



USER BEHAVIOUR ANALYSIS

SMART Attendance Bot

Through In-App Notifications

UK: (29 July - 11 August' 2025)

HP, J&K, Daman: (11th Aug-20th Aug '2025)

SYNOPSIS

NEED

While bot usage data revealed transactional patterns, it didn't capture user behaviour and needs. To bridge the gap, this user behaviour analysis exercise has been initiated, wherein CleverTap's in-app notifications feature has been used to gather real-time qualitative feedback, enabling behaviour tracking through targeted engagement and automated surveys at **zero cost**. It was piloted in UK and later expanded to HP, J&K, and DNHDD, providing us with valuable insights for Attendance chatbot related product improvements.

PARAMETERS

ENGAGEMENT ON IN-APP NOTIFICATIONS

High user engagement on state specific In-app notifications:
Success rate - 20.24% (J&K) & >10% elsewhere
Proving the efficacy of In-app Notifications

Chatbot Vs Register

USER SATISFACTION RATING
~80% (J&K), ~76% (Daman), 75% (UK) & ~70% (HP) gave 4-5 star ratings to marking attendance through chatbot.
In **J&K, ~84%** of teachers prefer using chatbot instead of Attendance register.

TOP ENHANCEMENT REQUESTS

Product Enhnacement Sub-Category	Stats
Edit Attendance Feature	13.97%
UI/UX-Simplify Bot flow	6.35%
Student Leave Options	13.65%
Attendance Reports Related Suggestions	13.65%
Check-in/Check-out Feature	12.38% (in HP)

OTHER REQUESTS

1. Requests for **offline capability & precise geo-tagging**
2. **Registry & Network Issues** was flagged by **> 33% users in J&K**, revealing the need for urgent API integration and efficient registry dumping process.

KEY INSIGHTS

- Positive Adoption:** Attendance Bot is well-received in **J&K** → **potential to scale further** via product delivery teams.
- Policy-Linked Feedback:** Feedbacks recieved for **attendance marking time extension, Check-in/Check-out feature, Student leave options & UDISE API integrations etc.**
- Reports Related:** Requests received across states for Webview enhancements, **monthly/yearly reports, Historical Daily Attendance reports.**
- Operational Burden:** Teachers highlighted the need to maintain a **manual attendance register esp. in HP**, pointing to **double workload** concerns.

WAY FORWARD

Focusing on the most demanded features and clearing infrastructure barriers will not only **boost adoption** but **transform workflows** for **thousands of educators**.

HYPOTHESIS

H1 (Non-Starters -never initiated a conversation): To figure out how many such users there are and why. The UK has already reached 99% teacher Attendance and over 95% Student Attendance.

H2 (Regular Users - consistent use): For insights into chatbot’s UI/UX, their motivation for continued engagement, and suggestions for improvement based on day to day working.

H3 (New Users - 1st-5th use): To capture their first impressions, features used, and suggestions.

Note: We received 0 responses for H1 as expected.

