NATIVE INSTRUMENTS

Case study: Native Access 2 - Research, software design,
information architecture & evaluation (2017 - 2018)

NATIVE INSTRUMENTS

Locations: Germany, USA, UK, France, Japan, & China

Native Instruments is a global manufacturer of innovative music technologies consisting in software and hardware for computer-based audio production, sound design and Djing. The company's mission is to develop fully-integrated solutions for all musical styles and professions. The resulting products regularly push technological boundaries and open up new creative horizons for professionals and amateurs alike.

Link: https://www.native-instruments.com
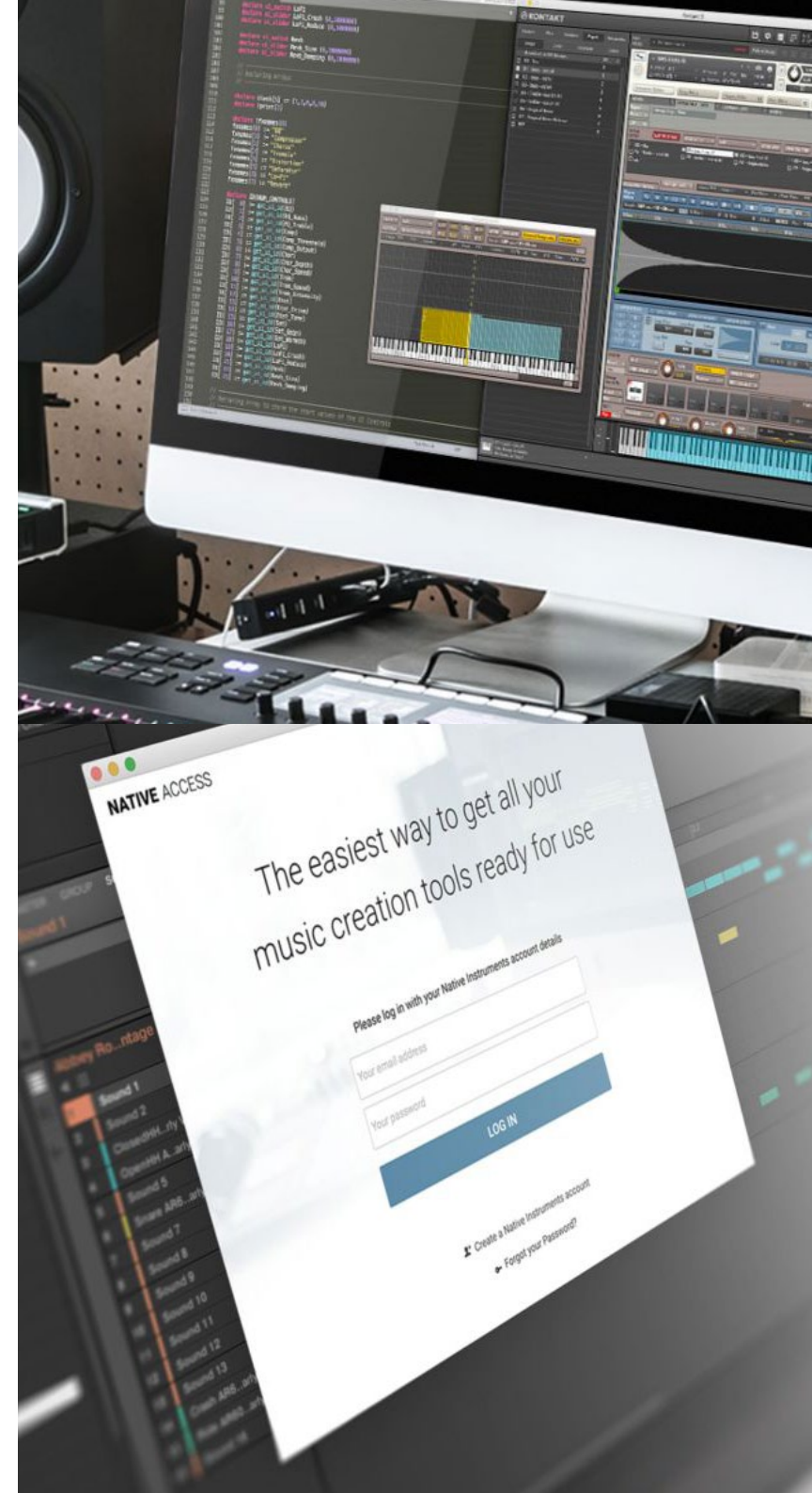
Challenge

I temporarily joined a product team at Native Instruments to re-conceptualize Native Access, an administrative desktop software client used by 650k+ users to manage purchased music assets powered by Native Instruments technology.

Over the years, Native Instruments has steadily expanded its catalog, offering a vast array of plugins, sound libraries, and virtual instruments. These assets are deployable via Native Access proven a valid perpetual license is in possession.

However, as the number of assets increased, the need for a design and technology overhaul became clear to ensure the software could continue supporting users' productivity without disruptions.

From a UX perspective, the problem became apparent. Users (including myself as an existing client), found it increasingly cumbersome to manage and update these extensive asset libraries via Native Access. With some users managing hundreds (100s) of assets, it became clear that an efficient solution was needed to simplify asset management via functions leveling searchability, findability, repairs, updates, and more.

Goals

To elevate music productivity via a scalable solution fortified with refined architecture, semantics, and hi-end functionalities to ensure effective music asset management leveling UX and searchability securing an uninterrupted workflow.

Role

Researcher, Designer, Prototyper, Information Architect, Subject matter expert (music domain)

Timeline

6 months (2017 - 2018)

Teams

The project involved collaboration with various stakeholders plus 5 product teams in Germany, London, UK and California, US. Each team comprised of:

• 1 PO
• 1-2 Product designers
• 4-6 Developers
• 1-2 QA
• 1 Scrum master

In addition to:
• Customer Insights
• Engineering

All **Installed** Available

All Applications Instruments Effects Kontakt Reaktor Expansions

Arkhis	1.0.0	13.20 GB	
Ashlight	1.0.1	2.76 GB	
Guitar Rig 6 Pro	6.0.2	720 MB	
Hybrid Keys	1.1.1	3.98 GB	
Massive X	1.3.0	1.06 GB	
Piano Colors	1.0.0	28.44 GB	
Scene	1.0.0	19 MB	
Super 8	2.1.0	146 MB	

||\ Library

Subscription

Updates

+ Add Serial

your.name@native-inst..

Leave Feedback

NATIVE ACCESS v.2 (new)

Native Access

File   Edit   View   Help

NATIVE ACCESS

All   Installed   Available

Library

Updates   13

All   Applications   Instruments   Effects   Expansions   Kontakt   Reaktor   **Vendors**

All   Native Instruments   ProjectSAM   Soniccouture

Products categorized by Vendor. Find Soundwide brands and NKS partners here.
Don't show again

108 items

Relocate All   Install All

Abbey Road 80s Drummer   1.3.0   8.49 GB   Install   ...

Abbey Road Modern Drummer   1.3.0   7.83 GB   Install   ...

Abbey Road Vintage Drummer   1.3.0   7.62 GB   Install   ...

Absynth 5   5.3.4   2.59 GB   Install   ...

Action Strikes   1.2.0   3.33 GB   ⚠   Repair   ...

Action Strings   1.5.0   9.94 GB   Install   ...

Alicias Keys   1.5.0   7.48 GB   Install   ...

Balinese Gamelan   1.5.3   2.39 GB   ⚠   Repair   ...

Add Serial

Preferences

Help

Log Out

NATIVE ACCESS v.1 (old)

Native Access

NATIVE ACCESS

Add a serial

Software   >   Not Installed

Software

NOT INSTALLED

Not installed   47

Available updates   17

Installed products

INSTALL ALL

Evolve Mutations 2   1.2.0   1.42 GB   INSTALL

Evolve R2   1.7.0   3.12 GB   INSTALL

George Duke Soul Treasures   1.3.0   4.77 GB   INSTALL

Guitar Rig 5   5.2.2   962 MB   INSTALL

Kinetic Metal   1.1.0   1.52 GB   INSTALL

Kontakt Factory Library   1.3.0   23.26 GB   INSTALL

Kontour   1.0.0   25 MB   INSTALL

Maschine 2   2.5.0   745 MB   INSTALLING

Downloading   7 mins remaining – 505 MB

Maschine 2 Factory Library   1.3.0   5.48 GB   INSTALL

Maschine Drum Selection   1.3.0   69 MB   INSTALL

Retro Machines Mk2   1.3.0   3.71 GB   INSTALL

Rise and Hit   1.2.0   5.90 GB   INSTALL

Rounds   1.2.0   27 MB   INSTALL

Scarbee Funk Guitarist   1.2.0   7.45 GB   INSTALL

Scarbee Jay-Bass   1.1.0   2.24 GB   INSTALL

Responsibilities

In summary, key responsibilities included:

