The Beta Concept

Getting Buy-in

Beta Framework

Evaluate



Review new projects as they are introduced into the roadmap and work with stakeholders to build test plan for testers

- Understand new features
- Document risks
- Provide insights from previous programs
- KPI established

Engage



After evaluating the program, build out tester profile and start recruitment. Begin tester engagement through various methods

- Emails
- Beta Community
- Surveys
- Tasks
- Product Logistics

Learn



Once a program starts, learning occurs at every step. From opening the product the first time, to completing advanced tasks, insights are documented for stakeholders

- Create JIRAs
- Develop insights
- Regularly engage with testers to gain deeper understanding of their experiences

Validate



Through KPIs, the team validates if features meet or exceed success metrics. Findings from surveys, community reports and tasks represent these features with stakeholders

- Create JIRA dashboards
- Hold internal triage meetings
- Review overall feedback

Inform



From the beginning to end, stakeholders are informed on the status of the program. Beta ensures groups are confident with each phase, including going to GA

- Insights meetings
- KPI review
- Tester testimony
- Critical/Blocker JIRA Review
- GA concern review

What We Do

Explain the Offerings

Beta Program Management

Beta Program Managers

- **Review and Assess**
  - *Complete review of Product Requirements Document*
  - *Work with QA to develop test cases*
- **Recruit & Administer**
  - *Based off of demographic and program requirements, recruit internal and external testers*
  - *Build out community pages on Center Code*
  - *Work with Logistics team to setup NPI for distribution*
- **Design & Evaluate**
  - *Develop and send surveys to testers*
  - *Review and analyze results*
  - *Document findings and prepare for readout*
- **Communicate & Publicize**
  - *Deliver program findings to key stakeholders*
  - *Highlight KPI results and review current CSAT for program*

Beta Quality Engineering

Beta Quality Engineers

- Validate hardware and software experience before we release to testers
- Engage with testers via our Beta community
- Manage build releases for each program by collaborating with our release team
- Review and troubleshoot reports coming into our community
- Create JIRAs and assign to appropriate teams
- Triage issues with the teams that have bugs assigned to them
- Identify potential GA-impacting themes (these are not bugs but could impact CX)

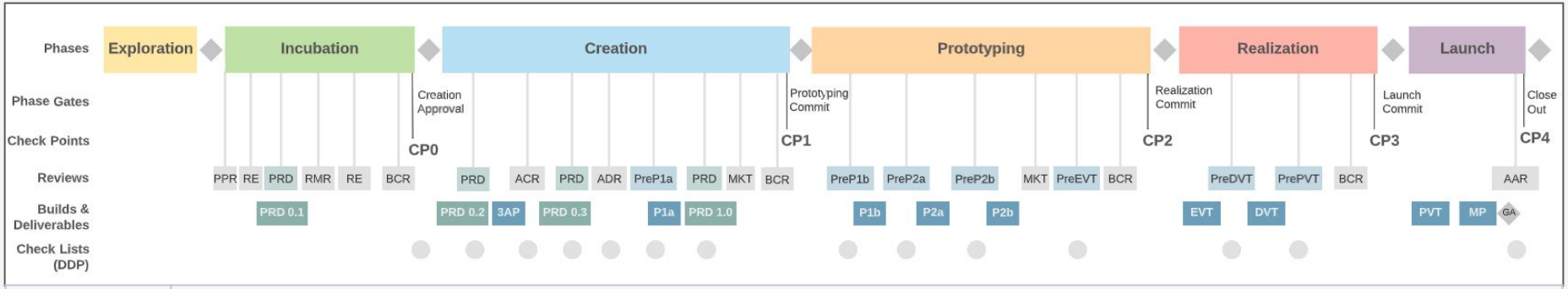
Other Services

- **Omnibus** - Feature-specific data discovery surveys to determine future feature development
- **Press readiness** - Prepare marketing for external reviews of new products

Getting Involved

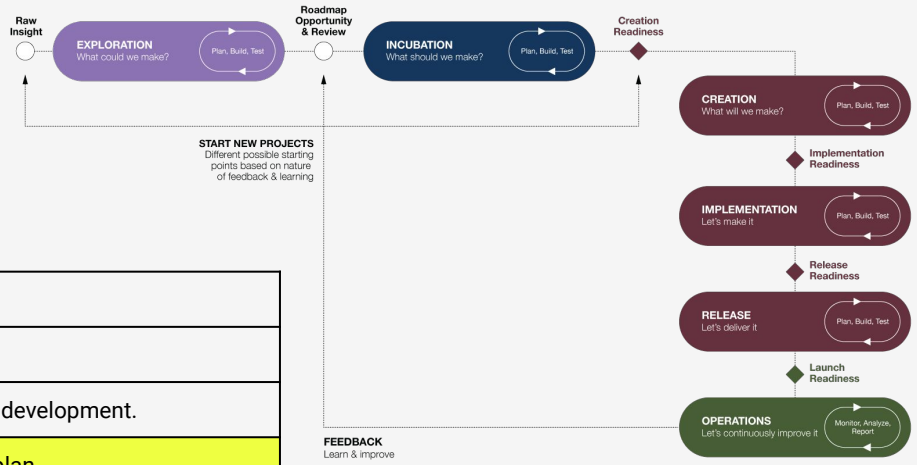
When to Enter

HW Process



Phase	Brief Description
Exploration	*Optional phase used for nebulous concepts or programs that are not ready for incubation. Updating documentation for this phase may be a future project.*
Incubation	**Determine desirability, viability and feasibility of the product vision, business case, and technical requirements. Resource and complete the product definition and risk mitigation workstreams.**
Creation	**Assemble the full, cross-functional development team, narrow the design direction to a single path, and develop the product system architecture.**
Prototyping	**Build, test, review, and refine successive prototypes to prepare the product design to deliver on the product experience goals so it can be locked for the start of EVT.**
Realization	**Prepare for mass production product manufacturing needs.**
Launch	Launch the product and reflect on lessons learned.