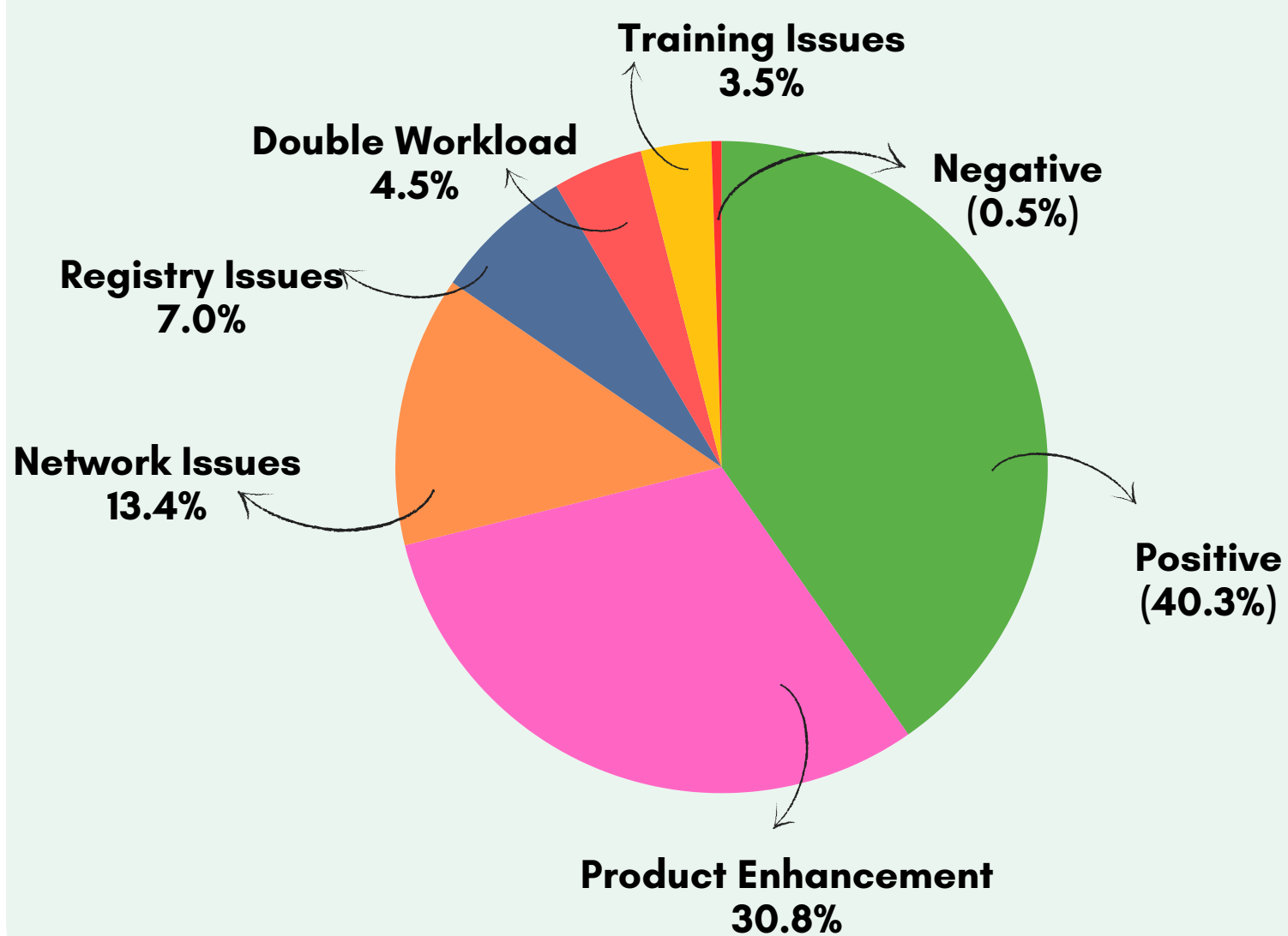
Metric	H2 (Regular User)	H3 (New User)
Engagement Rate (Total responses/ Views)	13.80% (1672/ 12117)	12.45% (530/4258)
User Rating Insights ★★★★★	Is Attendance Chatbot making their work easier? ~ 75% (4-5 Star) 	Initial experience of using chatbot? ~ 67% (4-5 stars) 
MCQ Response Insights	Why are the users using bot regularly? Is it voluntary or forced? Voluntary - 46% (Like the new Chatbot Technique) Forced - 32% (State’s Mandate)	Features used Vs Unexplored Basic Attendance Submission (Student & Teacher)- >95% Mid -day meal Attendance-27% Attendance Report- 30%

COMMENT ANALYSIS

Hypothesis 2 - Suggestions to make the Chatbot better as a regular user?

- **Total Comments Received: 220**
- Out of these ~91% (201) of comments were relevant for further analysis

Major Comment Categories



Enhancement Requests

Major Enhancement Requests	% count (Out of 62)
Edit Attendance Feature	17.70%
UI/UX-Simplify Bot flow	16.10%
Student List Web-view enhancements	14.50%
Student Leave Options	12.90%
Attendance Reports Related Suggestions	9.70%

Few minor product enhancement requests related to:



