høre på musikk umiddelbart. Den konseptuelle fasen dreide seg dermed om finne en mer intuitiv struktur for tjenesten og forbedre tilnærmingen til onboarding. I tillegg lå fokuset på å utforske hvordan Tidal kan bidra til at brukeren danner vaner og investerer i produktet ved å se på hvordan tjenesten kan assistere brukeren i å oppdage ny musikk.

RESULTAT

Prosjektet resulterte i et redesign av musikkspilleren med en ny struktur, ny onboardingprosess og elementer for å bidra til vanedannende oppførsel knyttet til å finne ny musikk. I tillegg designet jeg en alternativ nettside som et forslag for å skifte mot en mer produktfremmende strategi for å hjelpe nye brukere å raskere forstå konseptet bak Tidal.

Table of contents

PART 0
INTRODUCTION

The thesis description

To the right is the thesis description as submitted in September. There were made elaborations on the problem definition and limitations to the project scope during the commencement of the project, which are described later in this chapter.

NTNU
Norges teknisk-naturvitenskapelige
universitet

Fakultet for ingeniørvitenskap
og teknologi
Institutt for produktdesign

Masteroppgave for student Lina Linnea Aspen

Å designe for den moderne musikkonsument – onboarding og lojalitetsbygging av nye brukere til en musikkstrømmetjeneste

Designing for the modern music consumer – onboarding and loyalty building of new users to a music streaming service

Å oppleve musikk har endret seg i tråd med den teknologiske utviklingen. Den moderne tids verdsettelse av bekvemmelighet har gitt brukeren stadig mer mobile og tilgjengelige løsninger. Fra å være en sted- og tidsbetinget aktivitet, kan musikk i dag nytes hvor som helst, når som helst og rett på ørene, gjennom digitale strømmetjenester. Slik har ulike aspekter ved musikkopplevelsen endret seg, og bruksmønstrene med dem. Når kvalitetene og mulighetene knyttet til digitale musikkopplevelser stadig endres – hvordan designer man for lojale brukere av en strømmetjeneste?

Tidal er en liten aktør på markedet med rundt 3 millioner betalende brukere i sammenligning til Spotifys 40 millioner. Tross den lille brukermassen er selskapet ansett som en seriøs konkurrent med sin sterke tilstedeværelse i musikkbransjen gjennom at artister eier selskapet. I tillegg skiller tjenesten seg fra konkurrentene ved å tilby CD-kvalitet på strømming av musikk, høyoppløselig videostrømming, musikkjournalistikk og eksklusivt materiale fra sine eiere. Eksklusive utgivelser har gitt Tidal nye brukere, men lojaliteten blant disse brukerne er lav.

Gjennom kvalitative undersøkelser vil oppgaven hente innsikter om bruksmønstre til brukere av musikkstrømmetjenester og hvordan Tidal oppleves for nye brukere. Formålet med oppgaven er å utforske hvordan Tidal kan forbedre sin onboarding av nye brukere og hvordan få de til å adoptere Tidal som sin hovedtjeneste for strømming av musikk.

Oppgaven vil blant annet omfatte:
- Kartlegging av eksisterende løsninger
- Innhenting av brukerinnsikter og bruksmønstre gjennom kvalitative studier
- Utforsking av aspekter ved musikkstrømmeopplevelsen
- Konseptualisering og testing av tiltak for å gjøre en førstegangsbruker til en lojal bruker av Tidal

Oppgaven utføres etter "Retningslinjer for masteroppgaver i Industriell design".

Ansvarlig faglærer:	Trond Are Øritsland
Bedriftskontakt:	Anders Herning, Tidal

Utleveringsdato:	16. september 2016
Innleveringsfrist:	09. februar 2017

Trondheim, NTNU, 19. september 2016

Trond Are Øritsland
ansvarlig faglærer

Casper Boks
instituttleder

Partnership with Tidal

ABOUT TIDAL

Tidal is a music streaming service offering amongst the largests catalogs in the market, music videos, live shows and journalism, through an editorially curated platform. It is the only music service offering lossless audio streaming through its High Fidelity subscription. In addition Tidal provides a second standard subscription option at competing prices.

The company is owned by the world's most successful artists – Jay Z, Rihanna, Beyoncé, Daft Punk and more, whom purchased the Swedish technology firm Aspiro including its music service WiMP in March 2015[1]. The vision of the acquisition was to create a music service providing a better experience for both fans and artists, or as the company put it: "Support the artists, create a sustainable music industry, and deliver the high quality music and experiences that fans crave"[2].

Being a music service owned by artists enables for exclusive content. A number of artists make their releases solely available on Tidal for a period of time or permanently. This has been Tidal's foremost strategy for user acquisition the past year, and in May 2016 the company announced a paying user base of 3 million. This still leaves them as an underdog in the market when compared to their main competitors Apple Music and Spotify.

THE PARTNERSHIP

The headquarters of Tidal are located in Oslo which made the cooperation possible. The partnership was initiated by my personal interest in music and technology and a desire to work with a consumer oriented product, while the assignment was developed in cooperation with Tidal. At Tidal my supervisors have been Anders Herning – Head of Product with charge of the user end products including the mobile, desktop and web application, and Snorre Seim – Senior Creative primarily responsible for tidal.com and digital presence. They have shared their knowledge and answered questions as far as Tidal's policy let them, and we have met and emailed throughout the project run. In return - the value for Tidal is the input from a new viewpoint and depth in subjects they can't prioritize themselves.

It has been a fruitful cooperation of an independent nature where I managed the project an it's focus in accordance with their advise, research findings and personal interest. The results of the project, as well as the personal gain from the project, are all thanks to the inspiring discussions with, and helpfulness of, Anders Herning and Snorre Seim.

A more detailed description on the product, strategy and market follows in chapter 1.

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1 Business Insider (2015 a)
2 Tidal (2016 a)
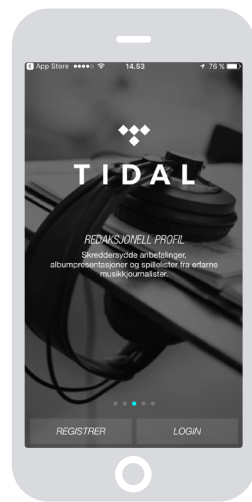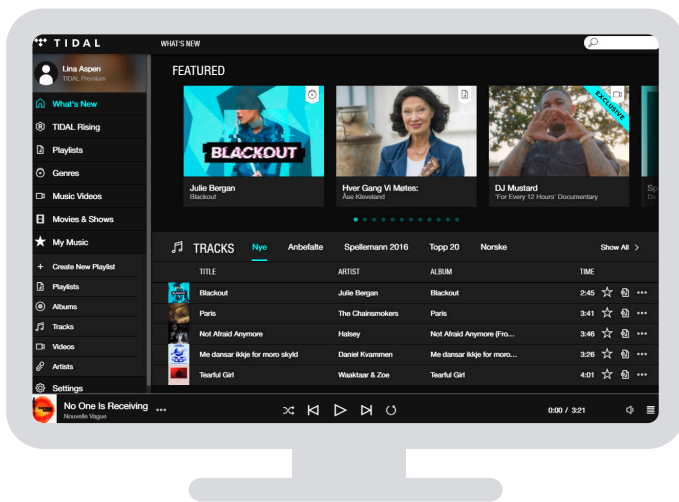
The music player and first time use screens of Tidal at the time of project commencement.

The scope of the project

Underneath follows an elaboration on the problem definition and limitations on the scope.

ONBOARDING, NOT USER ACQUISITION
This thesis focus on onboarding of new users, and how to make a first time user of Tidal into a loyal user. A loyal user is considered one that adopts Tidal as his/her main music streaming service, use it at a frequent basis and prolongs the subscription after the first month of free trial. One aspect of becoming a frequent user is to attain a skill level enabling the user to reach his/her goals successfully[1], as elaborated on the following pages. This thesis concerns users who have decided to sign up for Tidal, and does not address user acquisition.

INTERMEDIATES, NOT EXPERTS
Further on, a distinction is made between intermediate users and expert users. This thesis does not look at initiatives to motivate user to evolve skill sets for expert use, as described on the following pages.

TESTING
It is challenging to test or measure how the design initiatives and the concept score on the goal of creating loyal users. This would require a prototype with content so as to research user behaviour and satisfaction over time. This was considered too time consuming and resource demanding to accomplish during the project period. Therefore the usability testing of the concept focused mostly on the first time use experience as that was convinient to test with participants. The loyalty and user engagement aspect of the concept was developed and reviewed based on insights from the user research, theoretical

principles and perceived value from test participants.

THE SERVICE, NOT THE BUSINESS
This thesis deals with the user experience of Tidal's product - the music player service, not the business or strategy of Tidal. This implies that the project commits to Tidals existing strategic decisions when developing alternative solutions. The project aims to explore the qualitites of user experience design as a means to improve user onboarding and loyalty building. This understanding of loyalty building is further described in the following pages. In relation to loyalty building, this entails that the project does not reflect on strategic questions related to Tidal's identity, brand management, target user groups, business models, subscription models or market positioning. This limitation of the scope is made based on a desire to reach a level of depth in the onboarding and engagement assignment within the set time constraints.

LEVEL OF DESIGN
The result from this project is a solution designed at the interface level focusing on interactions, with visual presentations, but not detailed design. Nor does the scope of the concept include animations or microinteractions. The strategy and scope levels of the solution has been in focus, and based on qualitative user research together with the existing strategy and feature set of Tidal.

1 Crumlish, C., Malone, E. (2009)
2 Garret, J. J. (2010): *19-34, 161*

The elements of user experience

VISUAL
The graphics, animations and detailing of the solution.

NOT EMPHASIZED

INTERFACE
The design of interface elements and information presentation.

STRUCTURE
Structural design of the user flows for completion of tasks.

FOCUS

SCOPE
Feature set to meet user needs.

STRATEGY
The goals for the solution based on user needs.

FOCUS
based on existing strategy

Why user onboarding & loyalty building?

An introduction to the problem area and why it is of relevance.

FROM BEGINNER TO INTERMEDIATE
Onboarding is a tool to assist beginners to better master the service and advance in the user evolvement process illustrated to the right. This includes navigation and functionality control. A design principle that has guided this projects understandig of onboarding is presented in *About Face: The Essentials of Interaction Design:*

Nobody wants to remain a beginner.[1]

People don't like to be incompetent and strive to manage the service as a tool to reach their goals. Hence people move quickly from being beginners to become what Cooper et al. describes as perpetual intermediates[1]. If the users don't manage that transition, they drop out. As the book points out: everyone spend time as a beginner, but nobody is a beginner for very long[2]. According to Cooper the user population has a bell-shaped distribution across the user spectrum[2]. This shifts the focus to the intermediate user - the largest group of users. The book presents a second design principle:

Optimize for intermediates.[1]

DESIGNING FOR BOTH
This design principle builds on the understanding that although it is critical to support the beginners, the majority of the users will identify with being intermediates.

Intermediates master the service to the degree where they can reach their goal without effortlessly, but don't feel the need to advance further with their skill set - only a few evolve into expert users[1].

As an intermediate user you no longer have the needs of assistance, and can experience these beginner initiatives as disturbing their use flow[3]. Here arises the challenge of designing for both beginners and intermediates which has been a central concern during this project.

Different ways to meet the needs of both beginners and intermediates has evolved. To mention a few well used practices we have: a first time use wizard, a guided tour, a dialog box, explanatory interface overlays, explanatory empty states, nudging and more. A closer look at these approaches will be presented in chapter 2.

This project sets out to explore if Tidal needs an user onboarding for beginners at all, what such an initiative should address and how it should be presented and act.

LOYALTY BUILDING
Once a user has transferred from identifying as a beginner to an intermediate, he/she is one step closer to becoming a loyal user. A loyal user is in this project understood as one who fully adopts Tidal as his/her foremost music player - a user who use

The levels of user evolvement
Illustration based on About Face: The Essentials of Interaction Design

USER ONBOARDING

EXPERT

PERPETUAL
INTERMEDIATE

BEGINNER

CURIOUS
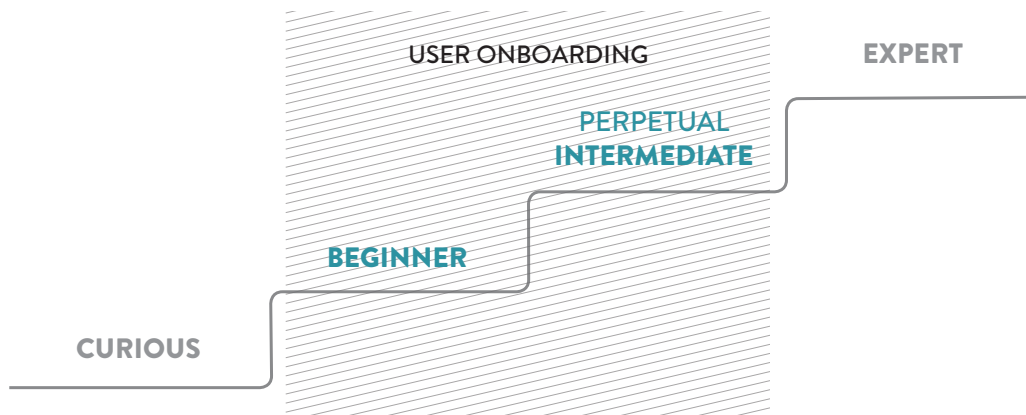
Tidal at a regular basis. Hence loyalty building is related to providing something worth returning to and create a feature and product fitting the users behavioral habits. Of habits related to streaming music, examples of scenarios include deciding what to listen to, find new music, and listening to music as a secondary activity - in the background. This project is based on a qualitative user research exploring habits related to streaming music, and aims to design for the behaviors recognized from the research. Another approach that this project explores involves triggering the user to invest in the product. Examples related to music streaming can be to create

playlists and personalize the application.

BARRIERS
This procets also sets out to identify barriers that prevents users from adopting a new music streaming service in general, and Tidal in particular. An example of a barrier is the investment users have done in other services, for example by building a large personal library of music.

Relevant theories on behaviour design, and designing for triggering and investment, is described in chapter 2.

1,2,3 Cooper et al. (2014): *239, 238, 243*

Process & guiding principles

In order to commence the project, a plan on how to go ahead and some principles to guide the process was needed.

EXPLORATIVE & SOLUTION DRIVEN
The explorative nature of the project enabled for challenging the problem definition from several angles, and allowing for gradually approaching the core of the problem through qualitative user studies. A solution driven process initiates visualizations enabling for quick testing of ideas and feedback from users. With a Lean UX approach I starting to think solutions early, which resulted in additional insights for continuous delvelopment of concepts.

USER CENTERED APPROCH
To provide a service that is enjoyed by its users, while meeting there needs, it must be based on a genuine understanding of the users needs and individual experience[1]. This project has revolved around gaining these authentic user insights and translating them into new designs and experiences, with a special empathy for the first time user. As an approach to form loyalty to new users, understanding the users' behavioral patterns has been in focus[2]. User involvment in this project included interviews with existing users, an edge case user interview, a user study over three weeks with seven

participants adopting Tidal and sharing their experiences, and usability testing of prototypes (read more in appendix).

SEQUENTIAL & HOLISTIC
The process of adopting a new service consists of several interrelated steps over time[1]. To provide a good service, it necessary to understand the full context the service is a part of[1]. With the goal of designing a holistic solution, I took a sequential approach zooming in and out on the related steps of becoming a loyal user of Tidal.

STRUCTURING OF THE REPORT
The report is structured chronological in relation to how the project evolved. Theory and princinples for onboarding and loyalty building is described in chapter 2, while design and research methods are presented in relation to when they were applied in the process or the text will refer to the appendix for further description.
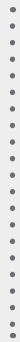
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1 Stickdorn, M., Shneider, J. (2011): *26-37, 40-41, 45, 44*
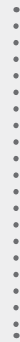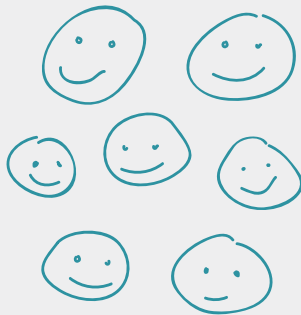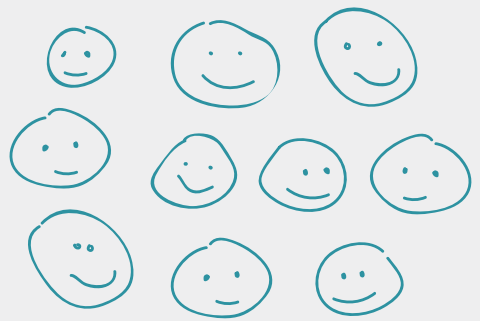2 Cooper et al. (2014): *74*

User involvment

3
Interviews

7
User study participants

11
Usability testing participants

PART 1
BACKGROUND
& CONDITIONS

The modern music experience

In order to get to know the modern music consumer, I set out to better understand the characteristics of today's music behaviors through a retrospective view on the evolution of music consumption.

A music consumer 200 years ago would listen to music live in the venue as it was being performed. The modern music consumer can listen to all the music of the world – anywhere and anytime. The premises for enjoying music has undergone dramatic changes the last 200 years, altering the attributes of the music experience itself. The backdrop is the technological evolution which has continually disrupted all aspects of the music industry from music media and consumption, to production and distribution. The technological advances has transformed music from being a time and place dependent activity, to gradually become more and more detached from its creation while empowering the user with control.

The personal music experience has been closely linked to the media of the time. In times of live performances the music was generally experienced in social settings where the production of the music could be fully exposed for the listener. Music became gradually more ubiquitous with

media changing forms towards more portable and personal devices, conquering new settings – first the living room, the bedroom, the car, the park, the workplace, and so on. The music experience reached its most personal with the headset enabling for an intimate experience isolated from the surroundings.

Today music is for many detached from any physical presence, provided through different multifunctional devices with graphic interfaces. In relation to this digital transformation and streaming services, the personal relationship to music is characterized by not owning music – you own access to a million of songs, but never make the decision of investing in artwork. The personal devotion to discovering music and the joy of a successful treasure hunt, is arguably missing from today's trend of behavior based algorithm recommendations.

Additionally, the evolvement has distanced the listener from the creators, where the artists no longer have control of how their

work is experienced, where for instance single songs are often removed from their entirety and experienced separately in new compilations.

The development has occurred on the users behalf in the spirit of the 21st century – providing freedom and control. While receiving this convenience, the consequences have been an accepted decline in quality and some believe the music experience has lost richness along the way. While the evolvement has curbed some sensual aspects of the initial music experience, others have risen. The artwork can today be enriched by visual storytelling, artists and fans can connect through social media, and the mobility enables for music to enrich new activities. Michael Bull has investigated the audiovisual aestheticization of the urban experience that started with the Walkman in 1979. He points at how the possibility of carrying with you your entire personal, has placed sound at the heart of everyday aesthetics[1]. David Byrne, the lead singer from Talking Heads and author of How Music Works, is

fascinated by another aspect of the modern music consumption: "People probably heard a greater quantity of music, and a greater variety, on these devices than they would ever hear in person in their lifetimes."[2]

While the musical technology is ever changing, the radio has nevertheless survived the many inventions taking hold of the commercial entertainment market and the LP has recently made a comeback to the private homes. David Byrne reflects on the evolvement as music becoming less of a thing--a cylinder, a cassette, a disc-- and more ephemeral, questioning which aspects of the music experience are of value to the modern music consumer[2].

1 Bull, M. (2012): *151-162*
2 Byrne, D. (2012): *124, 136*

Product description

The project is based on the music streaming service that Tidal offers today.

Editorial
Tidal is a editorial curated service where humans curate content in forms of playlists and journalism pieces. For example the *featured caroussel* in the *What's New* section is curated by Tidal's editorial teams, and the playlists and journalism featured in it is also created by these teams and other invited professionals. This differs the service from for example Spotify and Apple Music, where both content and personalization of presentations are largely built on user behavior based algorithms.

Supporting artists
An initiative in spirit of their vision is *TIDAL Rising* - a section of the music player presenting up-and-coming artist from around the globe. It assists newcomers with more exposure and helps the user broaden his/her music experience by getting to know the names of tomorrow. Other initiatives are *Tidal X* - a program to strengthen the relationship between fans and artists with exclusive events or deals.
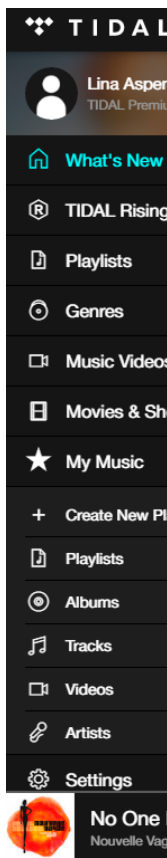
Personal library & offline content
Similar to other music services, the user can save favorites to his/her own library called *My Music*. There the user can also select which content should be available offline on the mobile application.

Content & features
Tidal differs from some competitors by additional features that aiming to bring depth to the music experience: music videos, music movies & shows, live performances and music journalism pieces. To read a journalistic piece the user is redirected to read.tidal.com.

TIDAL

Lina Aspen
TIDAL Premium

What's New

TIDAL Rising

Playlists

Genres

Music Videos

Movies & Shows

My Music

Create New Playlist

Playlists

Albums

Tracks

Videos

Artists

Settings

No One
Nouvelle Vague

FEATURED

Julie Bergan Blackout	**Hver Gang Vi Møtes:** Åse Kleveland	**DJ Mustard** 'For Every 12 Hours' Documentary

EXCLUSIVE

● ● ● ● ● ● ● ● ● ● ●

🎵 TRACKS

Nye   Anbefalte   Spellemann 2016   Topp 20   Norske   Show All >

TITLE	ARTIST	ALBUM	TIME			
Blackout	Julie Bergan	Blackout	2:45	☆	🔁	•••
Paris	The Chainsmokers	Paris	3:41	☆	🔁	•••
Not Afraid Anymore	Halsey	Not Afraid Anymore (Fro…	3:46	☆	🔁	•••
Me dansar ikkje for moro skyld	Daniel Kvammen	Me dansar ikkje for moro…	3:26	☆	🔁	•••
Tearful Girl	Waaktaar & Zoe	Tearful Girl	4:01	☆	🔁	•••

Is Receiving   •••

0:00 / 3:21

25

Business & strategy description

The project does not reflect on business and strategy questions related to Tidal, but relate to these as guidelines when developing the concept in order to obtain a solution in line with Tidal's vision and preconditions.

SUBSCRIPTION MODEL
Similar to other music services, Tidal is available on a monthly subscription. It offers a month of free trial with automatic renewal if not cancelled. There is no freemium option nor any third party support in form of ads - Tidal only supports paid users after the first free month. This model stands by their vision of creating a more just revenue sharing model for artist. Tidal offers two different subsciptions: Premium (priced to compete with Spotify and Apple Music) and HiFi (priced higher), both available for either individual or family plans.

HIGH QUALITY AUDIO STREAMING
Tidal is the only music streaming service offering streaming of lossless audio. This means that files are not compressed and that the quality matches CD quality. It allows for larger nuances in volume and don't lose details that can go missing in MP3 compression. Tidal offers 1411 kbps for HiFi subscribers, and 320 kbps to premium users – which is similar to competitors. The High Fidelity streaming is the upscale option as it requires quality audio produts to hear the difference. In May 2016 around half of Tidal's user base had a HiFi subscription.

EXCLUSIVE CONTENT
Being a music streaming company owned by artists, allows for windowed releases, permanent exclusive releases and exclusive playlists created by artists sharing their inspirations. This advantage has largerly been used as a strategy to attract new users the last year. This approach has also been adopted to some degree by Apple Music and Spotify, but it remains to see if it will be an approved strategy by labels and producers[1].

TARGET USER GROUP
When approaching the supervisors at Tidal with questions on target user group, it emerged that Tidal have not established a target user group. In addition the demographics of their existing user base was considered restricted information. Based on the most recognizable attributes of the service and the two subscription models, two target user groups were suggested:

- HiFi streaming addresses the music nerds owning quality audio products
- Exclusive releases targeting the fans of Tidal's owners.

The supervisors at Tidal shared this perception of their user base, which formed the basis for the personas presented in chapter five.

STRATEGY & IDENTITY
Tidal is an underdog in a market dominated by large companies: Apple Music launched in June 2015 by one of the world's largest tech companies, and Spotify - the music

The launch of Tidal in New York March 30th 2015, with the 17 stakeholder artists present.

streaming pioneer and leading player. Tidal aims to differ from competitors by being an editorial service curated by professionals and musicians, based on the belief that this brings an valued depth to the music experience. Tidal don't believe the "easy listening" experience that is trending these days provides the best music experience, and aims to offer the superior experience by rather focusing on the qualities of human expertise and putting the artwork as a whole in center.

More on "easy listening" on the upcoming pages, and the positioning and competitors in chapter four.

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1 The Guardian (2016)

Market landscape

In order to understand Tidal's preconditions and opportunities as a music streaming service, it was necessary to gain an understanding of the market landscape of today, and how it is affected by trends, disrupted business models, technology advancements and emerging players.

EASY LISTENING
Making smart recommendations and personalization of platforms is becoming common and expected in many consumer products. Spotify purchased tech companies to further evolve its product to provide the "easy listening" experience for its users.

EXPANDING CONTENT TYPES
Many music streaming companies are incorporating video content, audio books and other content into their catalogs. Examples are Spotify adding podcasts to their features, and Google who is incorporating YouTube music video subscribers into Google Music Play.

MATURE PRODUCTS
Companies have spent years building the largest catalogs, but with more players in the game the experience of the catalog plays a greater role[1].

MAJOR TECH COMPANIES
Apple, Amazon and Google are stepping up the game[1]. With large war chests and considerable brand power, they are aiming to convert their customers into users of their recent music services.

ACQUISITIONS
Consolidations continues as smaller players exit. Apple purchased Beats Music and Google acquired Songza, both in 2014.

COMPETING WITH FREE
The mass market is still compelled and familiar with ad-supported alternatives[1], pressuring subcription based products to prove its added value to the user.

STRUGGLING WITH PROFITABILITY
Stand alone music service companies are struggling. Spotify reported a operating loss of $170m in 2014 on a revenue run of over $1.1b.

