

Research Report

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# **OVERVIEW**

Problem Space
Opportunity
Recommendations

Persona: Meet Elliot

#### **EXECUTIVE SUMMARY**

Music is fundamental to the human experience with some of the oldest instruments dating back to over 42,000 years ago. This demonstrates our innate affinity towards it and explains the gravity that pulls us towards learning an instrument. We all know someone or some many who have tried to learn after childhood, but how many of us can confidently say we play an instrument? We set off on the Affinity project to understand the answer to that question and find a solution through research, synthesis, ideation, and actionable design.

Before beginning the product research we looked into potential business partners that exist in the musical instrument/education space. We identified the <u>Suzuki School</u> to be the most viable

partner due to the global recognition and implementation of their curriculum. With their association to our product, Affinity would have greater credibility and access to the Suzuki School's international repertoire of certified Suzuki method instructors.

We set forth with three assumptions about the problem space encompassing the process of learning an instrument as an adult and as well as a hypothesis to validate.

Some key takeaways from our product research include the pain points of users while learning an instrument, reasons for their success/failure in becoming a musician, and information on the optimal learning environments for music education. Ultimately, this research **validated** our initial hypothesis and allowed us to move forward into rapid prototyping and usability testing.

#### PROBLEM SPACE

We asked ourselves why there were so many people out there who want or have wanted to learn an instrument, yet never blossom into musicians. We answered that question with three core assumptions to guide our research.

## **Assumptions**

- 1. The initial buy in, or investment, is considerably high for a new a hobby (i.e. the cost of buying/renting an instrument, lessons, etc.)
- 2. The time commitment is demanding having to allocate designated time for lessons/ learning as well as the time and effort in practicing
- 3. Because of the lack of support adults face when embarking on this educational journey they often have to rely on their own self-motivation and self-discipline to drive their progress, which often falls short and leads to quitting

These assumptions in mind, we needed to clearly define a problem through a **problem** 

**statement:** Adults are struggling to commit to the process of learning an instrument due to the strenuous demands associated, in turn have trouble investing time, money, and energy. How might we make the process of learning an instrument a worthwhile investment for these adults?

#### **OPPORTUNITY**

We saw the opportunity to provide the necessary support to adults who want to learn an instrument, make that initial investment worth it by facilitating a rewarding and enjoyable learning experience, and to inspire the musician that lives within each one of us.

Having a clear problem to solve for, we crafted a hypothesis that we set out to validate or invalidate through comprehensive research

**Initial hypothesis:** If adults do not feel the weight of their investment in time, effort, and money, they will be able to see a clearer path to learning a new instrument, in turn becoming successful musicians.

#### **RECOMMENDATIONS**

We seek to bring Affinity forward by incorporating some of the changes suggested by our usability testing, which will be more clearly detailed in the Design section of this report, as well as incorporate some of the features we chose not to include in our initial roll out in order to create a more robust product to further engage users and bring them delight in their musical education journey.

We also recognize that Affinity as it is is geared towards the adult learner. However, these users will be interacting with human mentors and we recognize that further research needs to be done to successfully design a complementary interface for the mentors.

Being a responsive website, we must also create mobile and tablet prototypes to accommodate the different devices users may want to learn on. These prototypes will need to be tested to confirm they are usable and appropriate avenues.



#### PERSONA: MEET ELLIOT



Elliot has enjoyed success in his career as an accountant, but feels like he's missing a sense of creativity in his life. For a change of pace, he went to a concert with his friends and found himself moved by the pianist's performance, causing him to explore the idea of self-expression through music.

He wants to learn the piano, and though he did learn a little when he was in the 5th grade, it's been so long since then, and he didn't have the best learning experience at the time. Now, he's looking for a fun learning experience that meets his needs as a busy working professional.

#### **GOALS**

- . Fulfill his newfound creative itch.
- . Perform a song on the piano at his sister's wedding in June.
- . Stay on schedule; one lesson per week + practice twice a week.

#### **NEEDS**

- · Needs lessons that will fit in with his busy work schedule.
- · Needs a skilled instructor who will keep him motivate.
- Needs a lesson plan that will help him gain the skills to learn a difficult song.

#### **PAIN POINTS**

- . Work often takes over his life-schedule.
- . Doesn't know where to find the right instructor for him.
- . Is worried he's too old to start piano lessons again.