SW Process



Exploration	Generate product opportunities from raw insights
Incubation	Align on vision, features and feasibility
Creation Readiness	Determine if we are ready to move into the Creation phase of development.
Creation	Develop feature architecture, user experiences and program plan
Implementation Readiness	Determine if we are ready to move into the Implementation Phase of development.
Implementation	Build the functionality according to technical and experience specifications. Begin testing with Alpha users
Release Readiness	Determine if we are ready to move into the Release Phase of development.
Release	Prepare for release to production and begin testing with a wider set of Beta users.
Launch Readiness	Determine if we are ready to Launch the feature into production and begin the Operations phase.
Operations	Launch the feature into production through GA/LA release and evaluate performance against our objectives to feedback into the roadmap process.

Planning
(Incubation/Creation)

4-6 wks

Audience

- Product Owners
- Release Manager

Who Provides Input & Guidance? (Dependencies)

- Product Managers/Feature Leads
- PCL/PRL
- Logistics
- Packaging
- SW Engineering
- Quality
- CX Engineering
- UX
- Industrial Design
- User Research
- GTM

How is the Work Done?

- Program pages are built in confluence by the Program Manager.
- Test cases are agreed with feature owners.
- Define research methods (surveys, usability studies, journals, data).
- Success metrics are established
- Plan builds and define release vehicles.
- Tester Demographic is aligned

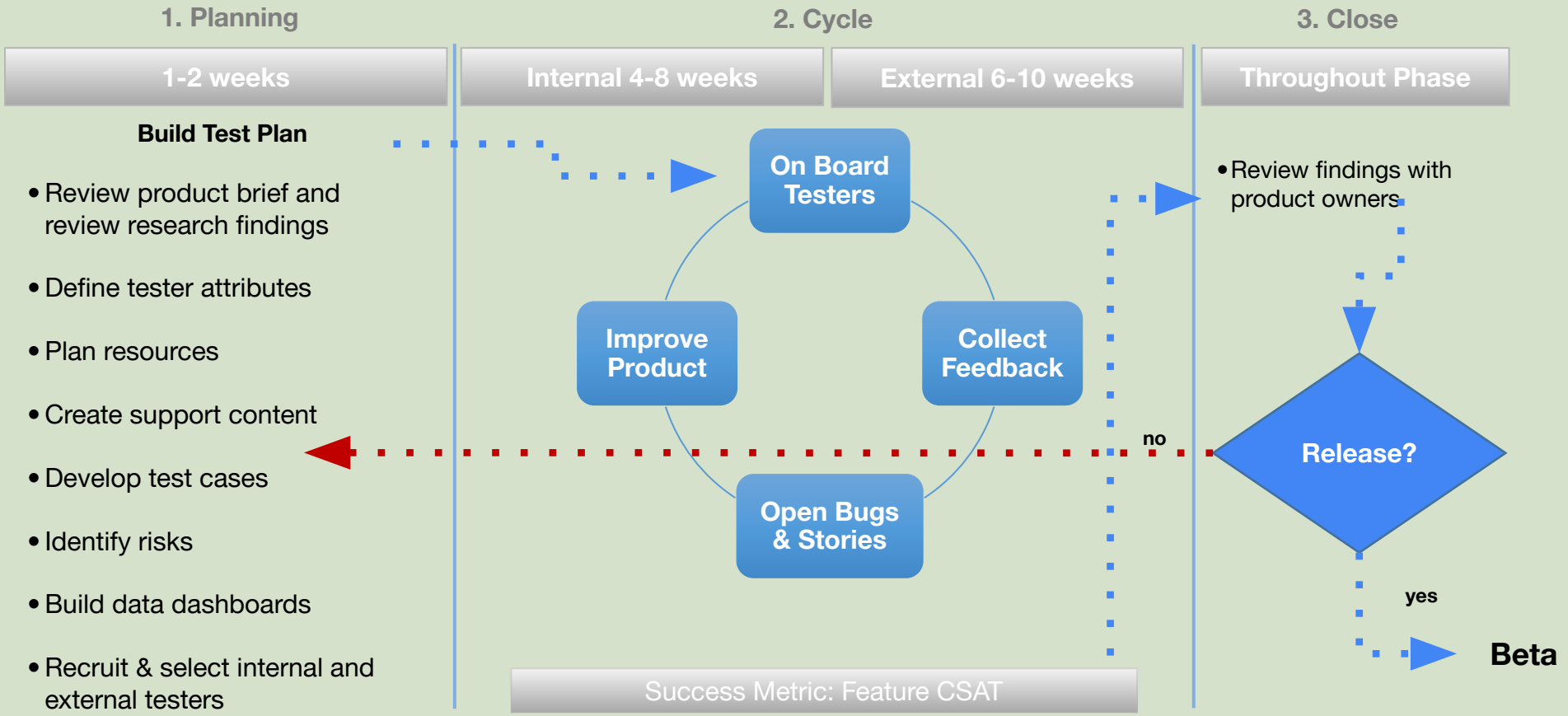
Inputs

- Feature Confluence Pages
- PRD's
- SFDF
- QA Test Plans & Results
- User Research Results