- Defining objectives and roadmap with stakeholders

- Research, discovery and competitive analysis

- User interviews and requirements analysis

- Workshops, audits and peer reviews

- Design, feature ideation, and technical investigations

- Moderated usability evaluation

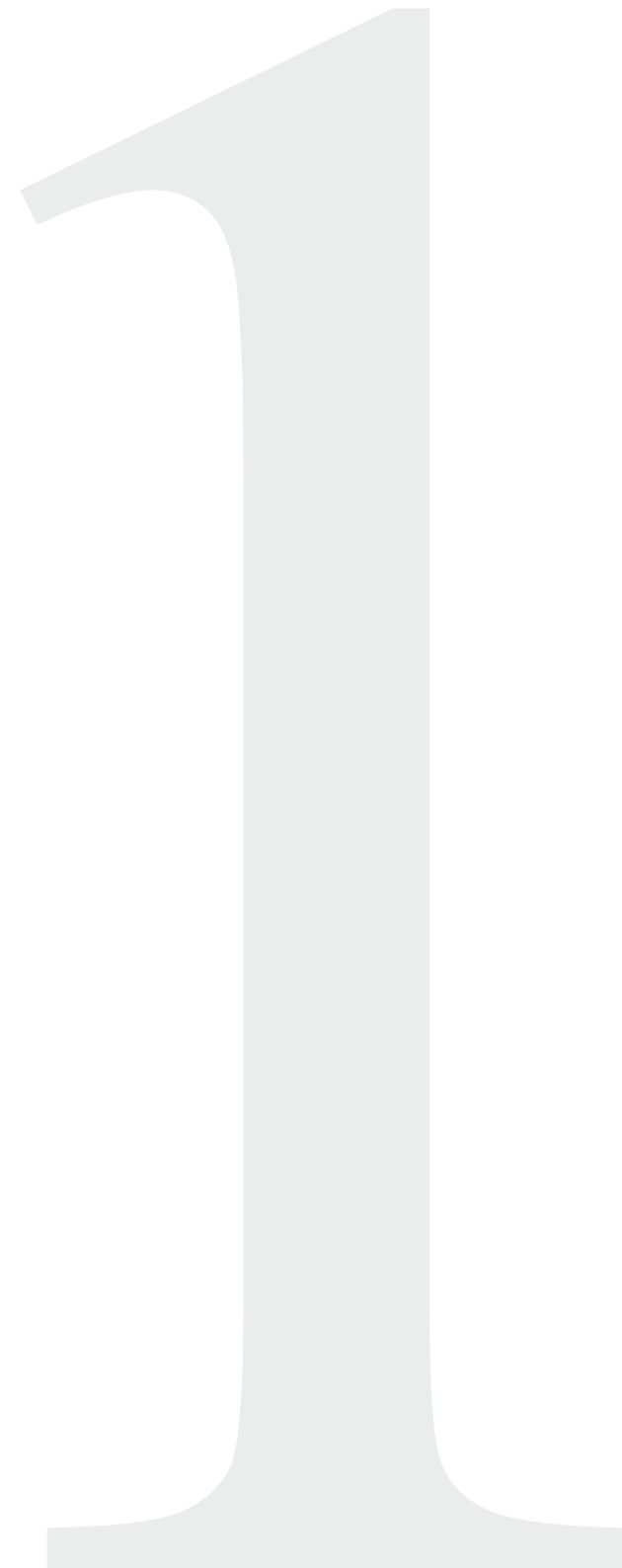- Results and recommendations presentation to stakeholders
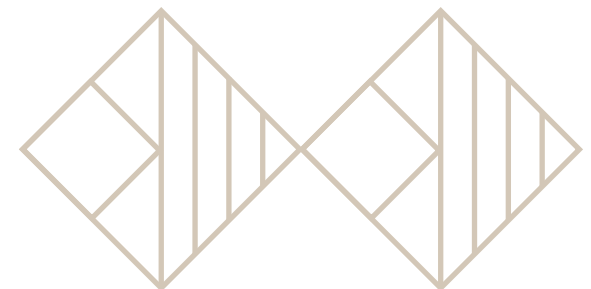
Steps

01.   Kickoff

02.   Discovery

03.   Audit, concept design, workshops & expert reviews

04.   Evaluation & results

05.   Outcomes & reflection

Kickoff

1
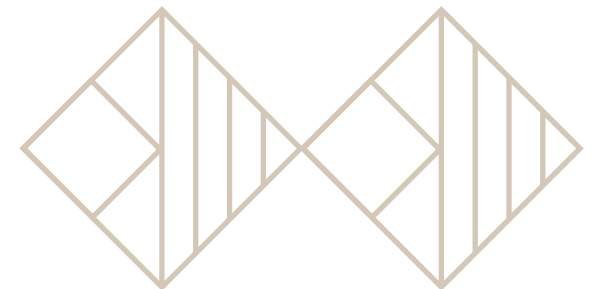
Kickoff

We kicked off with a project onboarding and discussions between a Product owner (PO), Scrum master, and 3 product designers including myself.

Together, we reviewed business requirements and established a roadmap comprising tasks, and objectives. As well, we set weekly reviews to report milestones and challenges.

Because of technical complexities, 4 more teams whose products function via Native Access **became involved.** Of these, 2 teams are based in California, US and London, UK.

Teams

As more teams got involved, I assigned a 'letter' to each team to make it easier for you to understand the setup:
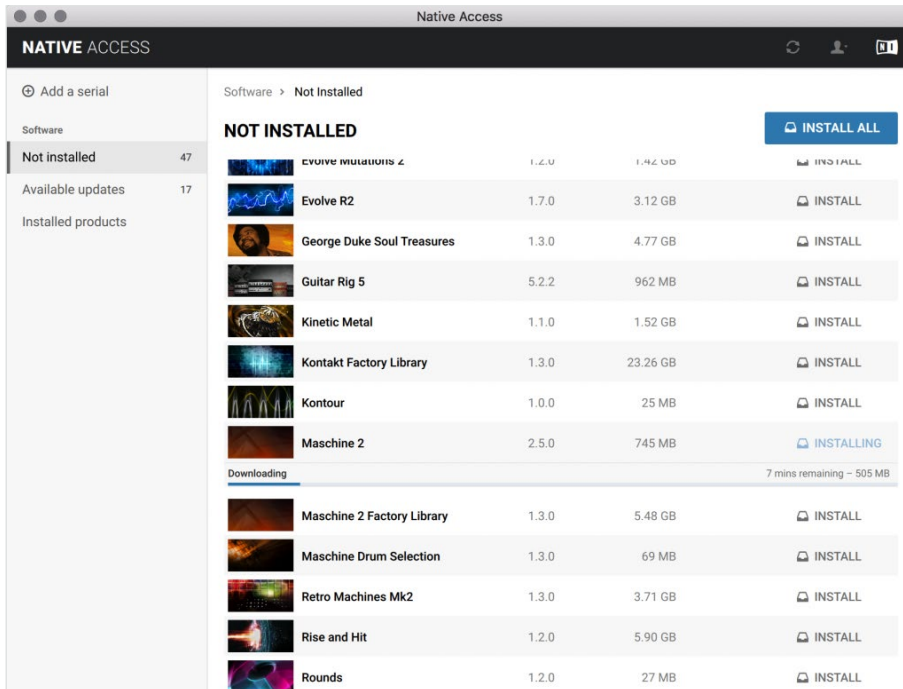
MY TEAM for Native Access.

TEAMS A & B for web & customer accounts integration.

TEAM C for *'Maschine'* a music productivity software & hardware suite.

TEAM D for a seamless Native Access component that validates product licenses and credentials.

How Native Access works

Understanding Native Access and its context will help you to better understand this project. If you happen to be familiar with Adobe Creative Cloud (CC), the process is fairly similar.

1   Customers create an account on native-instruments.com and purchase an item such as a digital sound design tool.

2   After checking out, the customer is prompted to download and install Native Access on their system.

3   Later, the customer signs into Native Access using the native-instruments.com credentials to access the purchased items via the application.

4   The customer installs and activate the product via a valid license. The product is ready to be used.

Discovery

2

Secondary research

To obtain a broader perspective on the product and its history, I reviewed documentation and data from previous research, usability evaluations, user feedback from forums, and behavioral metrics via Mixpanel.
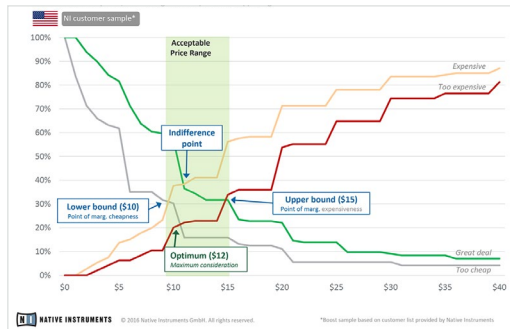

Competitive benchmarking

Together with another designer, we benchmarked 5 competing solutions. The key takeaway is that competing solutions have excellent search and filtering mechanisms.