# **BUSINESS RESEARCH**

Partner Proposal

Business Model Canvas

Google Heart Model

## Partner Proposal

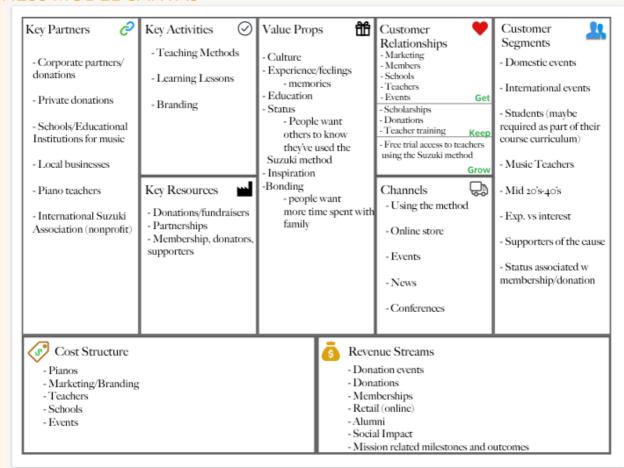
#### **SUZUKI SCHOOL:**

- 1. A method of teaching music founded over 50 years ago by a Japanese violinist.
- 2. Mission statement: "...We seek to create a learning community, which embraces excellence and nurtures the human spirit.
- 3. Suzuki Association of the Americas is a non-profit organization with a network of Suzuki approved teachers and institutions. Revenue sources include: membership dues, chapter affiliate dues, donations.
- **4.** SAA's website is primarily aimed at Teachers as a resource. They also offer resources to Parents.
- 5. Teaching approach based on the way children learn to speak their first language—parents are just as involved in the learning process with the mother/father taught to play a piece at home with the child only listening at first for the child to be able to imitate

#### **OPPORTUNITY:**

The Suzuki school is well known for having excellent teachers that go through strenuous training. They use a teaching method unlike any other program, where the children learn everything about instruments, from the very base of music itself. The Suzuki school is unlike any other school and offers students a very advanced method in learning and teaching.

#### **BUSINESS MODEL CANVAS**



# GOOGLE HEART MODEL

	Goal	Signals	Methods
Happiness	For users to feel inspired to continue learning to play the piano	Users keep trying to raise their scores	Satisfaction, perceived ease of use
Engagement	For users to keep discovering new songs to play and keeping up with their points	The amount of time users spend looking at new songs and checked their scores	# of units passed, # of hours played # of times a user checked their stats, # of times a user played a new song
Adoption	For users to use the website, then eventually on the app	The number of logins online	Upgrades to latest versions, new subscriptions
Retention	For users to continue using the website	The number of return users	Number of active users, renewal rate
Task Success	For users to accomplish their goal	The number of successful completions of a study	Changing the submission date, making a profile and logging on, finding feedback from an old lesson

# **PRODUCT RESEARCH**

**Key Takeaways** 

Screener Survey

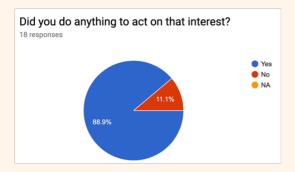
**User Interviews** 

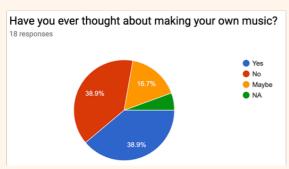
## Key Takeaways

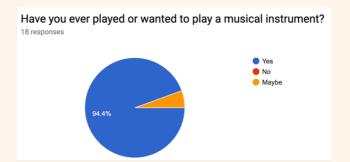
- Users wanted a reliable source to help them learn how to play a new instrument
- They wanted something to support them
- They wanted something to give them a reliable and achievable schedule to keep them on track
- People learn when they are children and often lose the skill in adulthood
- Schedules are busy and demanding, often leaving a small window for practice time
- Adults need external motivators to keep them encouraged, accountable, and determined
- Students prefer to work with teachers that are more like mentors and coaches
- These mentors need to create an encouraging environment and excite the students through engagement to illicit effective learning
- Since adults tend to learn independently, they would benefit from receiving feedback and validation to see they are making progress and attaining results

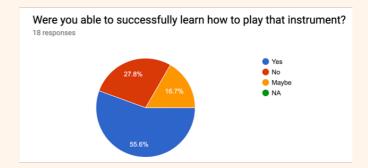
## Screener Survey

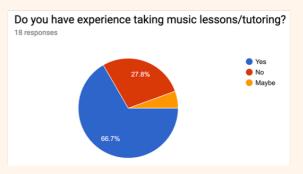
18 participants total | 8/11 interviewed from survey
Remaining 3 (relevant) interviewed from outer circles











#### **User Interviews**

#### **Reasoning:**

We interviewed participants to understand their past experience in learning instruments, their different learning styles and what has stopped them in the past from continuing to practice, so we could gain insight into what will work best in our prototype.