Outputs

- Test Plans Aligned
- Survey Plan Developed
- Email Communications
- Beta Portal Content/Community Created
- Recruitment Profile Identified

Alpha Process
(Proto/Implementation)



Beta Process
(Realization/Release)

1. Planning

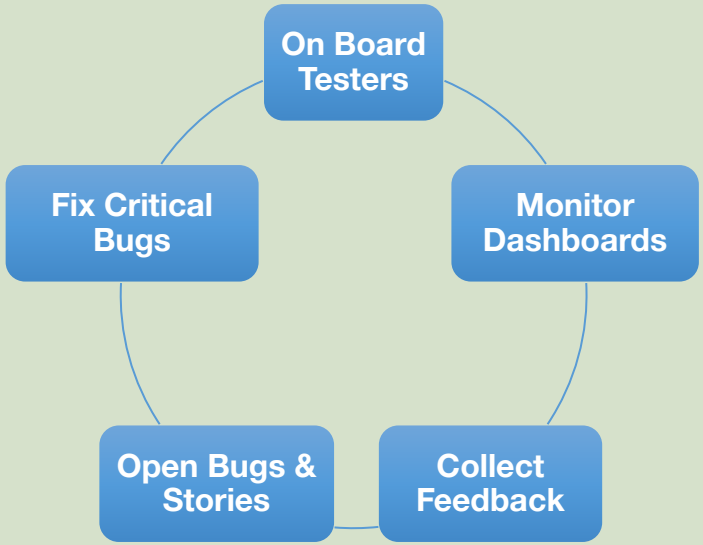
1-2 weeks

Build Test Plan

- Review features & bugs fixes in each release
- Roll testers over from alpha testing
- Include testers for focus areas, like Home Theater, Music Services and different devices
- Develop release checklists
- Identify risks

2. Cycle

Internal/External 8-12 weeks



Success Metric: Customer Satisfaction

3. Close

1week

- Point testers to production or roll over to next program
- Conduct end of beta survey/Final insights
- Review findings with product owners
- Prep marketing and PR for press reviews
- Hand off to CX
- Product and software launched to GA

TESTER FEEDBACK

Entire program

Audience

- Product Owners
- Engineering
- UX
- Release Management
- QA
- Marketing
- HW Quality

Who Provides Input & Guidance?

- Care Engineering
- Beta Testers
- PLT & SWLT

How is the Work Done?

- Testers report feedback via surveys or through the community.
- Beta team reads feedback and replies to the tester.
- Beta assesses if the feedback is a bug and tries to reproduce, debug, and troubleshoot.
- Beta opens and escalates bugs to the engineering or QA team.
- Beta reviews the survey results and creates recommendations for product managers either via JIRA or through a face to face meeting.

Inputs

- Beta Community
- Slack
- Survey Results
- Tableau Dashboards

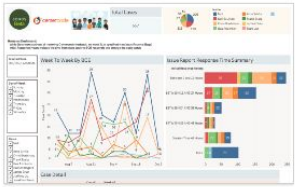
Outputs

- Survey Insight Reports
- JIRAs created
- Training and Content Documents

Learning

Show Value

Beta Data



SLA Dashboard



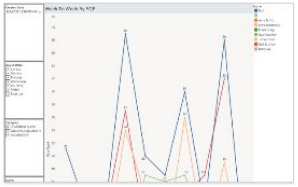
Feedback Category Dashboard



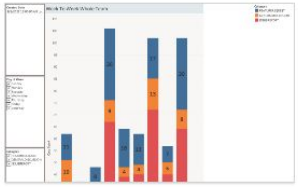
Case Detail



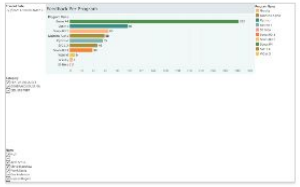
Issue Report Response Time S...



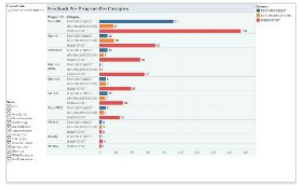
Week To Week By BQE



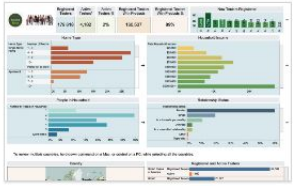
Week To Week Whole Team



Feedback Per Program



Feedback Per Program Per Cat...



Tester Dashboard



Tester Makeup Dashboard



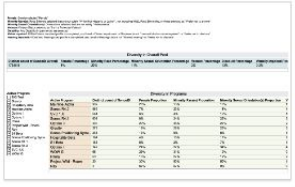
Registered Tester Growth



Diversity Dashboard



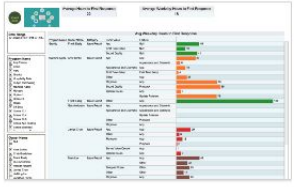
Diversity Dashboard Cont



Diversity in Programs Dashbo...



Program Dashboard



Program Response Time Dash...

What did we want to learn?