- Offline Feature in the Bot
- Iphone compatibility

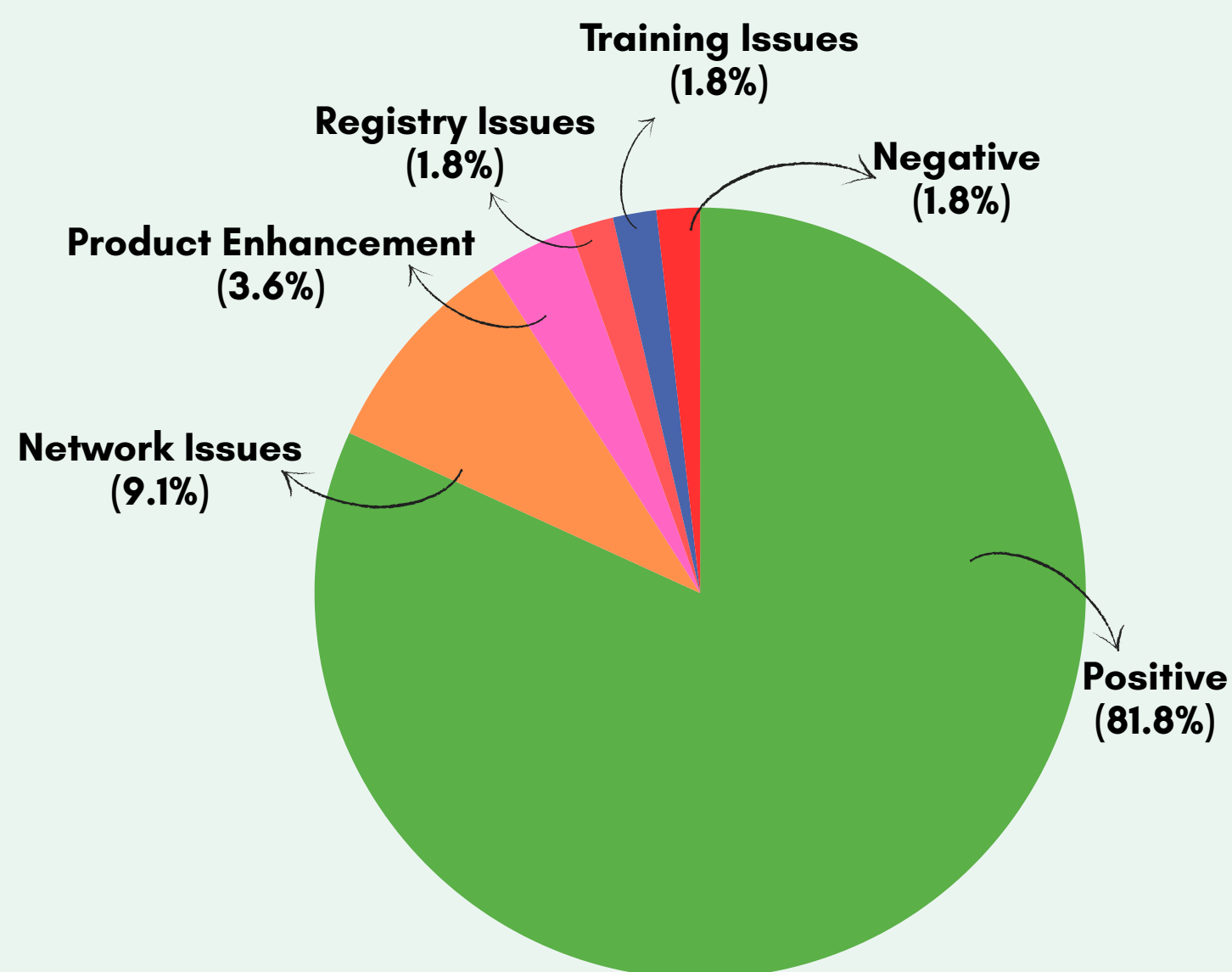


- Geo-Location Feature
- Biometric Feature

Hypothesis 3 - Do you feel you need any support as a new user?

- **Total Comments Received: 58**
- **~94.8%** (55) comments were relevant for the further analysis.

Major Comment Categories



Product Enhancement Comments (2) were related to:

- Reports Feature
- Edit/Regularisation Feature

Jammu and Kashmir

HYPOTHESIS AND RESULTS

Hypothesis:

To understand whether the attendance chatbot is preferred over the attendance register.

Results:

- ~84% teachers prefer the chatbot over the register
- They find it easier, faster, and more convenient
- Teachers actively like the experience.