## **Methodology:**

- 1) We began by sending out a screener survey, so we could assure that the people we continued to interview had past experience in learning an instrument, either successful or unsuccessfully.
- 2) We interviewed 11 adults as our target audience included working professionals who have a lack of time and energy, with slightly more in-depth questions.

#### **Scope of questions:**

Our questions remained broad as we wanted to make sure that our users could tell us a story about their different experiences. Some of our questions included "What is you best learning environment?" and "Who has been your most impactful teacher?"

# **SYNTHESIS**

**Affinity Map** 

Topics to "I Statements"

Affinity Map: Key Insights

Journey map: Without Affinity

Competitive Feature Analysis

Comparative Feature Analysis

Journey Map: With Affinity

Google Heart Model

## **AFFINITY MAP**



#### TOPICS TO "I STATEMENTS"

Using the affinity mapping tool seen on the previous page, we were able to compile and synthesize data from our user interviews into the following topics and "I" statements.

### Community/Friends

» I feel supported when I have a community.

#### Approach/Method

» I need a dynamic and thorough education

#### **Teacher Quality**

» I need a knowledgable teacher who treats me like a colleague, is challenging & encouraging, passionate & exciting, and patient.

#### Inspiration

» I find music to be a personal experience.

#### Motivators

» I am motivated by learning with songs that I like/enjoy.

#### **Learning Environment**

» I prefer to learn with others.

### Discouragement/Inhibitors

- » (1) I don't like feeling pushed/forced to learn
- » (2) I don't have enough time to learn on my
- » (3) I find that the early stages of learning a new skill can be intimidating
- » (4) I need to see that I'm making progress
- » (5) I feel that it's difficult to switch to a new instrument

#### Youtube

» I use YouTube to learn the fundamentals.

#### **AFFINITY MAP: KEY INSIGHTS**

We then further distilled the affinity map "I" statements and combined them with other insights from our research to create key takeaways.

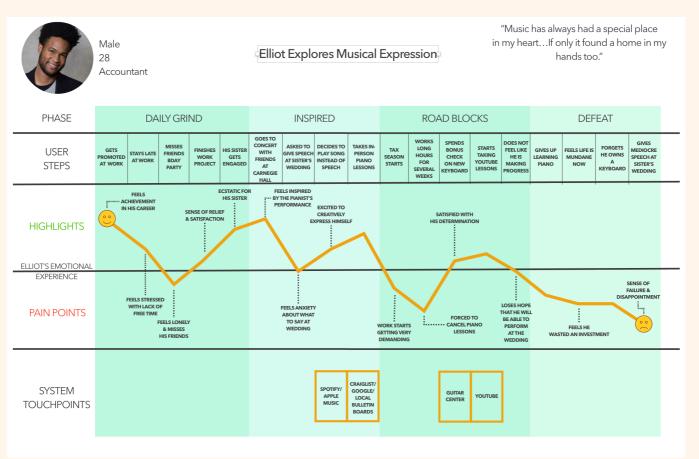
### **Target Audience**

- •People are inspired by music, motivating them to learn an instrument
- •People learn an instrument when they're children and often lose the skill going into adulthood
- •Adults don't have time to dedicate to learning and practicing

#### **How People Learn**

- •They need external motivators to keep them accountable/practicing
- •Teachers need to be encouraging and facilitate discovery
- •People want teachers who are more like mentors and coaches
- •People need immediate feedback and validation
- •People prefer 1:1 learning or learning in a group depending on their goal and circumstances