- The survey was released in January 2018 during the first phase of DVT testing. The **primary objective** of the survey was to receive feedback from external Sonos Beta testers regarding the setup and configuration of El Rey and potentially reveal opportunities for improvement to this experience.
- The survey questions were designed to understand Beta testers impressions of all aspects of the El Rey setup process, including:
  - El Rey's packaging,
  - El Rey's look and feel,
  - Setup process with either ARC HDMI or an optical adaptor,
  - TV remote control setup,
  - El Rey's sound quality.
  - El Rey's placement in a room.
- This report summarizes findings, as well as provides sample photos and comments, collected during the survey. All responses are available in the survey tool: https://data.surveygizmo.com/r/477927_5a5fa3af730829.85143798.

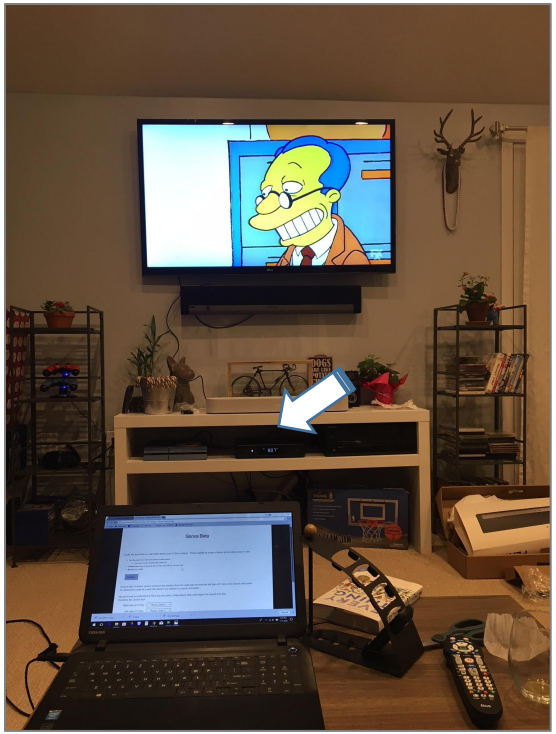


Photo submitted by Beta tester - survey on computer, El Rey on bookcase and mounted TV.

Packaging

- Overall, **86%** reported that the packaging was in **perfect condition**. However, a small number (3% or 5 testers) reported that there was some damage to the packaging. Notably, 3 testers reported punctures or compression to the corrugated cardboard shipping box. Only 2 reported issues pertaining to the interior Sonos-branded packaging.

- All testers reported that the package contained the appropriate components (optical adapter, HDMI cable, power cord and Quick Start Guide).



Photo submitted by Beta tester – indented El Rey carton

One tester reported that the bottom, middle section of the box was indented.

One tester shared that the exterior sleeve was difficult to remove and ripped easily. It appears that he did not depress the handle prior to removing the sleeve.





Photo submitted by Beta tester – torn El Rey package sleeve

Look & feel

- testers responded **very positively** to El Rey's size, shape and design.
- Overall, **99%** rated the El Rey in "**perfect condition**." Only a few testers reported a minor issue.
    - Two reported smudges or wear marks next to the buttons, and one reported fingerprints on the white cloth covering El Rey.



Photo submitted by Beta tester – El Rey in perfect condition

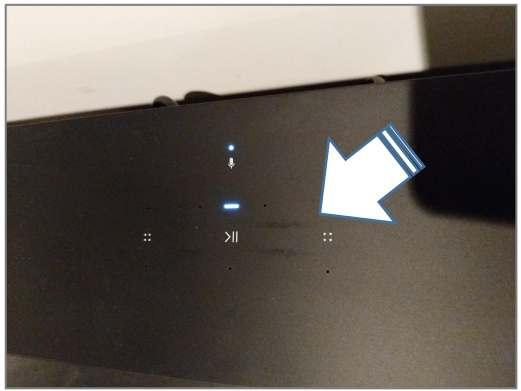


Photo submitted by Beta tester – marks next to El Rey's buttons



Sample responses

"Very clean, compact and modern looking."

"First reaction during the unwrapping of the actual El Ray. It's beautiful and exciting. Can't wait to listen to the sound."

"It's beautiful! I have an older, larger Playbar, I prefer this form."

Setup & configuration – General

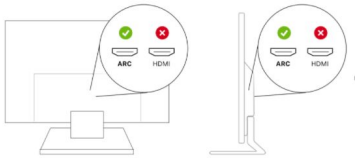
We asked Beta testers a series of questions designed to understand their general setup.

TV position

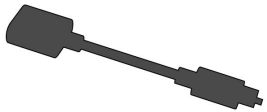
- While **52%** use a wall-mounted TV, 48% keep their TVs on a stand or other surface.

ARC HDMI versus optical adapter

- **66%** (132 of 200 testers) reported that they were going to use **ARC HDMI** to setup El Rey.
- **34%** (68 of 200 testers) indicated that they would use the **optical adapter**.



ARC HDMI



optical adapter





Photos submitted by Beta testers – Wall-mounted TV (left) and TV in cabinet (right)

Setup & configuration - ARC HDMI (continued)

ARC HDMI successful setup findings

- Of the 114 testers that completed setup with the ARC HDMI, **49%** (56 testers) needed to move a HDMI connected devices to a different port in order to make the "ARC" port available.
    - **10 testers** had to permanently remove another HDMI source to connect El Rey. These included a cable or satellite box, Blu-ray or DVD player, gaming system, Apple TV, Fire TV and Raspberry Pi.
- **18%** (or 20 testers) needed to adjust their TV settings to enable El Rey to work. The TV brands included: LG (8 testers), Vizio (5 testers), Samsung (3 testers), Panasonic (2 testers), Hisense (1 tester) and Toshiba (1 tester).

