



Unified Insights Product Review With Devendra

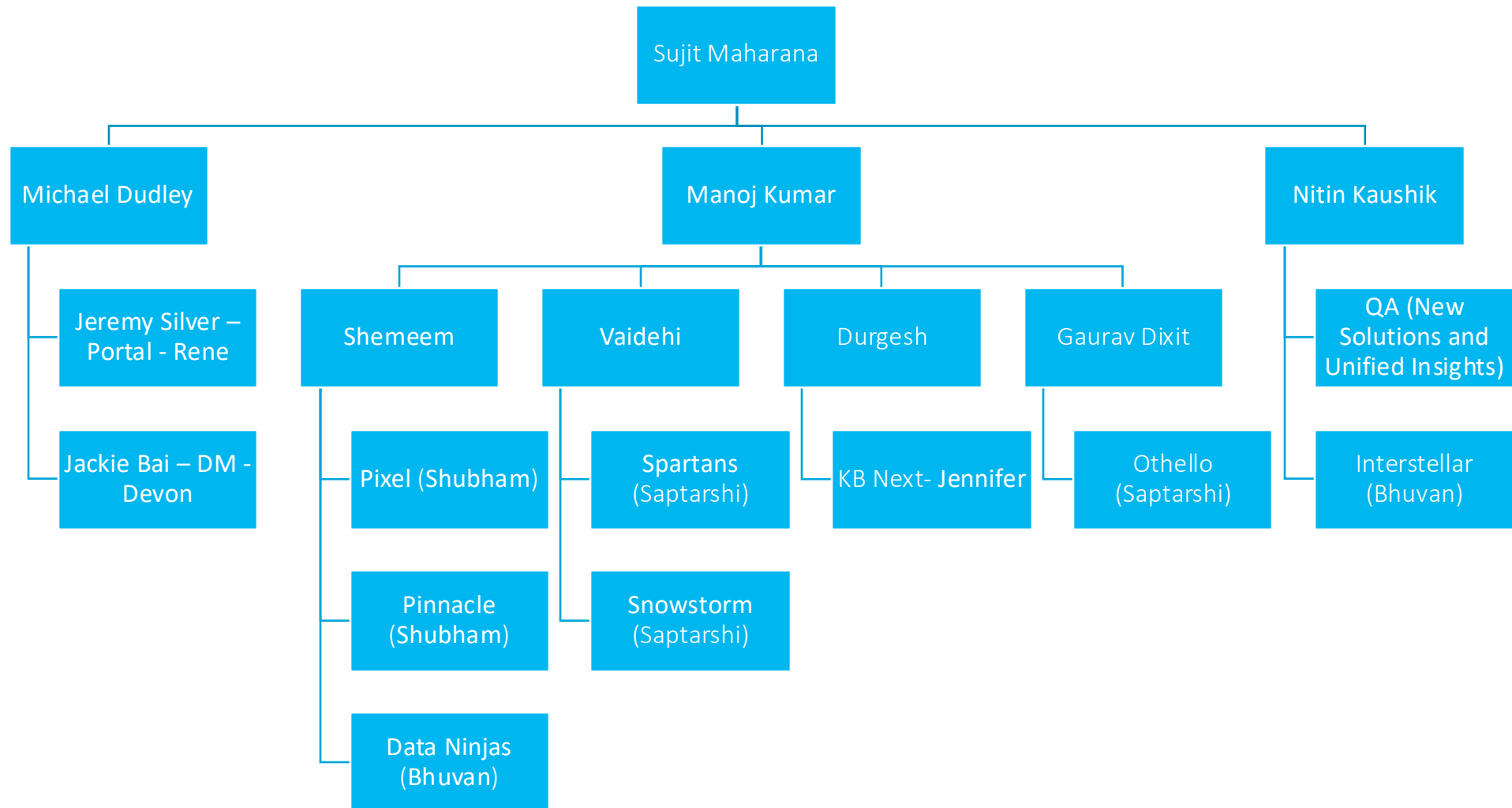
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8/?, 2024

Classification: Confidential (Do Not Share)



Org Chart - Engineering



Headcounts

Latest Updates

- Total 49 in India and 18 in US
- 4 open requisitions
- 12 QA (incl Kickboard)
- 3 PM India (4 in US)

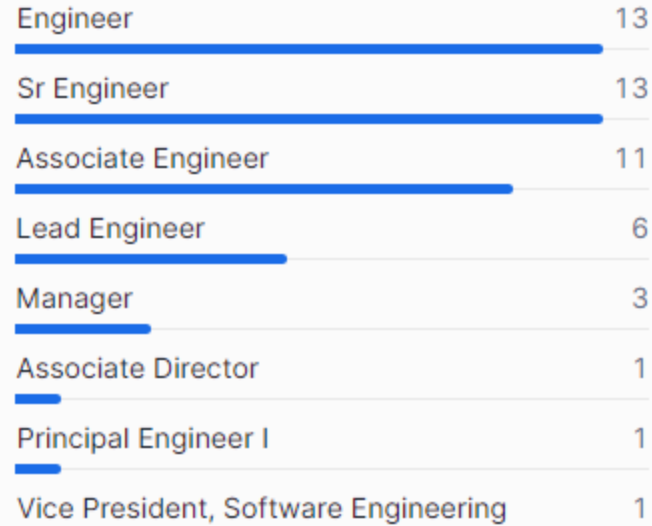
Highlights (H1-2024)

- Delivered innovations and platform improvements.
- Focus on reducing backlog and invalid bugs.