Understanding users

We interviewed 15 participants (n=15) comprising existing customers (i.e. musicians, students, and producers) to learn about their productivity habits, toolsets they use, and the **pros** and **cons** they see in Native Access.

Discoveries were translated into **user stories**, **problem statements**, and other deliverables to aid us in making informed decisions. The user stories became part of the product roadmap.

Take aways

In summary, we discovered that:

- Productivity habits vary by individual's preferences.

- On average, a user has about 300 items by Native Instruments, partner vendors, and competitors.

- Limited filtering capabilities hinder productivity as users spend ample time finding the desired music asset for their workflow.

User stories & problem statements (extracts)

'AS A USER' STATEMENTS - *As a user...*	SOLUTION IDEAS
...As a user, I tend to be in a hurry to finish my composition, hence I'd like a quick option to locate an instrument right away...	Clearly, a search functionality could help.
...I have many virtual instruments and often it gets challenging looking an instrument for my next composition.	How about we introduce various filters such as alphabetically, by vendor, by instrument type, etc. ?
...I have many installed applications, I tend to run out of space, therefore I use external drives (HDD). Would be nice to have the means to migrate existing installations from one drive to another...	Although this feature requires investigation, such functionality could make it easier for users to relocate installed libraries into other external drives particularly for the least tech-savvy user.
...I am new to Native Access. Because of that, I search for tips online to learn how to configure Native Access according to my preferences...	Availing helpful guides at hand could mitigate this issue.

Scenario map (example)

STEP	STEP	STEP	STEP	STEP
Jacob just got his Komplete 11 bundle HDD	He wants to install some specific instruments to start composing	He is in a hurry due to a deadline to send compositions at the studio for final mastering	Jacob is only interested in installing instruments straight from the Komplete HDD	Finally the instruments / effects are selected and installation is in progress...
Jacob is already familiar with most of the NI products	Will Jacob manage to find his desired instruments?	Would these time constraints lead to unwanted issues?	Would there be any mishaps by selecting an item that must be downloaded beforehand?	Is Jacob satisfied about the entire process?
Great! I got my Komplete 11 HDD. Now I need to see which items to install...	*So many instruments! It will take me a while to decide what to choose for my compositions*	*Been scrolling up and down to find the NI instruments I am eager to use*	*Oh yes...I also need to install this specific studio effect*	*Finally! It took me a while to see which Piano samples I should install*
	Luckily I know which ones I want...after reading the specs on the NI website	*Certainly I need to select the right Piano samples to utilize*	*Ah...it has to be downloaded first. Why does the instrument listing says 'install' then??*	*The interface is nicely designed. Pity it takes that long to find what I actually need*
If the user knows exactly what s/he wants, then provide a 'search' utility	*Damn it! All the pianos are scattered all around. Of course...all items are displayed alphabetically*	Improve labelling and differentiate downloadable items from those already located within the HDD	The NI Access features 87 items, and it will become overwhelming once more instruments are released
		Provide an option to filter, group & categorize items by instrument type	Respect users' mental models	Therefore content management must be improved!

STEP	QUESTION	USER COMMENTS	IDEA / SOLUTION

Personas (made with other designers)

Heath | 36, Music Sales Specialist
Chicago, IL

Products
Kontakt, Ableton, Logic

Genre
Soundtrack, indie rock/electronic

Context of Use
• Small home studio
• Professional studio

Product Source
• Friends at other companies
• Online directly from company website

Technical Fluency
Mobile Apps
Studio Gear
Social Networks

Purchasing Behaviors
• Tracks new product until it goes on sale or he can convince a friend in the industry to hook him up.
• Looks for intro pricing
• Purchases based on necessity

Product Discovery
• Forums
• Reddit
• Trusted network of Facebook friends

Music Skills
Production
Playing Instrument
Recording
Sound Design
Composition

Sharing Behaviors
• Creates a Wix website to sell to friends.
• Posts on forums when there's something he's proud of.

Bio
Produced and played bass for a locally successful band for 12 years and now focusing on branching out and finding a new career path in sales. Has regular DJ residency Friday and Saturday night at local bars. Has dabbled in film scoring for friend's projects. Making money is important in supporting his partner and kids.

Goals / Motivations
• Recognition in his industry
• Growing personal brand
• Create as many diverse revenue streams as possible through gh his music

Hurdles
• Setting up to sell samples online takes time away from creation
• Wix isn't set up to sell intellectual property, licensing, downloading content

"Making and sharing sounds is what I love, but it's a tough hustle and hard to earn as much money as I need to."

Chris | 35, Professional Sound Designer
Detroit, MI

Products
Maschine, Expansion Packs, Ableton Live, Massive, Reaktor

Genre
American: Hip-hop, EDM, Pop

Context of Use
• Professional studio

Product Source
• Industry accommodation
• Forum downloads

Technical Fluency
Mobile Apps
Studio Gear
Social Networks

Purchasing Behaviors
• Buys sounds based on necessity
• Cost conscious
• Concerned with exclusivity and obtaining sounds that are hard to find.

Product Discovery
• Social Networks
• Other artists

Music Skills
Production
Playing Instrument
Recording
Sound Design
Composition

Sharing Behaviors
• Sensitive about sharing creative property, but views it as a necessary way to make some money.
• Likes to protect content until he gets in the room with the right people.

Bio
Chris works as a hip hop producer and finally had the first break in his career contributing to a track for Drake. Now it's all about sustaining the momentum through relationship building and creating content while continuing to make money. He's married, lives in Detroit but travels for work to New York and LA.

Goals / Motivations
• Using every opportunity as a stepping stone to get a career break.
• Growing his reputation to gain exposure to a wide network of artists.
• Create as many diverse revenue streams as possible through his music.

Hurdles
• Waiting to get his sound pack approved by a third party is too time intensive and doesn't allow him complete creative freedom.
• Dislikes the idea of businesses taking a cut of his profits from sound packs
• Doesn't enjoy the process of back and forth meetings, wants to spend most of his work time, in-studio or producing content.

"As a sound designer/producer, I wear a lot of hats. I don't make money through performances so I have to constantly hustle to expand my income."

This **domain/concept model** outlines the complete process users follow to acquire and deploy music assets, ensuring a streamlined approach to their creative productivity. The model was created based on direct insights gathered from users during the requirements phase, highlighting critical needs and behaviors. I developed this model to guarantee that no essential elements were overlooked in the concept development, particularly as the project turned out to be more complex than initially expected. This approach helped us maintain clarity and focus, ensuring the design solution addressed key user pain points effectively.
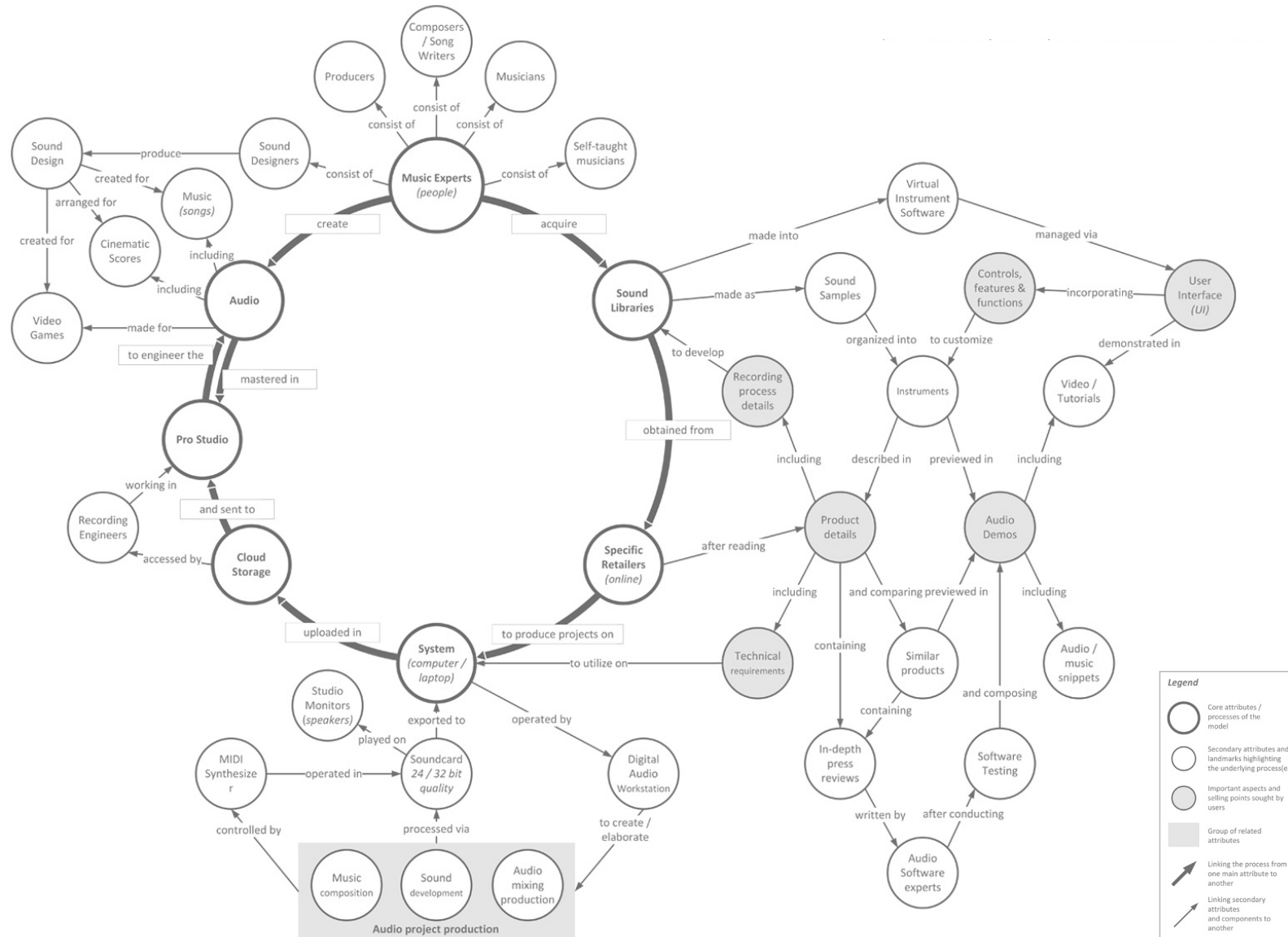
Workshops, audits & expert reviews