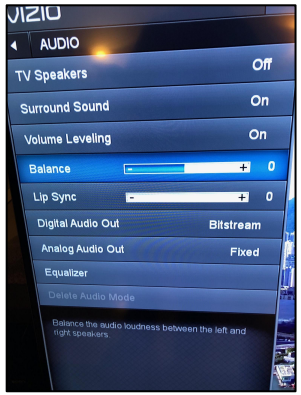
86% succeeded

in setting up El Rey with ARC HDMI

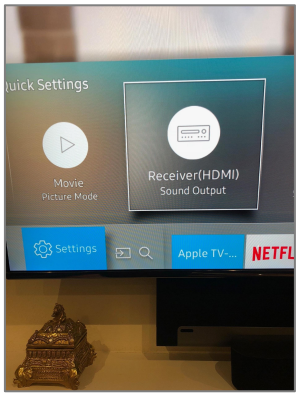
Sample images



LG



Vizio



Samsung

Photos submitted by Beta testers

Beta Plan

Share the Strategy

Initial Beta Plan

- We'll use a total Pool of 450 testers in US/UK/AU/EU/CN to collect a statistically significant response sample.
- CompanyX beta will cover two major setup types:
  - Existing Station mode
  - First time setup
- CompanyX will cover testing for Bluetooth, comfort, wireless performance, battery life & durability along with overall satisfaction with audio quality.

	P2A	EVT	DVT
Start Date	June '23	Aug '23	Oct '23
Applicant Pool	Internal	Internal /External	Internal/ External
Total Number of Testers	100	200	150
Number of Units (EVT/DVT)	110	210	160

- We have a consistent communication toolset that testers are familiar with: slack and community. For collecting feedback we will use surveys and community. We will also use journal entries and interviews where needed.
  - We are recruiting testers based off home environments, tester attributes and outdoor spaces
  - With these selections, we are able to test out hundreds of different head size types to ensure we are capturing common & rare use cases, along with tracking down interoperability
- We'll measure and monitor performance with dashboards in Tableau.
- CompanyX P2a, EVT and DVT testers are committed to participate in all alpha and beta phases of software testing.

	P2A (Tech Alpha Phase)	EVT (Alpha Phase)	DVT (Beta Phase)
Start Date	June 23’	Aug 23’	Oct 23’
Tester Pool	100	200	150
Tester Units	110	210	160

Test Configurations

- CompanyX Bluetooth
- CompanyX HT (Wifi)
- CompanyX HT (BLE/Lasso)

Tester attribution considerations

- Home environment (indoor/outdoor spaces)
- Multi-occupant HH
- Relative Demographics (ages, genders, native languages)

Communication

- Slack
- Community (Center Code)
- Survey (Medallia)

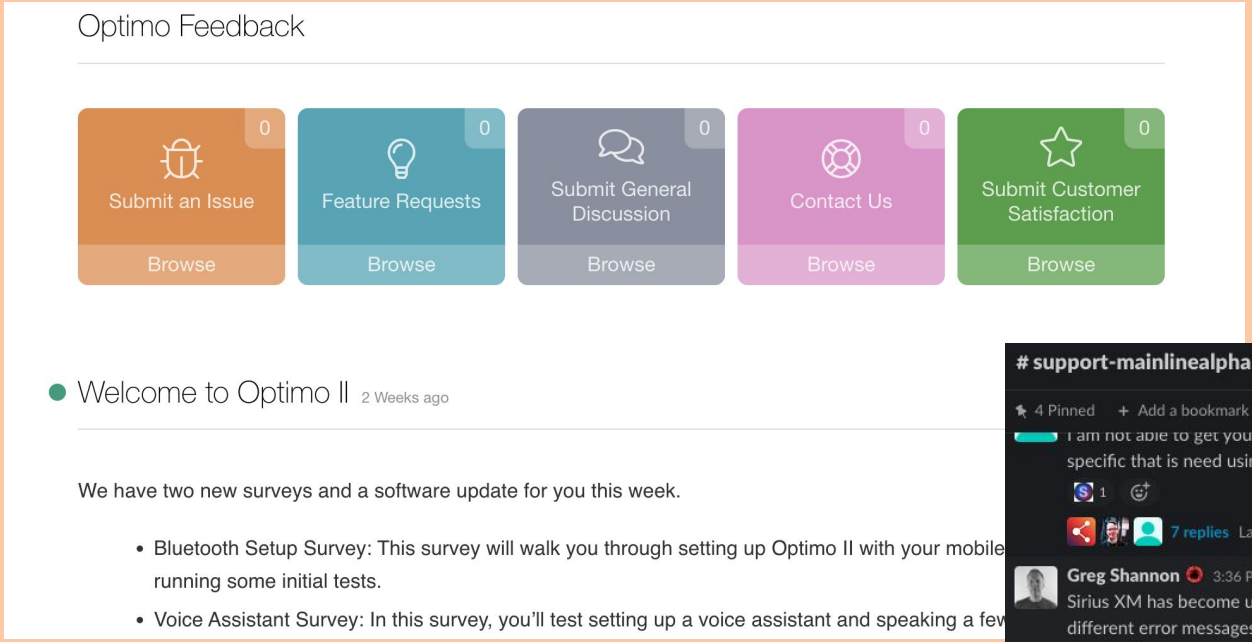
What do we want to learn?