Lowlights

- Attritions including 2 managers in 2024

By Title - India (Includes QA)



Upcoming Focus

- Consistent quality and efficiency
- Co-pilot and genAI usage
- Hire new engineers (4 reqs)

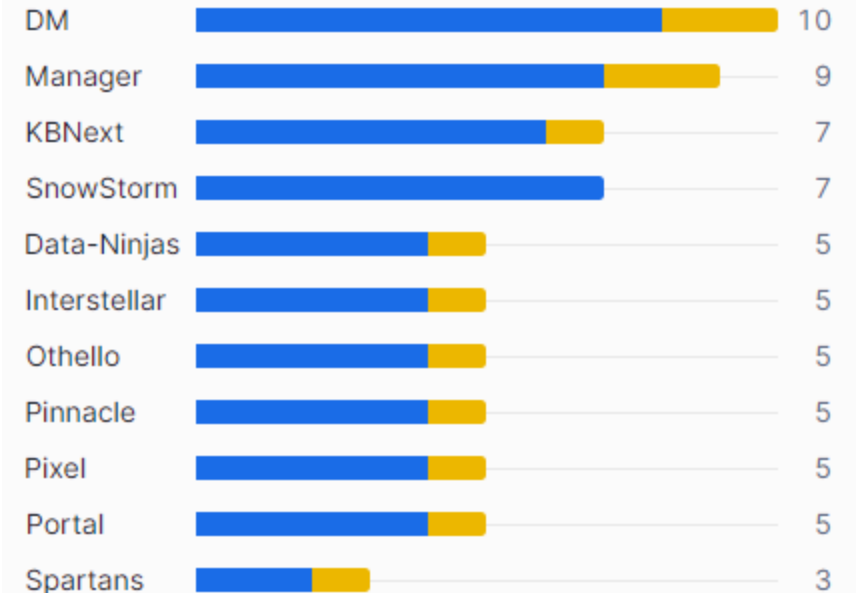
Total Active Headcount B...

■ Engineering ■ QA



By Team and Department

■ Engineering ■ QA



2024/2025 ROADMAP PRIORITIES

		H2 2024		H1 2025	
		Q3 2024	Q4 2024	Q1 2025	Q2 2025
Innovation	Interstellar	Student Success Cloud: AIS Analytics			
	Multiple teams		Allovue – A&I Integration		
	Othello	Logi Phase 1 - Embedded PowerGrid replacement.		Internationalization	
	Spartans	Educator Analytics – Phase 1		Logi Phase 2	
	Pinnacle/Pixel	TMA – Phase 3 & Crosswalk Automation		Educator Analytics – Phase 2	
	TBD	MTSS / Student Plans - Doc. attachment, Notes, Intervention Block (Student Plans)		MTSS - Data entry rework, notifications, central repo dev.	
			Power buddy for A&I		
				MyPowerHub - Parent/Comms	
	KBNext	District enhancements (Dashboard, Move config to Next custom permissions)		Referral Management	

2024 Key Achievements (Q2)

New SKUs/Innovations:

- **MTSS Intervention:** Pinnacle and Pixel Teams delivered 180 story points worth of work under MTSS Epics.
- 600+ Story points worth of work delivered across *Behavior (KickBoard) Analytics, Kininvolved analytics, Student plan analytics connectors, dw-etl and dashboards*
- **Intervention analytics**
- Platform improvements for scalability: LAUSD, Montana: Reduced upgrade times and scalability.
- **Advanced analytics** (Logi integration) in Hoonuit for LAUSD
- AWS and Snowflake Migration: 200+ tenants 35 tenants pending
- **Kickboard SIS roster sync & smart group** released
- PBfDA (TTYD) Validation and GA sign off
- TMA Phase 2 Delivered
- Production support and Assessment.