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1 Financial Times (2017)
Tidal (2016 b)

The main competitors & number of paying users

Spotify
40 M
Sep '16

Apple Music
20 M
Dec '16

Pandora
3.9 M
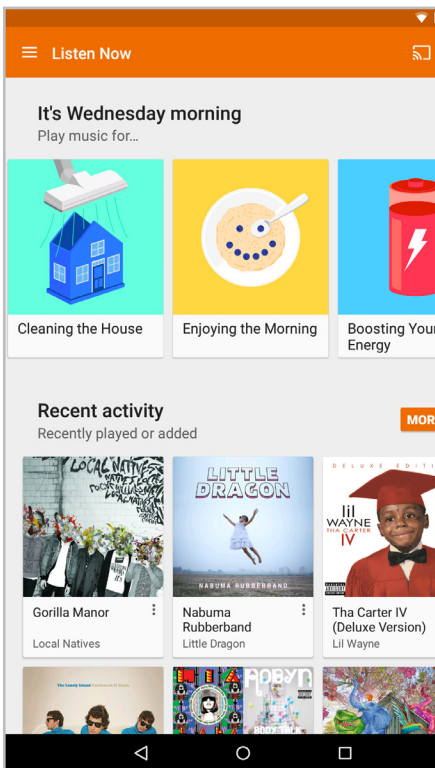Jan '15

Deezer
3.8 M
Jun '15

Tidal
3 M
Mar '16

Napster
3 M
Jul '15

Tidal (2016 b)

Best of breed experiences

To further get familiar with the domain of digital music services, I explored competing and substituting services, where the following represent products of inspiration that nail one specific aspect of the music experience.
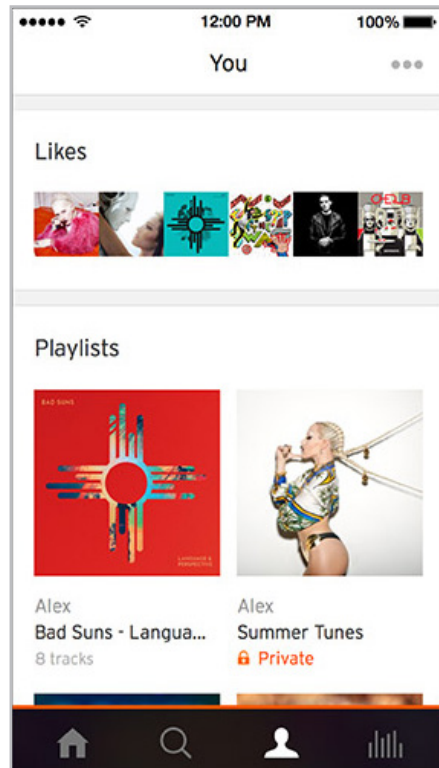
Easy listening

Google Play Music

Google use context aware suggestions to help the user decide what to listen to. Based on time and location, the appliaction proposes activities and lets the user associate situations with types of music. Arguarbly a more human way of navigating music.

Community & User Generetad Content

SoundCloud

SoundCloud is a social sound platform where anyone can listen to or create music for sharing. It's a placego for underground music, and also where artists prerelease early versions to get feedback. By emphasizing user activity - comments, likes, reposts and sharing, the platform has succeeded in creating a community based music service.
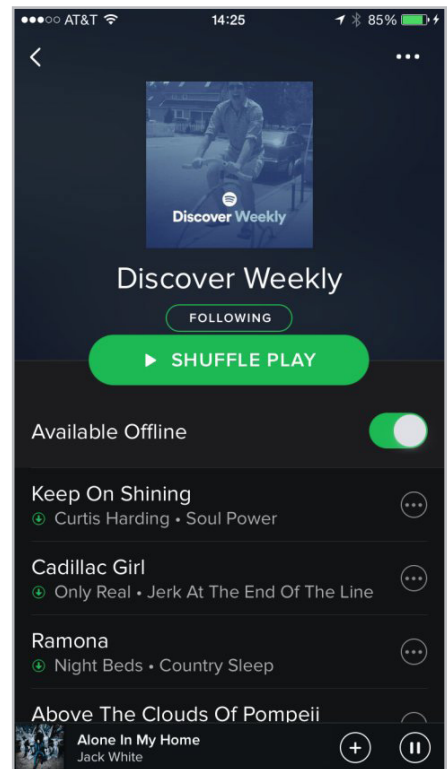
Editorial music service
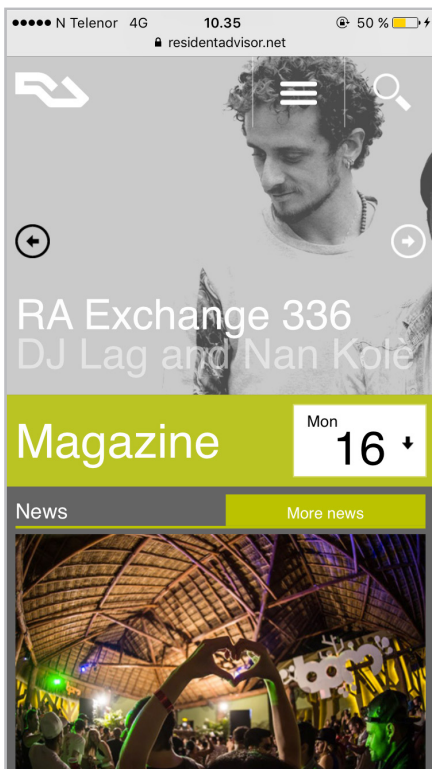
Resident Advisor

One of the largest independent online electronic music magazines. It presents news, events and reviews - everything worth knowing of electronic music. The magazine lets you get to know your favorite artists, tastemakers and venues through journalistic pieces and podcasts.

Personal recommendations

Spotify

Based on the user's listening history and that of other Spotify fans with similar tastes, Spotify creates a weekly playlist, called *Discover Weekly*, with songs the user might like. This feature makes 'finding new music' easy.

PART 2
THEORY ON THE PROBLEM AREA

Mechanism for user onboarding

To analyse the onboarding process of Tidal's service, I did a literature search in order to etablish a theoretical understanding of the problem and equip myself with tools to explore new solutions.

WHAT IS USER ONBOARDING
The term onboarding is commonly used in relation to organizational socialization:

"Onboarding, (...) refers to the mechanism through which new employees acquire the necessary knowledge, skills, and behaviors to become effective organizational members and insiders."[1]

The term has later been adopted to address mechanisms assisting new users of products and services to acquire the essential skills to efficiently reach their goals. User onboarding aims to make the first meeting with a product a successful one to result in revisits from the user. The onboarding should relate to how the user is often impatient to get started with the product, or as the game designers Zichermann and Cunningham describe user onboarding:

"Train and engage, but don't overwhelm."[2]

This description also points to the two general approaches one can take - functionality and/or benefit oriented. The first one providing guidance in how the product works, and the other to show the user how the product brings value. In relation to the latter, a goal is to strive for the user to experience the product in it's "full glory" as quickly as possible.
An associated principle is to provide the user with "a warm start". A warm start refers to a welcomming first meeting where the user is not left to him-/herself with a blank state and unfamiliar interface[3]. This relates to the 'Empty states' explained on the following page.

Which approach to take is linked to the product in question. Here follows a selection of mechanisms that are either used in todays existing product by Tidal or has been explored and tested during the project.

INTERACTIVE WIZARD
A common way to walk the user through the essentials of the product, allowing the user to learn by doing[4]. Malcolm Knowles four principles of learning states amongst other that "Adults often learn best through experience" and that "Adults learn best when the topic is relevant to them and immediately applicable."[6] This argues for interactive wizards as effectful if it is perceived relevant and digestible. A widespread challenge has been linked to many products designing for the intermediate user and leaving all guiding for novice users to a wizard. This results in users that skip the wizard, (which is common due to too many expereinces of irrelevant wizards and a misconception that wizards are for untechy persons only), is left to figure out the system all by themselves.

WIZARD SCREENS
By presenting a set of screens, this

approach aims to explain features and functionality for the user when opening the app. It is applicable for products that are not too complicated and best employed to reinforce the value proposition of the service[4]. It shortcomings are that is does not support the 'learning by doing' approach, but is found to often include complex information. Additionally this approach is static and not engaging the user, resulting regularly being skipped by users eager to get started with the service.

EMPTY STATES

These are states that will be filled up with activity or data once the user has gotten started with using the product. By designing for the first time use, the first day or the first week of use, these blank states can be an opportunity to provide a warm welcome to the product[5]. Related to music services this applies to the personal library which is empty until the user saves music to it, and in the solution presented in this project - the personlized home page which content is generated by the user's activity. An empty state should engage the user to take the actions that will result in the state no longer being empty.

NUDGING

Nudging is timed overlays or callouts that point to specific features to help the user discover less intuitive elements[4]. It can either be tooltips to better master the service, or a way to nudge the user to complete certain tasks related to the onboarding process or to fill the empty states[7]. The challenge with nudging is to find the balance of being prominent, but not obtrusive. By finding the level of frequency and refine the timing to not disrupt the use flow, but rather assist.

PROGRESS VISUALIZATIONS

By indicating the user's progress of undergoing the onboarding process, the user is encouraged to complete the process[4]. For successfull implementation, the progress should be linked to the user's perception of success - each step in the progress should be useful and bring the user closer to his/her goal of the product[5]. People strive for accomplishment of tasks and will return to reach this state. The Zeigarnik effect reveals that unfinnished tasks better improve peoples ability to remember the details subsequently[8]. This suggests an interesting aspect indicating that an onboarding process which is not fully completed during the first session, will trigger the user to return while also improving the user's learning outcomes.

1 Bauer, T. N., Erdogan., B. (2011)
2 Zichermann, G., Cunningham, C. (2011)
3 Crumlish, C., Malone, E. (2009)
4 Alvarez, H. (2015)
5 Traynor, D., Hulick, S. (2015)
6 Hanson, L. (2015)
7 Agrawal, P. (2016)
8 Waude, A.M. (2016)

Mechanism for loyalty building

In order to gain knowledge on tools and approaches applicable to the problem definition of loyalty building, I did a literature review exploring relevant mechanisms and case studies.

LOYALTY BUILDING THROUGH USER EXPERIENCE

There are several dimensions to loyalty building, where this thesis focus on how the user experience of a service can strengthen the loyalty between the service and its new users. The goal is to use this dimension as a tool to make new users adopt Tidal as their primary music streaming service.

Loyalty building through user experience design address the relationship between emotions and behavior[1]. A good user experience is related to the user's loyalty towards that product[2]. In addition there are a variation of user experience elements that can facilitate and amplify loyalty building to new users of a product. Underneath follows a description of the mechanisms considered relevant for building loyalty to new users of Tidal.

DESIGNING FOR BEHAVIOR

Designing for behavior entails designing product behaviors that complement the user's own behaviors, given assumptions, and mental models[3] (read more in appendix). This includes designing for the users needs, goals, and contextual aspects, while facilitating and supporting the user's behavior[3]. By understanding the behavioral patterns of music streaming consumers, the service can facilitate

for the user's habits of listening to and dicovering music - which are recognized as critical aspects of streaming music. As Nir Eyal puts it in his book *Hooked: How to Build Habit-Forming Products* - "Habits keep users loyal"[4]. By linking the service to daily routines and emotions, products can form habits[5]. There are two main factors describing a user's potential for establishing these habits; frequency of use and the user's perceived utility of the product in question[4]. This is as described further in the figure on the right. In addition, the degree of complexity and importance a user assign the habit, influence how quickly that habit can be formed[4]. This entails that Tidal should build on conventions related to both interfaces and behaviors (for instance how people are used to go about to discover new music), since nontraditional solutions are more demanding to adopt[4] (read more in appendix).

1 Bandyopadhyay, S., Martell, M. (2007)
2 Pullman, M. E., Gross, M. A. (2004)
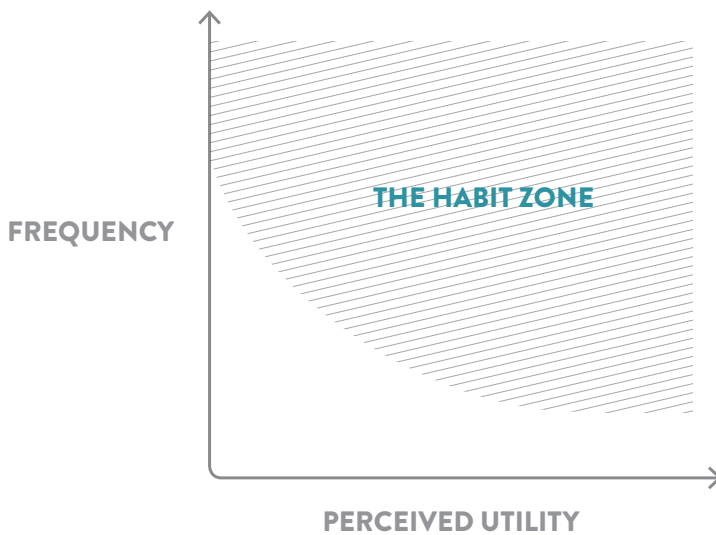3 Cooper et al. (2014): *74*
4 Eyal, N. (2014): *27, 29, 31, 27*
5 Verplanken, B., Wood, W. (2006)
6 Parks Associates (2016)

The habit zone

The figure illustrates the connection between the frequency of use and the perceived utility of the service. By plotting the two, you see the potential for the product to succeed in forming habits. Illustration from *Hooked* by Nir Eyal.

A study from Parks Associates suggests that streaming music is a strongly valued activity with two thirds of US smartphone users listening to music via a streaming service of some sort[6]. The frequency of use for streaming music is also considered high with the same study showing that 68% of US smartphone users stream music on a daily basis for about 45 minutes a day[6]. Although the use statistics of Tidal's music streaming service were confidential, this study demonstrates Tidal's potential as a habit-forming product.

EMOTIONAL DESIGN

Through creating emotional value for the user, the likelihood of a long-lasting relationship to the product will increase. Don Norman argues that loyalty building derives from reflective emotions where the user to a larger degree connects personally with an experience[1]. This approach suggests that the service should reinforce the intimate and personal experience the music experience can be, to bring emotional value to the user. This also include experiences that carry emotional weight in terms of intensity where an experienced peak in emotions are more likely to be remembered in retrospect, and if that was a peak of pleasant emotions - the likelihood of returning to the service will raise[2] (read more in appendix).

INVEST & BUILD BARRIERS

An aspect that strengthen loyalty to a product, is the user's ability to invest in the product. By investing in a product, the user gets more committed and the barriers for leaving in favor of another service will raise. In relation to music services, the most widespread barrier is the user's personal music library. It represents a value to the user that is stored in the product, and rebuilding the collection in a new service is a hassle that keeps users from migrating to competing services. Additional investment features can for example be to set preferences or personlize the service[3].

WHY THIS APPROACH

Through behavioral design a product can create strong user habits resulting in achieving unprompted user engagement instead of relying on expensive marketing[3]. Focusing on habit-forming initiatives also increase how long and how frequently customers use the product, which results in higher customer lifetime value[3]. Additionally, strong habits increase the conversion from free to paying users of a service[4]. This implies that if Tidal succeed in onboarding new users and establishing habits related to the service within the free trial period of one month, the likelihood of users prolonging their subscription will increase.

Building loyalty through user experience design is also valuable in terms of growth[3]. Users who continously find value in a service will to a larger degree tell their friends about the service[3]. Lastly, strong habits die hard and are in themselves a barrier from migrating to new services.

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1 Norman, D. (2005)
2 Kahneman et al. (1997)
3 Eyal, N. (2014): *3, 19, 20, 21, 21*
4 Verplanken, B., Wood, W. (2006)

This project has explored four main approaches to building user loyalty to Tidal's product:

Create emotions

**Make the user invest**

Form user habits

Trigger for revists

PART 3
PROBLEM
UNDERSTANDING

Research activities

To be albe to design a successfull service, it is necessary to obtain a thorough understanding of both the complexity and the core of the problem area, and gain genuine user insights to be able to empathize with the users of the service.

Several activities were conducted with this aim, and the following chapter presents them in chronological order; describing the procedure and the main findings of each. Finally all the insights are summarized by plotting them in relation to the different stages of the user journey of adopting Tidal.
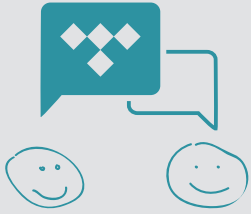
Interview:
Existing users

Interview:
Super user

User study:
Adopting Tidal

Expert review:
Tidal.com + Sign up
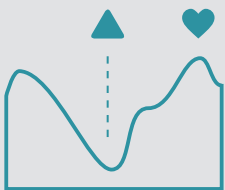
Summary &
Experience map

Interview: Existing Tidal users

To start of the research, I consulted existing users of Tidal to learn about the behaviors of intermediate users of the service, and their long term experiences related to the problem area.

The interviews revolved around story telling, where their Tidal application was open during the interview as an artifact to assist in recalling experiences and pointing to what they were commenting. Here follows a short summary on the main issues they shared:

EXCLUSIVE CONTENT
Both expressed that the exclusive releases were cool, but as the releases seldom matched their kind of music taste, it became a bit annoying with these releases promoted all the time. One participant experienced it as noise when she was scanning the news page for new music.

FINDING NEW MUSIC
They explained how it in general was difficult to find new music. The news feed wouldn't update too often, and their weekly lists didn't come at a weekly basis.

VIDEOS
Both liked to watch music videos every now then, and would pick up some new favorites from there. They didn't really watch the other videos - the documentaries or live shows, mostly because they had checked them out once and found out they didn't match their taste in music.

TIDAL RISING
One participant shared how she liked to explore Tidal Rising from time to time, to look for new music, but it was difficult to know where to start when all the names are new to you. She would either listen to random tracks or choose the albums that looked cool, and sometimes she would be lucky and discover some new favorites.

WHY THEY GOT TIDAL
Both participants had WiMP before, one through her father who wanted a service that worked seamless with his Sono Stereo equipment, and the other got it through his subscription with Canal Digital.

PROJECT VALUE
These insights were valuable in planning of the user study by pointing at areas to focus on and hypotheses to investigate - for instance how Tidal assist users in discovering new music. Additionally they provided insights on areas of opportunities based on long term experiences with the service.

Finally, the interviews included the same card sorting exercise and focus on music habits that was conducted with the user study participants. Those insights are described collectively - with the user study participants' - later in the chapter.
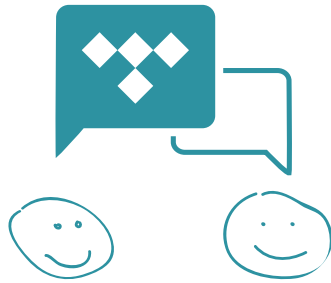
Interview: Super user

To obtain a deeper understanding of the domain of music services and learn some new perspectives on the problem area, I met with a professional whos job is to play music for audiences through DJ booths and internet radio series.

His 25 years of professional experience can characterize him as a super user(read more in appendix), where his experiences brought new perspectives to the problem areas of muic streaming services. Here follows a summary of our discussions, paraphrasing his comments of different topics.

SPOTIFY FOR PERSONAL LISTENING
For personal listening at home or when travelling, Spotify meets his needs. Work, on the other hand, requires uncompressed audio files which he buys in records stores. This is also where he goes to discover new music.

SPOTIFY AND OTHER STREAMING SERVICES DON'T SUPPORT SEARCH BY PROFESSIONAL METADATA. I MOSTLY GO BY LABELS OR PRODUCERS WHEN I'M LOOKING FOR NEW MUSIC.

This is provided by records stores like Discogs and AllMusic, where he can also get a preview of tracks before purchasing. He describes his routines as listening to snippets of songs and pressing 'Next', until something catches his attention, then he might listen to the entire track. He spends hours doing this every week, to stay updated and find new music for his gigs. Additionally he finds music through blogs and friends. At home he listens to a larger spectre of music, and often make use of the personal *Release Radar* that Spotify provides.

IT'S SIMILAR TO GOING TO RECORD SHOP IN THE OLD DAYS: 'IF YOU LIKED THAT ONE, YOU WILL LOVE THIS ONE.'

SPOTIFY FOR BUSINESS
Spotify is also convenient for some work related requests. When making playlists for restaurants, weddings or private parties, it's convenient to use Spotify as that is the most widespread service here in Norway. Spotify facilitates for the social aspect of music through sharing and public profiles, which also leads to some edge use cases for professionals.

WHEN I GET REQUESTS FOR CURATING PLAYLISTS FOR PRIVATE PARTIES, PEOPLE MAKE A POINT OF MAKING THEM ON THEIR PROFILE SO THAT THEY CAN SHOW OFF THEIR GREAT MUSIC TASTE TO FRIENDS.

STREAMING SERVICES
He explains how Spotify has changed the game for artists as well as listeners. Now it is all about knowing people at Spotify's Scandinavian editorial team to make an entrance to their weekend playlist.

IF YOUR TRACK IS ON THE TOP PART OF THOSE LISTS, YOU GROW AN AUDIENCE OVER THE WEEKEND.

He is more excited about the alternative ways the platform has been used to connect with fans. An example is how Röyksopp made use of their Spotify profile when they released their newest album. They made three fictional characters that each had 'curated' their own playlists.

IT'S INTERESTING TO GAIN INSIGHT INTO WHAT INSPIRE THEM AS MUSICIANS.

This was more an exception than the norm, as he saw it, as the streaming service is yet to facilitate for that kind of marketing.

Project value

The interview sparked the idea of Tidal as a community driven service, and gave input to the questions on how streaming services can evolve better ways for artists to build stronger relations to their fans.

I also gained insights on how music services relates to professionals, providing opportunities and influencing the industry.

User study: Adopting Tidal

In order to gain an empathetic understanding of the problem, I conducted a qualitative user study where seven participants adopted Tidal for a month and shared their experiences throughout the period.

THE SETUP
Over a period of four weeks seven participants agreed to adopt Tidal as their main music streaming service and take part in a study. The study consisted of two one-on-one meetings, three surveys and exchange of experiences. The interviews were semi-structured, making use of artifacts and storytelling (read more in appendix).

1ST MEETING
The first meeting revolved around a card sorting exercise about their habits concerning experiencing and discovering music in their daily life (read more in appendix). They were asked to sort various music services according to frequency and amount of time used, while we had a conversation on how they used the different ones for different purposes and in different situations. This formed a picture of their behaviour regarding listening to music, discovering new music, and other aspects of the music experiences - for example being a fan and building social relationships.

SIGNING UP FOR TIDAL
At the end of the first meeting, the participants would share their expectations and concerns regarding adopting Tidal as their new music streaming service, before signing up for a free trial of one month.

Sitting next to the partcipants while they were signing up and completing the wizard, I would observe their first meeting with Tidal (read more in appendix).

SURVEY DIARIES
In between our meetings the participants would receive two short surveys addressing their experiences of adopting Tidal and leaving their former music service behind. The surveys consisted of a mix of direct and open questions to initiate reflection on how they experience Tidal. The purpose was to help them remembering these experiences and thoughts - both painpoints and delights.

2ND MEETING
After one week of use, we met for a more open interview inspired from 'The 5 Whys' approach, revolving around the responses from their surveys. In addition to sharing their experiences so far, we discussed how their expectations were met or not. Their Tidal application would be open during the meeting to initate more memories from their first week of use.

3RD SURVEY AND FOLLOW-UP
The third survey included a tip on how to import playlists from Spotify. As this had been a frustration amongst five of the participants, the four who had not found out about it themselves, were notified on

Goals - to gain insights on:

- Motivations and barriers related to adopting a new music streaming service

- The role of personal music experiences in daily life

- Behavioral patterns on listening to and discovering music

- Areas of opportunities and friction related to adopting the service Tidal offers today

The user study of adopting Tidal

1	2	3	4
Interview + signup	Survey	Interview	Survey
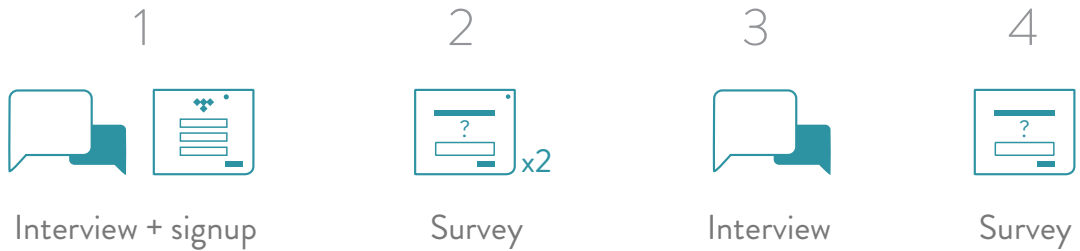
how they could do this. The reason for this was to see if their experience of Tidal would change once they had a collection of playlists they knew and enjoyed at hand.

SHORTCOMINGS OF THE SETUP
The participants joined the study based on a curiosity on Tidal, but we can question if their experience would have been different if they were not commited to this research. Additionally the hawthorne effect questions if the experiences they shared and performed under observation are genuine, which should be kept in mind when analysing the findings (read more in appendix). One issue that arose, was how some participants didn't invest in the service as they said they would otherwise do. They explained this themselves as a consequence of knowing that they were only participating for a limited period of time before returning to their former music

player.

This can arguably be said to be an issue regardless of partaking in a study or not - many signup for a trial period with Tidal to check it out or listen to an album exclusively on Tidal for a period. This leaves them unmotivated to invest in the service, for example by refraining from creating playlists.

One more unrealistic aspect of the setup, was that the participants were asked not to use their former music player, but fully adopt Tidal for the period of the study. This was considered necessary to gain some insights despite the short period of time. In reality users will probably not be as devoted to Tidal the first period if they already use another music player.

Another downside of the recruitment was

Demographics of participants

In work

In university

☐ Female   ☐ Male   Age 22-31
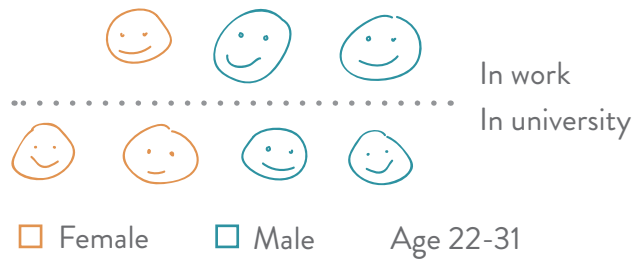
that all except one were daily users of Spotify. Hence their experience of Tidal was always compared to Spotify. A larger variation in user background would be preferable. On the other hand, Spotify is the market leader with the largest active user group, framing this as a realistic and useful composition to engage in the research.

An additional shortcoming of the research was the composition of the group of participants. The participants were recruited through Facebook because that trumps other approaches administratively. This resulted in six out of the seven participants being of acquaintance, which can affect results of the research. On the other hand, as a relationship was already established   the threshold for sharing thoughts and personal experiences was lowered. In addition all the participants

were Norwegian, and four out of seven were designers or design students, neither which is in compliance with Tidal's user group. This might have influenced the results in cultural preferences, but this is not considered to affect the validity of the insights.