3

NATIVE ACCESS v.1 (previous version)
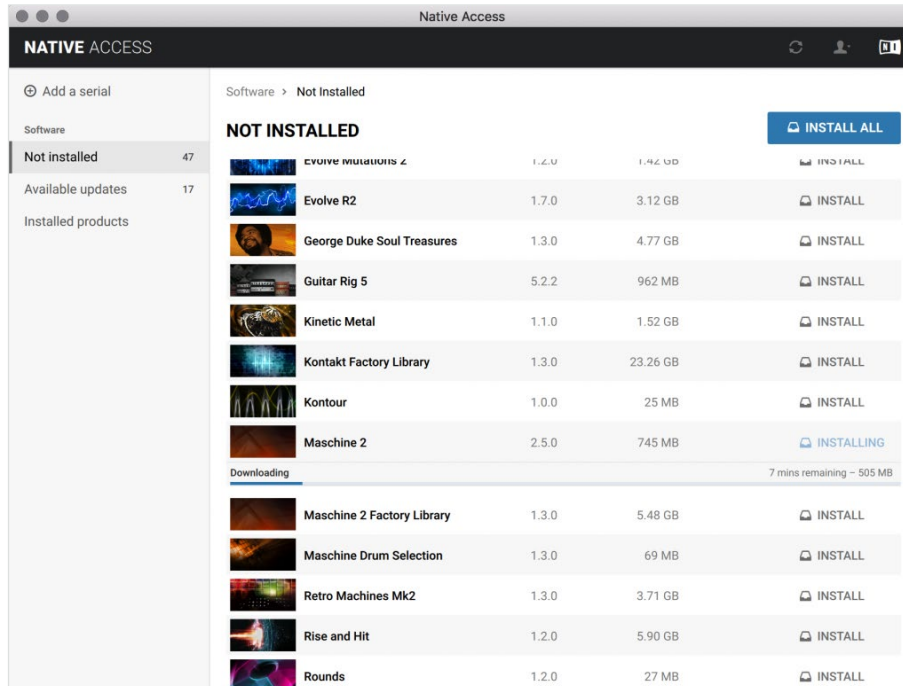
Design audit

I audited Native Access to identify pitfalls undermining UX alongside opportunities for improvements. The product carried limitations such as:

- Not being tailored to host a growing list of music assets.

- No search and filtering utilities were included.

Later I drafted low-fidelity concepts to exemplify ideas aimed at improving the product capabilities to help musicians with their productivity.

Concept design (selected samples)

Several screenshots for the proposed software UI concept bundled with filtering utilities, extra functions, revamped architecture and revised semantics.
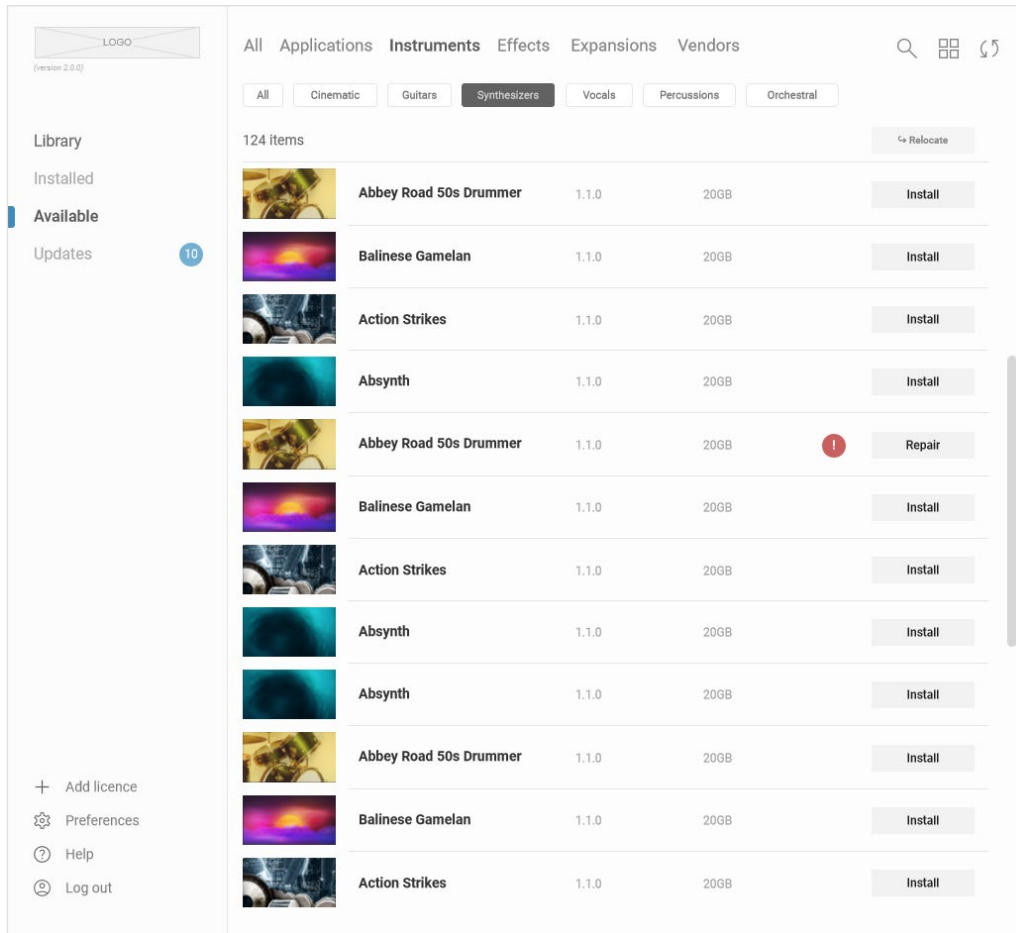
DESIGN RATIONALE: *I proposed retaining similarity with the original Native Access UI structure because an entirely new interface could implicate the overall learning curve and productivity among 650k+ users. As well, the original structure was tested rigorously and was found to work well among its users.*
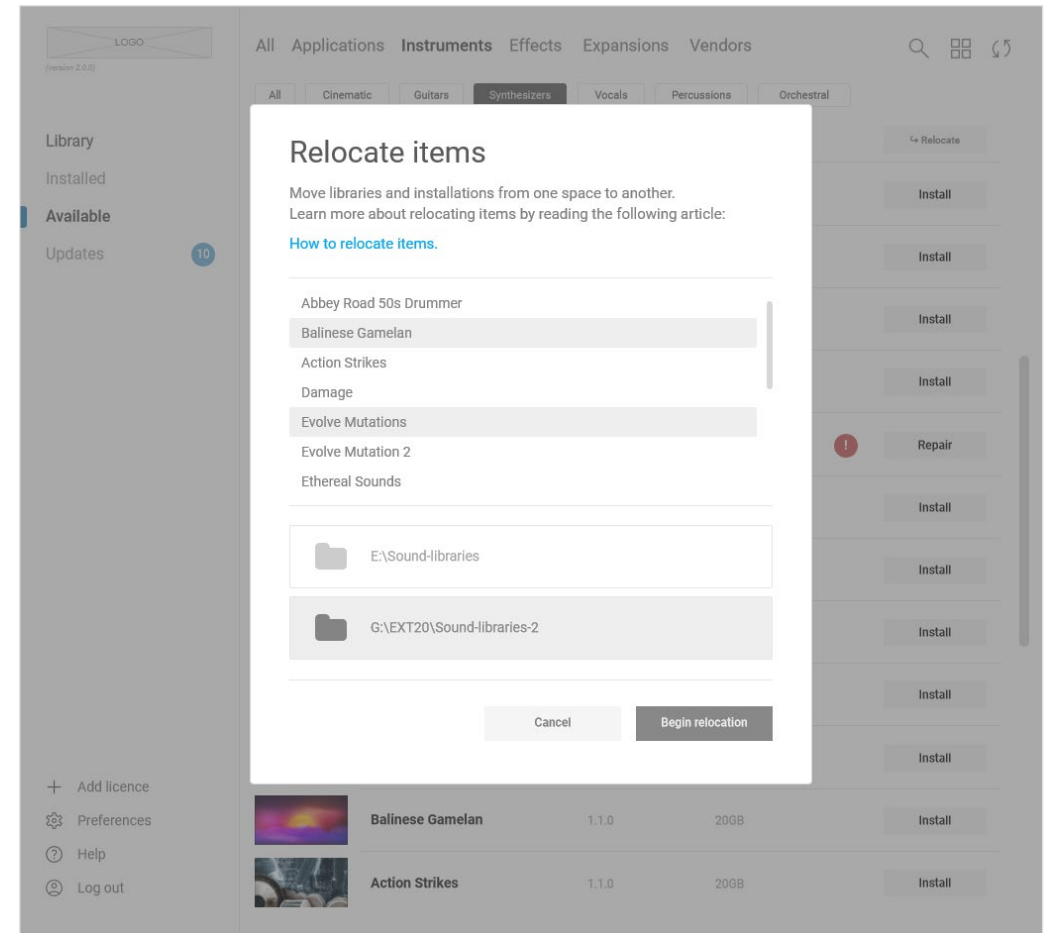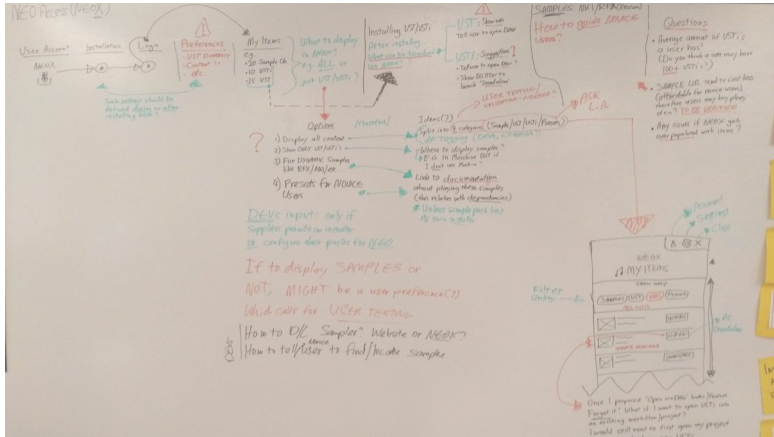
Expert reviews & ideation (workshop)