Major platform improvements in 2024

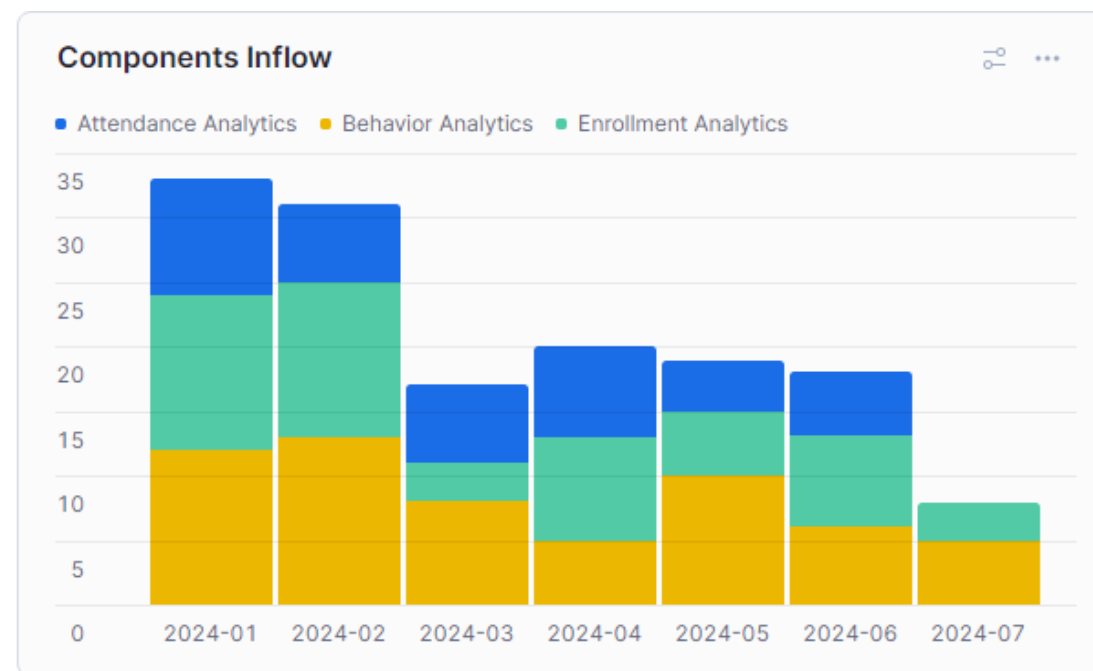
- Reduced release upgrade time to 6-8 hours (from 12-18 hours beginning of 2024):
 - Compared to beginning of 2024 when upgrades would take 12-18 hours on weekends, its reduced to 6-8 hours despite increase in number of tenants to 400 in this year.
 - It is expected to maintain this timeframe for a few hundred more customers.
- Enabled partial upgrade for customers:
 - Dashboard, ETL, connectors, and configurations can now be upgraded without a full system upgrade. This was vital for large customers like Alabama where one small change in one district required upgrading all 100+ districts earlier.
- RM Sheet is automated:
 - Being in review with Cloud-ops
- Dashboard scaling in Kubernetes Istio:
 - Crucial for LAUSD to scale with 750k+ students.
 - It was challenging due to K8S and how Istio manages sessions vs how hoonuit portal uses sessions and tomcat clustering
- Logi reports integration:
 - SSO configuration
 - Embedding reports in the dashboard.
 - Performance analysis and adhoc reporting matching with existing functionality
- ETL status in TM
 - Reduced ETL monitoring efforts for SRT team
- TM APIs for enhanced monitoring and data about our tenants
- RDS backup and restore time reduced to 15 minutes from 7-8 hours:
 - Achieved by moving from AWS snapshot to SQL Server native backup with differential log backup.

AI Usage

- UIHN **Chatbot** slack app & PB Custom-AI are being evaluated for better coloration with support/services teams for inflow reduction.
- POC - Chat GPT for identify tickets that require **security review** – working with Marcos
- ChatGPT usages for **mock data creation** for TMA sales tenant.
- ChatGPT usages for **mapping extract data** (SIS & Kickboard) for setting up 3 sales/demo tenants.
- *POC - Chat GPT used to **scan ETL audits** and characterize those as Human-readable ETL Raw Audits format.*
- *POC - Looking up **ACT codes from NSC files** to match college codes in NSC files to ACT (to link college school codes with DW school codes*
- *POC - Co-Pilot use for **Circular Dependencies** checker and tool to automate removing circular dependencies*
- Leveraging CoPilot to **generate regex** for C2.0 automation
- All engineers using Co-Pilot for **Code completion**, code suggestion, unit-test cases, code review, Documentation
- Shared video on **Co-pilot deep dive** features and usage
- AI usage in QA
 - PowerBuddy testing (**PBfDA**) & automation strategy.
 - **Test scenarios generation** and listed in QPS.
 - **Automation code review**
 - Co-Pilot is used to help **writing automation scripts**.

Other Initiatives..