Main insight 1: Getting to know Tidal

Participants had trouble with grasping the concept of Tidal and what the service offers, as well as how it is structured.

ORIENTATING ONESELF & CREATING THE MENTAL MODEL
While observing their first meeting with Tidal, it was clear that they didn't grasp the structure at first (read more in appendix). After one week, the participants still navigated the product with little control.

TIDAL IDENTITY & CONCEPT
The majority of users were not sure what to expect from Tidal compared to other services. It was a recurring concern that Tidal might have a smaller catalog of songs. Some participants had heard about Jay Z buying WiMP and that Tidal was more fair to the artists. Others had heard about the quality sound streaming and were curious if they would hear the difference. Overall the participants had little knowledge of Tidal and expected it to be similar to Spotify.

Those signing in on the mobile application were presented with the five screens before signup and the six screen wizard, but most participants skipped both and were left alone, similar to those signing up on the web, to grasp the concept of Tidal by themselves.

After one week of use, participants still had trouble telling the difference between Tidal and their former service (for most parts being Spotify). They had noticed the videos and a few had seen the journalism pieces without reading them. All in all there were still many features that remained undiscovered, and a general frustration that they perceived as being like Spotify, except it didn't quite act like they were used to.

THE WIZARD - IRRELEVANT & SKIPPED
The majority of the participants skipped the wizards while commenting that they didn't believe wizards ever brought anything of relevance.Those who did complete the wizards, commented on the

What is all this?

- Orientating oneself
- What has Tidal got to offer?

1 week

Still getting lost
Undiscovered features

- Failed to create mental model

parts explaining interface elements as irrelevant.

The majority of the participants can be categorized as tech savvy, explaining why they don't believe in wizards. One participant, on the other hand, was not very tech savvy, set out to complete the full web wizard. This participant was confused by the box moving for every step and unintentionally closed the wizard, and had a rather confusing first meeting with Tidal.

THE STRUCTURE & MENTAL MODEL
When first opening Tidal, as with any new service, the user try to quickly orientate himself. The participants quickly spotted the menu and would browse through the different tabs trying to get an overview and an understanding of where to find what. One week later, many still didn't know what the different sections in the menu contained. During our meeting this would arise when trying to show me how they had

found a playlist they liked, or some would even comment themselves the feeling of not having full control.

THE LAYOUT
The participants expressed difficulties in navigating the service, because everything looked the same:

I'M NOT EVEN SURE WHERE I FOUND THIS PLAYLIST, IT WAS EITHER 'WHAT'S NEW' OR 'TIDAL RISING'. BOTH LOOK THE SAME TO ME.

This suggests that the layout of the service fails to strengthen the structure of the service. The modest differentiation between the section reinforces the trouble of grasping the structure of the product.

Summary: Insights on first time guidance

*THESE ALL LOOK THE SAME?
I JUST WANT TO SEE THE APP,
LET'S SKIP THIS..*

*AH.. I JUST WANT TO SEE THE APP!
HALF OF THE SCREENS DON'T
EVEN SAY ANYTHING..*

Mobile - Before login

Mobile - Wizard

Before login, the user is presented with five screens promoting the product and its features.
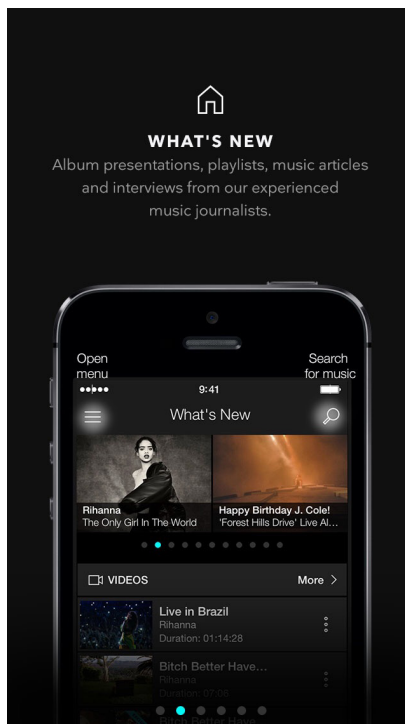
The mobile wizard consists of six screens the user can swipe through, which most people swipe without reading. The first and last screens don't contain any information, while the remaining screens presents a selection of information on features, structure and interface elements.

The wizard is prompted everytime the user logs into the account on a new device. This results in many users meeting the wizard several times.
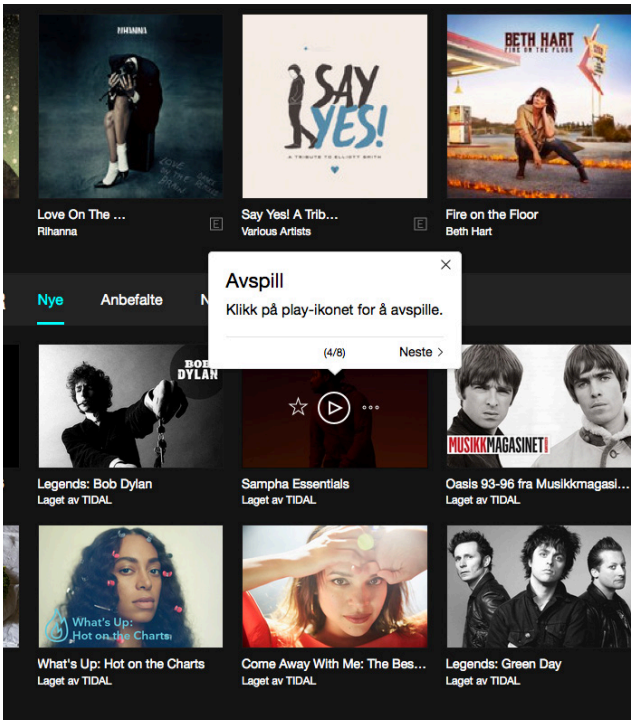
Desktop/Web - Wizard

The wizard has eight steps explaining mostly interface element, that the user click through. One step about the *Play Queue* opens the drawer to show it to the user, while the rest of the steps points to buttons in the interface.

Empty states

The empty states of *My Music* explain the user how to add music to his/her library in a very little engaging way.

Main insight 2: Habits on finding music

Participants had trouble transferring their habits to Tidal, and had difficulties in finding regular sources for discovering new music.

GETTING STARTED

As a new user to Tidal, the first time you open the service you are presented with a large music catalog and an empty personal library. To get started with listening to music, most users cater the search option and find an artist or an album they know they enjoy. Participants described the first period as bothersome - they had lost all their usual go-to-places for instant listening.

EMPTY LIBRARY & IMPORTING COLLECTION

The main concern amongst the participants when partaking in the study, was to lose all their playlists and having to rebuild their personal library. Four out of the seven participants said they missed their old playlists. Out of those four, only one bothered to search on google to see if it was possible to import playlists from Spotify to Tidal. He was relieved to find out that this was possible and his experience of Tidal changed for the better after doing that. It allowed for him to keep some of his 'instant listening' habits intact.

Information on importing playlist from other services is available on the website, but none of the participants looked for information there.

WHAT IS INTERESTING & HOW TO FIND MORE OF IT

During the first meeting with participants, a lot of the conversations revolved around how they went about to find new music. Participants had different habits and sources they would attend that had proven to bring them new input on music. After a week of using Tidal, many explained how they had trouble finding music they liked - their habits had been disrupted and finding new sources they trusted was difficult.

The habits and sources that participants used had demonstrated to provide them with music they enjoyed. These could be either algorithm based recommendations that had proven to be good (*Discover Weekly* was popular amongst the participants), a person the user respect or know have a similar taste in music, or a podcast or journalistic service that the user

Ah.. Start from scratch..

1 week

Seeking new sources
for new music
& go-to elements

- Library is empty
- Established habits are disrupted

- Failed to reestablish habits

acknowledge. A common approach is also to use the features in Spotify to find similar artists or playlists featuring a mix of known and unknown artists.

A main insight from the research with the participants was their struggling with establishing new habits or new sources for finding music. Participants explained how they felt left by themselves with no help in navigating the large catalog of music to find what was interesting to them. On the next pages follows some insights on how the participants experienced Tidal related to the different modes of finding new music. These are summarized in the illustration on the next page, and described further here.

CONSCIOUS EXPLORATION
When actively looking for new music, the participants experienced a lack in support for this - they felt they were left by themselves to scan lists of content. A hypothesis is that the structuring of the content is hard to grasp - the user don't know where to go to find what. As a user

you are presented with many choices, but not much information to see what could be interesting to you. For example, in New Albums - all different genres are presented interchangeably. You can filter by recommended, norwegian, top 20, and similar, but the research suggested that these groupings were not the established way for the participants to navigate music.

PEOPLE & SERVICES THE USER ACKNOWLEDGES
Users explained how they listened to collaborative playlists, playlists from friends and just playlists from random people whom they shared musical taste with. When adopting Tidal, these community based and social aspects of music streaming went missing. On Tidal user profiles are not public, which means a user can not enter a friends profile to listen to private playlists. It is possible to share a playlist, but not to collaborate.

When it comes to taste makers and curated playlists Tidal creates both playlists and journalism for those seeking professional

Discover Weekly

People of credence

Friends
Experts
Podcasts

**FINDING
NEW MUSIC**

Consciuos exploration

Similar artists
Playlists

Not actively looking

The radio
Concerts & festivals

recommendations, and invites experts and artists to create playlists. Some of the participants found playlists they enjoyed, but were frustrated with having to start the hunt all over again when they wanted a new one.

ALGORTITHMS & RECOMMENDATIONS
It has become increasingly common in digital services to develope algorithms based on user data to make recommendations on content appealing to the user. As mentioned before - the participants expected Tidal to be similar to Spotify, including smart recommendations based on user behavior. Their first impression of Tidal matched their expectations as it looks very similar, and after one week many still believed the service would start to provide them with

personal recommendations based on their listening history.

One participant explained how he felt he had to train Tidal to understand his taste in music so that it eventually could come with nice recommendations for him. He stayed away from his guilty pleasures, only to realize that Tidal didn't track him at all. Realizing this, his patience with Tidal dropped:

THEN IT'S EVEN MORE ANNOYING WITH ALL THIS STUFF FEATURED ON THE NEWS PAGE - WHAT ARE THEY BASED ON?

He felt he had no control and that Tidal was pushing music of no interest on him.

No algorithms?
So I have to do all the work myself?

Participant realising after a week that Tidal doesn't track his behavior.

Discover Weekly is my "laziness list" for when I don't know what I want to listen to

Participant missing her Discover Weekly list during the study period.

I like the radio, then I don't have to decide what to listen to all the time.

The participant who used the radio more often than a streaming service.

Aspects of the music experience

In order to gain a deeper understanding of the problem area, the user study and interviews investigated what role the music experience play in the daily life of a modern music consumer.

NOT A STAND-ALONE EXPERIENCE
Streaming music is not a stand-alone experience, is relates to aspects both personal, social and contextual. Or as former lead singer of *Talking Heads* and writer of *How Music Works,* David Byrne, puts it:

MUSIC RESONATES IN SO MANY PARTS OF THE BRAIN THAT WE CAN'T CONCEIVE OF IT BEING AN ISOLATED THING. IT'S WHOM YOU WERE WITH, HOW OLD YOU WERE, AND WHAT WAS HAPPENING THAT DAY.'

Personal aspects related to music and listening to music, emerged from the interviews and meetings with participants. Examples are how one participant would buy LPs although she didn't own a record player. She would stream the music, while enjoy owning a physical representation of her favorites. Another participant shared how his preparations for running his first marathin, was just as much about creating the perfect playlist that helped keep the right pace for the different parts of the run. One last example is how one participant just couldn't get rid of his CDs. Allthough he would never listen to them, and couldn't relate to the music anymore, they represented his youth personality. Those CDs had meant so much to him back then, that throwing them away now felt as betraying his younger self. Nostalgia and music's ability to provoke memories, was another aspect that emerged during the discussions.

Through these insights I gained a deeper understanding of the problem area and an empathy for the user, that laid the base for the rest of the project. Additionally, they prompted questions of how a music streaming service should relate to these aspects.

Social

"I DON'T WANT PEOPLE TO SEE MY GUILTY PLEASURES."

Music is to many an important way of expressing their identity. The social aspect of music is also present when building relations through for example sharing experiences and recommendations.
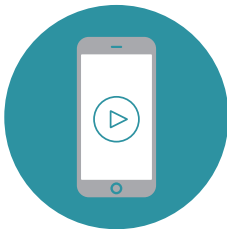
Convenience rules

"I NEVER CREATE PLAYLISTS, SPOTIFY DO IT FOR ME"

This aspects is for example expressed by the struggle of coping with too many choices when deciding what to listen to, and the desire for 'instant listening'. This relates to most people choose the path of least resistance[2].

Secondary activity

"I DON'T THINK - *NOW I'M GOING TO LISTEN TO MUSIC*. IT'S MORE SOMETHING I DO WHILE I'M DOING SOMETHING ELSE."

It is common to listen to music in the background while doing another activity - either to lift the mood or as a tool to perform better in the primary activity. Examples of activities participants often supplied with listening to music: exercising, cooking food, commuting, working.

1 Byrne, D. (2012): *136*
2 Thaler et. al (2010)

Complex habits

Each line represents one participant and shows how much he/she uses each service - all the lines together illustrate the complexity of the modern music experience. This is based on the card sorting exercise where the participants sorted the services according to they used the most.

Participants shared their habits of using several music services for different needs. The daily use was dominated by streaming, while turning to other services for specific features or moods that the initial streaming service did not fulfill. This could be listening to underground artists on SoundCloud, watch music videos on YouTube, create a special ambience with the record player, or get new input from the radio.

	Streaming	Live performance	Radio	Internet Radio	YouTube	LP	MP3 files	CDs
Daily/weekly								
Now and then								
Never								

Expert usability review of tidal.com

As the user study revealed frustration due to mismatched expectations and difficulties related to grasping the concept of Tidal, an expert review was conducted to explore what role tidal.com plays today in relation to these issues.

WHAT IS AN EXPERT USABILITY REVIEW
An expert usability review, or heuristic evaluation, is a method where you identify usability issues by investigating a system against a set of usability prinsciples (heuristics)[1,2]. It is cheap and quick, and a good way to recognise larger issues[1]. The downside of the method is that it does not pick up contextual or user specific issues[1], and the results can be subjectively linked to the evaluators expertise[2].

WHY WAS THE METHOD SUITABLE
It was considered a suitable approach since the hypothesis was not regarding questions on users themselves, but rather an existing solution and its qualities and shortcomings. Following the ethnographic research I felt confident I could conduct a review that included user and context specific evaluations. To ensure my evaluation was not subjective, a quick and informal session of reviewing the website was performed by a classmate. These two evaluations confirmed my conclusion and added minor discoveries of usability issues for consideration.

WHAT ARE THE PRINCIPLES BASED ON
The principles that the evaluation conducted on were based on the ten heuristics developed by the Nielsen Norman Group, with some adjustments made to better meet the conditions of a user curious to maybe sign up for Tidal.

The ten heuristics presented by Nielsen Norman Group are general principles basen on common properties of usable interfaces[2]. They are focused on system design and some of the principles were therefore considered irrelevant for this evaluation.

1 Hall, E. (2013)
2 Nielsen Norman Group (1995 a)
3 Nielsen Norman Group (1995 b)
4 Nielsen Norman Group (2014)
5 Henderson, R. U. (2015)

Principles

1.

User need/content strategy fit

Help the user reach his/her goal of visiting the website.

2.

Recognition rather than recall

Minimize memory load. Give cues to help the user recognize information and interactions.[4]

3.

Feedforward

Use visual affordance to give hints to the user on what follows that action[5].

4.

Consistency and standards

Things that appear the same should behave the same[1].

Findings from expert usability review

Tidal.com does not score high on the first principle as information on the service is not easily accessible, leaving users with unanswered questions and misperceptions of what Tidal is. This influence how the first experience of Tidal unfolds as users strive to grasp the concept and scope of the service.

CONTENT FOCUS, NOT PRODUCT FOCUS

Tidal's website is revolved around promoting the exclusive content the service provides, as a strategy to attract new users. It is visual and clean, with a lot of 'white space' and a dark graphic profile expressing quality and exclusivity. The landing page features the newest releases that are exclusivily available on Tidal, often with an embedded 30 second preview of the song, video or album in question. Scrolling down you are presented more exclusive releases, and a reserved user who only scrolls, will not learn anything more about Tidal than its exclusive content.

The strategy of devoting the home page to exclusive content releases, back fires when a user is not interested in the artists or albums promoted. The home page does not try to convince the user by any other means - it is selling the content, not the product. There is not presented any information on what Tidal is, what it offers, what it looks like, how it works or how much it costs. This information is all available, but inaccessible, hidden in the menu behind different labels.
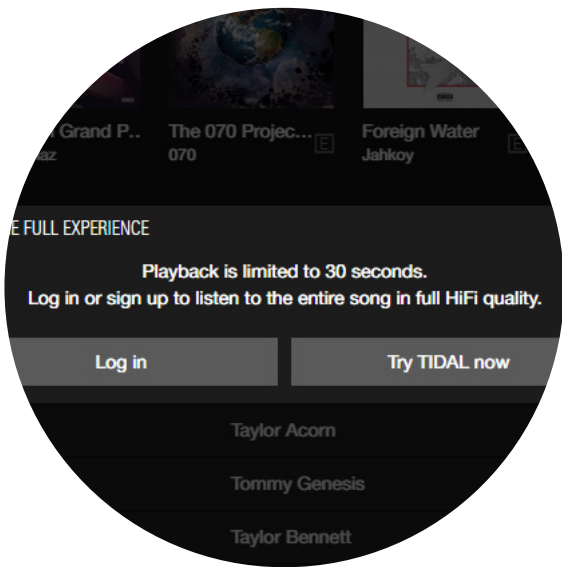
A TASTE OF TIDAL

If pressing the 'Stream.../'Watch...' you are, for most parts, directed to the webplayer where the user can navigate freely and listen to 30 second previews of songs and videos. This is a great opportunity for new users to explore and get to know Tidal before signing up. However, this is not an encouraged activity and hidden behind misleading labeling as described on the following page.
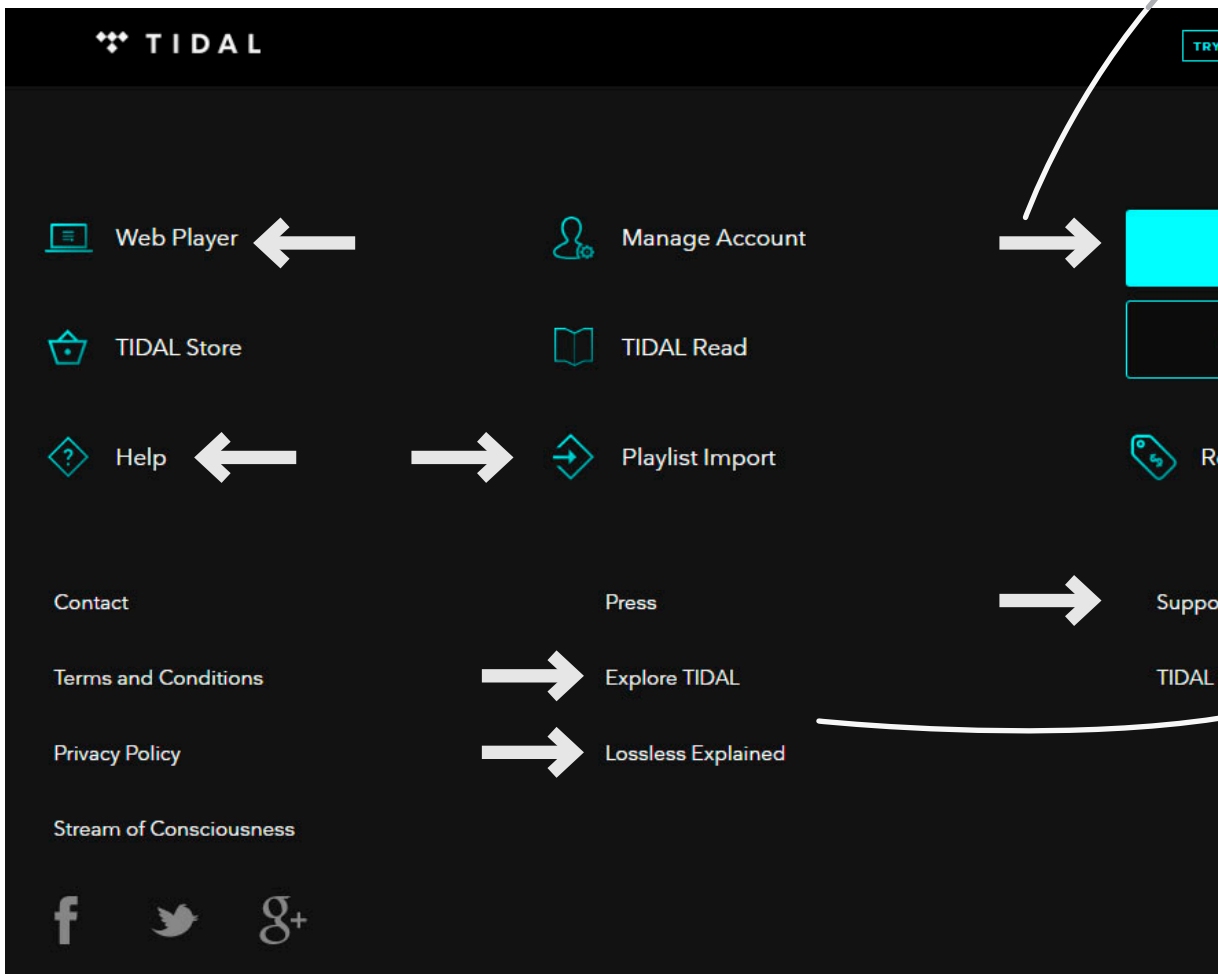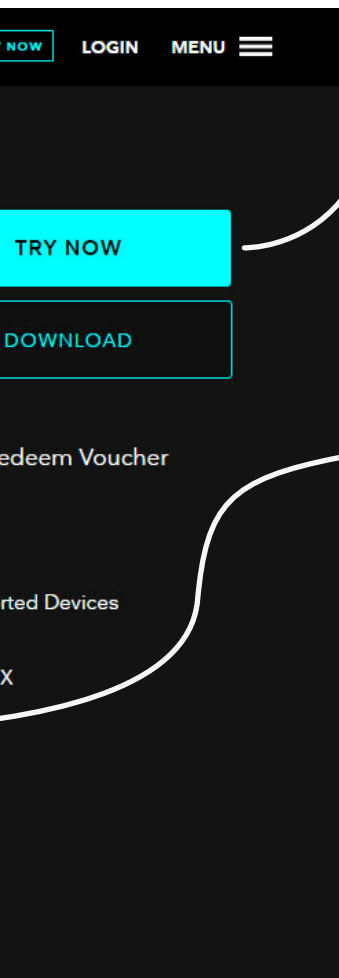
POINT NEW USERS

The white arrows point to the elements in the menu that contain information about the music player, the subscription models, the lossless option, the functionality - all the information a new users would like to know before signing up.

The website is not designed with new users in mind and fails to point new users to the information they are looking for. It is hard to recognize which option are of interest to you as a new user. A grouping of the options related to new users and already signed up users, could help a new users quickly find the answers they are looking for.

FAQ & SUBSCRIPTION INFORMATION

When pressing the 'Try now' button you are presented the different subcription options and a FAQ section providing most a lot of information a new users might ask for. This is information the user would like to have *before* starting the sign up process, and it's hidden behind a label that doesn't communicate to contain this information. This information should be relocated and given a label explaining its purpose.

AFFORDANCE & LABELING

It isn't only the 'Try Now' that suprises you - these two buttons (Explore Tidal & Lossless Explained) will bring to a video, and seven out of the nine main options will redirect you to a new site.

It is a recurring ileading to the two issues described above, is the lack affordance and misleading labels on buttons (read more in appendix). To a new user, the labels don't match the words you are scanning the site for. For example, when looking for information about the music streaming service, you mighst scan for 'About Tidal', but that information is part of the FAQ you find when pressing the 'Try Now'.

Another critical lack of affordance is when buttons unexpectedly redirect the user to a new site with new navigation, a new menu and a new 'home' button.

These issues are linked to the the principle 'recognition rather than recall'. When navigating the site, the user must learn and recall where the buttons lead, how to find his/her way back and where he/she finds what kind of information, as the buttons fails to provide cues to the user.

Menu elements (partial, left side)

NOW   LOGIN   MENU ≡

TRY NOW

DOWNLOAD

edeem Voucher

rted Devices

X

Insights on signup

To fully understand a user's first meeting with Tidal, an analysis of the gateway to the service was conducted. Based on the user study and an expert review, insights revealed lack in heuristics and engagement.
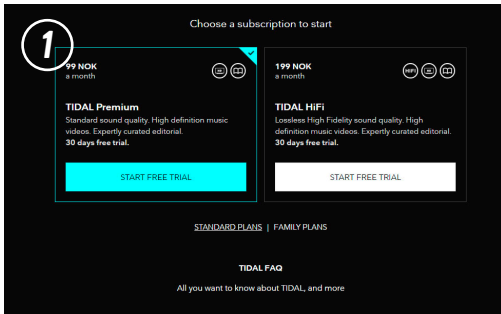
Choose subsciprtion plan & FAQ
The participants did not expect FAQ to appear behind the 'Try now' button. Many were not prepared for choosing a subscription plan when signing up for a free trial.
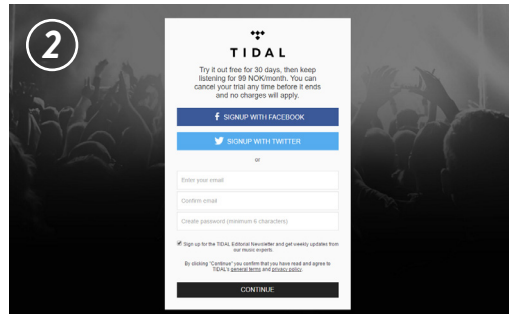
Register - Create account
The information presented here on cancelling the subscription was desired on the previous step as well. An option on signing up with Gmail was expeccted in addition to Facebook. The user is not in control, missing options to opt out, review steps and status visibility (read more in appendix).