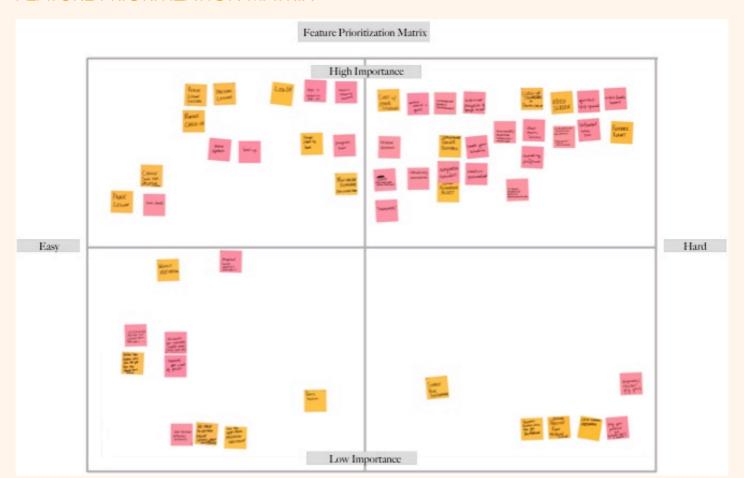
#### JOURNEY MAP: WITHOUT AFFINITY



## MoSCoW MAP



## FEATURE PRIORITIZATION MATRIX



# Competitive Feature Matrix

We chose 4 competitors to find where Affinity's features stood apart and fulfilled expectations as well as to ideate ways to make our features stand out or more effective. Out primary takeaway is that **our proposed features fills existing gaps across online education platforms**.

	Affinity Music	Flow	Artist	Udemy	Simply
Video Lessons	•	•	•	•	•
On Boarding Quiz	•				•
Recording & Playback	•	•	•		•
Close-up Video	•	•	•	•	•
Sheet Music Lessons	•	•		•	•
Customize Playlist	•	•			•
Encouragement/Motivation	•				
Lesson reminder alert	•				•
Chromecast/videocast	•	•	•	•	
Chat w/other students	•		•		
Personal lesson stats	•		•		•
Points/Reward system	•				•
Customized lesson plan	•	•			•
Right/left handed lessons		•			
Progress bar	•	•	•	•	•
Show notes played		•	•		•

# Comparative Feature Matrix

We chose 4 comparators to discover unique features among companies in different spaces that share similar business models with our concept. This research also supported out takeaway from the competitive matrix that **our proposed features fills existing gaps across for many similar businesses.** 

	Affinity Music	Peloton	Khan Academy	Wii Fit
Personal Stats	•	•	•	•
Encouragement	•	•	•	•
Video interface	•	•	•	•
Customized lesson	•	•	•	
Reminders	•	•		
Points/rewards	•		•	•
Proprietary hardware		•		•
Interact w/other users	•	•		
Goal setting	•	•		
Real instructors	•	•		
Subscription	•	•		
Help/live chat		•	•	

## REVISED PROBLEM STATEMENT

Music is fundamental to the human experience and for most, if not all people, there is an innate *affinity* towards music that causes many to seek out music lessons that including learning a new instrument. Despite the nearly universal desire to personally engage with music in this way, the fact is that most people, especially after childhood, never move beyond the beginning phases of learning an instrument due to various roadblocks.

Elliot, a busy professional has been inspired to learn the piano and is looking for classes to help him achieve his educational goals, including a curriculum that can can accommodate his specific needs.

How might we give Elliot a tailored and comprehensive learning experience that fits his schedule?

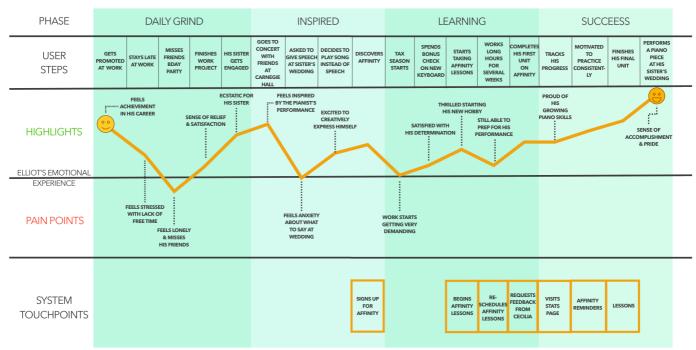
#### **JOURNEY MAP: WITH AFFINITY**



Male 28 Accountant

# Elliot Explores Musical Expression with Affinity

"Music has always had a special place in my heart...If only it found a home in my hands too."



# **DESIGN**

InVision Prototype (Link)

Usability Test: Overview

Usability Testing: Round 1

Usability Testing: Round 2

## INVISION PROTOTYPE (LINK)



https://invis.io/Y7UAZXNKZA3#/387777225 Landing Desktop

#### **USABILITY TEST - OVERVIEW**

To test our prototype, we created 3 scenarios/tasks to better understand the usability, flow, and navigation of the website. We ran the test on 5 participants, observing where they struggled, what they understood, how quickly they were able to complete the task, how directly they got to the result, and how easy they found the usability of the task.