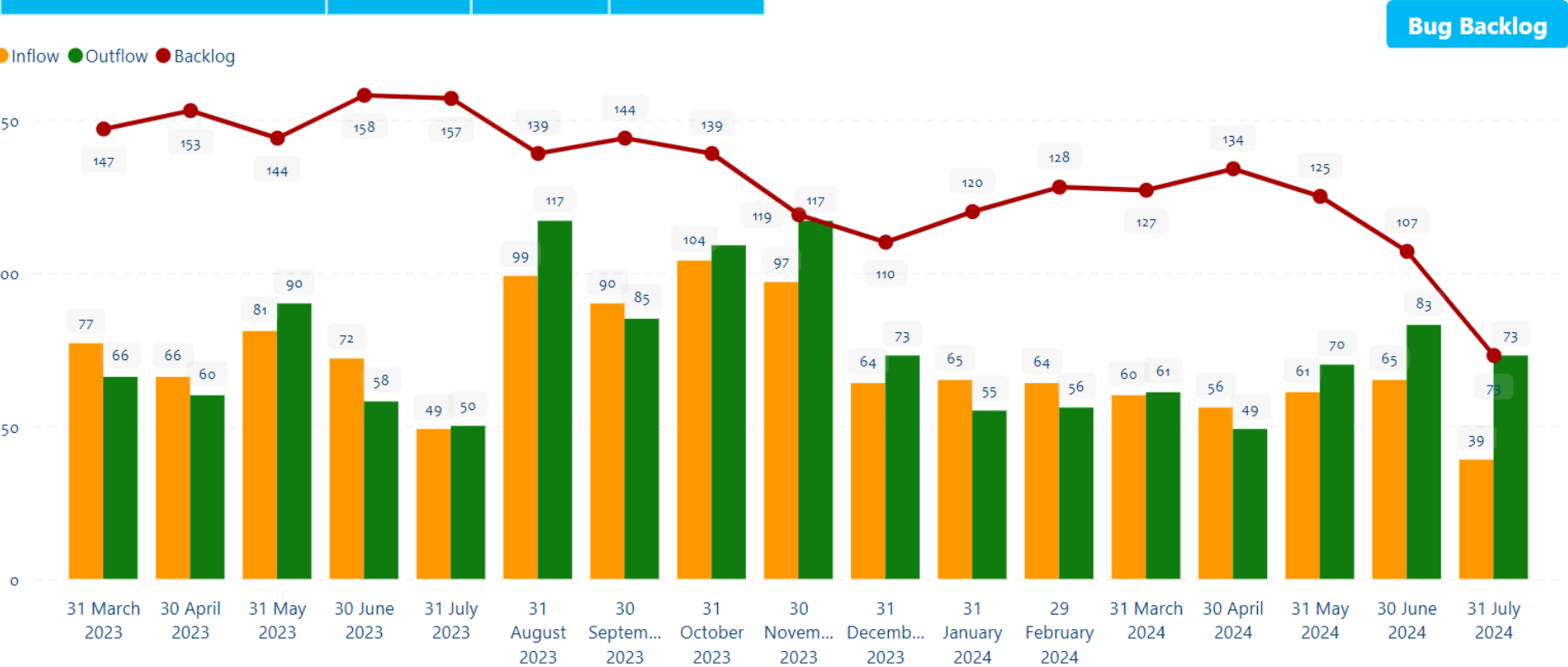
- **Forums with Support**
 - Focusing on **Invalid Bugs RCA analysis** and **enhancing support knowledge** of UIHN modules
 - **14 KB Articles** created by Support Team.
- **Forum with Cloud-Ops:**
 - **Reduced monitoring time** from over 8 hours to 1 hour (with number of districts doubled)
 - **Automated RM Sheet.** Review in progress.
 - **Improved upgrade times** and other monitoring and observability.
 - Focus on **enabling cloud-ops** to resolve invalid tickets.
- **Tech Designs, Spikes** and other higher complexity work such as Portal, DW ETL taken up by teams in India.
 - **Dashboard Scaling** work driven from India
 - **Advanced Analytics** (Logi) embedding and SSO
 - **MTSS** all enhancements done from India with scalability In mind
 - **SIS roster sync** and all other enhancements 100% driven from India Team
- **Cross Training** of Teams and component wise expertise building up
- Continue focus on **Invalid bugs** across all channels



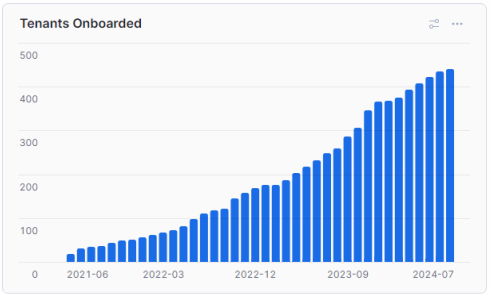
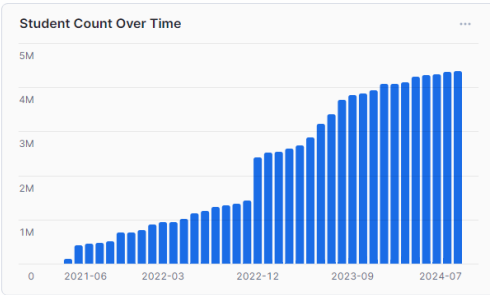
Production Backlog

Backlog by Month (July vs STLY)

Product	Current Month Backlog	STLY Backlog	Difference
Unified Insights - Hoonuit	73	157	-84
Total	73	157	-84



- We worked with product team and backlog cleanup took place. It is reduced significantly.