WHY DO THEY NEED MY BIRTH DATE?
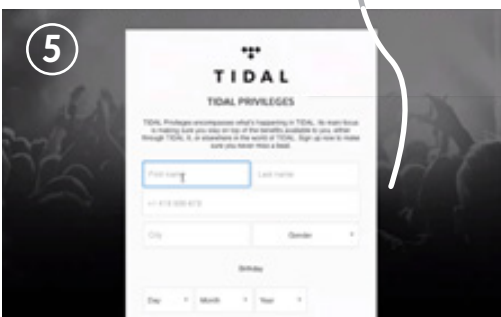
Register for Tidal Privileges
Participants could not get around what Tidal Privileges was, nor why they had to register personal information. They were frustrated with not having an option to skip this step. When asking the supervisors at Tidal about Tidal Privileges they could not explain what it is, nor why it is in the signup.

Option to connect with Facebook for login

Payment information
Nice to present the information on cancelation again, as many were skeptical to provide their payment information.
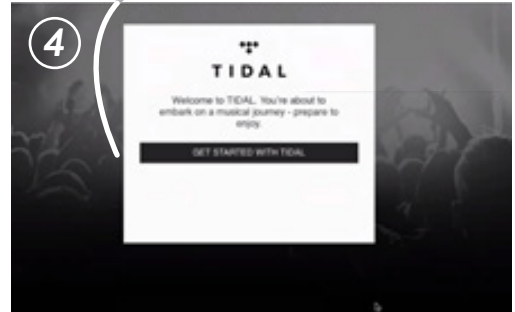
Welcome with 'Get started' button
This step implies that the sign up process is done, and the participants were surprised when the 'Get started with Tidal' button took them to step 5.

PHEW,
ALMOST THERE...!
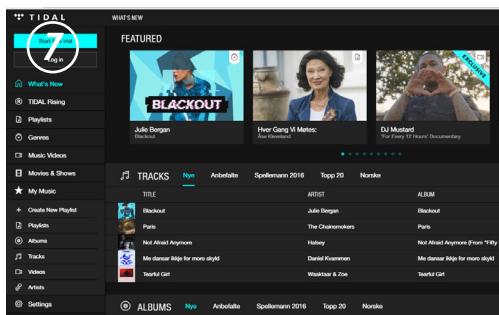
Web application - not logged in
The user is redirected to the web application, where many participants were puzzled that they were not logged in automatically.
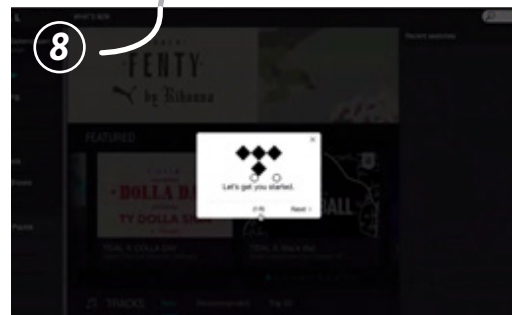
Wizard
Some participants conducted the wizard, while others preferred to explore by themselves.

Summary of findings

The extensive user research required systematization in order to learn what role the different points of interaction played in the prosess of adoping Tidal.

RESEARCHING
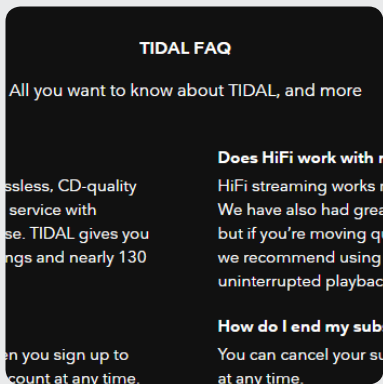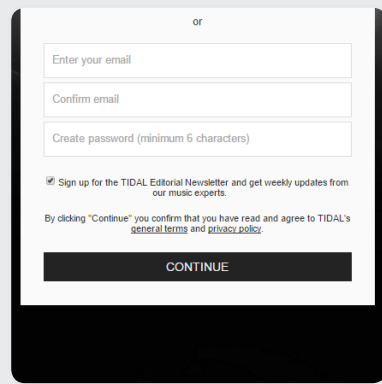
Search for info on product & subscriptions

Tidal.com

Information relevant for a new user is hidden. The website could play a greater role in helping the user grasp the concept of Tidal and set the right expectations.Lack of affordance, misleading labeling and redirection to external sites, results in friction.

SIGNING UP

Enters required personal information

The sign up process

The first step in the sign up process provides much of the information the user was looking for in the previous phase. The 4th step indicates copmletion, but there is a 5th step asking for more personal information without making it clear why. The process lacks progress visibility and control to the user.

GETTING TO KNOW TIDAL

r ikke lagt til noen videoer som favoritter
r å legge en video til favoritter, trykk på
menyikonet, så Favoritt

USING THE SERVICE

Getting started, understanding
features & navigation

Find more music &
establish habits

The onboarding

The wizard is perceived irrelevant and is skipped.
It's difficult to get an overview and grasp the
concept of what Tidal offers and how to navigate
it. The service offers a cold start - the library
is empty the user is left alone to find what is
interesting to him/her.

The loyalty building

The structure of the service fails to help users
create mental models. It is hard to find what
is interesting and keep finding more of it. The
service does not facilitate for establishing
habits.

Experience map of adopting Tidal

In order to understand the total experience a new user goes through, all the insights were mapped out contextually, and critical situations were recognized.

THOUGHTS & EMOTIONS

Exclusive releases, cool! Looks fancy

What does Tidal's musicplayer offer?

Where can I find info on what it costs?

Where am I know? I can't find my way back!

I found the webplayer, cool!

A free trial sounds great, exciting!

I need a subscription for a free trial?

Which subscription plan fits me?

I must remember to end the subscription to not be charged!

Done! Exciting!

What is this? Why do you need number and birth date?

IS TIDAL SOMETHING FOR ME?
Exploring and searching on tidal.com

LET'S GET THE FREE TRIAL
Signing up through tidal.com

The journey above follows a fictional user who adopts Tidal (read more in appendix). The experiences shown are based on the interviews, the user study and the expert review, and illustrates the emotions and experiences related to where in the sequence they arose. Situations that are marked represents intense emotional experiences - either positive or negative. The Peak-End Rule suggests that these peaks are keys to how the user evaluates the experience in retrospect, influencing the opportunities for loyalty building. Hence these marks presents painpoints to diminish and opportunities exploit, that the next chapter aims to develop solutions for.

Legend

- Emotion throughout the journey
- ♥ Peak of opportunity
- ▲ Painpoints

Finally, let explore!

This wizard was a waste of time

What a long menu. I don't know what half of it is, lots to learn

Cool, movies and journalism!

Where will I find something I like?

Where should I start? My library is empty..

This was a cool playlist! How can I find more of these?

There is so much irrelevant stuff here

No algorithms to help me?

Not what I thought Tidal was

MY FIRST SESSION
On the webplayer, desktop app or mobile app

MY FIRST MONTH
On the webplayer, desktop app or mobile app

PART 4
DEFINING THE
PROJECT VISION

Debriefing with Tidal

In order to build on my research findings, I met with my supervisors to hear their version of the issues I had recognized. The extensive research had revealed several approaches to address the problem definition, and we discussed which area my project should focus on.

THE FIRST TIME USE
The insights from the study question the relevance of today's wizard and points to an opportunity of making use of more engaging empty states. At whole, the research raise the question of whether a total redesign of the whole onboarding process is needed.

The supervisors at Tidal shared my understanding of these insights and said that a new wizard for the mobile app is in the pipeline. It will largely focus in solving the issue of users skipping the wizard. It will be based on a "learning by doing" approach, where the user is guided through some features and how they work, by completing tasks. It will focus on three features that Tidal has recognised as loyalty-building: adding music to favorites, creating playlists and adding music to offline library. These three will both make the user invest in the product, while facilitating for more streaming which helps building a stronger relationship to the service.

RECOMMENDATIONS & ALGORITHMS
Another main insight from the user study, was that the participants struggled with finding the music they were interested in and establishing trusted sources for finding new music. In addition, the participants were frustrated when realizing that Tidal didn't make smart personal recommendations.

In the meeting, the supervisors further explained Tidals approach to recommendations and their vision for the service. While Spotify has developed as a data driven service, Tidal believes in the value of human curated playlists and recommendations. Spotify has developed into a hit making service with it's power through millions of playlists followers, while Tidal wants to create a sustainable music streaming service where the artwork as a whole is in the centre.

The supervisors agreed that the approach today is demanding quite a lot from the user. They want to explore ways to ease this while still meeting their vision of human curated quality. They want to approach Apple Music's level of algorithm usage which seems to be 50/50 AI and human curated. They said they will be looking into how user data can be used as a tool to, for example, strengthen their editorial practice.

IMPORTING PLAYLISTS
One issue preventing new users from adopting Tidal as their primary streaming service, is a general one: the loss of their existing library and playlists. This is one obstruction counteracting migration to new music streaming services. When sharing this issue, and how the option of importing music through *Soundiiz* could be made more accessible and better timed, they explained how this is a complex issue. Tidal can not offer this service themselves, it has to be a third party, and promoting it is also disputed.

Choosing focus area

First time use

Import music

Recommendations
& algorithms

When discussing these three topics, it became clear that there was a great interest for exploring how Tidal can make use of artificial intelligence and user based algorithms, while still provide a service and a music experience in line with their vision. I could also see a lot of potential within this area when related to assisting the user in finding music of relevance, and this was chosen to govern the next phase of exploring concepts.

I wasn't quite convinced by the new wizard they were planning, and believed a more holistic approach would be valuable. Additionally, as the problem definition was based on my hypothesis about the need of a redesign of the onboarding process, was confirmed with the user research, it was clear that this area should also be included as a focus when developing concepts.

Exploring the chosen focus area

With a large set of insights mapped out, it was time to explore how the chosen focus area can provide solutions that meet the user insights.

─── *VISION* ───

The project should explore alternative ways Tidal can be designed to help users find the music they like, and keep finding more of it. The solutions should be in line with Tidal's strategy on use of human expertise versus user based algorithms, and their vision on the superior music experience.

DISCOVERING NEW MUSIC

One aspect of the music experience that proved itself as critical when adopting a new service, was *to find new music - and keep finding more of it*. The user study also suggested that Tidal did not support this very well, or as one participant put it:

I FELT I WAS LEFT TO NAVIGATE THIS HUGE LIBRARY ALL BY MYSELF.

The figure on the right illustrates how Tidal, Spotify and Apple Music apply user data based algorithms to generate and present content, and to what degree the user is provided tools to be in control. This project aims to explore how Tidal can proceed in the different directions to offer a music service that better assist the user in discovering interesting music, while being in accordance with Tidal's strategy concerning employment of user data algorithms and their identity as a quality editorial service.

REFINING THE EDITORIAL APPROACH

Tidal could advance further as an editorial music service by building its credibility around journalism and curating by experts and musicians, and the service's foothold amongst artists. The user study showed that many turned to journalist mediums to stay updated and discover new music. Tidal could combine these qualities with its catalog to bring more value to the user and become the quality music service they aim to be, while distancing themselves from the competition.

Recommendation approaches

USER IN CONTROL

EDITORIAL
CURATED

DATA DRIVEN/
ARTIFICIAL
INTELLIGENCE

AUTOMATIC
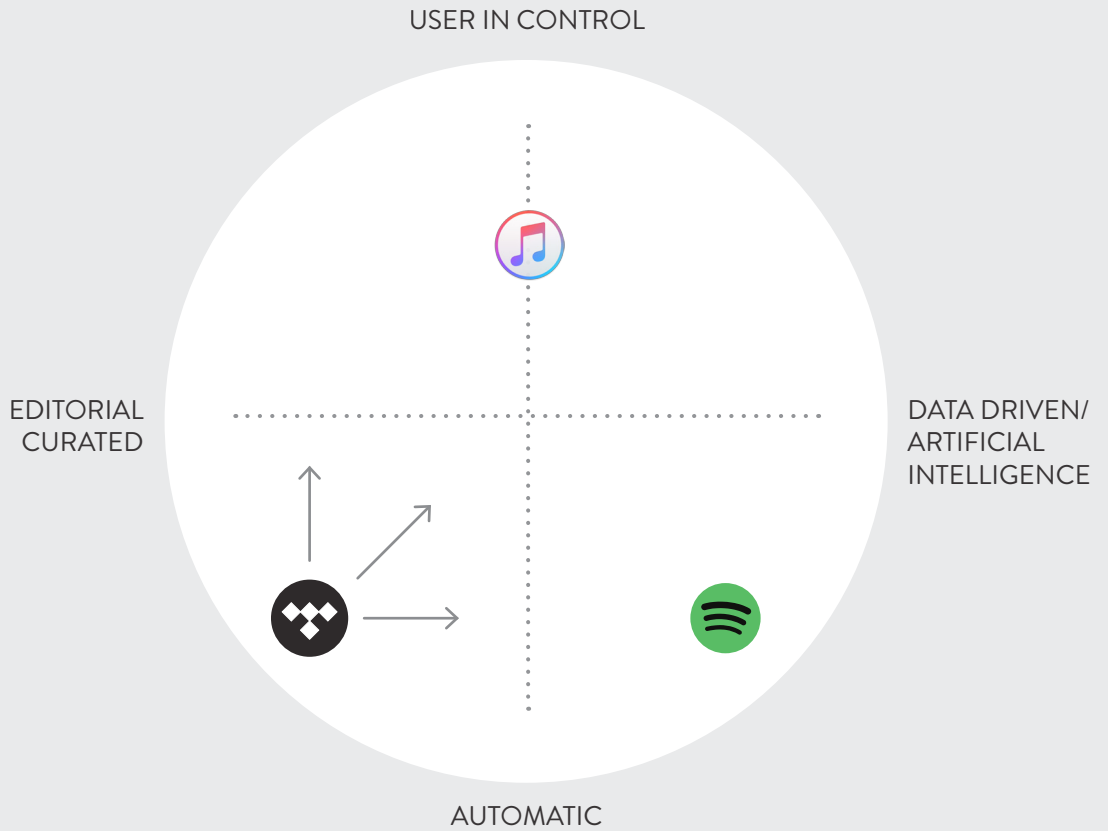
MORE CONTROL TO THE USER

By providing the user with more control to adjust and personlize the service, he/she will find the service more relevant by being presented content related to his/her preferences. Apple Music has implemented nice ways for the user to adjust what kind of genre and which artists he/she wish to be presented recommendations on.

A more radical direction for a user controlled editorial service is to open for user generated content. Tidal possesses an opportunity as their high fidelity streaming option attracts users to a greater extent devoted to music. Tidal could facilitate for a more community based service where users share, recommend and discuss music, directly linked to their catalog. The user study showed how people caters to private persons they trust for recommendations, which Tidal could better facilitate for. In addition many find music as a platform to build relations - enabling for this in the service, can bring more user engagement and stronger loyalty to Tidal.

User generated content based services are dependent on active users, which might be a challenge to achieve from the user group identifying with the persona 'The Easy Listener'. The pitfall for this approach is then that it doesn't present content appealing to half of Tidal's user group. Another challenge for this approach is to ensure the quality of the content, which is critical to Tidal to hold their identity as a quality music service.

SMARTER RECOMMENDATIONS

Recommending content based on user behavior data has proven to enrich the user experience by easing the quest of discovering new content and, in relation to music, deciding what to listen to. This approach applies to the trend of 'easy listening' based on how convenience rules and is embraced by both Spotify and Apple Music. Spotify has invested largely in developing algorithms to generate both content and what the user is presented, and has made great success with it feature 'Discover Weekly' serving personalized playlists. Apple

Music involves more humans when curating playlists and leaves the user with some control to adjust the presentations, which is more in line with what the Tidal supervisors explained might be of interest in the future to support the work of the editorial teams.

Even so, developing successful user behavior based algorithms is complicated, and if they fail the result can counteract its purpose and ruin the user experience. In relation to music the pitfalls are linked to listening behaviors, and as they are complex and ever evolving - the algorithms need to be sophisticated. Spotify's Discover Weekly has encountered a problem well described by Juan Buis in The Next Web[1]:

THE ALGORITHM NOW KNOWS MY TASTE ALL TOO WELL, AND IT'S SERVING ME THE SAME KIND OF SONGS OVER AND OVER AGAIN.

If the user mainly rely on these smart recommendations when listening to music, there is a risk of a filter bubble that will narrow the variations of content and new input for the user[2]. Another challenge is related to people's complex habits with enjoying different genres and tastes that evolve over time. An algorithm will constantly strive for stability and struggle to pick up on the nuances and variations in a user's behavior.

The supervisors at Tidal had recognized these downsides of using user based algorithms, while also inhabiting a belief that professional curators and musicians bring value to a music experience. In addition, Tidal do not have the funds to develop the algorithms necessary to meet their requirements. However they are interested in how Tidal in the future can implement user data based algorithms to support the work of the editorial teams.

1 The Next Web (2016)
2 Deutsche Welle (2016)

Benchmarking of how services assist users in finding content of interest
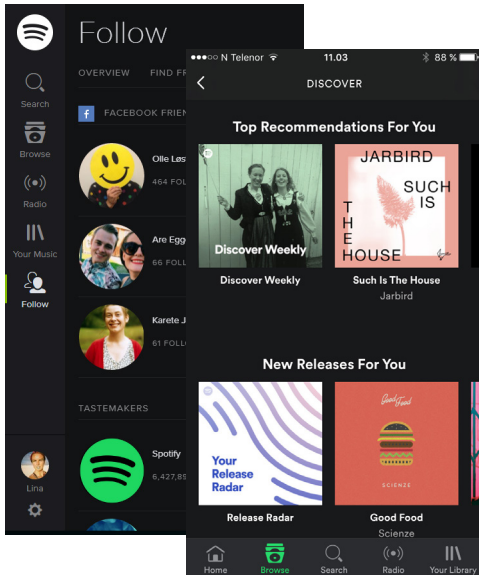
Spotify

Spotify is embracing 'easy listening' and offers recommendations based on the users behaviour. Most of the featured playlists are also curated by algorithms; for example *Discover Weekly*. The user has no control of what he/she will be recommended - the only way to adjust this is to change his/her behaviour.

Another feature is the public profiles enabling the user to follow friends and 'taste makers'. This allows for a control based way to establish sources of music recommendations.
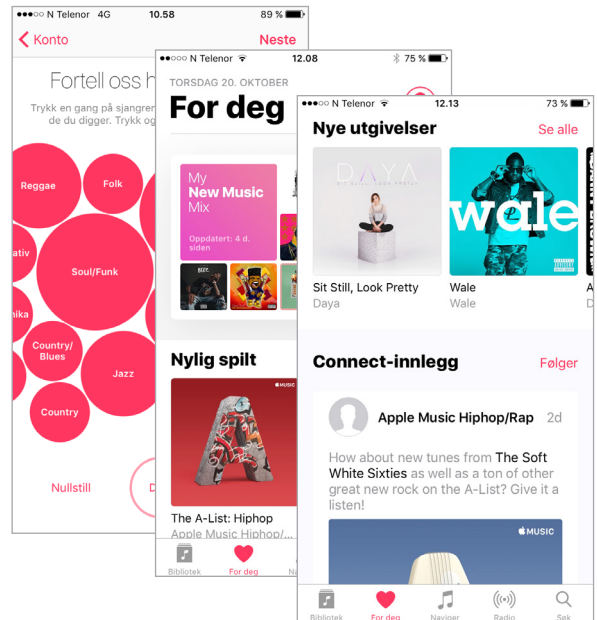
Apple Music

Apple Music offers content generated by algorithms and by humans. The wizard includes an activity where the user share his/her taste in genres and artists which is used to create a *For you* feed presenting content related to these settings. This recommendation feed is available right after the wizard is done, providing a warm welcome, and adjusts according to user behavior. The user can also follow artists and taste makers for updates directly. The user is to some degree in control of the recommendation feed by being able to adjust the genres and artists chosen in the wizard, later in the settings.
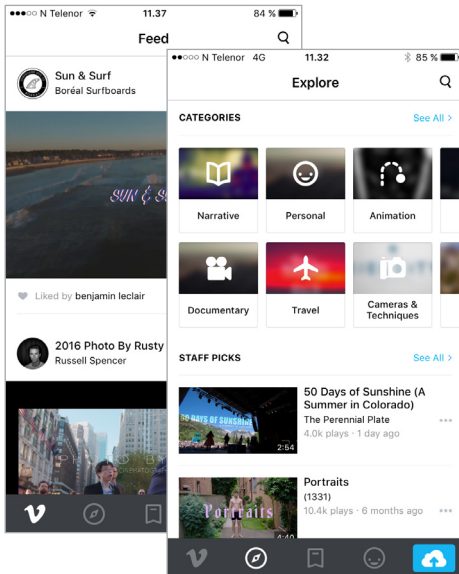
Vimeo

Vimeo has a clear distinction in sections, which is related to how recommendations can be made. *The Feed* is where the user is in total control of what is appearing by following profiles. *Trending* presents videos with many views and in *Discovery* the user can navigate by categories. The featured category is *Staff Picks* which offers expert recommendations. This way Vimeo provides the user with different modes to discover new videos.
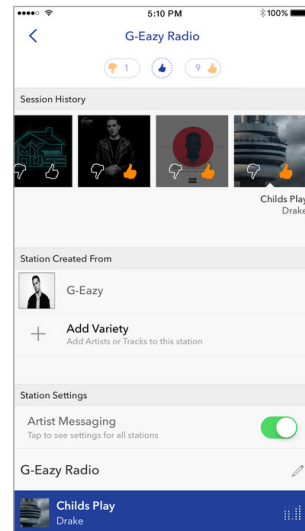
Pandora

Pandora is a music radio where the catalog is analysed based on musical properties. The user can search for a song and make a station that will play that song and music with similar attributes. The user can then add variations to adjust what music is presented on the station. In addition the user can like and dislike songs played on the station to control what kind of music should be played on that station. The service offers some simple ways for the user to control what music the station plays, but the focus is also to be different from a playlist by not showing the queue and not give the user full control.

PART 5
DEVELOPING
THE CONCEPT

Concept development process

From the definition of a project vision and exploration of the focus area, a development phase followed as decribed below.

PROJECT VISION

IDEATION

Through an explorative ideation session based on the directions staket out on the precious pages, ideas on concepts and initiatives where produced and quickly sketched out. Two main groups of ideas emerged: group one consisting of ideas characterized as additional features to the existing music player - for example a mixing board where the user can adjust different musical aspects like tempo and geographic origin, and be presented a playlist with songs matching those qualities. This group addressed user engagement and loyalty building aspects.

Group two contained ideas related to redesigns of the existing player, and was the direction chosen for further exploration. This choice was based on the consideration of opportunities related to both onboarding and loyalty building, as well as the project vision.

CONCEPTS

A selection of the ideas in group two were developed further by mocking up both digital visualizations and paper prototypes. The ideas evolved in a singular direction refining the chore of the idea to explore its full potential.

Through feedback from supervisors, quick guerilla testing with classmates, and by evaluating the ideas based on prospects of reaching the vision, two ideas were chosen to bring forward.

The two ideas addressed respectively personlization through a service consisting of widgets and a newspaper analogy for structuring and presenting musical content. These two aspects waa merged into one concept for a music player.

Test   Analyse
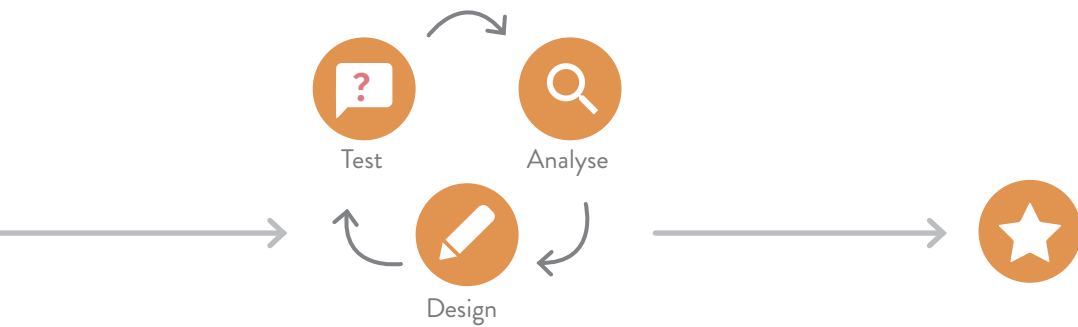
Design

ITERATIONS

The concept development phase may be categorized as an iterative process through its steady refinement of the design based on user testing and other evaluation methods[1].

The approach was inspired by lean ux principles where the process is flexible rather than rigid, and based on hyptheses and related testing[2]. This commits the work to a continuous improvement of the design through making editable and quick prototypes[3]. Lean ux enables for focusing on parts of the total user experience in a conscious manner. This allows for exploration of specific elements or flows, while still obtaining the holistic view and measure against the project vision[3].

The concept was developed through four rounds of the cycle above focusing on respectively the music player structure, the website, the first meeting with Tidal, and onboarding mechanisms. Each round was conducted with a focus on the next step in the cycle: how to make the prototype to best test the hypothesis, how to test to learn the most, and analyze to reveal improvements and what to explore in the next cycle. A total of eleven external users, without prior knowledge to Tidal, participated in the tests where each round of tests varied in scope.

FINAL CONCEPT

The final concept is a solution based on insights from both the reasearch and the testing during iterations, developed in commitment to the project vision. Due to limitations in testing the concept's behavioral score on loyalty building, the final concept represents a potential solution in need of further validation. The solution is developed on an interface level and is presented in the next chapter.

1 Nielsen, J. (1993)
2 Gothelf, J. (2013)
3 Gothelf, J. (2011)

Personas

In order to develop solutions that meet the needs and motivations of the users, two personas was created to guide the development process. They were based on the user research and target user groups of Tidal.

Tidal Premium
THE EASY LISTENER
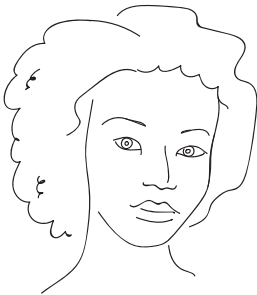
I DON'T CREATE ANY PLAYLISTS MYSELF, IT'S SUCH A HASSLE.

Sandra Foster (21)

Sandra's motivation for signing up for Tidal is thelisten to Beyoncé's newest album Lemonade.

Experience goal | Have fun

End goal | Stay updated on trending artists

Life goal | Being a fan is her identity

Time spent on:
Exploring | ● ● ● ● ● ● ● ●
Listening | ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●

The two target user groups of Tidal differ in both motivations for signing up, habits in listening and discovering music, and generally what they are looking for in a music streaming service. Tidal is targeting both and this project aims to explore how a solution can meet the needs and preferences of both. Hence the personas was based on characteristics from these user groups in combination with the user research insights, and were created in cooperation with the supervisors at Tidal. The personas acted as guidance throughout the concept development, as well as references when discussing the project with supervisors. (Read more in appendix.)