Together with stakeholders, we ideated and tackled technical implications imposing scalability following the audit.

Ultimately, we refined the MVP concepts I produced earlier by following the problem statements (user stories) resulting from the discovery phases.   Later, a mid-fidelity **prototype** was set via **AxureRP**.

This document covers only the key cases which are:

• Search functionality (i.e. search bar)
• Asset catalog filtering (i.e. by instrument, vendor, genre...)
• Capability to relocate existing installation to other HDD's
• Provide helpful guides and instructions
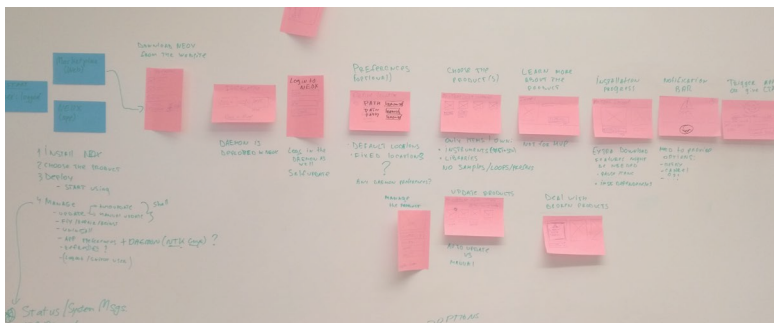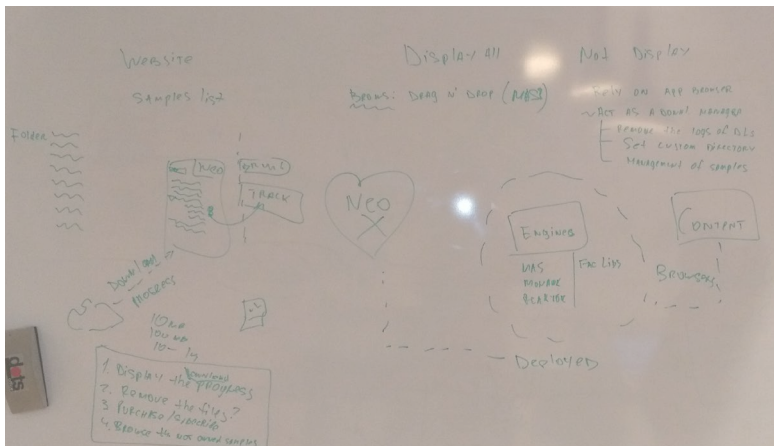
CONCEPT DESIGN

Preliminary prototype for the new Native Access
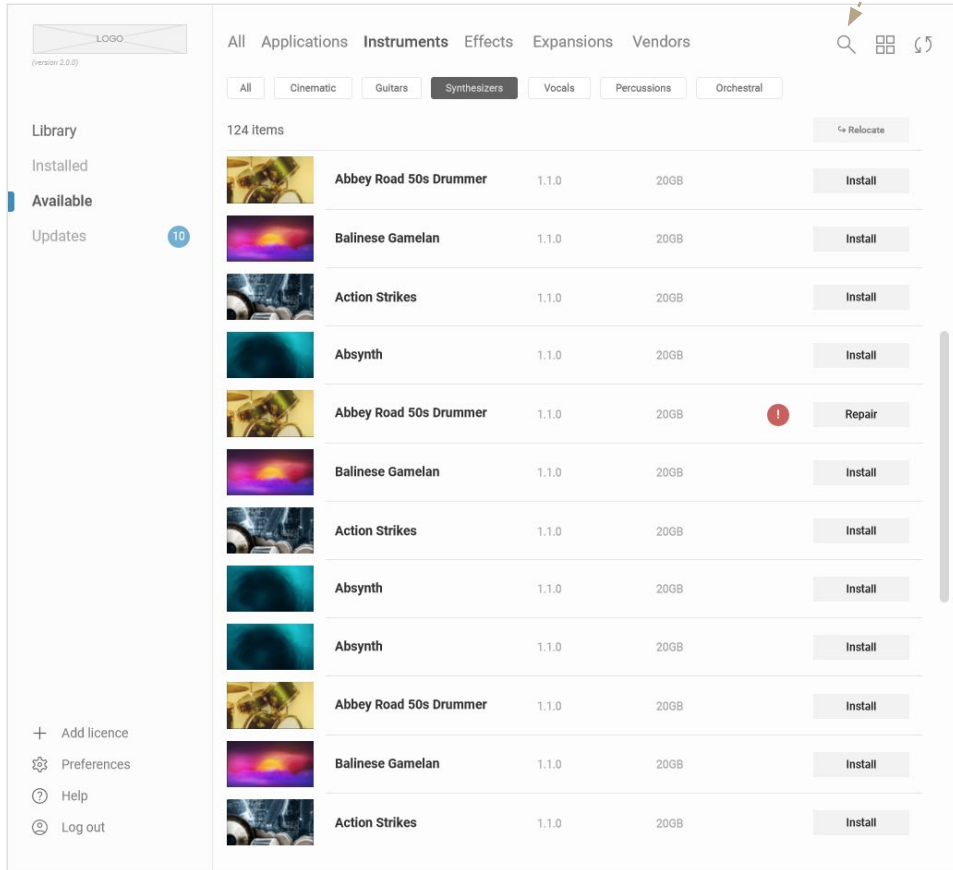
SOLUTION #1

Problem statement

As a user, I tend to be in a hurry finishing my composition, hence I'd like a quick option to locate an instrument right away...