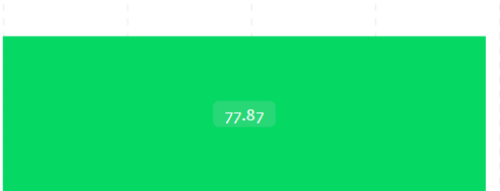


Production Backlog

Reported Bugs Triage SLA

Product	Bugs Met 7D	07-30	30-90	Total
Unified Insights - Hoonuit	183	49	3	235
Total	183	49	3	235

Unified Insights - H...



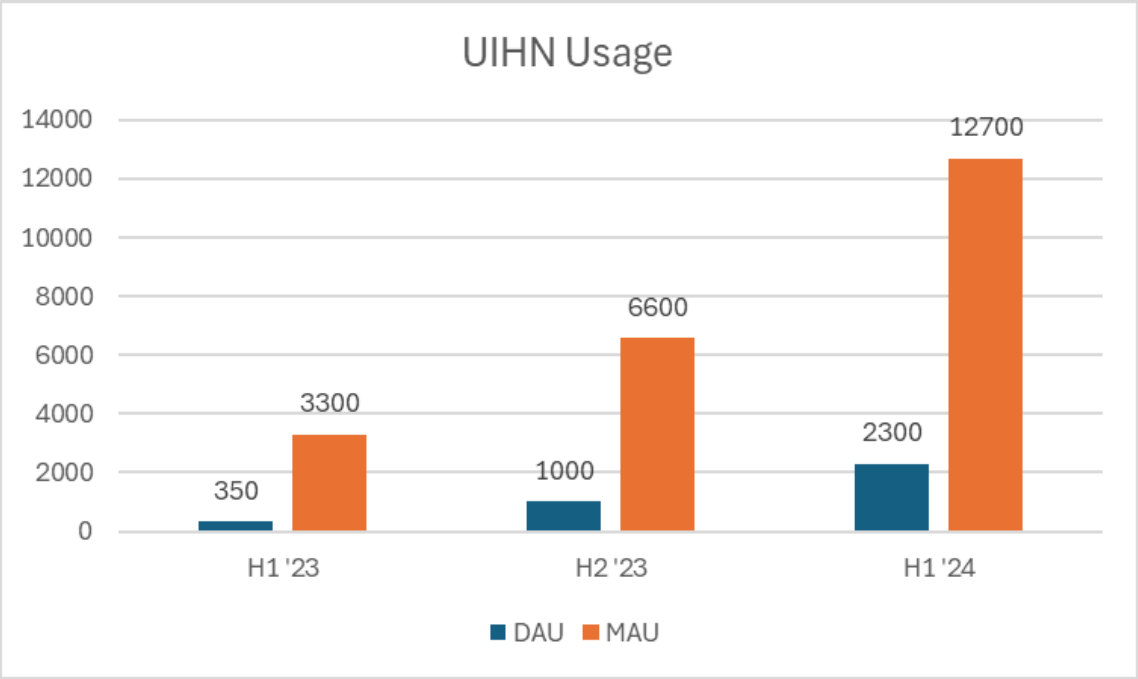
Reported Bugs vs Invalid

Product	Total Bugs	Open	Valid	Invalid	Invalid %
Unified Insights - Hoonuit	221	45	22	154	87.50
Total	221	45	22	154	87.50

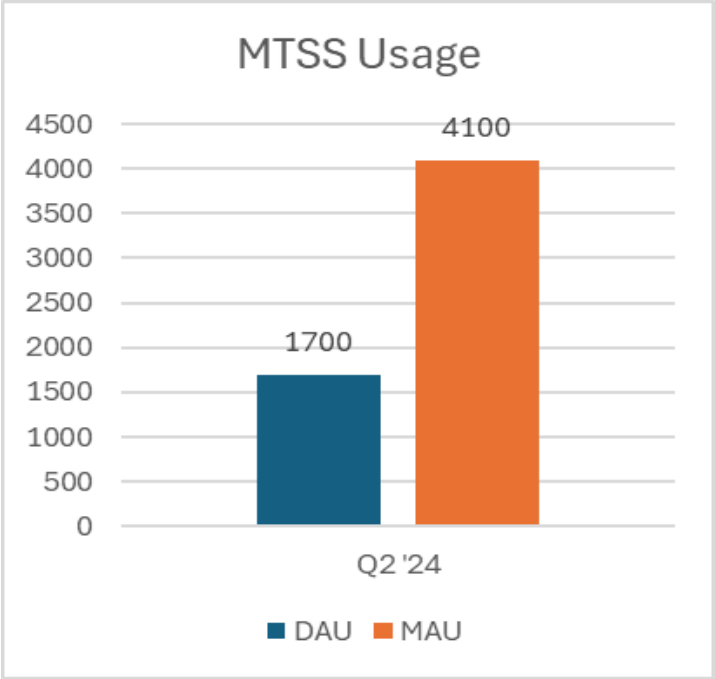
We are meeting 7-Day SLA for incoming defects. June onwards (when we started tracking ticket status), we are 96%+ in SLA.