Tidal HiFi
THE MUSIC NERD

I BELIEVE IN MY OWN TASTE, NOT THE ALGORITHMS'.

Norman Sandler (32)

Norman's motivation for signing up for Tidal is the lossless audio quality and the compatibility to his stereo sound system.

Experience goal

Be in control

End goal

Know what he's listening to so he can talk about it

Life goal

Music is his identity

Time spent on:
Exploring

● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●

Listening

● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●

Concept exploration

To further explore the directions recognized within the focus area, I conducted an ideation session where I produced tangible representations to be able to make an evaluation of their potential.

EXPLORATIVE MIX BOARD

COMMUNITY DRIVEN
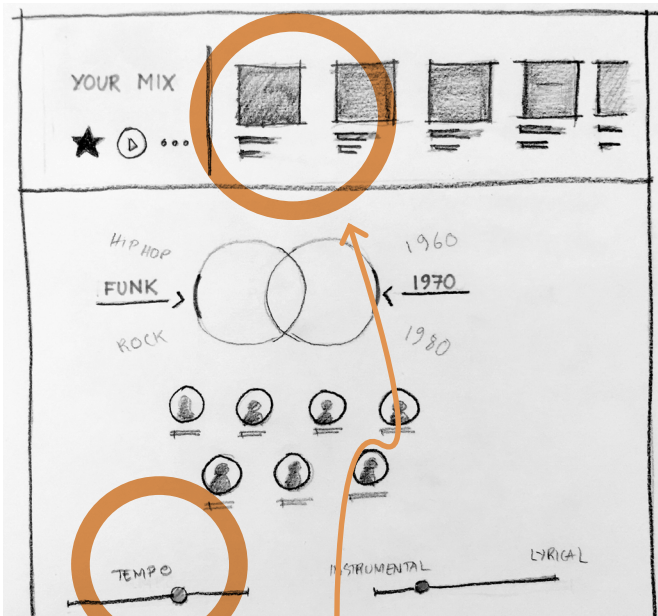
A playlist generated by the input from the user, aiming to help the user discover new music in a fun and engaging way.

Different controls let the user adjust different aspects of the music. I lets the user be in control of the exploration.
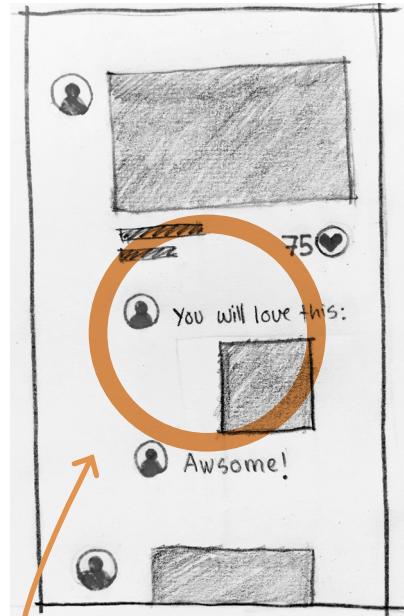
A user based service where the user discover new music by connecting with the community, where users can share recommendations and create content through playlists.

Above is a selection of the ideas that was explored further in paper mockups. The Explorative Mix Boeard concept was one of several ideas based on creating an additional feature to the existing music player. I decided to go for a concept that involved the music player as a whole to be able to include the focus on first time use from the very start of the concept development. The Newspaper Analogy showed potential on a structural level and was an intriguing concept for exploring the question of algorithm versus editorial curation, and was the concept creating the most engagement when guerilla testing the concepts. Hence this was chosen to build on further, along with aspects from the other concepts to be tested.

WIDGET BASED PERSONALIZATION   NEWSPAPER ANALOGY
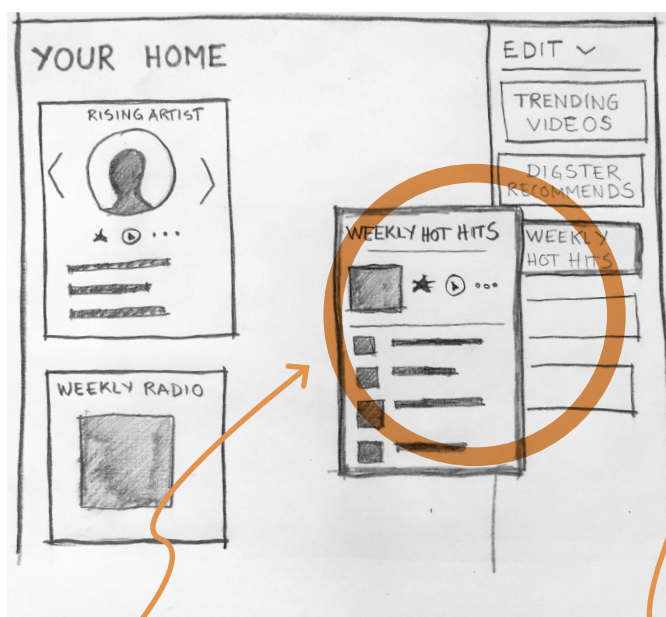
The user can create his/her own home dashboard with different widgets by dragging and dropping from a library og widgets produced by Tidal and external parties.
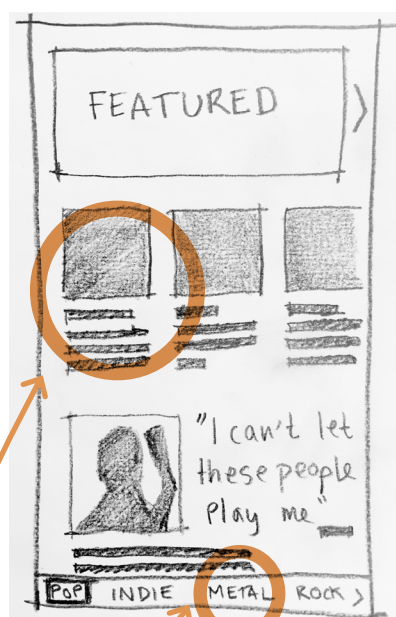
The user can scan the sections of interest to stay updated, while easily explore new genres.

Help users discover new music through regular columns - for example written or audio album reviews directly linked to the album.

Developing the concept

In order to ensure the chosen concept developed in line with the project vision, a set of requirements were created.

Requirements

1.

Structure

Help the user create a mental model of Tidal to quickly and easily be able to navigate the service.

2.

Loyalty building

Help the user establish habits and find go-to places for both instant listening.

3.

Recommendations

Help the user discover new music, and keep finding more, while leaving the user in control.

4.

Editorial identity

Strenghten Tidal's identity as an editorial based service, and help the user quickly grasp the concept of the service.

THE PROJECT VISION & PERSONA GOALS The requirements were created by reviewing the vision in relation to potential of the Newspaper Analogy concept, and based on the needs and goals of the personas. These requirements acted as guidelines in decision making and when evaluating usability tests. On the next pages follows a presentation of the final concept, followed by a closer look at each of the four parts of the concept scope.

Scope of the concept
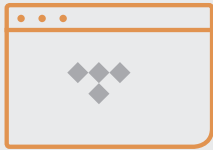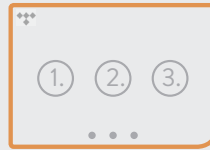
Website	Signup	First time use	Music player
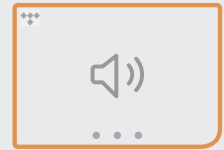
Holistic: The concept addresses all the stages of the onboarding process, including the music player itself. The website is included as it is a common first meeting with Tidal, where most Android and web users sign up for the service. iOS users mostly sign up via Apple Payment which is a fixed process.

The music player has been developed and tested for both desktop/web and mobile devices, while the new tidal.com and the onboarding initiatives has only been designed for desktop. This is due to the consideration that a successfull structural redesign of the music player required evaluation on both desktop and mobile use cases, while the tidal. com and onboarding designs need tailoring, but are applicable for both sizes.

☆ MY MUSIC   ○ SEARCH   ⚙ SETTINGS

Not in focus of concept due to lower priority and relevance for the problem definition.

The concept does not include the sections *My Music*, *Search* and *Settings*, which are all presented more or less as they exist today. Neither is read.tidal.com, album/playlist/ artist pages, which in this concept has the same qualities and properties as they do in the music player today.

The music player concept

The final solution for the music player is a music player facilitatin the user to discover new favorites, and keeping finding more. The prototype on the right presents the final solution as it would behave after some initial use. The next pages presents the first time use flow for both personas, showing how the product evolves in complement to the eprsonas. Next follows a more detailed description of the music player solution and how it build loyalty to new users.

Further on follows presentations of the rest of the concept scope and how they provide for an improved first time use and stronger loyalty building.

See more on the development and prototypes in the appendix.
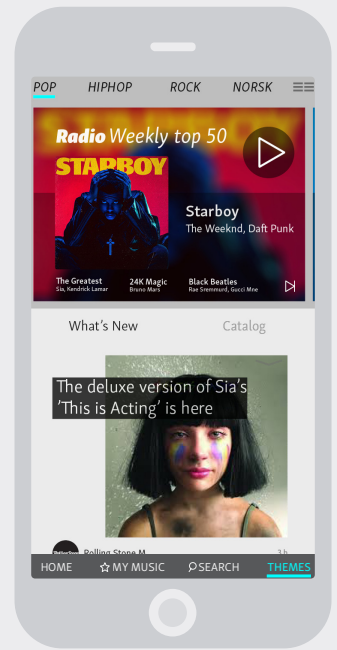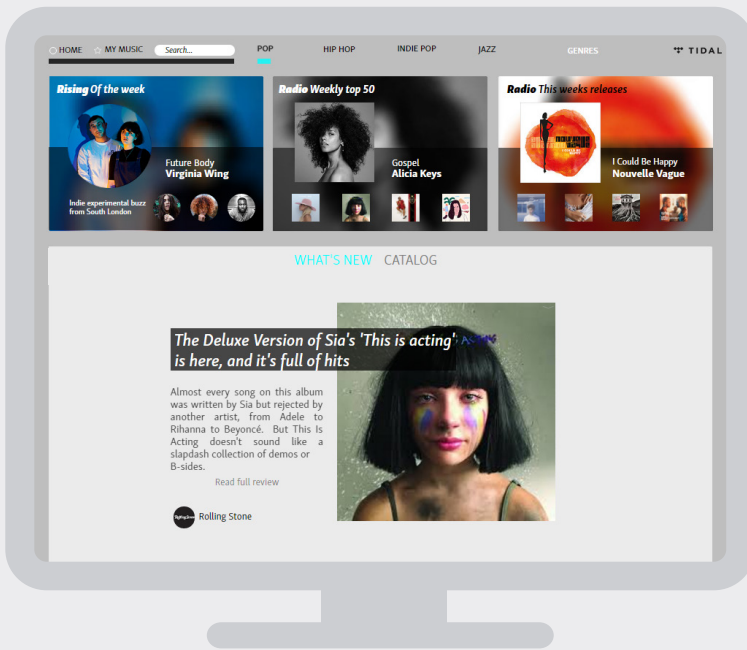
THE MUSIC PLAYER SOLUTOIN OF THIS PROJECT

Invision prototype:
https://invis.io/GDA4W7ER2#/215536185_22_Home
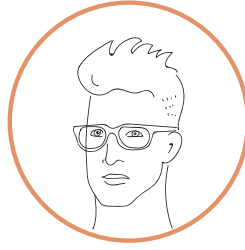
SCENARIO: THE MUSIC NERD

The music nerd Norman Sandler has signed up for a free trial of Tidal to experience if the service is a better fit than Spotify. The first time he opens the application, he sets out to explore its features and tries to get an overview of what is offered.

WELCOME TO TIDAL!
Where artists and fans unite

◆◆◆

Music journalism
High definition videos
Playlists created by experts

Get started

PICK UP WHERE YOU LEFT OFF

*Start listening to music, and you'll find **your recent history** here.*

ACTIVITY SINCE LAST VISIT

*A daily digest of what your **favorites are up to**.*

Lars Vaular

HOME ☆ MY MUSIC ⌕ SEARCH THEMES

☆ MY MUSIC   Offline

TRACKS   ALBUMS   PLAYLISTS   ARTIST

*Lets start building your very own music library!
Find something you like and press the star!*

Get inspired here!

*Already have a library?
Import your music collection through soundiiz.com*

HOME   ☆ MY MUSIC   ⌕ SEARCH   THEMES

1 ————————→ 2 · · · · · · · · · · · · · 3 · · · · · · · · · · ·

He starts to systematically go through the tab bar.

"Nice, I'll try importing my playlists!"

————————→ Redirecting user
· · · · · · · · ·   User action
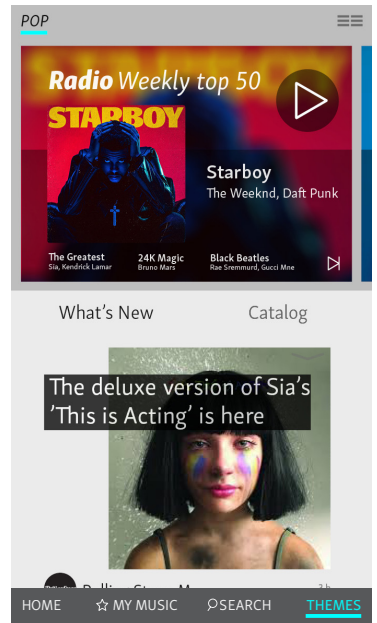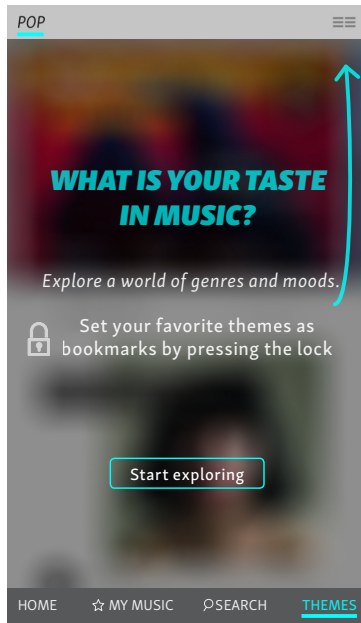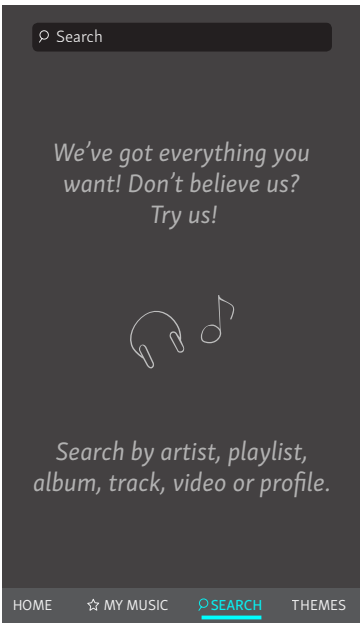
4 "Challenge accepted, I'm going to try out my garage punk collection."

5 "Cool, yes something other than pop would be nice."

6 "Rolling Stones Magazine is here, cool."

Explanatory text is only prompted for first time users until they have completed the action being decsribed.

Screen 7 (POP)

POP

The Greatest — Sia, Kendrick Lamar
24K Magic — Bruno Mars
Black Beatles — Rae Sremmurd, Gucci Mne

What's New   Catalog

// PLAYLISTS

Songs That Inspire Me
Created by: James Vincent McMorrow
Featuring: Black Heat, D'Angelo

Hot on the charts
Created by: Tidal Pop
Featuring: The Weeknd, Daft Punk

Bruno Mars Essentials
Created by: James Vincent McMorrow
Featuring: Black Heat, D'Angelo

twenty one pilots Essentials
Created by: Tidal Pop
Featuring: The Weeknd, Daft Punk

ALBUMS

LADY GAGA / JOANNE

HOME   ☆ MY MUSIC   🔍 SEARCH   THEMES

Screen 8

×

Genres
● ● ●

POP   NORSK   R&B

ROCK   HIPHOP   METAL

INDIE   ELCTRONIC   BLUES

Moods
● ● ●

CHARTS   CHRISTMAS   LOUNGE

FOCUS   ROMANTIC   PARTY

Press the lock to set your favorites as bookmarks   🔒

HOME   ☆ MY MUSIC   🔍 SEARCH   THEMES

Screen 9

×

Genres
● ● ●

▌*POP*   ▌NORSK   ▌R&B

▌ROCK   ▌HIPHOP   ▌METAL

▌INDIE   ▌ELCTRONIC   ▌BLUES

Moods
● ● ●

▌CHARTS   ▌CHRISTMAS   ▌LOUNGE

▌FOCUS   ▌ROMANTIC   ▌PARTY

Tap to select four sections
[Done]   🔒

HOME   ☆ MY MUSIC   🔍 SEARCH   THEMES

⑦

⑧

⑨

"So what is catalog then? Ah great, an overview of it all!

Ok, let's check out this menu thing up here."

"All right, let's try this, anything else than *pop* would be nice."

⟶ Redirecting user
∙∙∙∙∙∙∙∙∙⟶ User action

Genres
• • •

POP	NORSK	R&B
ROCK	HIPHOP	METAL
INDIE	ELCTRONIC	BLUES

Moods
• • •

| CHARTS | CHRISTMAS | LOUNGE |
| FOCUS | ROMANTIC | PARTY |

Done

HOME ☆ MY MUSIC 🔎 SEARCH THEMES

POP   HIPHOP   ROCK   NORSK

Radio *Weekly top 50*

▶

Redbone
Childish Gambino

The Groove   Rainy people   Man on fire
Henry Chikane   Bruno Mars   Ear St. Clair

What's New   Catalog

Lizzo does it again, get funky
with her latest album

Rolling Stone M

HOME ☆ MY MUSIC 🔎 SEARCH THEMES

⑩ ⑪

"Ok, lets just try these ones"   "Cool, it worked."

101

SCENARIO: THE EASY LISTENER

Sandra Foster is a big fan of Beyoncé. She has been waiting patiently for Beyoncé's newest album to appear on Spotify, but it seems to be of no avail - she has decided to sign up for a free trial of Tidal.

WELCOME TO TIDAL!
Where artists and fans unite

◆◆◆

Music journalism
High definition videos
Playlists created by experts

Get started

PICK UP WHERE YOU LEFT OFF

Start listening to music, and you'll find **your recent history** *here.*

ACTIVITY SINCE LAST VISIT

A daily digest of what your **favorites are up to**.

Lars Vaular

HOME   ☆ MY MUSIC   ⌕ SEARCH   THEMES

⌕ Beyonce

Artists

Beyoncé   Dominique Beyonce   Dama Beyonce

Albums

Lemonade Beyonce   Platinum Beyonce   I am ... Sash- Beyonce

Playlists

Lemonade   My Inspirations   Legen

HOME   ☆ MY MUSIC   ⌕ SEARCH   THEMES

① → ② ·········· ③ ··········

She goes straight to search to find the album that motivated her to sign up.

"Nice, the album is here!"

→ Redirecting user
········ User action

102

Returning to *Home* she will
see it has adapted. The text
for adding artists is still there
to ensure she notice the
correlation

(Original screen)
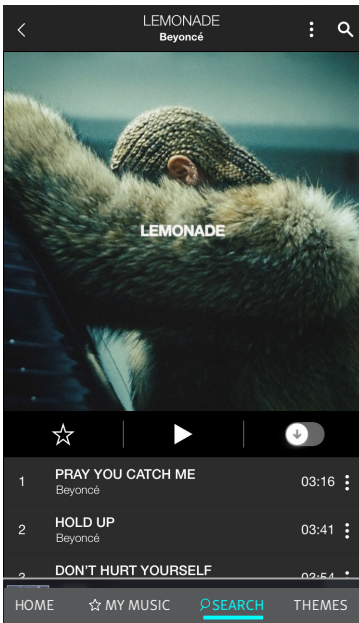
(Original screen)
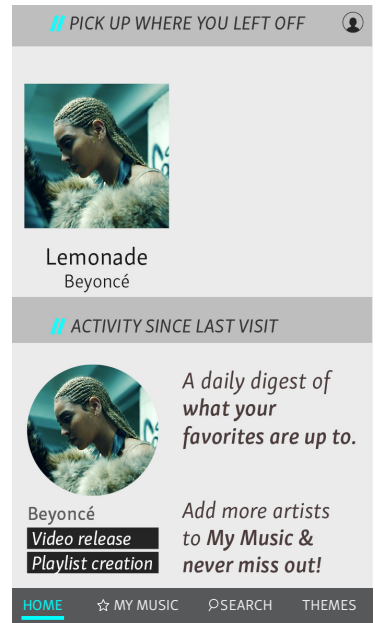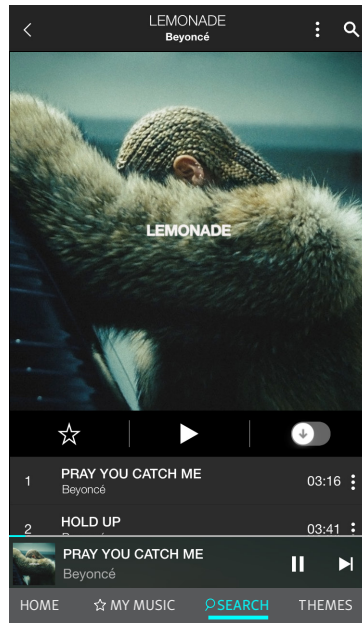
④ "Finally I get to hear it!"

⑤ "Sweet, I'll just star it right away."

⑥ "All right, lets start exploring"

Presentation of the music player concept

Home - personal start screen
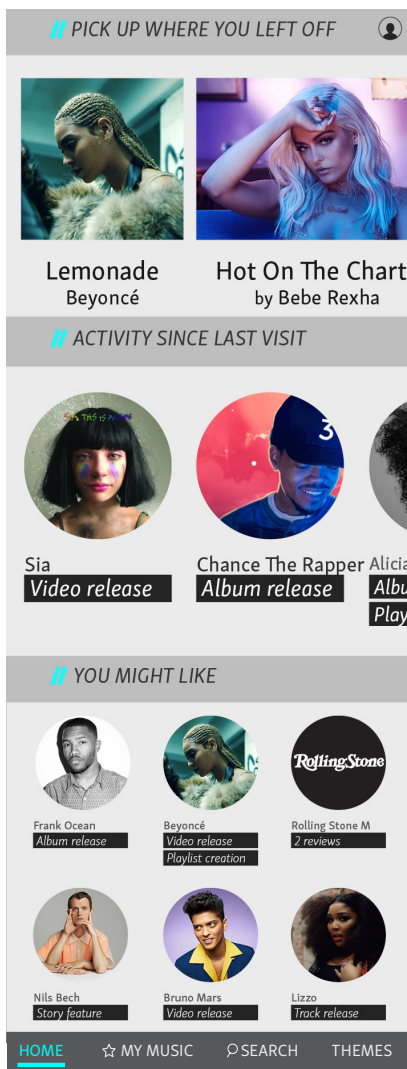
Quick start
Enables for a quick start of the listening experience - people tend to listen to the same playlists/albums over a time period.

Personal digest of favorites' activity
By adding music, artists and expert profiles to *My Music*, the user will be fed the recent releases and creations of his/her favorites. Today the user is left on its own to navigate the sections *What's New* and *Tidal Rising* to scan for new additions of interest. Tidal today does not provide any tools to help the user keep finding more of music of interest. This lets the user stay updated while being in control of what to be presented.

Suggestions of activity that might be of interest
Based on the music and profiles the user adds to *My Music*, it is suggested similar profiles to engage the user in discovering new music and help find new favorites.

Tab bar based navigation
The reduced number of main sections allows for providing direct access through a tab bar, instead of hiding the sections behind a hamburger menu as in today's mobile app (read more in appendix). The play bar will lay on top of this when playing a song. The web and desktop application has the navigation in a top bar.

Genre - Exploration screens

What's New

Weekly inspiration widgets

For the persona Sandra Foster who thinks it is tiresome to find new music: Each genre presents three widgets – A radio featuring the weekly top 50, *Weekly Rising Stars* introducing up-and-coming artists and their newest releases, and a radio featuring this weeks new releases. They are all fixed elements that change at a weekly basis with news within that genre. These elements aim to be "go-to elements" for the user to check out every week within favorite genres, or as an introduction to a new genre.
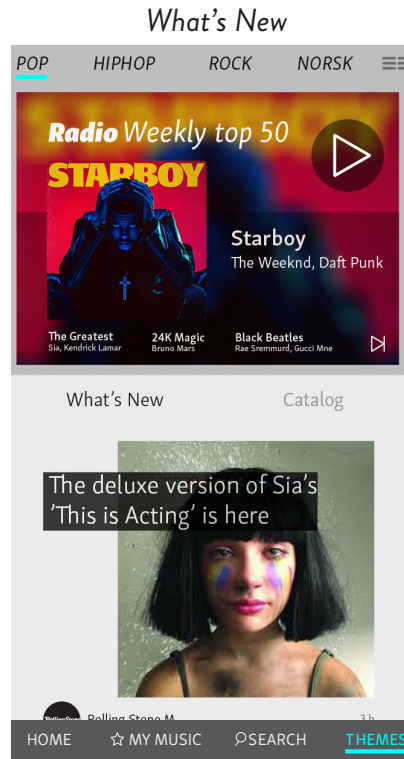
Feed with the newest addition to the genre/mood

The feed presents albums, tracks, videos, playlists and journalist stories, relevant for that genre/mood section. This is targeting the exploring mood. For example: the persona Sandra Foster can scroll down and be presented with visual elements with short descriptions to catch her curiosity.

Catalog sorted in type of media

Within each genre/mood you will find the catalog with all the music categorized for this genre/mood. The catalog is divided in types: playlists, albums, tracks, videos and stories - similar to the section *Genres* in today's Tidal. This view is dedicated to getting an overview of new additions – the persona Norman Sandler can go here to quickly scan for new releases as he often knows what he is looking for. The catalog is structured as swimlanes, allowing for browsing multiple categories of content within minimal navigation.