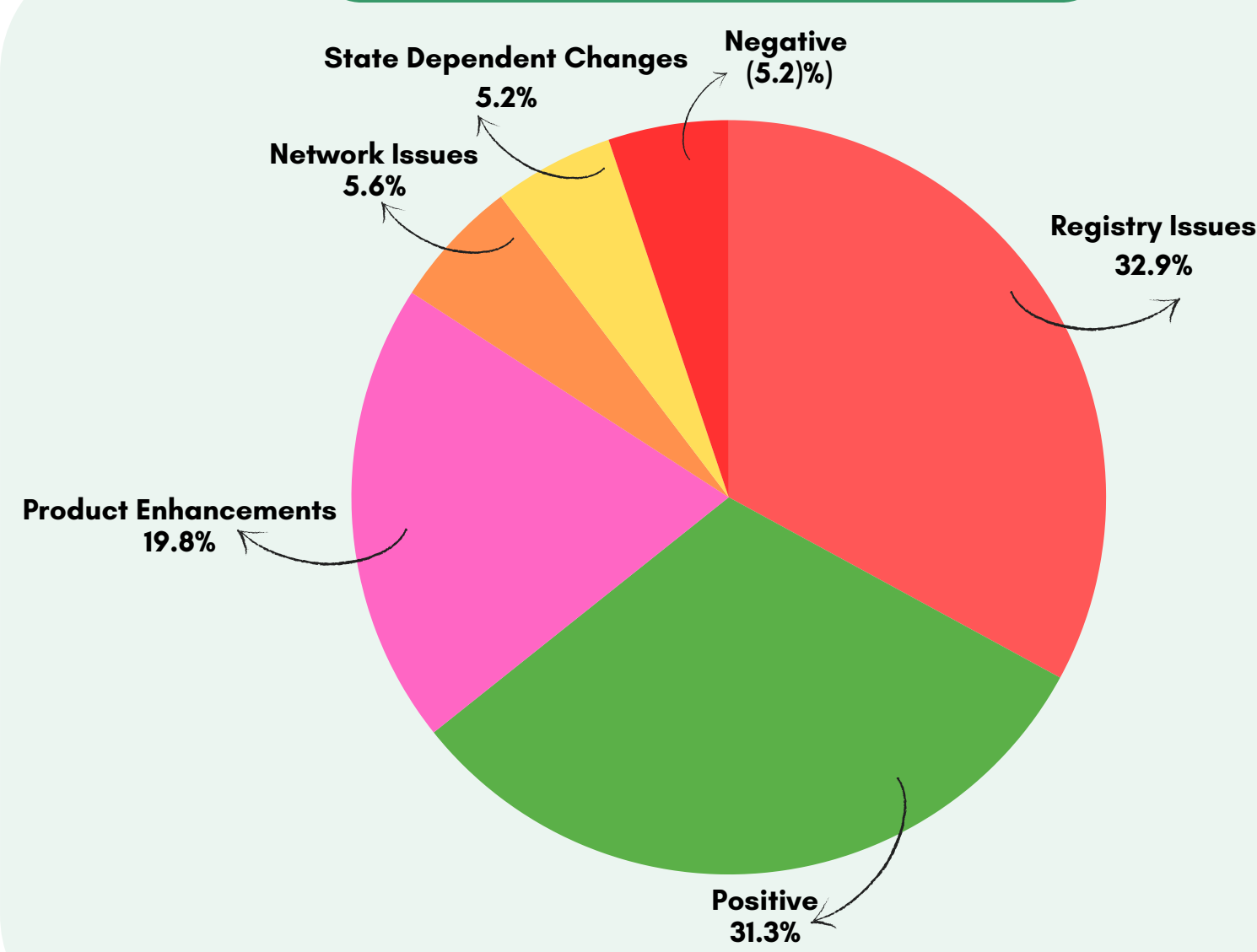
Metric	Non User (Never used the bot)	Regular User	New User (Used bot 1-5 times)
Engagement Rate (Total responses/ Views)	17.65% (3/17)	11.16% (1646/14750)	20.24% (17/84)

COMMENT ANALYSIS

- **Total Comments Received: 325 (Only from Regular Users)**
- Out of these ~88.6% (288) of comments were relevant for further analysis

Note:

Major Comment Category



Enhancement Requests

Major Enhancement Requests	% count (out of 50)
Edit Attendance Feature	16.00%
UI/UX-Simplify Bot flow	10.00%
Student List Web-view enhancements	0.00%
Student Leave Options	22.00%
Attendance Reports Related Suggestions	20.00%

Few minor product enhancement requests related to:



- Offline Feature in the Bot
- Face Scanning feature
- Biometric Attendance

State Dependent Changes:



- Attendance marking time extension
- Wifi/Better Internet facilities in schools

Himachal Pradesh

HYPOTHESIS

H1 (Non-Starters—never initiated a conversation): To evaluate why non-starters didn't initiate any conversation & identify user designation.

H2 (Regular Users—consistent use): To understand if the attendance chatbot is preferred over the attendance register.

H3 (New Users—1st-5th Use): To understand user experience and preference of chatbot usage.

Metric	H1 (Non-Starters)	H2 (Regular User)	H3 (New User)
Engagement Rate (Total responses/ Views)	15.79% (6/38)	7.66% (3237/42272)	0.28% (1/353)
User Rating Insights ★★★★★	How did you like the idea of an Attendance Chatbot? ~67% (4-5 Star) 	Is Attendance Chatbot making their work easier? ~70% (4-5 Star) 	Initial experience of using chatbot? ~100% (5 Star) 
MCQ Response Insights	Are these users Students, Principal & Teachers or officials? Teachers/HOS ~83%	Is there a need to use register after marking attendance on Chatbot? Yes- 68%	Would you like you use the chatbot to submit Attendance in future? Yes- 100%

COMMENT ANALYSIS

- **Total Comments Received: 590**
- Out of these ~81.2% (479) of comments were relevant for further analysis

Few minor product enhancement requests related to:

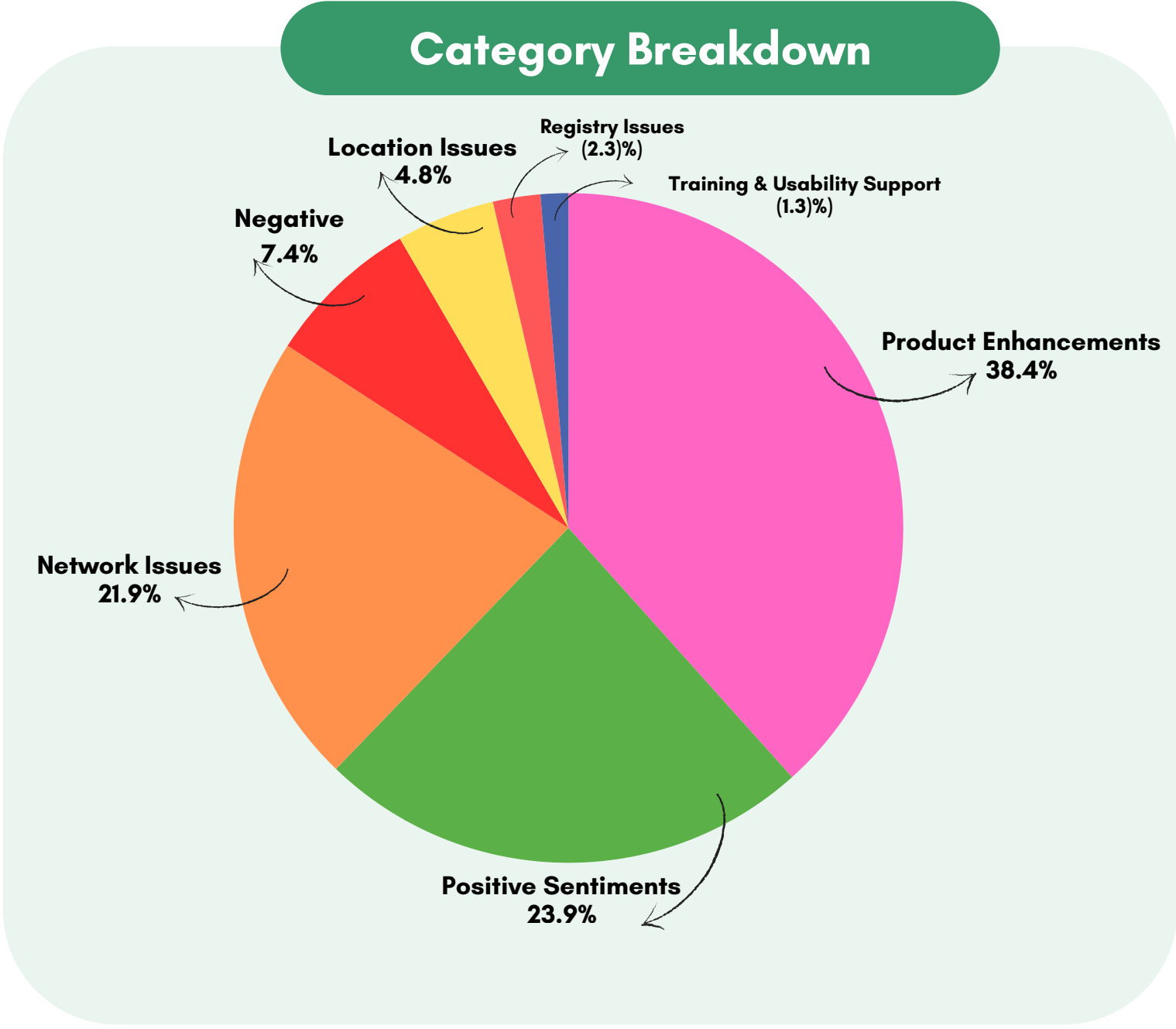


- Offline Feature in the Bot
- Face Scanning feature
- Biometric Attendance

State Policy Level Requests:



- Attendance Marking time extension
- Wifi/Better Internet facilities in schools



Enhancement Requests

Major Enhancement Requests	% count (out of 201)
Edit Attendance Feature	11.94%
UI/UX-Simplify Bot flow	2.49%
Student List Web-view enhancements	1.99%
Student Leave Options	11.94%
Attendance Reports Related Suggestions	12.94%
Check-in, Check-out Feature	19.40%

Note: Over 6500 calls received from 20-22 August for incorrect Geo-location capture

Daman & Diu

HYPOTHESIS

H1 (Non-Starters—never initiated a conversation): To evaluate why non-starters don't initiate any conversation.

H2 (Regular Users—consistent use): To understand if the attendance chatbot is preferred over the attendance register, and the ease of use of the chatbot

H3 (New Users—1st-5th Use): To understand user experience and preference of chatbot usage.