This problem was solved by introducing a search bar within the UI.

CONCEPT DESIGN

Preliminary prototype for the new Native Access
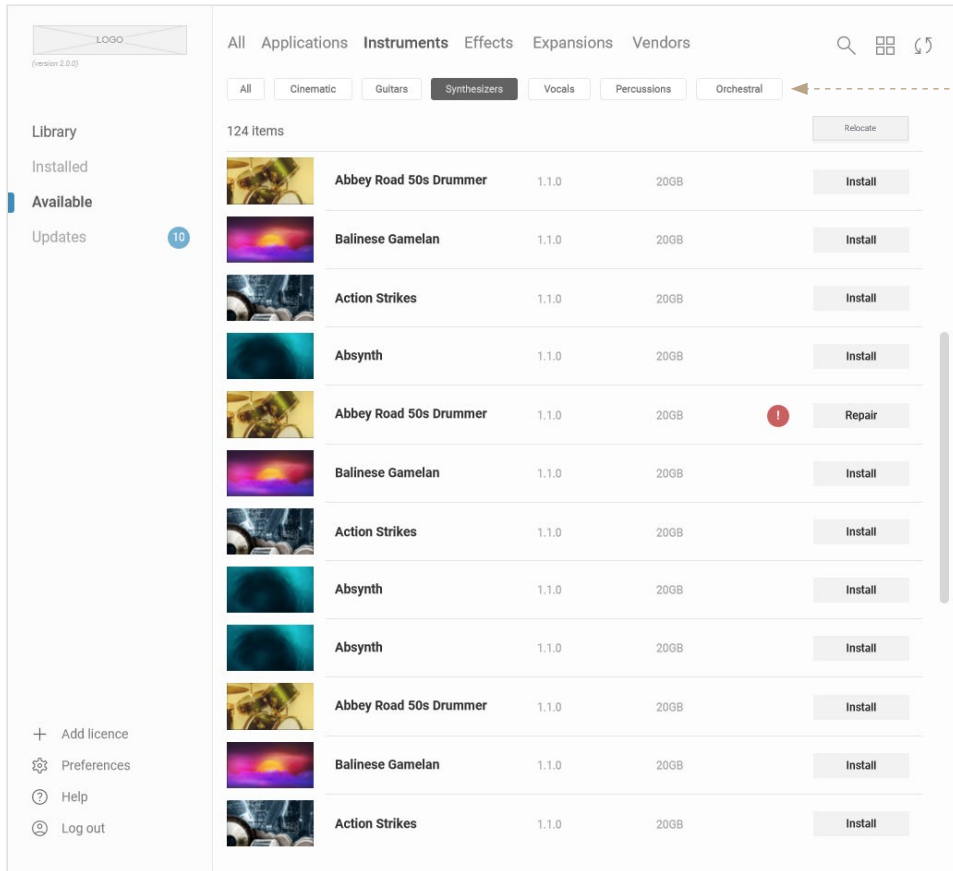
SOLUTION #2

Problem statement

As a user, I have many virtual instruments and often it gets challenging looking an instrument I need for my next composition...

The problem was solved by introducing filtering capabilities

The challenging part was defining the best filters that make sense to users. Luckily, back then, some students visited the headquarters to try new product prototypes before release.

I tasked 5 students (n=5) with a closed card-sorting exercise by administering 10 filters in paper format. Participants were instructed to sort filters starting from the strongly preferred down to the least preferred.
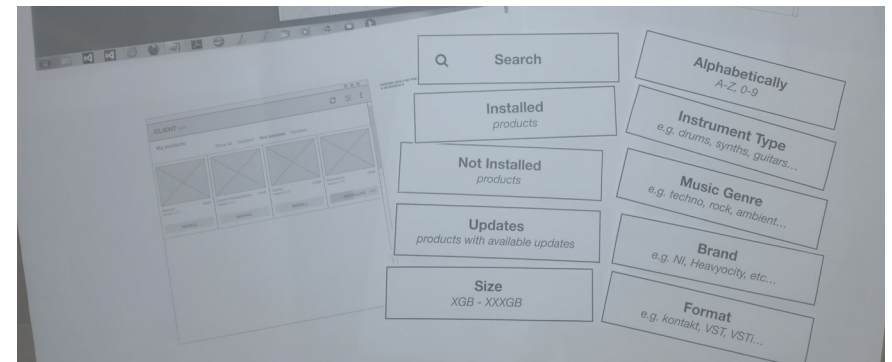
CONCEPT DESIGN

Preliminary prototype for the new Native Access
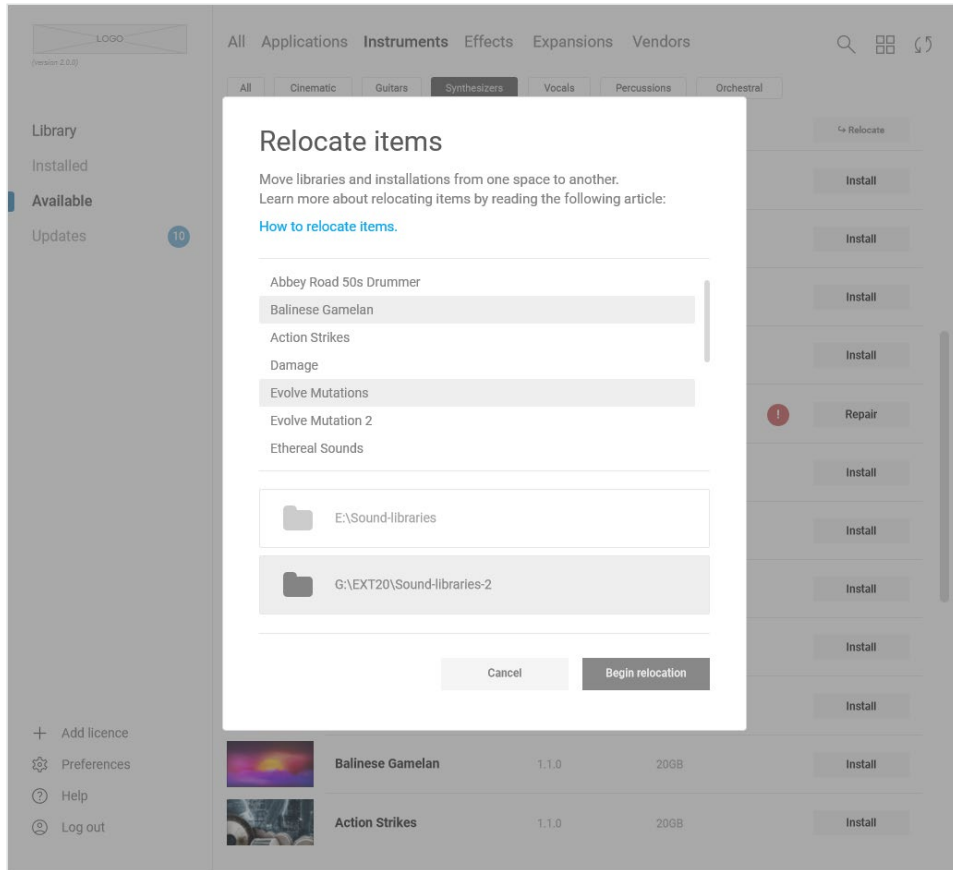
SOLUTION #3

Problem statement

As a user, because I have many installed applications, I tend to run out of space, therefore I use external drives (HDD). Would be nice to have the means to migrate existing installations from one drive to another...

We fixed this issue by introducing a new function tailored to relocate existing asset installations from one HDD to another via a few clicks.