Catalog

Togle between News feed and Catalog within each genre/mood
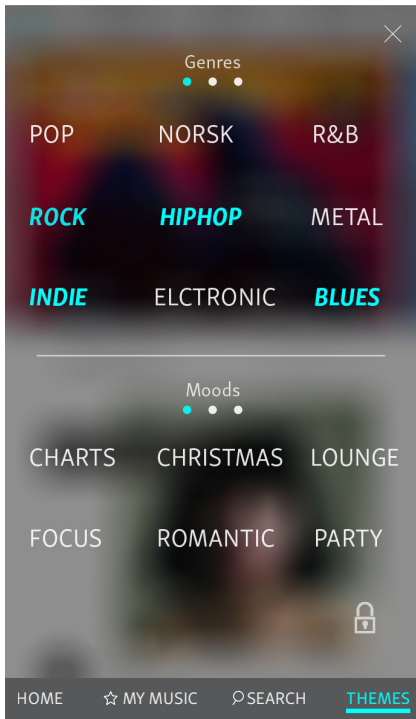
The genre & mood menu
The menu acts as a drawer appearing on top of the main content area. It presents all the genres and mood sections available structured in two swinelane carousels (read more in appendix).
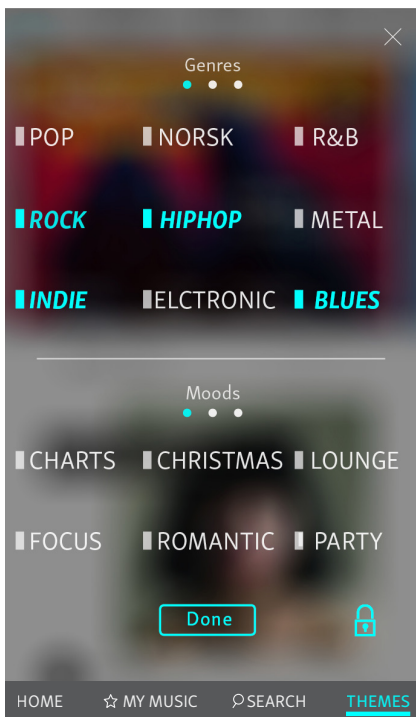
Setting favorites mode
By pressing the lock, the user is able to set the preferred genres and moods as bookmarks. This procedure is included in a first time guidance (presented later in the chapter).

The user can set his/her favorite genres/moods as bookmarks in the header (as shown on the previous page), allowing for direct access. This enables for personlization of the service, creating value for the user. In addition - setting preferences is an investment made by the user which increases the likelihood of returning.

Maximum four genres or moods can be fixed in the header as five elements in the header is considered maximum to meet usability standards of mobile applications.

Pitfalls & opportunities

CRITERIA FOR SUCCESS: REGULAR ACTIVITY

The features presented are dependent on regular and relevant activity. This goes for the home sections displaying recent artist and profile activity, as well as the *What's New* feed within each genre and mood.

To ensure regularity; activity can be created both by the editorial teams of Tidal and generated automatically by additions to the catalog and playlists created. Additionally the section *Activity from your favorites* on the home page will be based on all music added to *My Music* - not only artists or profiles. This addresses with users only saving playlists and albums to their library, and makes sure they still are presented with interesting activity on their home page. Yet, artists and profiles should be prioritized as they are added intentionally with a desire to follow. The user is also presented with the option to unfollow artists and profile, without removing them from their library, to ensure the feeling of control and relevance.

The section *You Might Like* is also an element for providing activity as artists release music irregularly. Basing the recommendations on the existing algorithms in use which suggests similar artists to what the user is listening to, makes this a realistic feature.

FUTURE OPPORTUNITY

If we exclude the required redesign and restructure this solution presents, the initiatives and elements introduced are feasable to implement, as they are based on existing features in today's service. For example, Tidal today provides a *Similar artists* feature when visiting an artist profile. The new solution takes these already developed algorithms and puts in them in a new frame of reference - *You Might Like* on the home page. Here the same algorithms are used to present relevant recent actvitity similar to the artists the user already has favored.

This way Tidal can provide relevant recommendations for the user, that don't require development of new sophisticated algorithms. Still the solution facilitates for implementation of smarter recommendations in the future, while ensuring the user remains in control.

The structure of the music player

In order to solve the issues regarding participants struggling with establishing a mental model of the service, I set about to explore a more intuitive and clear structure to provide navigation with minimal cognitive load.

A NEW STRUCTURE

With over 40 million songs, 130 000 videos, curated playlists, journalistic stories and more – what is the best way to structure the content so that the user can find what is of interest to him/her? This concepts aims to address this question by exploring intuitive ways to structure Tidal's music catalog, with the goal of easier finding the music of interest while quickly becoming confident in navigating the service.

The user study showed that the sections today were hard to distinguish from each other due to similar visual presentation, but also unclear content distinctions emphasized by content appearing within several sections, failing to base the structure on mutually exclusive categories[1]. Additionally, the service today presents eight main section plus sub sections to *My Music*. When people had trouble differentiating them, it is arguably a too broad structure resulting in cognitive load when navigating[1] (read more in appendix). The new solution presents a similar flat structure, but an organizing enabling for a narrower setup.

Findings from the user study showed that genres and moods are established categories that people relate to when discussing and navigating music content. This concept aims to explore a structure where genre and moods are the highest level of navigating the Tidal's catalog, with the hypothesis that users will easily esstablish a mental model related to this. In addition the sections *My Music* and *Search*, are brought along from the existing product as they were easily identified by the participants. *Home* is introduced as a personal landing page.

Testing of the concept showed that people quickly picked up on the structure, managing to differentiate the different sections and recall where they encountered what content. This argues the structure support the mental model the user create.

THE NEWSPAPER ANALOGY

Exploring the newspaper analogy further, I started looking into other editorial run services. The structure is also inspired by a newspaper analogy where the user navigate the paper through well established sections, like *World*, *Politics*, *Sports* etc in a newspaper, to find what is of interest to him/her. The concept also drawes on a loyalty building aspect of newspapers - the regular columns that readers return to regularly. The concept elements introduce such elements for example through the weekly widgets.

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1 Rosenfeld, L., Morville, P. (1998): *36-39*
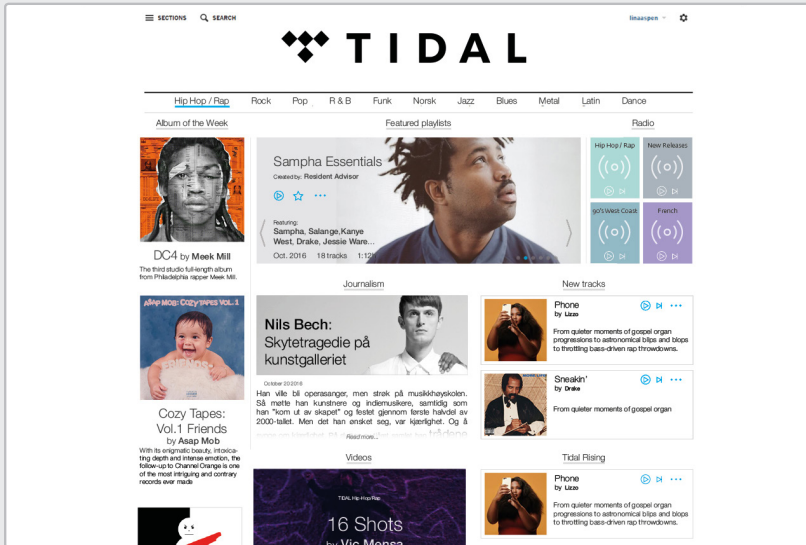
Above is Tidal visualized as The New York Times, conducted when exploring the question 'What if Tidal was a newspaper' (read more in appedix).

A flat structure

DRAWERS

Drawera opeining on top of content area
The user can navigate directly from these drawers, decreasing required interaction. The *Search* and *Genre menu* drawers are only available in the web and desktop applications tab bar, the mobile application solely supports full screen modes of these.

1ST LEVEL

Main sections - available from the tab bar
The user navigates between four main sections that are easy to distinct in both visual appearance and purpose. The web and desktop application provides direct access to all of the four genre bookmarks in the tab bar, while the mobile application has the bookmarks placed in the genre navigation bar.

Actions like to play music or video, create a playlist or add to *My Music*, are all available from this level.

2ND LEVEL

Mobile genre menu
The mobile genre and mood menu is located in the genre navigation bar, accessible from all genre and mood screens.

Information level
For further information on the contents of a playlist or album, or to see the catalog of an artist or creations of a playlist curator, the user navigates on level down in the hierarchy, where it is facilitated for navigation horizontally between the different information screens without going back to the top level.

EXTERNAL

Journalism
As it was not relevant to project scope, the existing solution of an external blog for journalistic pieces is used in this concept solution, but a solution for an integrated seamless journalism experience should be explored.

PLAY MODE

SEARCH

GENRE MENU

LANDING PAGE

HOME

MY MUSIC

SEARCH

GENRE/MOOD

(x4)

GENRE MENU

ARTIST/
PROFILE

PLAYLIST

ALBUM

GENRE/MOOD

JOURNALISM
PIECES

Only web/desktop

Only mobile
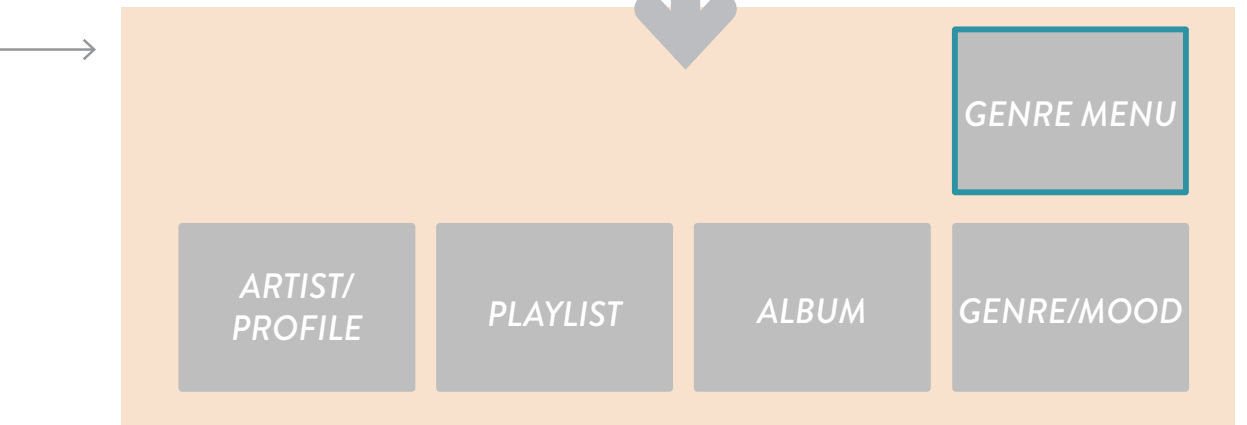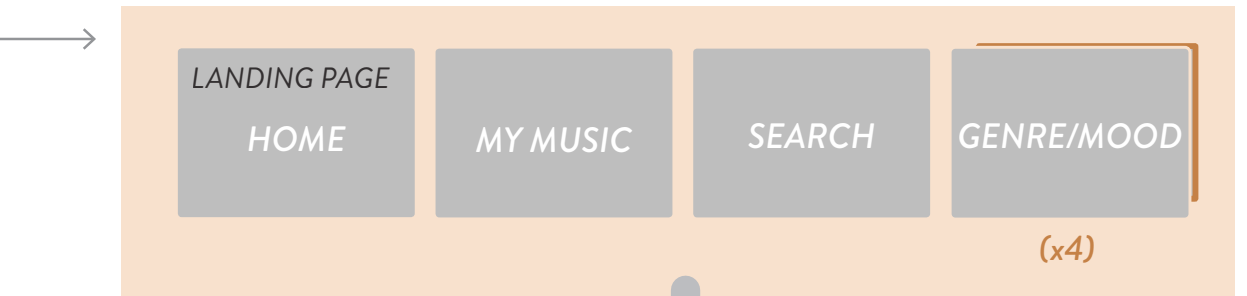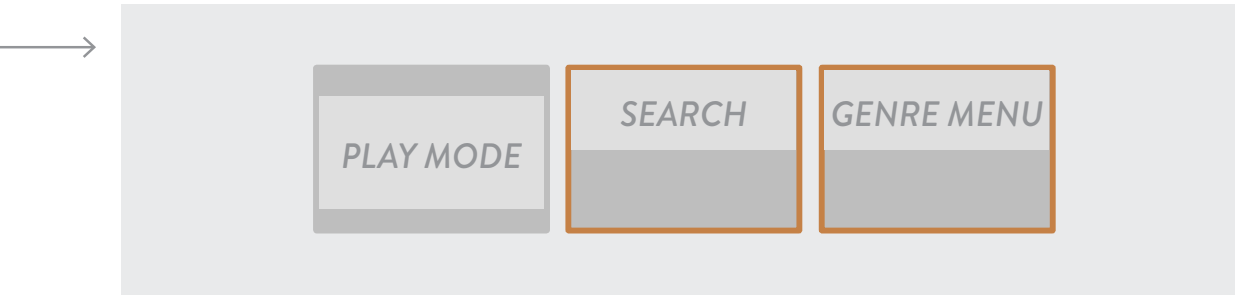
The onboarding experience

In order to find the best way to give new users a warm welcome and help them quickly manage the service, it was necessary to test different mechanisms to find the ones best suited for the concept.

GOALS & PROCESS

The testing of the structure of the player did not include any guidance – no wizard, no popups nor any cues in empty states. This was to investigate which elements and processes of the player structure and concept that caused confusions. After analyzing the test results, I divided the issues in two groups based on wether they could be considered usability issues or 'first time use' issues. The second group were pain points arguably only appearing for first time users, but not for intermediate users. This gave me a notion of what is relevant to address in a first time guidance.

The goal for this concept was to design a product that evolves in copmlement to how the users evolves his/her skill set. I set out to explore which mechanism were appropriate to achieve this goal. Three main approaches was tested, and the final solution is a mixed approach making use of the different qualities of each.

The final solution makes use of engaging empty states, a wizard for guiding the first time the user sets his/her favorite genre bookmarks, and nudging for the aspects considered loyalty building or helping bring the full experience of the app. It aims to provide guidance for novice users to help them quickly find something of interest, and rapidly understand the setup of the music player and how to navigate it. The following pages presents how the solution was developed and explains the purpose of the different approaches.

APPROACH 1
Wizard
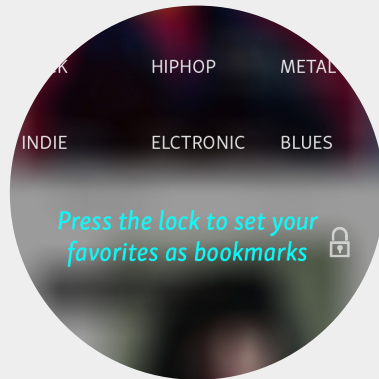
K   HIPHOP   METAL

INDIE   ELCTRONIC   BLUES

Press the lock to set your favorites as bookmarks

APPROACH 2
Nudging

WHAT IS YOUR TASTE IN MUSIC?

Set your favorite themes as bookmarks by pressing the lock

APPROACH 3
Empty states

We've got everything you want! Don't believe us? Try us!

Try searching by artist, playlist, album, track, video or profile.

Wizard

WELCOME

Set your
favorite genres
as bookmarks

1. Welcome screen

Done
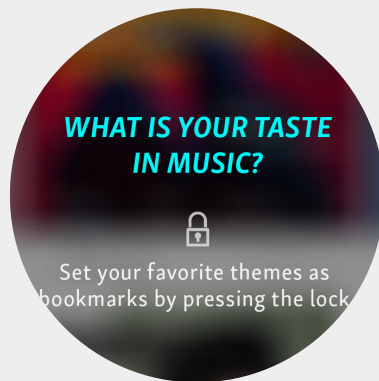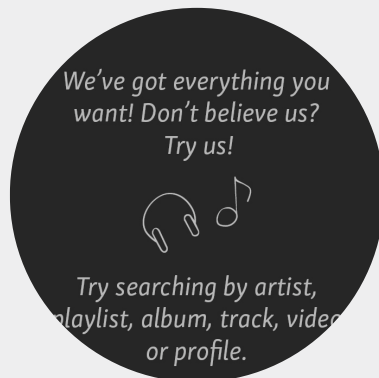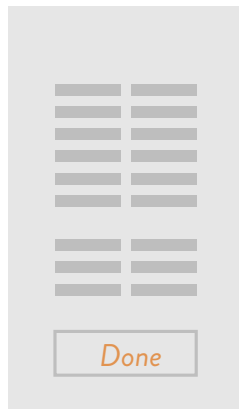
2. Genre menu, set
sections mode

ALL SET!

You can change
your mind &
navigate other
genres here

Get Started
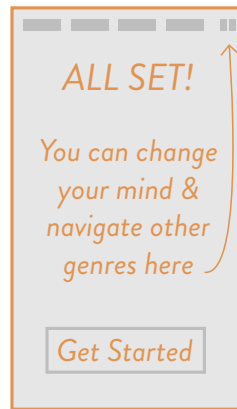
3. Message:
Change later

4. Genre

First time screen

WHY

It aims to get the application set up quickly
so the user can get the full experience right
away. By guiding the user thgough how
to set the genre section, the user learn by
doing and has a personalized experience
from the beginning.

Welcome to Tidal

WHAT IS YOUR TASTE IN MUSIC?

Set your four favorite music
themes as bookmarks

You can always change your mind
later,
be explorative!

I'll do it later   Get started
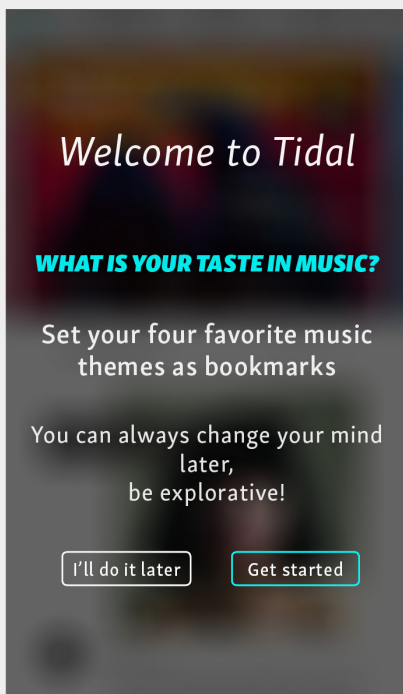
Insights from testing

Timing of setting favorite sections
It was perceived annoying to be urged
to set favorite sections before having
explored what these genre sections are
and know which ones fit best.

Home
The testing suggested that establishing
a mental model is more demanding
when *Home* is not introduced first.

APPROACH 2   *Nudging*
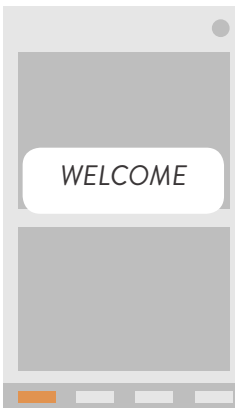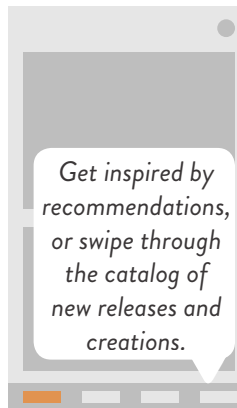
WELCOME	Get inspired by recommendations, or swipe through the catalog of new releases and creations.	Set your favorite sections.	Add to My Music or adjust feed
1. Message: Welcome	2. Home, popup to set bookmarks	Genre	Genre
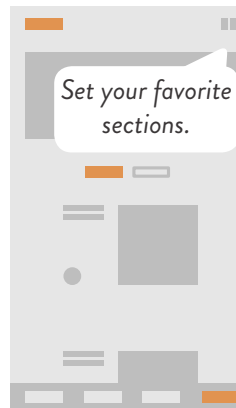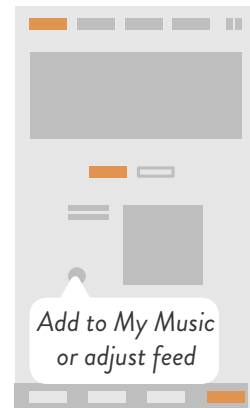
WHY

The approach enables for free exploration and adjusts according to the users behavior. Only if a feature is not discovered by itself, will the application prompt a friendly message to help the user discover the applications full potential. It will also nudge the user to act on the elements recognized as loyalty building - for example creating a playlist, add music to My Music or set the genre sections.
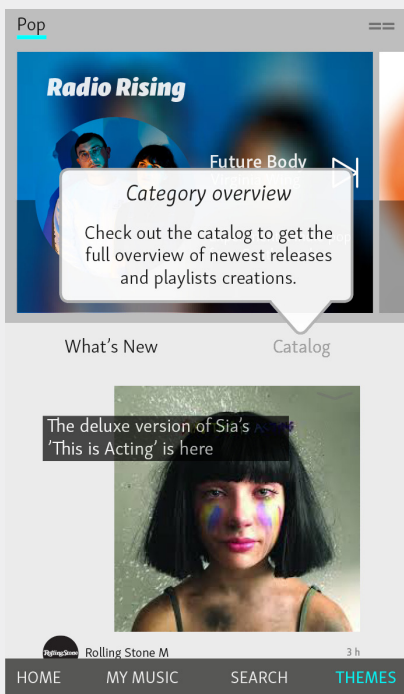
Insights from testing

Too obtrusive
The design tested was perceived as too obtrusive. Timing and content should be reconsidered to allow for more free exploration no the users terms.

I WOULD HAVE DISCOVERED THAT QUITE SOON MYSELF.

Finding the right balance of help and independent exploration is vital for this approach to succeed. Otherwise users can feel treated as stupid. In addition theory suggests that discovering independently reinforces the remembering process.

Empty states
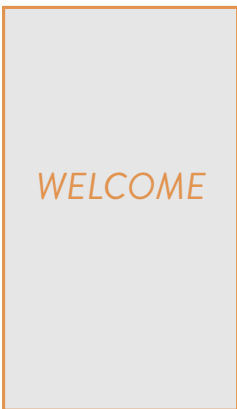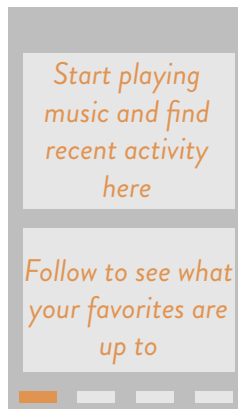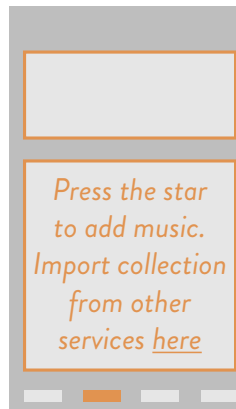
WELCOME	*Start playing music and find recent activity here* *Follow to see what your favorites are up to*	*Press the star to add music. Import collection from other services here*	*Navigate genres and set your favorites as bookmarks.*
1. Welcome screen	2. Home	My Music	Genre
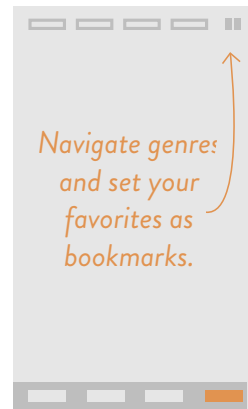
First time screen

WHY

The approach facilitates for independent exploration and aims to help grasping the purpose of each page by providing explanatory text and illustrations. Simoultaneously the approach aims to urge the user take action so at to generate content to fill the empty states.

☆ MY MUSIC   Offline

TRACKS   ALBUMS   PLAYLISTS   ARTIST

Lets start building your very own music library!
Find something you like and press the star!

Get inspired here!

Already have a library?
Import your music collection through soundiiz.com

HOME   ☆ MY MUSIC   ◯SEARCH   THEMES
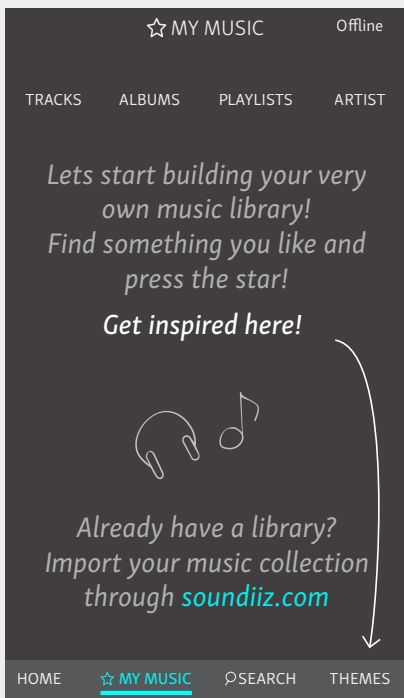
Insights from testing

Call to action
Empty states aim to direct the user to features helping them fill the screen with content.

Pitfall: Information disappearing before read by the user
Enabling for independent exploration risks that users skip reading the empty states information. A scenario can also be that the user go straight to search and adds something to My Music, which leads to the second paragraph on importing playlists will disappearing before being read.

★ *FINAL*   *Mixed approach*

EMPTY SCREENS

Call to action
The quicker the user get started, the more exciting will the application be, and the strucure easier to grasp. Distinct empty spaces nudge the user to fill them. For example leaving the areas arranged for the genre section in the header clearly empty and not finished, will trigger the user to set them up (as explained with the Zeigarnik effect in chapter 2).

Explanations
Short descriptive and illustrated explanations on what the user can find there and how to get started with it, shall both help the user establish a mental model of the structure and nudge to take action.

FREE EXPLORATION
Enabling for a free exploration increase the likelihood of a successfull first meeting with the service for both personas (see the first time use flows on pages 98-103). Additionally, discovering features by yourself brings more intensity to the emotional experience, which makes the first time experience stick more and trigger for revisits[1]. On the right is a first time use flow presenting the methods used.

GENRE WIZARD

How to set favorite genre sections
Setting genre sections was recognized as a feature in need of some introduction, but otherwise a well-known setup. This is also considered important to get configured as personalizations and setting preferences trigger returns to the application. A wizard was consider suitable as it will walk the user through the process, and the user will 'learn by doing'.

TIMED NUDGING/TIPS

Undiscovered features
The application will nudge the user to complete the onboarding proccess. This goes for aspects considered to be loyalty building and/or that will bring an enriched experience of the app to the user. Additionally, the system will track which features are discoverred and not, and promp the user with tips on undiscovered features or navigational tips; for example to introduce long press on the mobile application.

1 Norman, D. (2005)

→ Redirecting user

Empty states with cues

WELCOME

Start playing music and find recent activity here

Follow to see what your favorites are up to

1. Welcome screen

Press the star to add music. Import collection from other services here

2. Home

We've got it all!

Searh for artist, song, album etc.

My Music

Search

Nudging

Navigate genres and set your favorites as bookmarks.