Invalid bugs % remains high and teams are working on different initiatives (forum/KT) with Support to reduce this.

UIHN Usage



UIHN	H1 '23	H2 '23	H1 '24
Stickiness(DAU/MAU)	11%	15%	18%



MTSS	Q2 '23
Stickiness(DAU/MAU)	41%

PowerScore - Behavior/Kickboard

Name	Title	Quartile	PowerScore	Coding Days	PR Submitted	PR Reviewed	HALOC	Tickets	Story Points	Impact	Efficiency	
Abhinav Kumar	Engineer I	1	80.34	3.15	28	151	44	14	47	155.25	60.52	Coding: 90% Content: 10%
Aravindh R	Senior Engineer I	2	75.39	2.54	55	131	29	23	61	117.96	81.77	Coding: 80% Content: 20%
Kartikey Raut	Software Engineer I	2	72.66	2.85	38	152	49	21	43	92.97	79.21	Coding: 90% Content: 10%
Krithy Krishna	Lead Engineer I	2	59.88	2.64	28	131	19	29	63	61.39	76	Coding: 60% Content: 40%
Nithesh H	Senior Engineer I	2	58.79	2.58	33	144	18	17	54	59	70.77	Coding: 80% Content: 20%

PowerScore - Behavior

Name	Title		Comments
Abhinav Kumar	Engineer I	Coding: 90% Content: 10%	He is been involved in fixing production bugs and the regular epics, Apart from his day to day work he has also worked on some AI initiative because of that his PS is high
Aravindh R	Senior Engineer I	Coding: 80% Content: 20%	Aravindh has lead the team in the last initiative we have worked on, so he was more involved in mentoring and helping team, that's the reason his coding days are less but his PS remained constant because of PR reviews and the high story point tickets.
Kartikey Raut	Software Engineer I	Coding: 90% Content: 10%	kartikey is continue to work on current initiative and the epics. His PS score increased a bit from last quarter .
Krithy Krishna	Lead Engineer I	Coding: 60% Content: 40%	Apart from the coding, Krithy also lead the team and helps in managing the team. This gives her little less time to code which leaded to less PS
Nithesh H	Senior Engineer I	Coding: 70% Content: 30%	Nithesh had been involved in many spike tickets and documentation in the last quarter for SIS work because of that he had less coding tickets hence his PS is low this time.

PowerScore: Dataninja/Platform Team

	▼	Quartile▼	PowerScore	▼	Wk	▼	PR Submitt▼	Reviewed▼	HALOC	▼	Ticket Count	▼	Story Points	▼	Total Impact	▼	Efficiency	▼
yogesh.ramaswamy@powerschool.com		1.00	117.99		3.15		10.00	7.00	18,368.00		77.00		147.00		254.31		87.16	
mdsaz.akhtar@powerschool.com		1.00	81.80		3.62		19.00	8.00	5,909.00		63.00		157.00		179.36		64.10	
b.manoj@powerschool.com		2.00	73.49		3.38		7.00	0.00	13,409.00		21.00		50.00		163.26		71.49	
azaz.akhtar@powerschool.com		3.00	55.14		2.63		2.00	23.00	3,280.00		21.00		62.00		126.84		74.62	

PowerScore: Dataninja/Platform

Name	Title	PowerScore	Comment
yogesh.ramaswamy@powerschool.com	Senior Engineer1	117.99	He makes lots config changes and also works on lots of production issues.
mdsaz.akhtar@powerschool.com	Senior Engineer1	81.80	He works on lots of production issues and lots of code changes. Most number of MR submitted and second most number of tickets worked.
b.manoj@powerschool.com	Engineer 1	73.49	He makes lots of config changes.
azaz.akhtar@powerschool.com	Lead Engineer 1	55.14	The most impactful player of the platform team drove two major POCs (Dashboard scaling and Logi Analytics integration) during the last quarter. Although his number of MRs is lower, this is because the Dashboard scaling work was done in a separate feature branch and has not yet been merged into the develop branch. Additionally, the Logi SSO module was developed as a separate project, with no initial MRs raised against it. He also mentors other team members.

PowerScore Pinnacle/Pixel

	▼ Quartile ▼ e	▼ ↓ Days per	▼ PR Submitted	▼ PR Reviewe	▼ HALOC	▼ Ticket Cou	▼ Story Point	▼ Total Impa	▼ Efficiency	▼
shashank.rana@powerschool.com	2.00	68.26	3.50	24.00	74.00	5,292.00	18.00	58.00	135.65	65.45
sanketh.sr@powerschool.com	2.00	65.15	3.09	35.00	6.00	4,636.00	15.00	48.00	175.65	69.08
rohit.shrivastava@powerschool.com	2.00	57.80	2.58	36.00	67.00	2,621.00	35.00	90.00	71.00	78.93
shivam.tyagi@powerschool.com	3.00	47.80	2.67	20.00	9.00	3,417.00	13.00	39.00	124.80	49.55
suhaas.kamath@powerschool.com	4.00	38.97	1.77	25.00	5.00	2,982.00	16.00	55.00	64.00	67.95