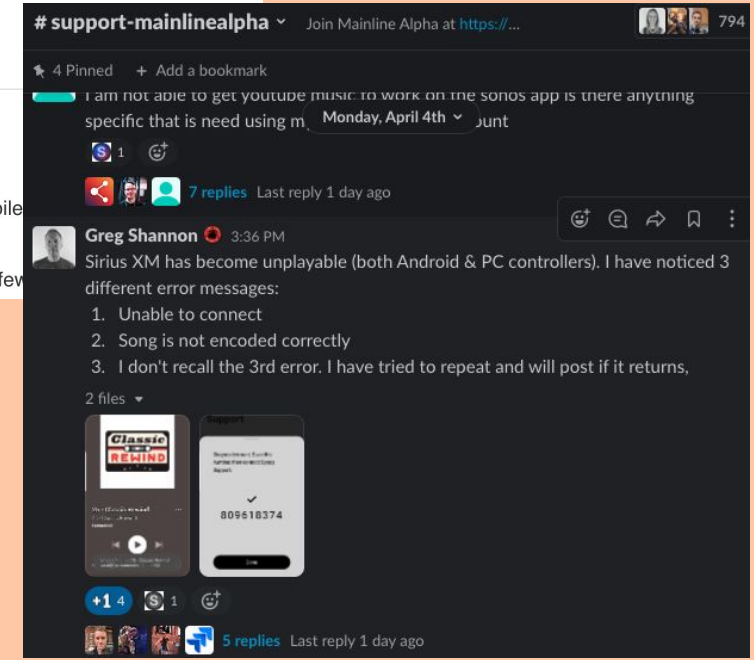
- First time setup
- Update over BT
- HW Quality
- Packaging
- Bluetooth performance
- Purchasing experience
- HT Playback
- Comfort Satisfaction
- LED understanding
- Battery life
- Product durability

High level risks

Risk	Mitigation
Incomplete schedules and/or KPIs Incomplete or undocumented milestones, sprint release dates and lack of KPI/success metrics leads to wasted resources & rushed results. This also leads to the inability to create surveys, communications and provided status of a feature.	• Implement telemetry/eventing earlier on in the program to make tracking results easier • Identify key test cases that are needed to validate experience • Ensure KPIs are established for each phase of the program (HW & SW) • SWTMP is currently working on providing a clear milestone and release schedule
Slips in the schedule/late implementation or late FC Missed or delayed implementation or completion of a feature causes a ripple effect and usually leads to limited bake time and inability to make changes based on the findings.	• Milestone/Deadlines are well communicated and updated • Continue to adhere to the SFDF/DDP guidelines. • Schedule meetings when delays are known and come up with backup plan • SWTPM is already proactively communicating around development readiness
Unknown scope/involvement of major programs With programs like CompanyX, Passport, AmpV2, Business, Pinewood etc..; there is uncertainty on the level of involvement that is needed and makes it hard to resource/plan appropriately.	• Collaborate with Product and Feature leads. • Working with feature leads to help gain early insights utilizing our beta testers. (Passport CompanyX) • Get clarification of build timing and test plans • Identify what items are still open in terms of risks & NUDDs
Testing HW in parallel environments (S2 vs Passport) We will end up running the same tests for HW on multiple versions of software. This will lead to less dedicated user validation on Passport.	• Ensure that we have enough HW to be confident in our findings in each environment • Provide an opportunity for a larger tester pool to validate experiences with Passport
CompanyX Badging/Logo during outdoor testing) As this is a ultra portable product, there is the risk for unintended exposure and possible leaks. This was something we did take into consideration during trident.	• Use a mock logo like we did for Roam and Trident. • Create different testing teams to complete tasks outside and inside at different times of the program. • Communicate the importance of secrecy and that the NDA exist for a reason :)

The Tools





How to provide feedback:

- Beta Community
- Slack
- Surveys
- Interviews

Roadmap & Capacity

Explain Resourcing

Team Breakdown and Resourcing

The Beta team is currently broken out in 5 different functions

- *Strategy and Vendor Relations*
- *Insights*
- *Data Science*
- *Program Management x 6*
- *Quality Engineering x 5*
    - *+3 KWS contractors (3rd KWS hire being interviewed this week)*

- *Resourcing starts to become an issue starting in FY23-Q2 (Capacity Link)*
- *We get introduced into HW programs 12-16 months before GA*
- *SW 6-12 months depending on the scale of the feature*
- *Unknown involvement and asks of the program will lead to fire drills and missed opportunities for richer insights.*