OK
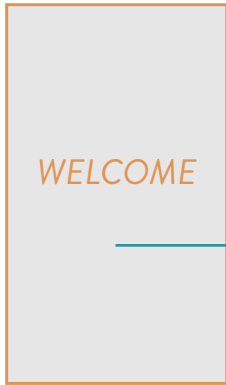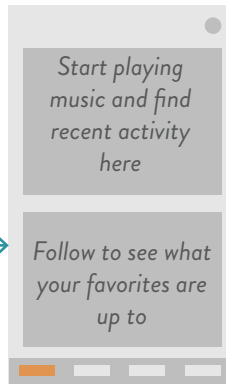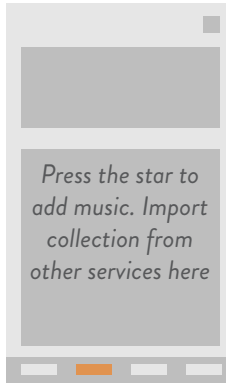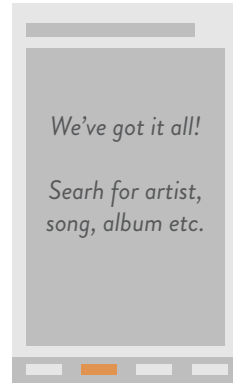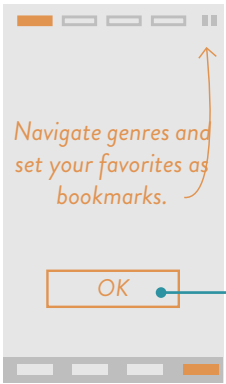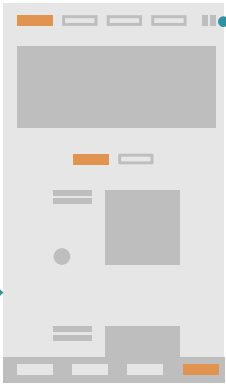
Genre

Genre Pop

First time wizard

Press the lock to set your favorite sections

Genre menu

Select your 4 favorites

OK

Hey, you can add music to My Music by pressing the star.
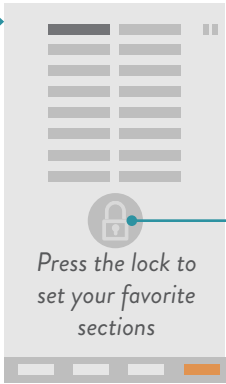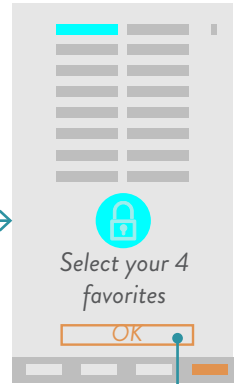
Example

1st Genre

Tidal.com

A new website was developed in order to meet the issues showed by the user study where users experienced frustration due to mismatched expectations to the service and difficulties with grasping the concept of Tidal.

Prototype in Adobe Muse:
http://prototypetidalmaster.
businesscatalyst.com/index.html
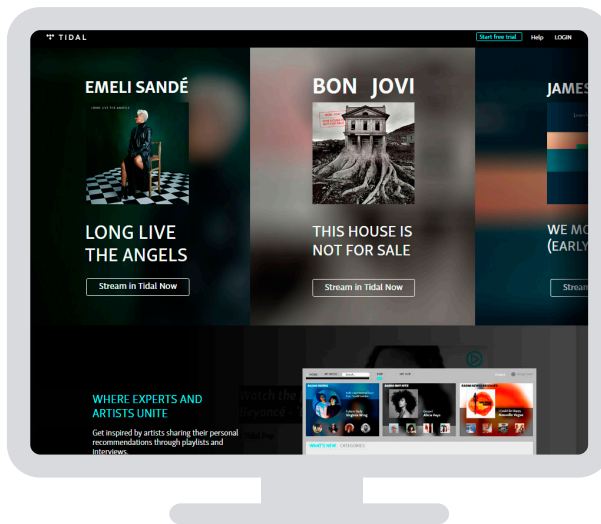
PRODUCT VERSUS EXCLUSIVE CONTENT
The aim was to create a website with a different focus – a "product promotional" site to help new users grasp the concept of Tidal. Additionally the website focus on insights from the user study showing what information the participants were looking for before signing up. Lastly, the expert review revealed friction for new users looking for information and failed usability heuristics, which are also addressed in this solution.

A benchmarking of similar product sites showed how Tidal's approach with exclusive releases was distinctive, and in addition to its identity as exclusive and quality focused. This concept aims to preserve these aspects, while still meeting the needs of a new user by revolving around the service itself.

The website design and sign up process were tested together with the music player, to gather insights on the sequential experience of the onboarding process. Instead of a menu directing the user to specific pages, this concept aims to create a one-pager where reservec users can obtain a lot of information by just scrolling and can open up more information within the same view.

Exclusive releases

Show the amount of exclusive content

The product & identity

Direct to webplayer

The app

Identity

About subscription & free trial
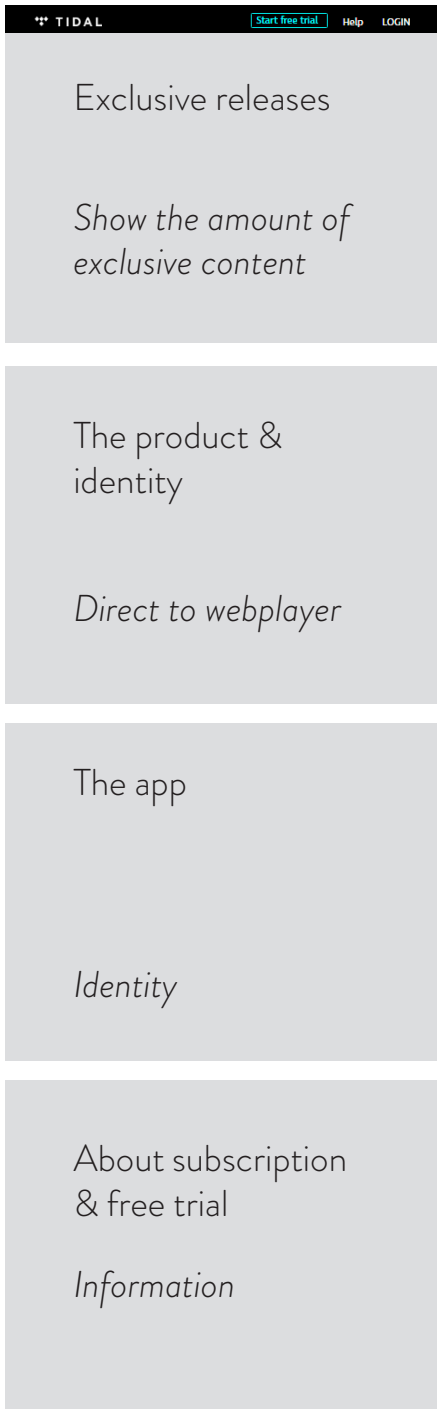
Information

One-pager - scrolling is less demanding
The concept moves all the relevant information from being hidden behind labels in the menu, to be visible on the landing page. Additional information is opened in the same view, dismissing redirection of users to new pages. Buttons should have a clear affordance when redirecting to the webplayer or the journalism blog.

Exclusive contents
The strategy of promoting exclusive content and releases has proven to be rather successful. It is still featured at the website, but it should be explored more ways to present them than dedicating the whole landing page to it.

Product promotion
By showing the product itself, not only its exclusive contents, and by encouraging users to check out the webplayer, Tidal is less mystified and it is easier to grasp what Tidal is once you have signed up.

Information grouping
The website is a common place to go to when one are curious about Tidal - information presented on the landing page should be targeting potential customers considering to sign up, while information only relevant to existing users is placed behind the log in.

Sign up, Help & Login

Exclusive content carousel slider

Urging players to visit the webplayer

Interactive app presentation

Information on subscription and the free trial

PRODUCT FOCUS

By showing visualizations of the product, provide an interactive view of the app for exploration, and encourage the user to visit the webplayer - the first meeting with the app will be warmer as the user will already be familiar with the interface.
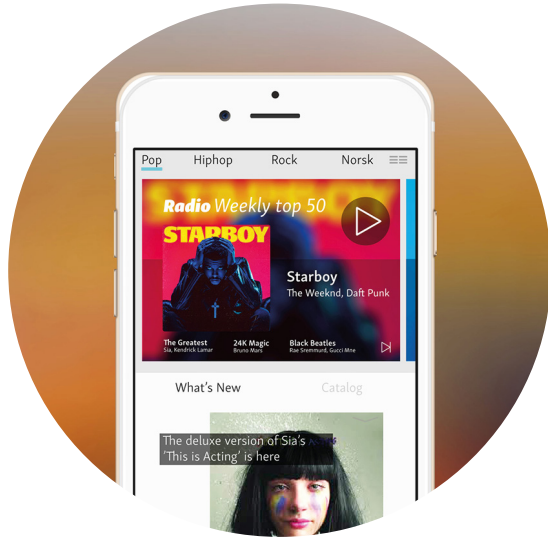
ADDITIONAL INFORMATION

Pressing the plus reveales additional information, which open in the same view, to avoid redirecting the user to a new page.

The signup process

In order to provide an engaging first meeting with Tidal, the user study called for a redesign of the signup process.

CLEANING UP &
GIVE CONTROL TO THE USER

The user study revealed a confusing signup process with unnecessary steps, and a lack of applying usability heuristics as well as creating an engaging first meeting with Tidal. The existing process lacks options to opt out or reveiw steps, as well as visibility of the process.

The new process is compressed from six to three steps. It aims to be a more streamlined and transparent process by providing the user with visibility of the process status, and a cancel button as well as options to return to previous steps[1][2]. This initiative aims to support user control and freedom. The new process has left out the step regarding Tidal Privileges. This step caused confusing due to unclear information and by requiring name entering a second time, and entering more personal information without clarifying the purpose. When inquiring my Tidal supervisors on Tidal Privileges they simply did not know what is was, nor why it was part of the signup process. Hence it is omitted from the new process. Otherwise, the process contains the same content and procedure, with some additional clarifying information and a more engaging copywriting.
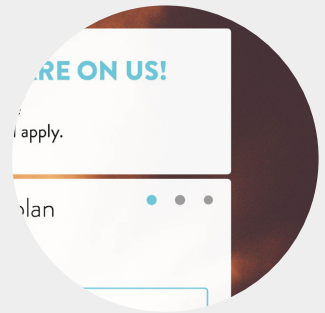
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1 Nielsen Norman Group (1995 b)
2 Nielsen Norman Group (2000)
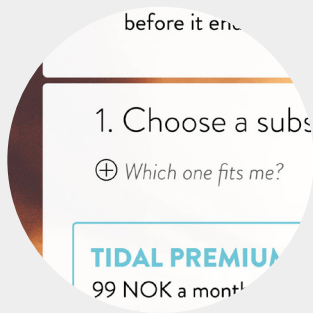
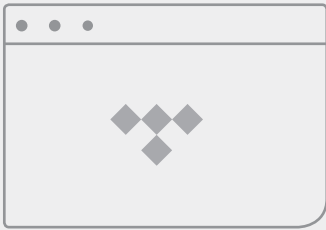*Provide information to help the user decide for the best fit*
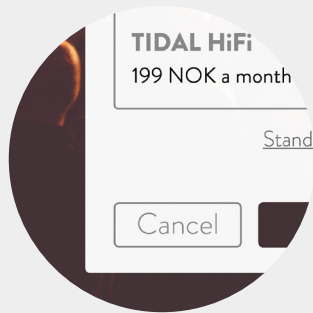
Put the user in control by providing option to exit

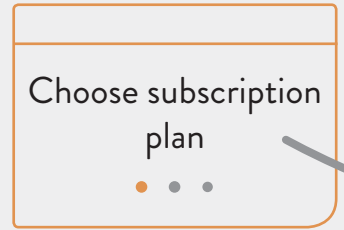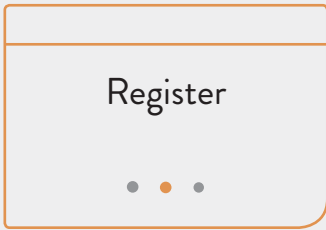*Status visibility & enable for review of steps*

New sign up process

0. tidal.com

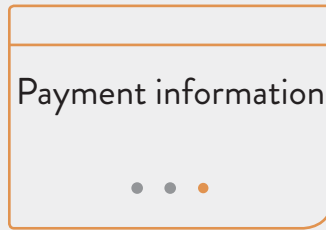**0.1 tidal.com or webplayer**
Popup: 'Get the full experience'

Choose subscription
plan

● ● ●

1. Offer additional info

Register

● ● ●

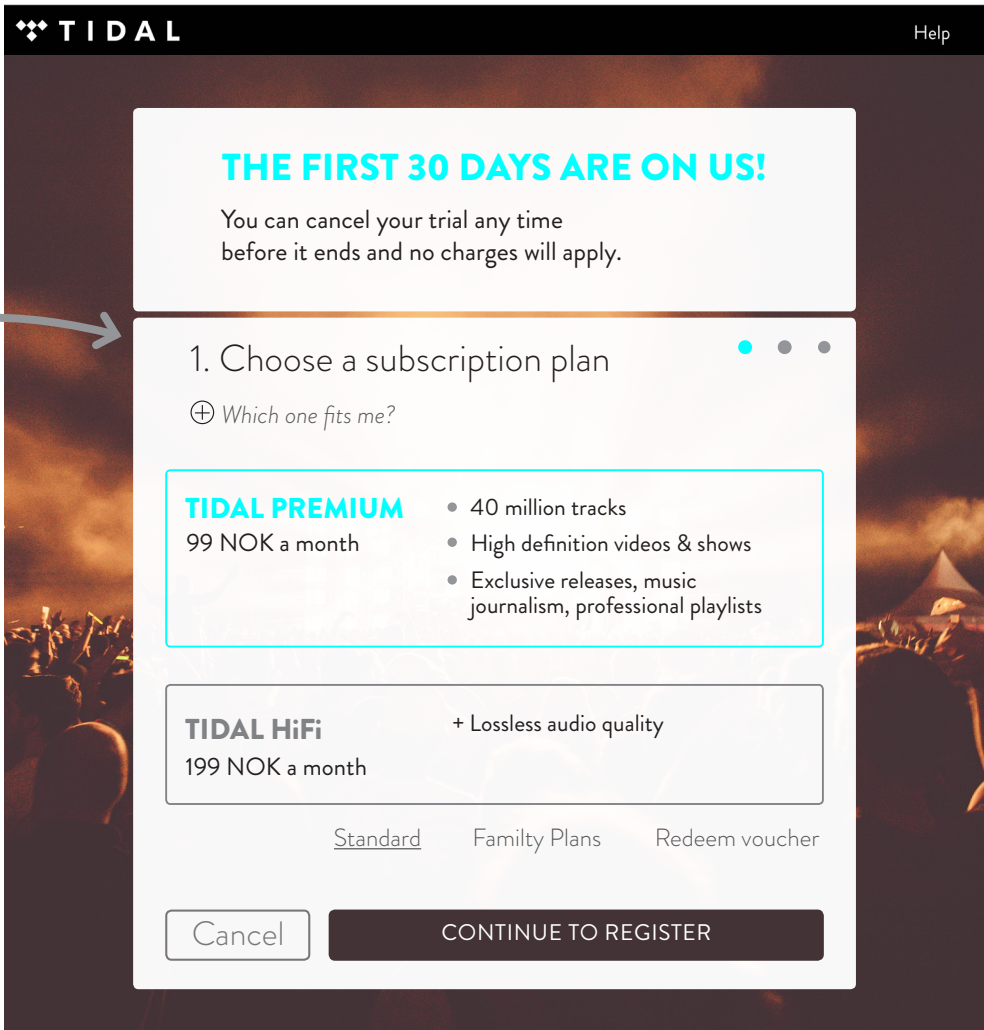**2. Reassure about free trial**

Payment information

● ● ●

3. Reassure about free trial

Welcome

◁))
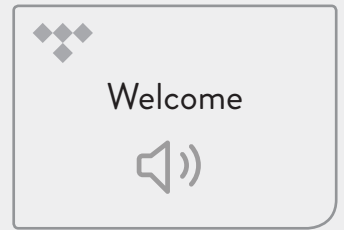
4. The webplayer

Feedforward

Similarly to the findings on usability issues with tidal.com, the signup process also lacked in communicating feedforward and labeling buttons. The particiants never knew what to expect when pressing the 'Continue' button, nor how many steps were left. An example was how step four presented the button 'Get started with Tidal' and the user prepared for entering the service, but two more steps followed before completion. This solution is more transparent and prepares the user for the succeeding step.

PART 6
DISCUSSION

Challenges & dilemmas

During the project I encountered several challenges and dilemmas that don't have one correct answer. Underneath follows a discussion on these, and an explanation of my approach to solve them.

DESIGNING FOR BEGINNERS & INTERMEDIATES

The problem definition raise the question of how to successfully design a service for both beginners and intermediates without compromising one over the other. This project explored how the service could evolve in complement to how the user evolved his/her skills related to utilize the service. Through engaging empty states, timed nudging for selected features, and taking a learning-by-doing approach to the aspects considered in need of a first time guidance, I believe the solution succeeds in evolving in relation to the skill level of the user.

DESIGNING FOR CONFLICTING USER GROUPS

As the research showed – people have complex habits linked to personal preferences. Additionally, Tidal's strategy is to target two dissimilar user groups. My approach to design for this diversity in habitual patterns and preferences, were to recognize the differences between the two user groups and design a solution facilitating for the behaviors of both. The challenge was to successfully make a product that appeals to both groups without one compromising the other. Inspired by emotional design and the Peak-end Rule my approach has been to design a music player where not necessarily every element appeal to both personas, but rather where each persona will find their elements creating value and emotions for them. As long as the positive emotions

overrule possible friction caused by elements targeting the other persona, they will recall the experience as a positive one, increasing the likelihood of returning and build loyalty to the service. Additionally the solution makes use of an explorative onboarding process enabling for diverse motivations, and personalization options of the service, to explore how Tidal can succeed in providing a service enjoyed by both user groups.

ETHICAL QUESTIONS: MANIPULATION & RESPONSIBILITIES

Underneath follows a presentation and reflections on the moral reflections I have encountered during the project. The approach of designing for loyalty building through forming habits, raises a question of morality when influencing user behavior[1]. The tools for creating habit-forming products are used to build products that solve user needs through long-term engagement[1]. Making use of psychological insights to persuade a certain behavior can be described as manipulation of peoples behavior. Ian Bogost, a famed philosopher and game designer, calls today's habit-forming technologies for the "cigarette of this century"[2]. He points to for example the smartphones behavioral dominance in daily life, and warns of its addictive and unknown destructive side effects[2]. The lack of knowledge of consequences of

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1 Eyal, N. (2014): *193, 163*
2 Bogost, I. (2012)
3 Arledge, C. (2016)

Emotional experience journey

Each colour represents two users and how they experience a session differently. While they have opposite emotions linked to specific situations, the Peak-end Rule implies that in retrospect they will both recall the experience as positive[3]. Both experience emotional peaks that connect them to the service and increase the likelihood of returning. The solution explores this approach by presenting some elements only target one persona, instead of targeting both which risks a more flat emotional experience journey for both.

some habits is one risk, while another is that not everyone have the best interest of the people they are influencing in mind, and can with persuasive incentives have devastating effect to users of that service[1]. As Nir Eyal puts it, though to different degrees and with different vision – we are all in the persuasion business[2]. So what responsibilities does a product maker have when creating user habits? Related to this project, the habits formed of Tidal will affect how the user listen to and discover music. One question of morality in this case is what kind of a listener the product fosters. Should the product evolve conscious listeners that know what they are listening to and develop their own musical preferences? Should the service require that users involve themself in the music, to have a good music experience, or should the service rather serve them a selection of music fitting the current desires. Tidal has reflected on this and their strategy is based on the idea that a music experience is more valuable if the user is more involved and conscious to what he/she is listening to. My approach has been to explore how Tidal can form habits supporting this vision.

Other moral questions related to habit-forming music services like Tidal, is linked to the music industry and the artists. An example of a habit can impact the music industry is linked to the users behavior of discovering new artists. Spotify's has a large impact when creating playlists that have millions of followers. These playlists act as hit making machine - songs that are featured on the playlists are immediately successful. This way Spotify has the power to steer the success of artists through forming its users habits to listen to pre-made playlists and return every week to stay updated. This hit-making playlist approach also forms the behavior of listening to single hits unrelated to each other. Tidal wants to use their platform as a way for new artists to find their audience through promoting underground and up-and-coming artists by sharing their stories and music.

My way of approaching these topics, has been to design for forming more explorative habits amongst the users, which in turn facilitates for more diversity in the music industry with room for more than the trending hits. Additionally, Tidal believe the artwork of the artist brings more value once it's enjoyed as intended. Hence this project has aimed to form habits where users listen to whole albums, rather than tracks detached from their wholeness.

1 Thaler et. al (2010)
2 Eyal, N. (2014): *164*

Reviewing the process & results

Approaching the end; the road to get here and the solutions presented deserves some reflection.

EXPLORATIVE & SOLUTION DRIVEN
Through the process I developed and tested several concepts, before choosing one concept to develop further through several rounds of testing with participants. A solution driven process enabled for a continuous enriched understanding of the domain, while exploring different approaches to a solution. A flexible process based on Lean UX enabled for directly testing new insights and ideas as they emerged. The final solution represents an alternative from today's product by presenting a new design and product behavior. It is in line with the restrictions and strategic decisions Tidal go by today, while addressing future opportunities of utilizing user data for recommendations and personalization of the service.

The final concept aims to challenge Tidal by making them reflect on how their service should welcome new users, and how it can behave to engage users by supporting them in discovering new music. Instead of developing a radical alternative to today's product, the solution presented here represents a more realistic alternative aiming to provoke comparisons to today's service. By presenting a solution pointing at the opportunities and flaws of today's service, the goal is to push Tidal to initiate actions to improve their service and reflect upon strategic development and future

vision for the product.

USER CENTERED APPROACH
All together twenty-one users were included in different stages of the project. Ten people were related to the research phase, forming a solid understanding of user needs and behaviors through individual experiences. This laid the foundation for the concept development, where additional eleven participants took part in testing different prototypes and concepts throughout the development phase.

Considering the diverse user group, I aimed for recruiting an assorted group of participants. I succeeded in including users that could be characterized within both of the user groups based on their music habits and desires related to a streaming service. However, a larger diversity, especially regarding what music streaming service they used daily, could have been beneficial.

SEQUENTIAL & HOLISTIC
The holistic mindset and sequential approach, required an extensive concept scope, and it was challenging to set the appropriate limitations related to depth and iterative cycles. The problem definition called for a focus on the music player for forming habits, and its first time use. Still the opportunities in a product focused

website was recognized. The signing up process was included to ensure the relationship between the steps of the total process, and to address some usability issues and easy improvements Tidal should consider.

SCOPE & PROBLEM DEFINITION
The approach above, moderated the level of detail the solution reached, where a stricter focus could have enabled for a more completed solution. I considered the holistic approach to the sequential process more relevant as the problem definition addresses behavioral matters. This was also regarded to Tidal's service at the start of the project – their expertise is high on visual design and communication, but the behavioral aspect had little emphasis in the product development.

The problem definition of designing for loyalty building raised the challenge of testing and obtaining feedback when time is a factor. Loyalty through habits is dependent on use frequency and a perceived value for the user[1], but this was challenging to facilitate for within the project period. Perceived value, on the other hand, was possible to reflect upon to some degree during the tests.

THE PARTNERSHIP WITH TIDAL
As we decided when initiating the project, an explorative nature of the project would be both beneficial, but also more feasible. Aiming for a more realistic

solution accompanying today's service, would require a closer collaboration and supervision from their part. To succeed such an approach would depend on more involvement of the supervisors at Tidal. Due to their hectic schedule, this was considered challenging to achieve with the risk of delaying the progress of the thesis. Additionally, I personally was more motivated by managing a project myself and being able to steer the project in the direction of my personal interest.

On the other hand, another aspect of motivation is the possible realization of your work. The likelihood of my work having an impact to Tidal's future product development would be higher if the project was more rooted within the company. The same explorative approach, and possible same solution, would weigh more if the supervisors at Tidal had been included even more in the process. For example by taking part in the user study to recognize the importance of the insights I presented, or by conducting a co-design workshop to incorporate them in the development of the concept. These were considered to not be realizable, and neither necessary to achieve a relevant and valuable concept when focusing on the solution driven and user centric process.

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1 Eyal, N. (2014): *29*

Conclusion

I am happy with the results of the project, but above all it has been enriching to work with a problem that engage everyone I meet - music has a special place in peoples' lives, and getting nerdy on its behavioral aspects has been a lot of fun.

THE PROCESS
I have conducted a project complying with the principles and goals I set initially. I have developed concepts in cooperation with users, resulting in a holistic alternative solution.

THE SOLUTION
The solution presents an user centered onboarding process where the product behaves in complement to the users evolvement through engaging empty states, timed nudging overlays and first time guidance to set preferences. The solution facilitates for loyalty building through habit forming elements based on assisting the user in discovering new music, as well as initiatives to encourage investing in the product through amongst other personalizing the service. A new product focused website aims to help new users easier grasp the concept of Tidal and

prepare for their first meeting with Tidal. A more streamlined and transparent sign up process ensures a frictionless experience of becoming a new user of Tidal.

THE ROAD AHEAD
The concept acts as an alternative solution pointing at flaws and opportunities with today's service. It aims to draw attention to novice users and inspire to a behavioral mindset for the future development of the service. The first time use initiatives and the habit-forming elements presented in the solution, are both applicable to today's product after tailoring them to the existing structure. The restructure of the music player is less applicable, but serves as a reflection on how today's solution can better refine the different sections and approach the users' mental model of the service.

APPENDIX &
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Terms & methods

A short deifinition to convey my understanding and employment of terms and methods made use of during the project, but not described in the report.

PERCEIVED AFFORDANCE

Affordance is the perceived properties of the object that determine how it can be used[1]. Perceived affordances help people figure out what actions are possible without the need for labels or instructions[2]. They visually communicate how to use the design aiming to prepare the user for the following action[2].

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1 About face 312
2 Norman everyday things

CONSISTENCY

Consistency regards similarity in look, feel and behavior accross various modules of a software product[1]. Achieving consistency provides a seamless and comfortable user experience low on cognitive load[1].