CONCEPT DESIGN

Preliminary prototype for the new Native Access
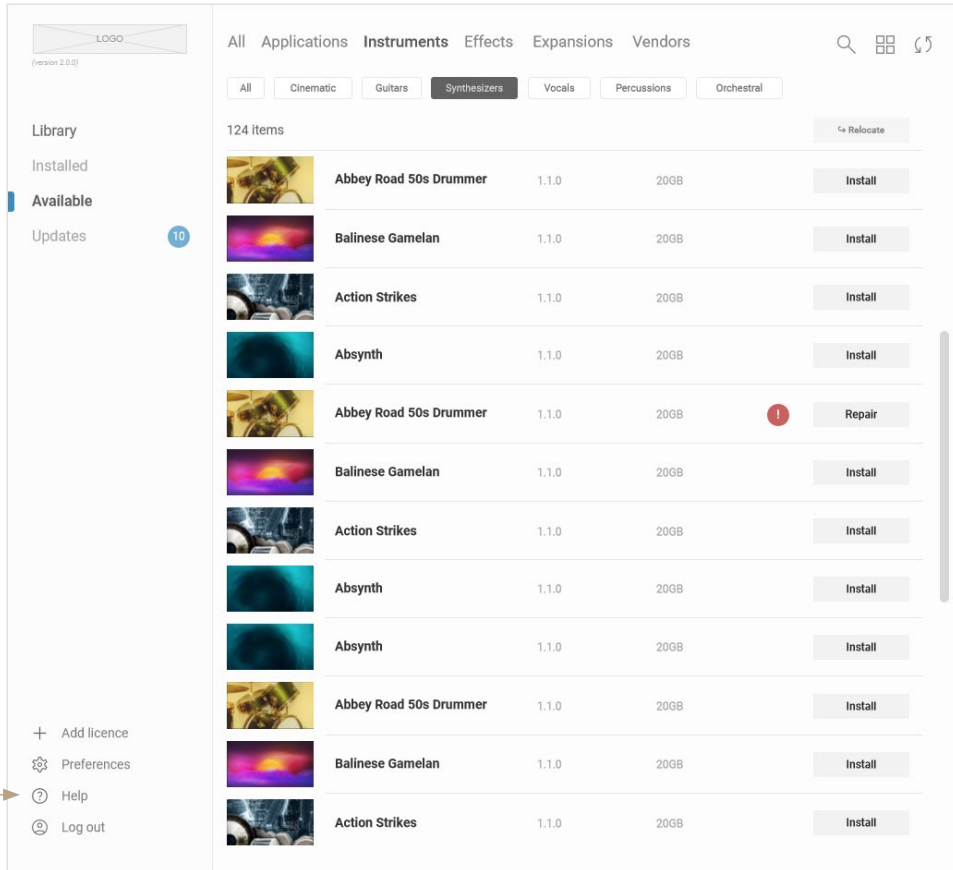
SOLUTION #4

Problem statement

As a user, I am new to Native Access. Because of that, I search for tips online to learn how to configure Native Access according to my preferences...

This problem was easily solved by including a 'help' link.

The tough part was about determining what happens after the click. We speculated whether we should display an overlay window with tutorials, or redirecting users to the website.

WIREFRAMES & FLOWS (CONCEPT EXAMPLES PRIOR ITERATION)

Basic user journeys

UPDATING AN ITEM

UNINSTALLING AN ITEM

FIXING

VARIOUS FEATURES & UTILITIES

PREFERENCES

Downloading & installing Native Access

- User visits website
- User signs in to online account
- My Purchases
- Downloads Native Access installer
- User begins installing Native Access
- User selects installation paths
- Installation finalized

Installing an item & reviewing preferences

- User launches Native Access
- User signs in to Native Access
- Daemon.exe validates credentials
- Daemon.exe synchs with user's online account
- User's purchases load in Native Access
- User lands in Native Access
- User wants to review settings
  - Clicks on 'Settings' or 'Preferences'
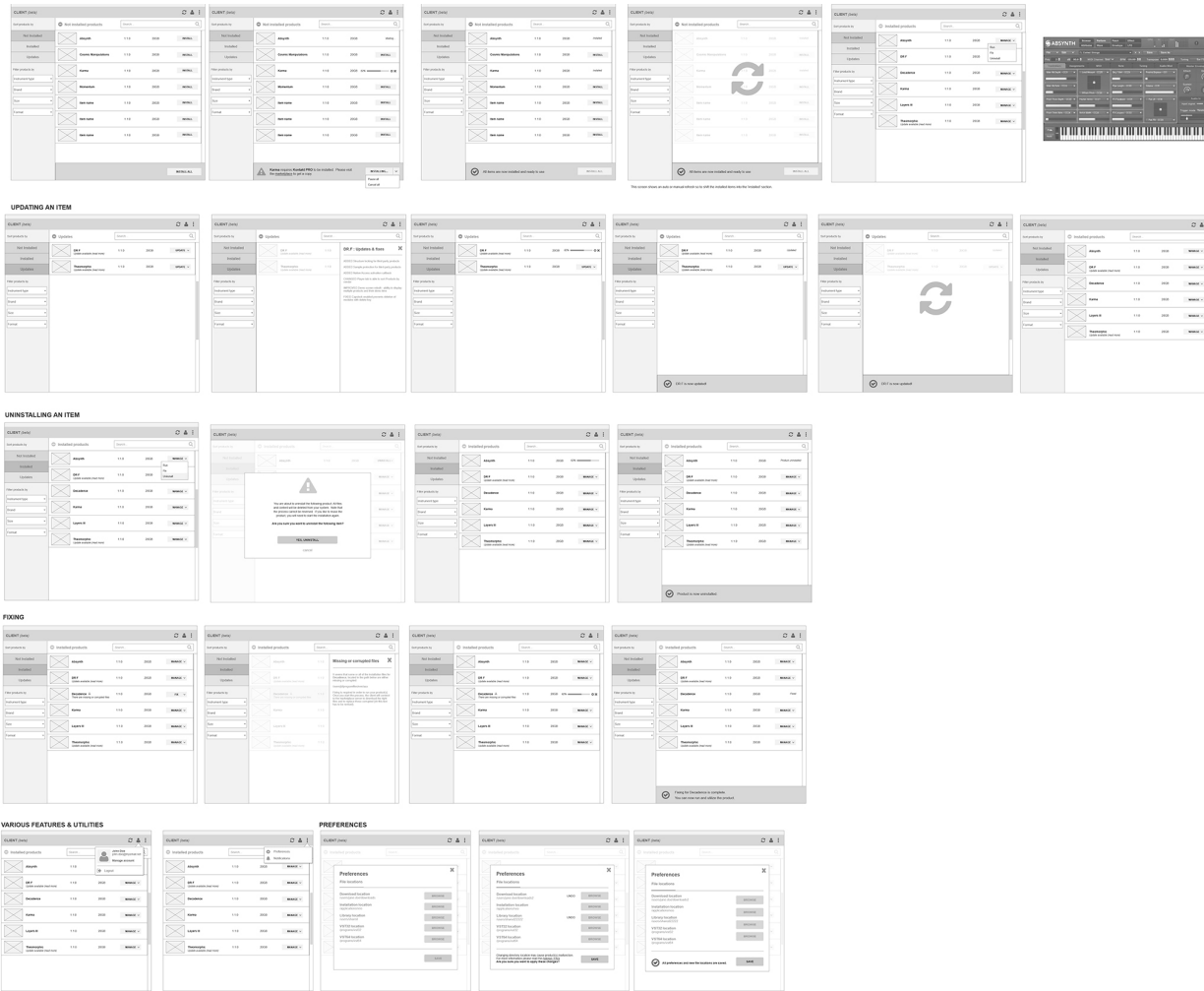 - wants to change an install path to ext. HDD
  - User selects an install path (e.g. VST32 directory)
  - Browse & selects new install path
  - New path automatically saved
- User decides to install an instrument
  - Browse instrument catalog
  - Clicks on the 'install' button
  - Native Access informs user that installation is completed
  - User launches DAW (music productivity software)
  - If prompted, user registers item by adding a serial number
  - Locates newly installed instrument
  - User launches installed instrument

Product Filters: Filter your library by category, type, or genre to find what you need with ease.

Evaluation & results

4
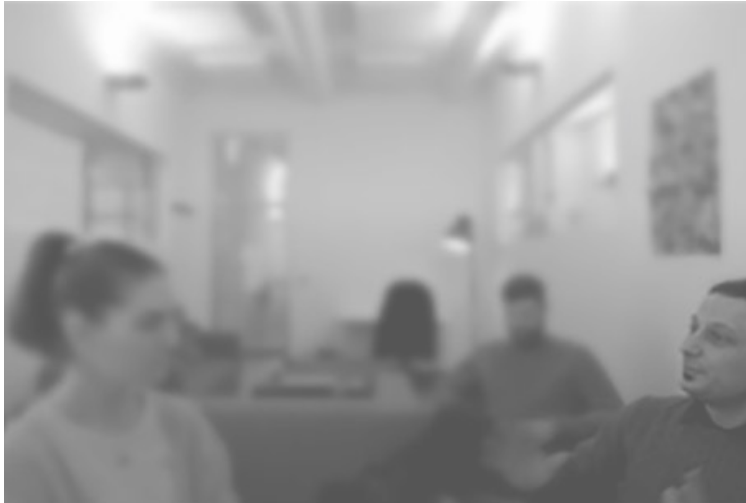
Moderated evaluation

Together with another designer, we evaluated the MVP concept with 12 participants (n=12) comprising musicians, students, and producers. Each session was set in the following format:

- Semi-structured interviews
- Prototype testing with task-based scenarios
- Close card sorting
- Survey study (SUS)

Results (summary)

Generally, all participants found the product:

- Self-explanatory,
- Easy to use, and
- Easy to understand because of its resemblance to the original Native Access and similar competing solutions.

However, iterations on status alerts were required.