Note: No responses received for H1 & H3 as expected because already 100% participation in Student & Teacher Attendance

Metric	H2
Engagement Rate (Total responses/ Views)	6.04% 33/546
User Rating Insights ★★★★★	Is Attendance Chatbot making their work easier? ~76% (4-5 Stars) 👍
MCQ Response Insights	Which is preferable, Chatbot or Register? Register- 51% Even when 100% of Teachers are using our Chatbot to mark Student & Teacher Attendance

Insights & Suggestions

Product Related Suggested Actions	% of Cumulative Comments (315)	RACI (Responsibility)
Editing/Regularisation Feature with an Optional Comment Box; Teacher Attendance regularisation to be approved by Head of School <i>(Similar to Keka- atleast for Teachers)</i>	13.97%	Product/Tech
Facility to mark Students “Outside School” for a particular day <i>(Additional student leave options: Half-day leave, Out for competition, and Medical Leave (as per state)</i>	13.65%	Product/Tech /State
Availability of following reports on Attendance Bot: • Historical Daily Report - To review past attendance of Students • Monthly Reports • Yearly Reports <i>(AI companion/ Redirection to Live Reports Bot or inclusion of monthly reports in Attendance Bot- Class & Section-wise)</i>	13.65%	Product/Tech
To make the UI/UX simpler with less and easier steps for transition between classes or to access reports. <i>(AI companion can be an option)</i>	6.35%	Product/Tech
Student/Teacher list Web-view Enhancements • Total Present/Absent count (As a summary message before final submission) • Search box for Student’s name (AI companion) • Daily registry count of Student/ Teachers + Total M/F (On Top section of web-view as per daily registry count) • Display Father’s first name/full name to avoid confusion (UK)	4.13%	Product/Tech



Insights & Suggestions

Product Related Suggested Actions	% of Cumulative Comments (315)	RACI (Responsibility)
HP's process to mark Teacher Attendance twice (Check-in & Check-out feature)	12.38%	Product/ Tech/State
GPS-Location errors within 200m radius - (A more precise GPS feature for capturing location)	4.44%	Product/Tech/QA
Introduction of a Tabular MDM Attendance format for all Classes and Sections (For schools Teacher< classes)	<1%	Product/Tech
Other Misc. requested features: • Face Scanning • Biometric Attendance Marking	<1%	Product/Tech
Use colour coding to differentiate Absent, Present, and other attendance statuses in all reports.	<1%	Product/Tech

Other Suggested Actions	% of Cumulative Comments (1023)	Team
Availability of Offline mode in absence of Internet and automatic updation on availability of Internet	15.15%	Product/Tech
Registry related: • Accelerate the registry update process by implementing live synchronization with the State registry • Implement robust data validation process before registry uploads to reduce errors. (UDISE API /MIS implementation or availability dependent)	10.75%	State/Data Insights





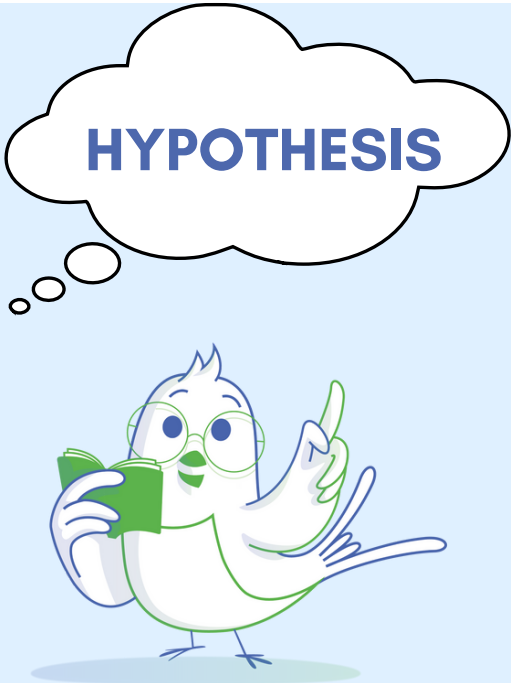
USER BEHAVIOUR ANALYSIS

School Based Assessment Bot

Through In-App Notifications

Maharashtra (29 August- 9 September)