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1 About face 428

CONVENTIONS & STANDARDS

Conventions and standards ensures that users understand individual interface elements and know where to look for specific features[1]. They are often related to particular platforms or use domains, where people learn them through training and experience[2]. For this project conventions and standard related to music services has been of relevance. Tidal's music player today comply with these, while also introducing elements unfamiliar to the user that could be more intuitive. Tidal.com, on the other hand, failed to follow some conventions, for intance when placing FAQ in the first step of the signup process.

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1 Nielsen Norman Group (1999)
2 About face 312

CONTROL TO THE USER

One of the ten usability heuristics The Nielsen Norman Group presents, urges to support user control and freedom by always providing the user with options to undo or opt out[1]. This is mainly addressing interactive system and is relevant for command-based processes like signing up or setting preferances[2]. User control can also be discussed in terms of product behavior where this thesis has been concerned with user control related to music recommendations and algorithms.

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1 Nielsen Norman Group (1995 b)
2 Rogers et al. (2011): 59-60

MINIMIZING COGNITIVE LOAD

The user perform cognitive work when trying to comprehend product behavior, text and organizational structures[1]. The degree of cognitive effort required to utilize a system, can act as a way to evaluate the usability of the system.

Methods to minimize cognitive load is for example through use of perceived affordance, consistency, mental model match, and conventions.

1 About face 271

MENTAL MODEL

Mental models are the conceptual models users create of how to interact with a product or system serving as guides to achieve their goals[1]. They seldom reflect the correct mechanism of the system or how it is implemented, but are rather simplifications based on experience, training and instructions[1]. A designers mission is to design a solution that is closely matched to the users mental model, to achieve less friction and cognitive load for the users[2]. This is based on the understanding that users don't need to undestand how a system actually works in order to use it successfully[2]. To achieve this it is critical to obtain a solid understanding of the users of the product.

1 Norman everyday
2 About face 19, 17

THE HAWTHORNE EFFECT

The Hawthorne effect related to how participants of an experiment or a study recognize their participation and hence modify their behvaior[1]. It addresses people who change their behavior as a reaction to the awareness of being observed[1]. These effects can influence the genuineness of the research findings[1].

1 Obrenović, Z. (2014)
46 i rapporten

STRUCTURE

The structure of content determines the primary ways in which a user can navigate[1]. Hierarchy is one structure widely used which users are familiar with grasping and navigating[1]. To design a successfull hierarchy the categories should be mutually exclusive, and the balance between breadth and balance should be considered[1]. The challenge is to divide the content in mutually exclusive categories, and relate it to the mental model of the user. This is what the user study suggested that Tidal failed to do, and which the new solution aims to solve differently.

1 Rosenfeld, L., Morville, P. (1998): *36-39*

USABILITY TESTING

Usability testing involves observing a representative user attempting to perform certain tasks on a prototype of your design[1]. The goal is to determine how well your design is related to experienced usability and uncover issues, to improve the design afterwards[1]. During the project I conducted several usability test of varying copmlexisity where testing the structure required a more estensive tests.

1 Hall, E. (2013): *47*

SEMI-STRUCTURED INTERVIEW

A semi-structured interview is open ended, but follows a general script and covers a list of topics, enabling for the interviewer to follow leads, while maintaining control[1]. This approach was used on when meeting the existint Tidal users, the super user, and with the participants of the user study.

1 Bernard, H. R. (2006): *210-250*

USER OBSERVATION

Observation is a powerfull tool to fully understanding the motivations and behaviors as users, as users themselves seldom are conscoius of them themselves, refrains from sharing experiences for several reasons, or don't know what is of interest to share[1]. During the user study and usability testing, I would observe while participants interacted with their former service/Tidal/prototypes, to pick up on behaviors or reactions the participants didn't share or I hadn't addressed in the interviews.

1 About face 43

CARD SORTING

Card sorting is method where participants are asked to sort a set of features, with the aim of discovering trends or uncover correlations and patterns[1]. In this project it was used when interviewing existing Tidal users and the first meeting with the user study participants, with the goal of getting to know personal habits related to use of different music services. The focus was to use the cards as a way to guide the conversation in a dynamic way, while also uncovering larger trends.

1 About face 58

INTERVIEW: ARTIFACTS

To trigger the participant to recall experiences and ensure all relevant topics are covered, their music player was open and visibile during the interviews. By making use of artifacts, observation can add to the discussions while enabling for follow-up questions[1].

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1 About face 49-56

INTERVIEW: STORYTELLING

Encouraging participants to tell specific stories of how they have experienced a product, is a way to obtain a deeper understanding of how they relate to and interact with the product[1]. By asking for concrete situations, the participants will more easily recall experiences and bring more details to the table. An example is to start with a specific date - 'Tell me about the last time you used SoundCloud', instead of 'When do you use SoundCloud?'. Generalization should be done by the interviewer in post-analysis, not the participant. Additionally, specific experiences raise more genuine stories than generalized discussions.

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1 About face 49-56

EXPERT USER INTERVIEW

Meeting with expert users of the service or experts to the domain in question, can bring new perspectives on the product and its opportunities[1]. They are critical when working with highly complex or technical domains, but all products have super users that have reflected upon problems that can be valuable to deepen your problem understanding or spark ideas for improvements[1]. A super user who made contributions to this thesis was a professional DJ with 25 years of experience, resulting a close relationship to the evolution of digital music services.

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1 about face 41

THE 5 WHYS

The 5 Whys is a method to dig below the outward symptons of a specific user experience[1]. By asking new questions triggered by the previos answer, you keep delving deeper into underlying motivations[1]. During the user study this was used to investigate the opinions and experiences of the participants had made during the first week of use.

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1 this is service - 166, 167

THE PEAK-END RULE

The Peak-end rule is a psychological heuristic suggesting that people remember an experience based on how it felt at the peak (the most intense) and the how it felt near the end of the experience[1]. This calls for strong emotional experiences, rather than a neutral experience. Related to designing for user experience, this proposes to design for both the experience itself, and the memory of the experience[2]. The post-use evaluation of an experience determines if the user will return to the service, relating to the likelihood of building loyalty, and is by this theory linked to emotional weight and that the experience ends pleasantly.

1 Kahneman et al. (1997)
2 Arledge, C. (2016)

EXPERIENCE MAP

A user journey map visualizes a users experience of a service by constructing a story and show the users reactions and emotions throughout the storyline[1]. It is based on qualitative insights and provides an overview of the factors influencing the user experience[1]. It is a tool to spot both problem areas and opportunities, in relation to touchpoints and individual stages of the journey[1]. In this project, the method was used to summarize the insights from the user research to identify focus areas, and as a tool to communicate the insights in an engaging and "personalized" way.

1 This is service 158-159

PERSONAS

Personas are fictional profiles developed based on user insights on behavior and goals, as a tool to engage with while developing the product[1]. They should be created by reflecting upon significance of behaviors and interests, while obtaining a appropriate cross sections of users[2]. The personas in this project was based on insights from the user study and interviews and the target user groups of Tidal, and were developed in cooperation with the supervisors at Tidal. The focus was the motivations and goals of using a music streaming service, and their habits of listening to and discovering new music, and they acted as a way to further engage the users in the concept development and as a tool to discuss ideas and designs with the supervisors.

1 this is service 178
2 about face s 62

WHAT IF ...

"What if..." is an an activity to prompt exploration of potential changes to a service or product[1]. By reflecting on a specific scenario, you can explore situations and possible outcomes[1]. In this project the activity was used to generate ideas by asking how Tidal's service would behave if taken in each of the directions explored related to discovering new music, andkeep discovering more of it. It lead to, amongs other, the newspaper analogy that was explored further.

1 this is service - 182-183

HAMBURGER MENU

A hamburger menu is a (mostly) a vertical menu hidden behind a hamburger icon, often acting as a drawer sliding in from the left[1]. Such a setup takes little screen real estate and can present the main navigation, as it does in today's Tidal application, or be used to interact with a secondary set of features[1]. The solution in this project removes the hamburger menu as the main navigation, but introduces a similar menu to the less frequent navigation of the genres and moods. The hamburger menu is a challenging one due to its lack of affordance and nature of hiding different features within different applications2. This project presents a version linked to the menu it presents, but further work should explore more intuitive icon designs.

1 About face 535
2 about 541

CAROUSELS

Carousels displays a selection of content items in a horizontal row, allowing the user to swipe new content onto the screen[1]. This way the user can navigate large amounts by being presented a digestible selection at a time. It can also be used on web with arrows as controls, or run automatically through the content.

1 About face 523

TAB BAR

A tab bar contains a set of controls and is the primary mechanism for navigating to different functional and content areas of handheld mobile apps[1]. It is one of the conventional ways of designing the interaction with the main sections of mobile apps, allowing for quickly switching between the mani areas of the app[1], and is simultaneously applicable for web applications. The solution presented in this project as a decreased number of main sections allows for direct access through a tab bar, removing the hamburger drawer as the main navigation.

1 About face 529

SWIMLANES

Swimlanes are a merge between carousels and grids[1]. They are a vertical stack of carousels, where each carousel can be browsed horizontally, intependent of the others[1]. This is applied in the catalog view on the genre pages, and allows for the user to browse through genre content of different categories, without drilling down into a hierarchy, as you do with the product today.

1 About face 524-525

User study execution

Communication & plan in Norwegian, followed up with facebook messages.

PARTICIPANT ACQUISITION

Posted on Facebook 2016.09.15

Kjenner jeg noen som kunne tenke seg å teste ut en ny musikkstrømningstjeneste for en måned? Og samtidig hjelpe meg med masteroppgaven? Jeg er på utkikk etter noen som liker å strømme musikk og har lyst til å møte meg for å prate musikk over en kaffe/te to-tre ganger ila neste måned. Du må være ny til Tidal (aldri signet opp før) og være villig til å bruke Tidal som din strømmetjeneste ila perioden. Det blir gratis fika, karma i lange baner, og du får bli med å teste og designe mulige løsninger for Tidal! Send meg en melding om du er nyfiken :)
(Har du allerede prøvd/bruker Tidal? Da spanderer jeg også gjerne et kafébesøk så kan vi dele tanker om ulike strømmetjenester)

INTERVIEW GUIDE: EXISTING TIDAL USERS

Kjempefint at du vil ta en liten musikk-kaffe med meg! Jeg skriver masteroppgave for Tidal om onboarding av nye brukere og hvordan skape lojale brukere.

Er det greit om jeg tar opp lyden? Så jeg slipper å notere imens. Jeg vil anonymisere alt du sier og slette opptakene etter innlevert oppgave.

Nå er jeg interessert i alt som har å gjøre med musikk i hverdagen, så selvom du sa at du bruker Tidal, så vil jeg gjerne høre om andre tjenester du bruker også.

1. Du og Tidal
> Hvor lenge har du hatt Tidal?
> Husker du hvorfor du fikk Tidal? (Og ikke en annen?)
> Hvor mye bruker du den?
> Når var sist gang du brukte Tidal?

2. Card Sorting: Hvilke tjenester bruker du mest?
Her har du 10 kort som representerer hver sin musikktjeneste/medie. F. eks youtube har jo også videoer, men nå er jeg interessert i videoer relatert til musikk - en sang, musikkvideo, eller dokumentar/intervju etc relatert til artist for eksempel.

Ta ut: Først ta ut de du aldri bruker, eller bruker mindre enn sånn 2 ganger i måneden.
Legg til: Er det noen som mangler, så har jeg noen blanke som du kan skrive på.

Sortér: Nå vil jeg at du sorterer disse i rekkefølge fra mest eller oftest brukt, til minst.

Spør om sorteringen

Hvor ofte hører du på den mest brukte? Hvor lenge har den vært den mest brukte?
Hvorfor bruker du denne mer enn denne?
Når er det du bruker denne? I hvilken sammenheng?
Når var sist gang du brukte denne? Husker du hvorfor?

3. Litt spørsmål

Når var sist du hørte på musikk? (en annen enn den mest brukte - hvorfor? Så for den mest brukte)
        Hvor og når? På mobil eller desktop eller noe annet?
        Hvilken tjeneste var det på?
Hører du mest på mobile eller desktop? I hvilke sammenhenger/når bruker du..?
        Hva hørte du på? Et album, spilleliste - din egen eller kurert?
Kunne du vist meg?

Spillelister (den du hørte på sist)
        Lager selv eller høre på kurerte? Eller begge deler?
        Kurerte- hvordan bestemme hvilken?
Hvilken spilleliste hører du mest på? Hvor ofte?
        Hvordan ble den til - hvor fant du ut hvilke sanger?
Når ble den opprettet?
Når ble det sist lagt til en sang?

        Hvordan pleier du å finne ny musikk? Hvor får du høre det? Hvilken tjeneste?
        Følger du noen

Avslutning:
Da er vi kommet til veis ende.
Er det noe du sitter inne med eller noe som streifet deg, som jeg ikke har spurt om?

Tusen tusen takk for hjelpen!

INTERVIEW GUIDE: 1ST MEETING USER STUDY PARTICIPANTS

Kjempefint at du vil ta en liten musikk-kaffe med meg! Jeg skriver masteroppgave for Tidal om onboarding av nye brukere og hvordan skape lojale brukere.

Er det greit om jeg tar opp samtalen vår? Så jeg slipper å notere imens. Jeg vil anonymisere alt du sier og slette opptakene etter innlevert oppgave.

Nå er jeg interessert i alt som har å gjøre med musikk i hverdagen - hvilke tjenester du bruker, hvor du finner ny musikk osv. Så ønsker jeg at du skal signe opp for Tidal og bruke dette som din hoved-strømmetjeneste av musikk de neste ukene.

Forklar hca vi skal snakke om: Card Sorting, Oppfølgende spørsmål om musikkvaner, Tidal - signe opp og utforske litt, Til neste møte

1. Card Sorting: Hvilke tjenester bruker du mest?

Sende en link på messenger og dele skjermen så jeg kan se på. Gjerne se deg samtidig hvis mulig. Her har du 10 kort som representerer hver sin musikktjeneste/medie. F. eks youtube har jo også videoer, men nå er jeg interessert i videoer relatert til musikk - en sang, musikkvideo, eller dokumentar/intervju etc relatert til artist for eksempel.

Ta ut: Først ta ut de du aldri bruker, eller bruker mindre enn sånn 2 ganger i måneden.

Legg til: Er det noen som mangler, (så har jeg noen blanke som du kan skrive på).

Sortér: Nå vil jeg at du sorterer disse i rekkefølge fra mest eller oftest brukt, til minst.

Spør om sorteringen
Hvor ofte hører du på den mest brukte? Hvor lenge har den vært den mest brukte?
Hvorfor bruker du denne mer enn denne?
Når er det du bruker denne? I hvilken sammenheng?
Når var sist gang du brukte denne? Husker du hvorfor?
Hva bruker hver til?

2. Litt spørsmål

Når hørte du sist på musikk?
Kan du vise meg hvis du har appen?
Er det andre sammenhenger du også pleier å høre på musikk?
På mobil eller data?
Spotify eller annen?

Spilleliste
        Lage selv?
        Hvor mange hører du på for tiden?
        Hvor lenge har du hørt på denne?
        Når ble det sist lagt til en sang?
        Hvor ofte lager du nye?
        Hvordan blir de til? - Hele, litt etter litt

Kurerte? Hvordan bestemme hvilken?

        Hvordan pleier du å finne ny musikk?
        Fan av artister - hvordan får du med deg når du slipper ny musikk?

3. Tidal
Da har jeg lyst til at du skal få deg Tidal!

Hvordan ville du selv signet opp? (App eller desktop) Har du iPhone eller Android?

Betalingsinformasjon, kommer til å trekke deg hvis ikke avbestiller. For å ikke risikere noe kommer jeg til å be deg om å kansellere abonnementet etter tre uker - du skal likevel ha tilgang ut måneden, men ikke bli trukket automatisk. (Med mindre du vil fortsette).

Pleier du å gjøre slike wizarder? (Ikke: Kan du gjøre denne likevel?)
Gratulerer! Nå er du sikkert litt nysgjerrig, bare å utforske litt!
(Observér)

4. Neste møte
Vil gjerne møte om en uke for å høre hvordan det har vært. Små oppgaver - for at du ikke glemmer det du opplever i mellomtiden kommer jeg til å sender korte spørreskjemaer. Fint om du svarer den dagen du får de, stikkord holder fint. Så kan vi snakke om det neste gang vi møtes.

Hva forventer du å oppleve - hva tror du kommer til å skje?
Hva gruer du deg til?
Hva gleder du deg til?

Opplever ting, frustrerende eller gøy - skriv ned en plass på mobilen så du finner det igjen, eller skriv til meg på face eller dele på disse spørreskjemaene.

Facebook eller mail?

Avslutning:

Er det noe du sitter inne med eller noe som streifet deg, som jeg ikke har spurt om?

Tusen tusen takk for hjelpen!

INTERVIEW GUIDE: 2ND MEETING USER STUDY PARTICIPANTS

Revolved around the answers from the survey, hence, each guide was individual. Asked them to have Tidal open during the meeting and show me what they were talking about, while using the 5 whys to dig deeper. Ask if, and then what, they missed from the old service.Ask if, and ho, they found new music.

EXPERIENCE SURVEY

The participants were sent three surveys during the study period, aiming to help them reflect and recall experiences while using Tidal for the first time.

Survey dag 2 med Tidal: https://goo.gl/forms/OlnDhP0A2GFWdSvG2

Survey dag 5 med Tidal: https://goo.gl/forms/ZYyDvt5j0naQ3nb02

Survey dag 8 med Tidal: https://goo.gl/forms/iifpuL2kUiXzY5wg2

Guide: usability testing

Several rounds of testing were done for different parts of the concept and with different copmlexity. Here follows a script for testing tidal.com and understanding of the music player structure.

Info:
Har du vært med på lignende test før?

Tester ikke deg, ikke prototypen heller - egentlig mest for å innspill og se hvordan folk opplever den - blir litt i min egen boble.

Så du kan ikke gjøre eller si noe feil - og jeg er ikke ute etter ros og blir heller ikke fornærmet, jeg vet allerede en del store endringer jeg skal gjøre, og det fine er at det ikke tar så mye tid - derfor så greit å finne ut av ting.

Lydopptak
Jeg har også lyst til å ta opp samtalen vår - så slipper jeg å stresse med å ta notater. Opptaket er kun for meg - for jeg husker nok ikke alt i ettertid, også sletter jeg det når masteren er levert. Er det greit for deg?

Vi må late litt som - at du er nysgjerrig på Tidal, kanskje interessert i å signe opp for en prøveperiode, men vet ikke helt hva Tidal er - blir en slags utforsking fritt, også stiller jeg spørsmål. Mye er ikke ferdig her.

Men først starter vi med noen spørsmål, så skal du få lov til å gå inn på tidal.com og bli kjent med Tidal, og så blir det nok litt spørsmål til slutt.

Spørsmål
Hvor gammel:
Occupation:
Hva bruker du av musikktjenester i dag:
Kan du vise meg? Hva var det siste du hørte på?

Hva vet du om Tidal allerede egentlig?
Hvis du nå skulle vurdert å bytte til Tidal fra Spotify - hva er din største bekymring?
Så nå når du skal bli kjent på Tidal - hva lurer du på?

Innledning prototype

Mye her er ikke ferdig - mange knapper som ikke gjør noe og slikt, men bare å klikke rundt.

Jeg gir deg noen oppgaver, og så har jeg lyst til at du skal prøve å snakke høyt - jeg vil gjerne høre tankene dine på en måte. Jeg kommer nok til å stille deg litt spørsmål underveis også.
Også må jo du bare stille meg spørsmål, men ikke sikkert at jeg vil svare på alt - ofte vil jeg se om du finner ut av det selv, men mye er jo ikke lagt inn her, så da kan jeg svare.

tidal.com

Supert, da sier vi at du har hørt fra en kompis at Tidal er veldig bra og du er blitt litt nysgjerrig. Du har gått inn på tidal.com for å finne ut om dette er noe for deg, i forhold til de tingene du var bekymret for også.

(Web player - egentlig høre 30 sek. Klipp og klikke rundt, men ikke mulig i prototypen)

(Exclusive - skulle kommet til den sangen i webplayeren.)

Signe opp

Ok, så la oss si du vil teste det ut med en måneds prøveperiode. Du heter forresten George Smith og jeg har fylt ut litt felter for deg.

Web Playeren

Hva tror du dette er?

Kan du forklare meg hva du ser på denne siden?

Avslutning, spørsmål

Ok nå spørsmål nå på slutten, og de er litt rare, og litt vanskelig siden du har kanskje ikke fått all den infoen du hadde lyst på men.. :

Hvis du nå etterpå skal forklare en venninne hva Tidal er - hva vil du si?
I forhold til spotify?

På en skala fra 1 til 10, hva er sannsynligheten for at du vil ila denne uka signe opp for en prøveperiode med Tidal?
Hvorfor det? Hvorfor ikke 'en under'
Hvorfor ikke 'en over'?

Da er vi ferdig - tusen tusen takk for at du tok deg tiden til å gjøre dette sammen med meg!

Sitter du inne med noen tanker eller spørsmål, som kanskje dukket opp underveis, som jeg ikke spurte om?

Takk igjen, dette var supert!
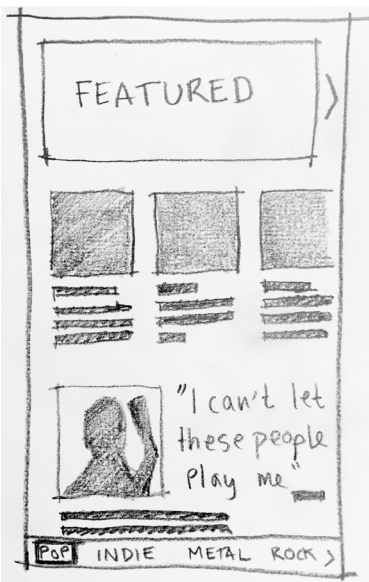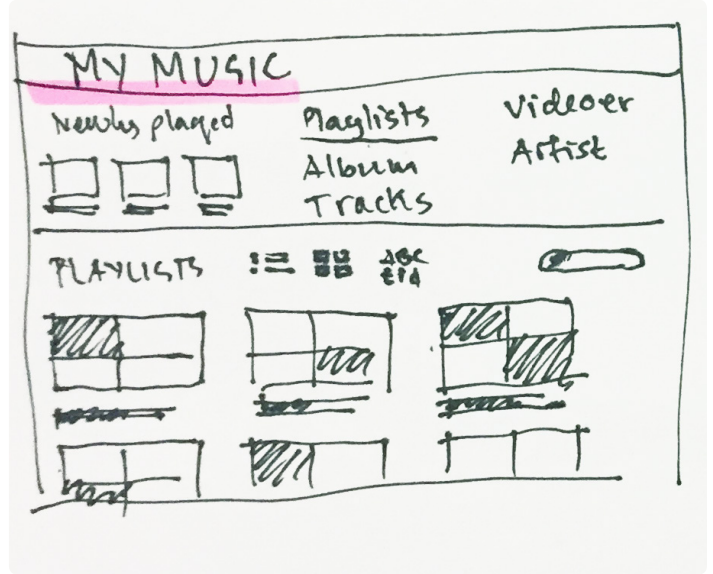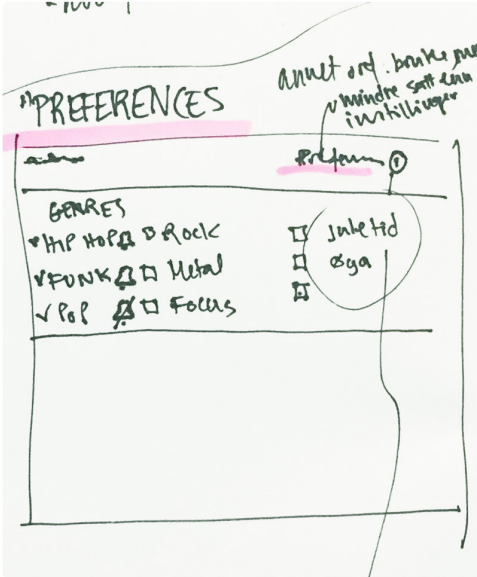
Sketches & mock-ups

Drag n' drop
kryss ut..

What's New

Your Music Feed

My Music

Drar inn fra
What's new

Pinterest

Endre følgere

Filtre   Search...

NxWorries Essential

by Tidal Hip Hop

Albums

Lizzo
Coconut Oil

By David Byrne

Albums

Albums

Resident Advisor

Journalism pìece

by Klassekampen

Lizzo
Coconut Oil

Lizzo
Coconut Oil

The next funk queen!

Recently played

Recommended

Search

My Music

News feed

Categories

Search...

Featured playlists

New releases   ›

RADIO

New tracks

Track

Track

Track

VIDEO

1 d

by Tidal Hip Hop

Journalism pìece

Lizzo
Coconut Oil

Kommentar bla
bla bla...

Drake
Sneakin'

Kommentar bla
bla bla...

2 d

Resident Advisor

Drake
Sneakin'

Rising artist

MOCK-UPS W/INTERACTION

PROTOTYPES & TESTING

As I conducted a lean development process, larger or smaller revisions on the design was made consecutively, resulting in many prototypes versions. Here is a selection showing the development.

Invision only allows for one project at a time, so only one earlier version from there remains.

tidal.com: **http://tidaltest.businesscatalyst.com/**

tidal.com: **http://tidaltest5.businesscatalyst.com/**

Webplayer: **http://tidaltest.businesscatalyst.com/what-s-new-limited.html**

Webplayer: **http://tidaltest4.businesscatalyst.com/new-pop-limited.html**

Webplayer: **http://tidaltest5.businesscatalyst.com/diff-pop-unlimited.html**

First time use: **https://projects.invisionapp.com/share/AW9ZWU6MK#/ screens/212576727_First_Screen**

Participant profiles

♀ ♂ **Occupation (age)**
Daily music service
Techiness level: Low/Medium/High

USER STUDY

♂ Video Producer (26)
Spotify
Medium

♀ Finance (26)
TuneIn (online radio)
Medium

♂ Designer (31)
Spotify
High

♂ Design student (24)
Spotify
High

♀ Design student (23)
Spotify
Medium

♂ Physics student (22)
Spotify
High

♀ Design student (23)
Spotify
Low

USABILITY TESTING

♂ Design student (24)
Spotify
Medium

♀ Chemistry student (23)
Spotify
Medium

♂ Architect student (23)
Spotify
Medium

♀ Construction student (26)
Spotify
Medium

♀ Architect (61)
Radio/CD
Low

♀ Media studies (23)
Spotify
Low

♂ Physics student (24)
Spotify
Medium

♀ Architect (28)
Spotify
Medium

♀ HR (23)
Spotify
Low

♀ Medicine student (21)
Spotify
Low

♀ Energy student (25)
Spotify
Medium