Survey study

Results from the System Usability Scale (SUS) indicate that the new concept was perceived well in terms of the ease of use and learnability per the 80 - 93% averages. Due to the small sample size, the 'confidence interval (CI)' was calculated to predict perceptions by the wider audience. The estimates (74.89% - 90.83%) suggest that the wider audience may find the product easy to use.
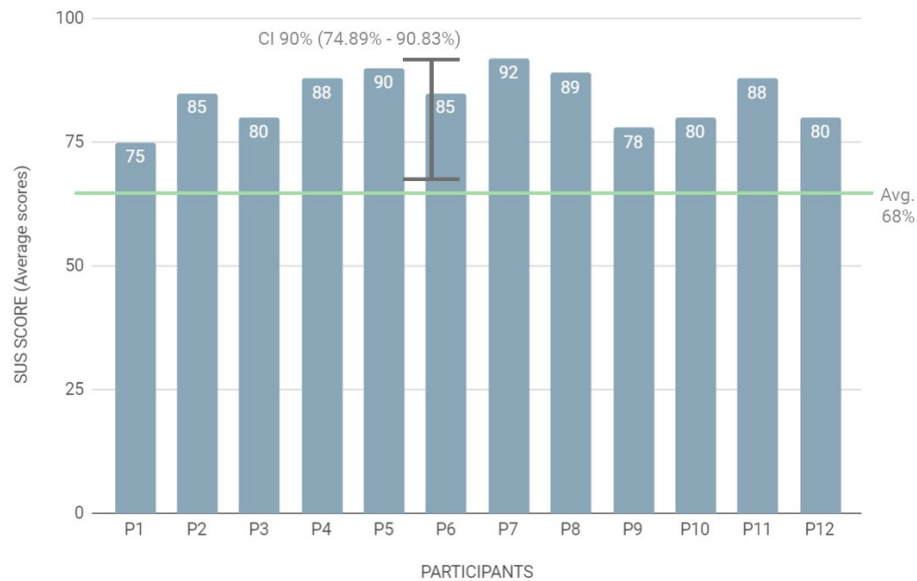
Closed card sorting

Participants were administered a set of cards representing, each with a filter via optimalworkshop.com. Participants vouch for having a 'search bar' utility, coupled with filtering by 'vendor,' 'instrument type,' and 'file format.

Computed results from the closed card sorting task (participants' sample size: 12)

Presenting findings to stakeholders

Lastly, the findings, severities, and other take-aways were presented to stakeholders and teams via power-point decks. The discoveries stimulated discussions relative to technical dependencies, and implications affecting the product build.

An **extract** from the severity scale based on the NN/g version

ISSUES & STATEMENTS	CATEGORY	SOLUTION	REQUESTS	RANK
Nice to have an indicator of how much HDD space is left	Status	*Display an indicator*	1	2
Inform user about updates & subscription expiry	Status	*Enable desktop notifications*	2	2
Nice to see a % of installation progress	Install	*Display a % indicator*	4	3
Nice to have a time estimate of an installation in progress	Status	*Display an indicator (e.g. 10 mins left)*	2	3
I'd like to be able to pause / resume an installation	Install	*Provide a pause / resume option*	2	3
As a novice user I want to be told when I can use an installed instrument	Install	*Display a status note*	1	3
I'd like to uninstall items I no longer need via Native Access	Install	*Enable uninstall function in Native Access*	7	4
I'd like to be able to sort items by those requiring updates	Findability	*Enable sort by 'pending updates'*	3	3
I want filtering utilities to find a product from my long list of items	Findability	*Include filtering capabilities in NA*	7	4
I'd like filter items by those recently installed	Findability	*Enable sort by 'recently installed'*	7	4
There are instruments I frequently used. Nice to have a favorite section	Findability	*Include an option to mark items as favorites*	5	3
I'd like to read release update notes before I run updates	Product	*Include update release notes*	7	4
What is the difference between Kontakt Player (Free) & Kontakt Pro	Dependency	*For dependencies, include clear info*	5	3
I'd like to have brief info about my subscription & what it includes	Subscription	*Can we include brief subscription info in user profile?*	5	3
As a budget user, I would like to be reminded that I have auto renewal enabled	Subscription	*To display such reminders when renewal is almost due*	7	4

LEGEND   Rate: 0 - no issues, 1 - cosmetic issues, 2 - low severity, 3 - severity high, 4 - severity very high
                 Requests: number of participants' reports

Outcomes, reflection & conclusion

Native Access 2 - Sorting instruments by vendor
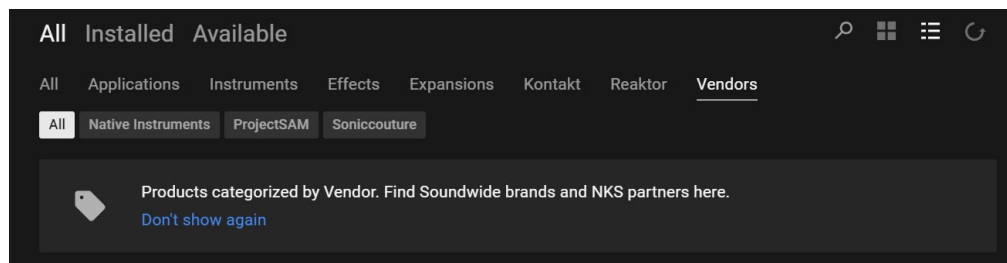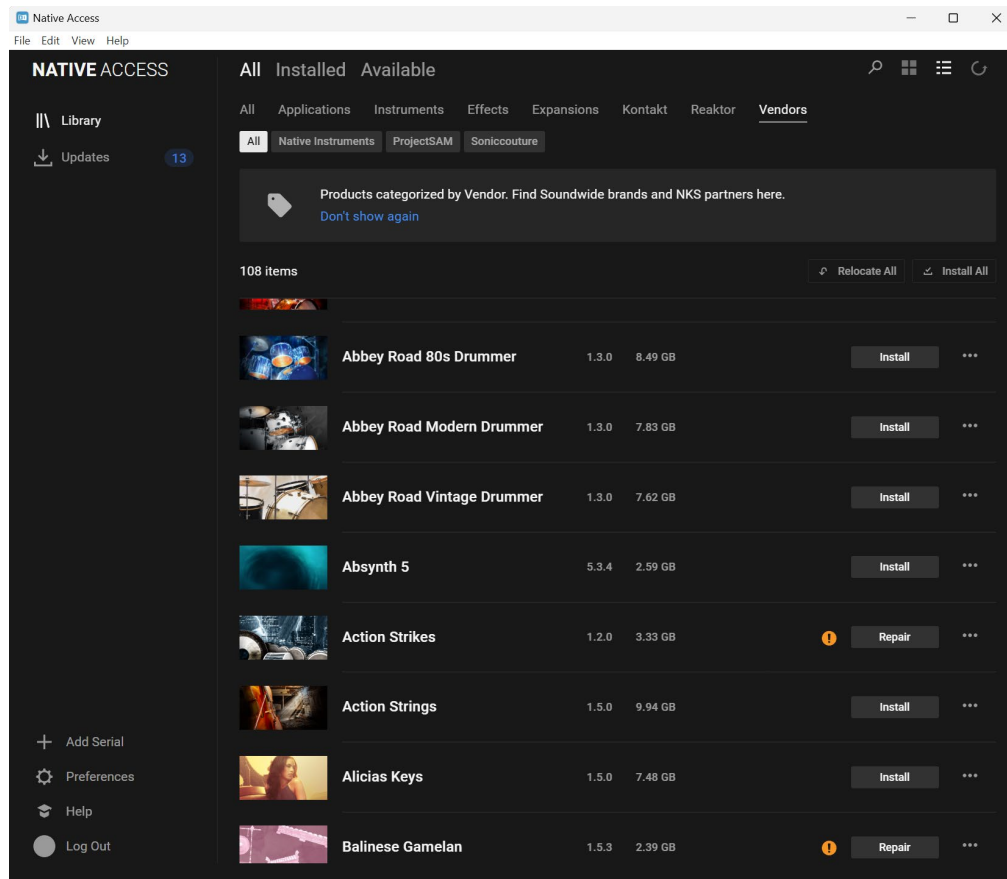
Reflection

This project proved its uniqueness due to challenges and technical dependencies hindering significant progress.

On the other hand, partnering and ideating with 5 product teams plus customer insights not only was fun but also made me reassert the importance of clear communication, facilitation, and time management skills in projects requiring significant experience in handling pressure.

Outcomes & conclusion

2018: The project was placed on hold indefinitely due to technical implications requiring further investigation.

2022: In December 2022, Native Access 2 was released. The final UI and most of the added functions (e.g., filtering, relocating installations) are based on the concepts I devised back in 2017.

For information about Native Access 2 and downloads, visit:

https://www.native-instruments.com/en/specials/native-access-2/