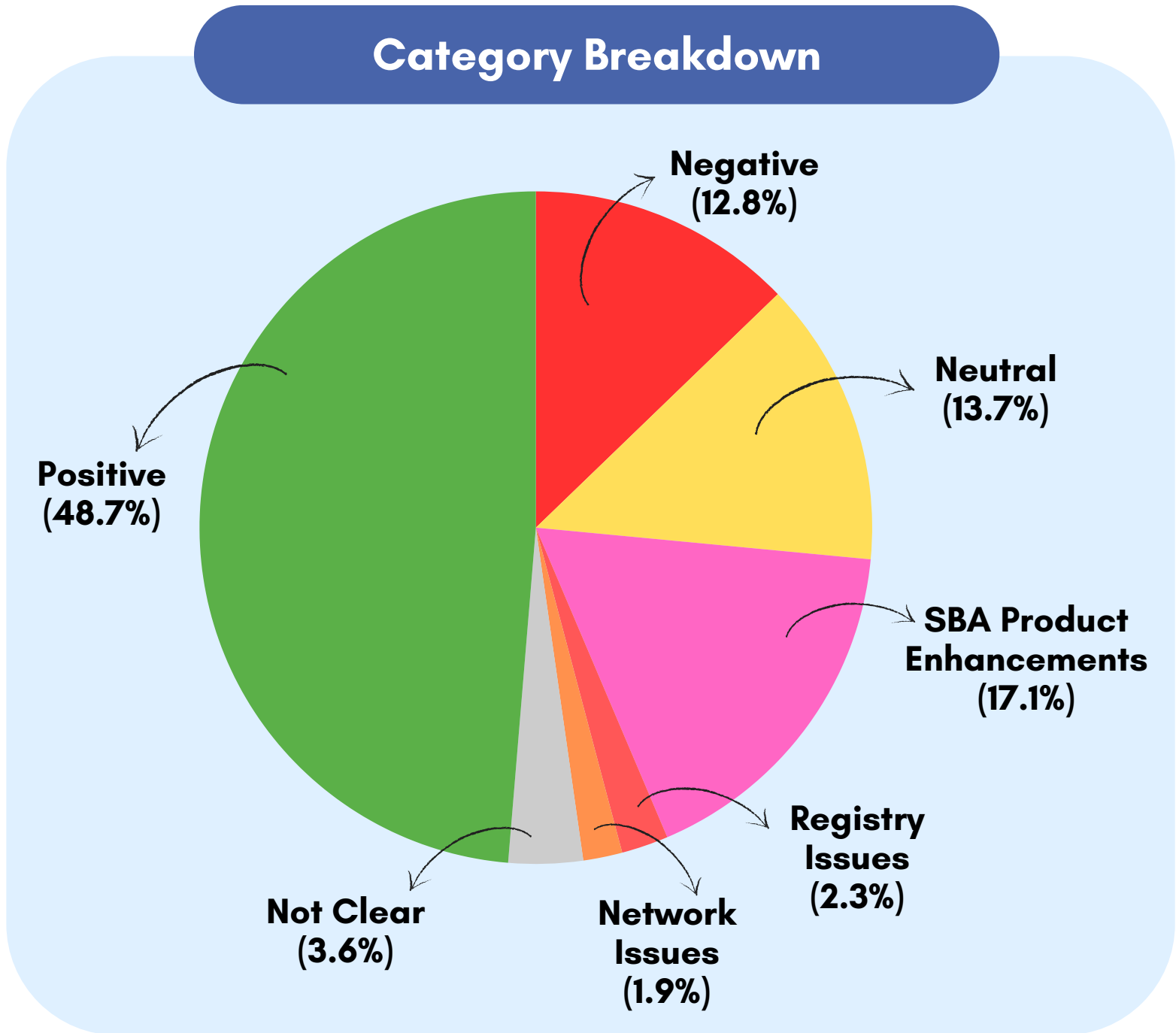
- **Hypothesis 1:** If subject and question-wise mark entry on the bot is simple, teachers will complete data entry more efficiently and accurately.
- **Hypothesis 2:** If teachers spend excessive time entering data in the current SBA format 1.0 & 2.0, integrating OCR will help reduce effort and save time.
- **Hypothesis 3:** If teachers receive immediate assessment reports, their engagement and satisfaction with the bot will increase.



Metric	Target: All SBA Bot Users
Engagement Rate (Total responses/ Views)	22.4% (11134/49665)
User Rating Insights (H1) 	Ease of filling subject & question-wise marks on PAT Chatbot ~78%  (4-5 stars)
MCQ Response Insights (H2)	Time taken to fill assessment data per student per subject ~62% users take < 5 minutes ~38% users take >= 5 minutes (Out of 38%, ~22% of users take > 10 minutes) <i>Seems like user responded for time taken per subject instead of per subject per student. In such a scenario, this 22% gets added to the 62% users who take <5 minutes</i>

COMMENT ANALYSIS

- Total Comments Received: 653
- Out of these ~82% (534) of comments were relevant for further analysis