PowerScore Pinnacle/Pixel

Name	PowerScore	Title	Comment
shashank.rana@powerschool.com	68.26	Senior Engineer I	Second most impactful player and primarily working on majorly on UI side.
sanketh.sr@powerschool.com	65.15	Engineer II	Primarily working on UI side.
rohit.shrivastava@powerschool.com	57.8	Senior Engineer I	He is the most impactful player on the team, primarily working on complex backend tickets that typically involve less boilerplate code compared to UI tasks. Additionally, he handles production issues.
shivam.tyagi@powerschool.com	47.8	Engineer II	He also primarily working on complex backend tickets which usually have less number of boiler-plate code as compared to UI.
suhaas.kamath@powerschool.com	38.97	Associate Engineer II	Associate engineer - His number of PR review and coding days are less. He needs to improve coding days. Given the feedback.

PowerScore - Interstellar

Name	Title	Quartile	PowerScore	Coding Days	PR Submitted	PR Reviewed	HALOC	Tickets	Story Points	Impact	Efficiency	
Basavaraj Kudagi	Lead Software Engineer II	3	45.93	1.44	9	26	897	63	152	23.57	84.22	Data Analysis - 80% Coding - 20%
Kulkarni Sunilrao	Software Engineer I	4	39.59	1.91	12	2	1953	27	102	42.03	84.09	Content - 70%, Coding - 30%
Nitesh Rathore	Associate Software Engineer I	3	52.91	2.42	15	0	4988	15	65	114.48	76.37	
Tejesh Gour	Senior Software Engineer II	4	30.93	2.82	4	1	1235	45	128	25.47	28.64	Content - 80%, Coding - 20%

PowerScore - Interstellar

Name	Title	Comment	
Basavaraj Kudagi	Lead Software Engineer II	Data Analysis - 80% Coding - 20%	Overall Interstellar team delivered new SKU Behavior (KickBoard) Analytics, Kinolved Analytics, Student Plan analytics along with other major features like Behavior by Year, State specific queries, TMA ETL support, Production bug tickets related to Attendance etc. More content work being done in team due to these new modules which does not count much in PS. But After Content versioning, we will start getting these counted. Basavaraj is team lead and he is involved in many production tickets analysis and closure hence his ticket count is high along with PR review. His time goes in lot of Spike, coming up with Datamodel design and then team executes that work.
Kulkarni Sunilrao	Software Engineer I	Content - 70%, Coding - 30%	We have cross trained the team. Now Swati is working on Content tickets as well. Thats why her PS went down from 57 to 39. She is now picking Content work as well after this cross training.
Nitesh Rathore	Associate Software Engineer I		Although his PS is high, he is our bottom most resource. Other team members need to help to have tickets completed. Hence ticket count is less. We are planning to put in PIP and asking for replacement.
Tejesh Gour	Senior Software Engineer II	Content - 80%, Coding - 20%	His PS has increased QoQ from 16 to 30. This is due to cross training and now he is picking connector and DW work. Earlier he was only a content developer.

PowerScore - Othello & Spartans

Name	Title	Quartile	PowerScore	Coding Days	PR Submitted	PR Reviewed	HALOC	Tickets	Story Points	Impact	Efficiency	Allocation
Jishi Chereekandy	Lead Engineer I	3	43.52	3.17	20	0	3	58	132	37.68	82.66	Data Analysis - 40% Coding - 10% Content - 50%
Gaurav Dixit	Lead Engineer I	4	39.48	1.8	16	10	15	34	92	40.71	81.72	Team Lead:- 30% Data Analysis - 20% Coding - 20% Content - 30%
Shashank Kumar	Software Engineer I	4	42.34	2.09	6	10	15	37	122	48.46	73.96	Data Analysis - 30% Coding - 20% Content - 50%
Humsini R	Software Engineer I	4	16.76	2.33	3	0	0	29	88	1.94	19.05	Content - 90%, Coding - 10%
Shalini S	Associate Engineer I	4	12.92	1.88	0	0	0	30	87	0	0	Content - 90%, Coding - 10%