Program Name	Program Type	GA DATE	BPM	Size
Beta Engagement (Medallia In-App Survey and Recording)	Beta Initiative	FY23-Q1	Hassan	Large
Be	Beta Initiative	FY23-Q1	Scott	Medium
Pr	Beta Initiative	FY23-Q1	Erica	X-Large
Te	Beta Initiative	FY23-Q1		Medium
Op	HW	FY23-Q3	Hassan	Large
Op	HW	FY23-Q3	Hassan	Large
Ra	HW	FY23-Q4	Hassan	Medium
Pr	HW	FY23-Q4	Phil	Large
Pl	SW	FY23-Q4	Erica	Medium
Pa	SW	FY23-Q4	Erica	X-Large
Du	HW	FY24-Q1	Ove	X-Large
Sc	SW	FY24-Q2	Phil	Large
Ja	HW	FY24-Q4	Scott	Medium
La	HW	FY24-Q4	Stacy	Large
Pi	HW	FY25-Q1	Hassan	X-Large
Pa	HW	FY25-Q2	Phil	Large
Pa	HW	FY25-Q2	Phil	X-Large
Gl	HW	FY25-Q4		X-Large
Ac	Beta Initiative	FY30		Medium
Be	Beta Initiative	FY30		Large
Ge	Service	FY30		X-Large
LE	SW			Medium
Ne	SW			Medium
Pr	HW	FY25-Q3	Phil	Medium
Total				

Confidential Programs

SW/HW Programs

with Beta Initiatives

FY22-Q4	FY23-Q1	FY23-Q2	FY23-Q3
• Example 1	• Example 1	• Example 1	• Example 1
• Example 2	• Example 2	• Example 2	• Example 2
• Example 3	• Example 3	• Example 3	• Example 3
• Example 4	• Example 4	• Example 4	• Example 4
• Example 5	• Example 5	• Example 5	• Example 5
• Example 6	• Example 6	• Example 6	• Example 6
• Example 7	• Example 7	• Example 7	• Example 7
• Example 8	• Example 8	• Example 8	• Example 8
• Example 9	• Example 9	• Example 9	• Example 9
• Example 10	• Example 10	• Example 10	• Example 10
• Example 11	• Example 11	• Example 11	• Example 11
• Example 12	• Example 12	• Example 12	• Example 12
• Example 13	• Example 13	• Example 13	• Example 13
• Example 14			
• Example 15			

Post GA Learning

Explore New Challenges



Project Wild

NEVER STOP LEARNING

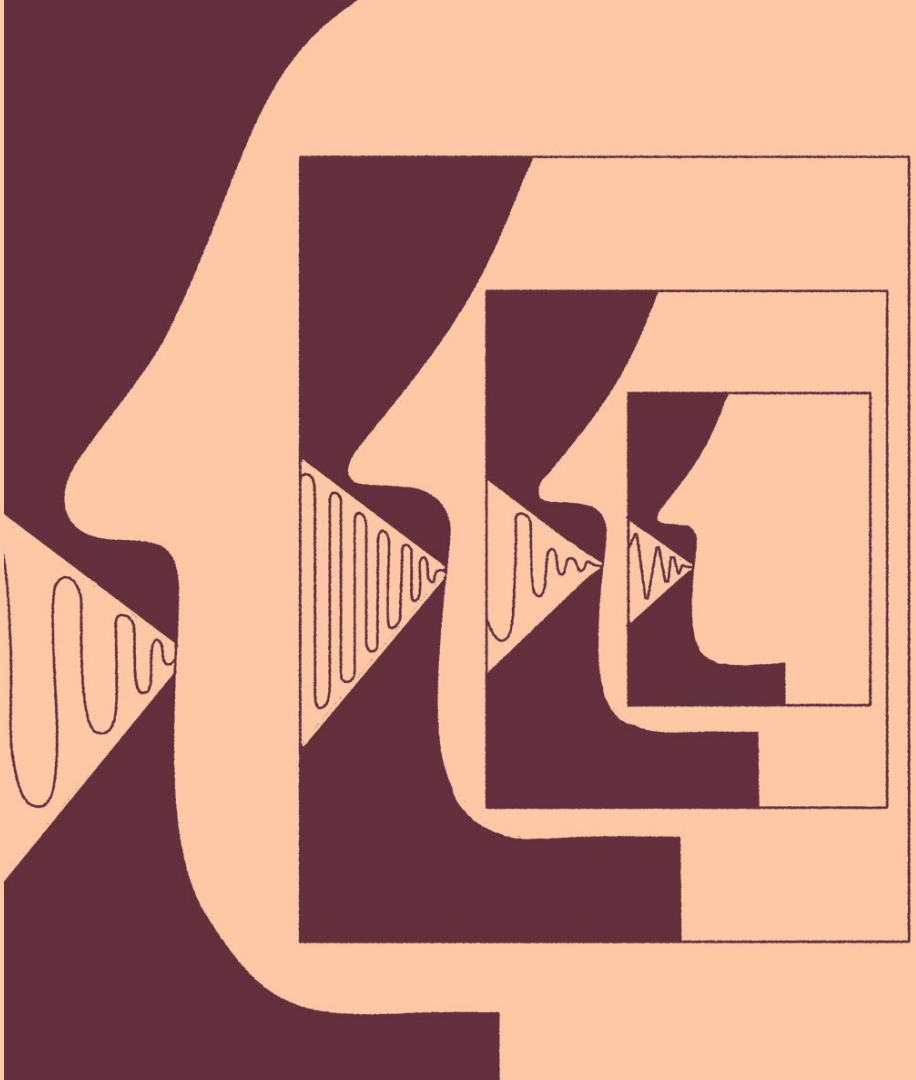
What is Project Wild?

Real-world insights by leveraging GA hardware, software and services through the lens of Beta. Extending the power of Beta's insights to the full customer experience.

What are we after?

The continuous voice of our customer.