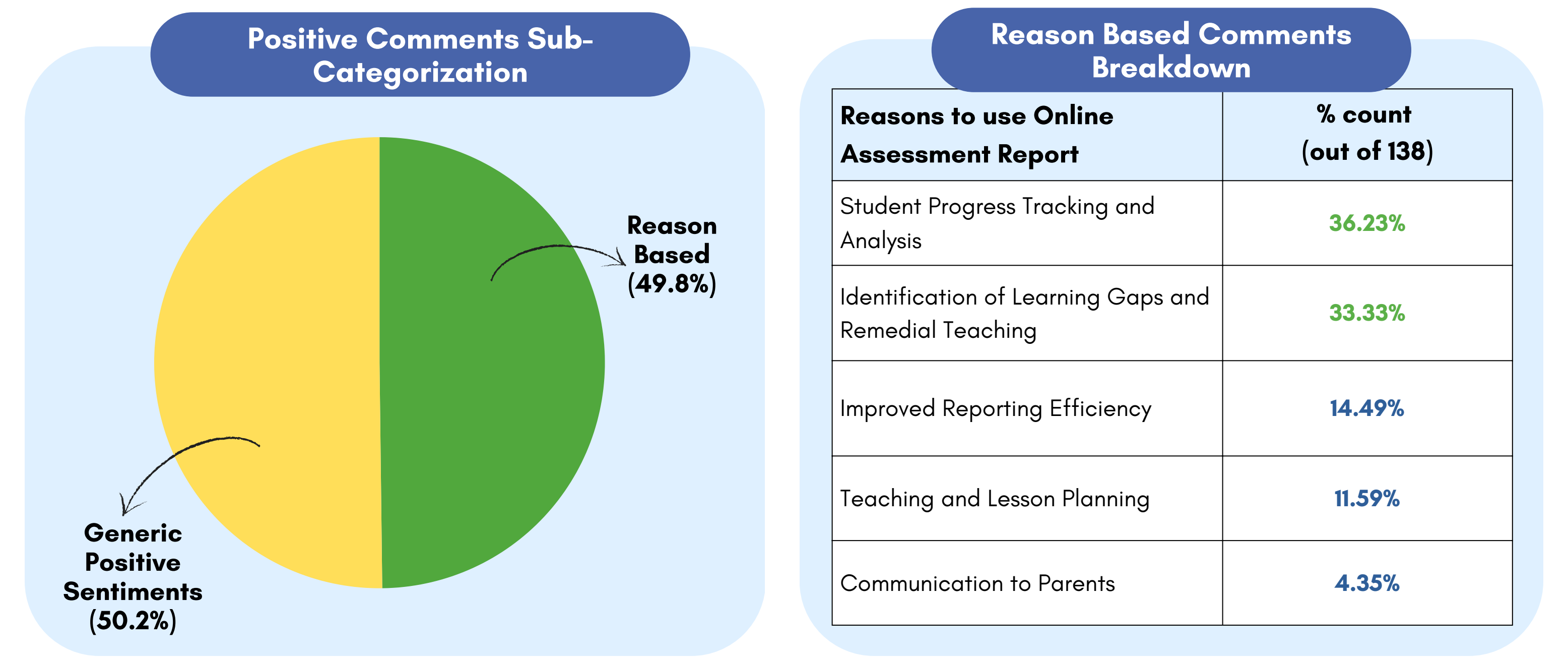


H3: If an online immediate report for the student assessments were available, how would you use it?

Positive Comments Insights - Why “Live Reports” matter?

- Positive comments indicate willingness to use the online reports if made available, which is further sub-categorised into **Generic Positive Sentiments** and **Reason-based** comments.
- While Generic positive comments give a **validation of the need for a report** to be made available, Reason based comments indicate **possible use cases for an immediate assessment report**.

Total Positive Comments Received: 259



Neutral comments (~14%) indicate teachers aren’t demanding the report but would use it if mandated, reflecting readiness that can be activated through orientation and guidance.

Voices That Shape the Product

SBA Product Enhancements	Insights										
<table><tr><th>Major Enhancement Requests</th><th>% count (out of 91)</th></tr><tr><td>Interface & Flow Changes</td><td>48.91%</td></tr><tr><td>PDF/Report Download Features</td><td>25.00%</td></tr><tr><td>Excel/CSV Upload Features</td><td>19.57%</td></tr><tr><td>Search, Sequence & List View Improvements</td><td>5.43%</td></tr></table>	Major Enhancement Requests	% count (out of 91)	Interface & Flow Changes	48.91%	PDF/Report Download Features	25.00%	Excel/CSV Upload Features	19.57%	Search, Sequence & List View Improvements	5.43%	• Upload, No Manual work– Excel/CSV one-click upload option to save time • Reports at Fingertips – Instant downloadable PDFs • Find Faster – Smart student search & flexible student sorting • Click Less, Do More – Simple flows, less clicks (Redundant bot steps & unnecessary confirmations) • SBA 1.0 Vs SBA 2.0 – ~22% of Product enhancement comments flagged SBA 1.0 was easier and faster.
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Interface & Flow Changes	48.91%										
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Excel/CSV Upload Features	19.57%										
Search, Sequence & List View Improvements	5.43%										



"Last year interface was easy to fill the marks now it has become very time consuming and slow"



"With one click, the entire study of the students is in front of the eyes, so it will be easy to guide the student by predicting what exactly he wants and where exactly it is."



"It is easy to fill marks in previous exam. Now it takes twice as much time to fill the marks of this exam. It is a humble request to make it more difficult to fill the marks and cause more mental trouble."



"Download and use the report."



If instant online reports are available for student assessment, it will be beneficial to track student progress and overcome difficulties.



"Before this method of filling marks was good. This new method takes more time and causes more network problems"



"It will be useful to know in which subjects the students are lagging behind in the components"



"It will be easy to show parents"



"If it is possible to upload a single file (Excel/Class PDF) for all the students in a class, it will save a lot of time for the teachers. so as to find the name of each student and then his child"