We conducted 2 rounds of this test, making improvements on the feedback we received and the results we observed. The following are the 3 tasks:

### Task 1 - Scenario: On-boarding/Survey

You (Elliot) have just discovered Affinity and you're excited to try out a new way to learn to play music, but before you can get into the lessons on the website, you'll need an account.

Task:Signup for an Affinity account and login.

#### Intended Path:

- 1. User starts on landing page and clicks on "Get Started" button
- 2. User is brought into on-boarding process. User enters name, email, and password.
- 3. User sees email confirmation message and clicks on "Continue to survey"
- 4. User clicks through three survey screens
- 5. Last screen; user clicks on "Finish" and is brought back to login overlay on landing screen
- 6. User continues on to Home/Welcome screen

#### **USABILITY TEST - OVERVIEW**

#### Task 2 - Scenario: Feedback

You (Elliot) recently finished Unit 4 and since you've opted to receive guidance from your live teacher, Cecilia, you're looking to see what she has to say about your performance on this specific unit.

Task: Locate and access the feedback for your recently completed unit.

#### Intended Path:

- 1. User goes to Welcome/Home screen and clicks on "Lessons"
- 2. On "Lessons" page, user locates Unit 4 and clicks on "Feedback" button for that specific Unit
- 3. User gets to Cecilia's message

#### Alternative Path (indirect):

- 1. User goes to Welcome/Home screen and clicks on "Feedback"
- 2. User gets to Cecilia's message

#### **USABILITY TEST - OVERVIEW**

#### Task 3 - Scenario: Calendar/Schedule

You (Elliott) have a big work project due on October 21st, and you need to figure out a game plan for getting practice time in during the busy week leading up to your due date. You want to make a designated schedule that is also compatible with your work schedule, but it's becoming apparent you'll need an extension, as working on your lessons and practice before the project ends is becoming increasingly unrealistic. Task: Locate and access the feedback for your recently completed unit.

Task: Locate the unit lesson that conflicts with your project due date on your calendar and give yourself an extension.

#### Intended Path:

- 1. Go to hamburger menu
- Click schedule
- 3. Click the date of October 20th
- 4. Change Unit 5 due date.

## **USABILITY TEST ROUND 1**

# USABILITY TESTING | ROUND 1 RESULTS

Task	Jill	Zita	Ariel	Aaron	Matt	Ease (1= Easy)	Avg. time	Success rate
Signup for an Affinity account and login.						1	11.25s	80% 5/5 users
Locate and access the feedback for your recently completed unit.						1	10.82s	60% 5/5 users
Locate the unit lesson that conflicts with your project due date on your calendar and give yourself an extension.						5	82.4s (1m 22s)	40% 4/5 users
		Direct path 100%	Indired		Failed 0%			

#### **USABILITY TEST ROUND 1 - INSIGHTS**

INSIGHTS: The users in the first round of the prototype usability test were mostly able to successfully complete the tasks, however the majority got to those results via an indirect path. Additionally, the users reported that it was difficult to complete the 3rd task around changing the due date of lesson on the calendar.

TAKEAWAYS: For task 1 some users took an indirect path which caused them to miss some key steps in the on-boarding process. This path was corrected in the next iteration of the prototype. Again, in task 2 many users took an indirect path that we felt actually made sense by clicking on a smaller link on the Home page. Therefore, we made this link more prominent as a button, and also added two more buttons that were relevant to the Unit on that page. In task 3 users struggled the most. There was confusion around which date Elliot's work project was due, because it wasn't listed. This insight confirmed for us that we need to integrate a Google Calendar API so the user's personal calendar is visible along side their lesson due dates.

#### **USABILITY TEST ROUND 2**

# USABILITY TESTING | ROUND 2 RESULTS



#### **USABILITY TEST ROUND 2 - INSIGHTS**

INSIGHTS: There was a noticeable improvement in the 2nd Round results of the Usability Test following the changes implemented. Users were now able to complete the tasks directly.

TAKEAWAYS: The results confirm that the changes we made were correct. We did gain further insight from users regarding the website in general; specifically around font size being a little too big, some symbols not being aesthetically pleasing, and closeout actions. Therefore font sizes should be reduced, use more modern looking symbols (eg, checkmarks), and rather than an "X" for closeout, use a "Save and Close" button.