Real	Actionable feedback from real customers in real time.
Direct	Access to users will be provided to all stakeholders to allow for deeper understanding of experiences and/or bugs.
Accurate	Data eventing will be validated through proactive communication with the user pool.
Visible	All results and dashboards will be accessible to stakeholders





What are we solving?

Time to insights	Quickly and efficiently understand the true customer experience without having to wait for a customer to contact Customer Experience.
Untapped learnings	Test the full customer journey, starting with the user's DTC experience.
Connecting the data	Avoid guesswork by leveraging actual data, examining issues reported and communicating directly with users.
Success meter	Measure success by leveraging real customer experiences to validate our PRD intent

Current Beta Process

Today, the Beta team enters the product development process at the tail end of Incubation - beginning of Creation phase for both SW and HW. Once a product or feature reaches GA, Beta exits the process.

Tech Alpha 1-2 months / < 30 Users	Alpha 2-3 months / <100 Users	Beta 2-5 months / >100 Users	GA
First look into features using a small pool of users. • Validate existing data • Document known issues • Establish test plans • Capture backend eventing	**Validate features and measure customer satisfaction using a larger internal pool of users.** • Create dashboards • Data validation in process • Hold triage meetings • Share experience with stakeholders	**Validate features and measure customer satisfaction using a larger external pool of users.** • Review bugs/stories daily • Send surveys • Feature complete in progress • Make adjustments to features	**Product and features released to general public.** • No further actions or learning happening outside of micro-experiments and customer NPS surveys

New Beta Process

Continue our learnings with real customers to inform our stakeholders about the current state of the program but also inform them for decisions being made on future programs.

GA

Tech Alpha 1-2 months / < 30 Testers	Alpha 2-3 months / <100 Testers	Beta 2-5 months / >100 Testers	Launch 4-6 months /> 100 Customers
First look into features using a small pool of Users. • Validate existing data • Document known issues • Establish test plans • Capture backend eventing	**Validate features and measure customer satisfaction using larger internal pool of Users.** • Create dashboards • Data validation in process • Hold triage meetings • Share experience with stakeholders	**Validate features and measure customer satisfaction using larger external pool of Users.** • Review bugs/stories daily • Send surveys • Feature complete in progress • Make adjustments to features	**Learn how our products and features are resonating in the wild.** 

Concept 1

- ⇛ Issue MP product on GA software with Beta tracking capabilities to a pre-selected group of users.
- ⇛ The program will last for 120-180 days and will include 80-100 users.
- ⇛ The selected customers will receive a 100% coupon, for this Example, for a Sub Mini.
- ⇛ Beta communications will be sent to track their purchasing experience, delivery, first time setup and hardware quality.
- ⇛ From there, we will track their telemetry through planned dashboarding and have them fill out experience journal every two weeks.
- ⇛ Based on feedback received, stakeholders can request to reach out to these users to deepen their understanding of any experience or bug that might need further investigation.



Key Insights:

Insight	Context
More than 90% of the pre-order customers were satisfied with the packaging, unboxing, and exterior of their Sub Mini.	Less than 5 customers total rated those experiences as dissatisfied or extremely dissatisfied. For the dissatisfied customers: 1 hit bug #5, 2 hit bug #8, and 2 hit bug #9 listed below.
Majority of customers were satisfied with the audio quality Sub Mini produced with their configurations.	97% stated they are neutral, satisfied, or extremely satisfied with the audio quality.
Majority of customers expressed overall satisfaction with Sub Mini	94% were satisfied or extremely satisfied, 5% neutral, and 2% dissatisfied or extremely dissatisfied.

KPIs:

Description	Target	Actual	Context
Top Cap Issue	0%	0%	870 customers responded to the survey, two we reached out to for more information regarding top cap, and both were determined to not be associated to the top cap issue.

Bugs Discovered:

	Defect	# of Reports	JIRA Link
1	Hardware arrived in non-factory reset state	20, CX had more	HWFLEX-310 - [Sub Mini] - Some units arrived at customer side in a non factory state OPEN
2	EU units landed with a customer in the US	1 customer, 6 units	HWFLEX-319 - [Sub Mini] - US customer received EU cables despite package being labeled as US OPEN
3	SN issues (missing SN, different SN, etc)	1 customer, CX had more	CSCORE-4667 - Tracking - Sonos Sub Mini (Gravity) is missing the PIN information WAITING FOR INTERNAL
4	Malaysian coin found in the Sub Mini box	1 customer	HWFLEX-318 - [Sub Mini] - Coin in box OPEN
5	Sub Mini foot fell off	1 customer	HWFLEX-317 - [Sub Mini] - Feet fell off OPEN
6	Fingerprints upon opening bag	2 customers	HWFLEX-316 - [Sub Mini] - Fingerprints out of bag OPEN
7	Sub Mini dirt/dust upon opening bag	2 customers	HWFLEX-315 - [Sub Mini] - Dust / Dirt OPEN
8	Sub Mini with scratches	2 customers	HWFLEX-314 - [Sub Mini] - Scratches OPEN
9	Sticker residue on Sub Mini	4 customers	HWFLEX-313 - [Sub Mini] - Sticker Residue OPEN
10	Missing accessories	1 customer, CX had more	HWFLEX-312 - [Sub Mini] - Missing Accessory OPEN

What are we trying to achieve?

A continuous stream of actionable feedback that can inform product teams about existing experiences and issues in order to shape future hardware, software and services.

Drive Engagement

Stay Visible

Questions?