PowerScore - Othello & Spartans

Name	Title	Quartile	PowerScore	Allocation	Comment
Jishi Chereekandy	Lead Engineer I	3	43.52	Data Analysis - 40% Coding - 10% Content - 50%	Based on the Team Roadmap, She works on Content/Dashboard creation , Owning Behavior and Academics component for Production bug tickets analysis Apart from that, She is trained on the connector as well as DW ETL process.
Gaurav Dixit	Lead Engineer I	4	39.48	Team Lead:- 30% Data Analysis - 20% Coding - 20% Content - 30%	Overall Othello team contributed on delivering Intervention Analytics, Kinolved Analytics, Kickboard Analytics Talent management Analytics , Owning Enrollment component for Production bug tickets analysis.
Shashank Kumar	Software Engineer I	4	42.34	Data Analysis - 30% Coding - 20% Content - 50%	Based on the Team Roadmap, He works on Logi Adhoc Report/ Dashboard . But normally work on Connector ETL as well as DW ETL .
Humsini R	Software Engineer I	4	16.76	Content - 90%, Coding - 10%	Based on the Team Roadmap, She works on Content/Dashboard creation . She has trained to work on Connector ETL as well as DW ETL. Improvement Plan:- Working on Content Versioning feature which will help team to track the PR, Coding Days etc.
Shalini S	Associate Engineer I	4	12.92	Content - 90%, Coding - 10%	Based on the Team Roadmap, She works on Content/Dashboard creation . She has trained to work on Connector ETL as well as DW ETL. Improvement Plan:- Working on Content Versioning feature which will help team to track the PR, Coding Days etc.

Latest Updates

- Team Structure - **55** Devs / **12** QA
- Releases - 2024
 - TMA - 2 Beta Releases
 - UIHN – 6 Releases, 2 Escalation
 - KB – 2024 : 5 Releases
- EDV
 - 2024 – 52
 - 2023 – 57
- Automation pass %
 - UIHN 93% in 2024 (96% in 2023) , KB 96% (started in 2024)
 - 41 Defects found by Automation in 2024

Highlights 2024

- **QA performing Code [review](#)** identified requirement gaps/issues early.
- **AI Validation [Strategy](#) defined**
 - Automation framework & metrics.
 - GA for AI PowerBuddy ([PBfDA](#))
 - AI Security – [17 issues](#) reported (Cobalt.io is finding hard to report issues).
- **Kickboard** Automation suite developed and stabilized.
- Continuous review to identify Automation Gaps
- Pre-prod cost reduction [initiatives](#)
- Thorough Audits for Epics, user stories & Test Plans
- AI usage in QA
 - Test scenarios generation and listed in QPS.
 - Co-Pilot is used to help writing automation scripts & review.

Upcoming Focus

- Pre-prod Cost reduction
- Reduction of invalid bugs by collaborating with support and push teams to complete KTs and track process improvements/gaps.

Lowlights

- One YET issue caused problems due to date transition in Jan 2024
- One Behaviour regression caused hotfix.

Latest Updates

- Delivered work across many epics including major work for MTSS.
- Delivered all major work part of MTSS functionality and application.
- Enabled Incremental upgrades of tenants for frequently changing configurations. APIs to provide tenant configuration so support and internal teams for analysis.
- The release upgrade time has been significantly reduced to 6-8 hours, despite the growing number of customers. This efficiency is anticipated to be sustained even with the addition of several hundred more customers.

Upcoming Focus

- MTSS / Student Plan Phase 2
- School Improvement plans
- Production and Internal Bugs
- Lightweight Releases
- Improved co-ordination with cloudops

Highlights

- Pinnacle and Pixel 2 Teams started from scratch in 2023 Oct. Onboarded new team and trained on the complex application (portal) within UIHN.
- Logi integration handled by team in India (starting with Architecture and Tech Design approach)
- Delivering end to end work including owning all Technical Designs, spikes by Teams in India.
- Movement of Infrastructure to AWS. Snowflake Migration Support.

Lowlights

- MTSS roadmap and Adoption ?
- Horizontal Scaling of Portal
- Snowflake Cost ?

Latest Updates

- 59 Tenant Migrated (3- Multi tenant, 56 Single Tenant)
- Talent Management Analytics Phase 2 Completion
- Logi Adhoc report for LAUSD (Pre-Beta)
- Kickboard Analytics, Intervention / Kinolved Analytics
- Student Plans automation for content deployment.
- Usage & Monitoring work (Enhance Observability)
- 12+ DW ETL bug fix

Upcoming Focus

- Collaboration with Support/Clou-Ops.
- Functional component expertise by teams
- No Fix Version Reduction (Reduce Inflow)
- Talent Analytics Phase - 3
- Educator Analytics Phase - 1

Highlights

- Talent Management Analytics phase 2 .
 - 2 Beta release, 4 Beta Customer, 150+ Story point.
- Usage & Monitoring work (Enhance Observability).
 - 8+ Spike, AWS Batch, CloudWatch, SNS, Jobs , S3 bucket, etc
- TM API Live tenant configuration detail into bronze .

Lowlights

- Noise and Data Issues .
- YOY Enhancements | Attendance & Behavior.

Latest Updates

- New modules delivered
 - Kickboard Analytics
 - Kinolved (AIS) Analytics
 - Student Plan Analytics
- Production support
- Detailed KT of Attendance modules to Support
- Support for TMA related ETL updates.

Upcoming Focus

- Deepen the knowledge on DW ETL module.

Highlights

- Team is Cross trained on DW ETL, Connectors, Content development

Lowlights

- More focus on Peer reviews.

Latest Updates

- Delivered 530+ story points worth of work across many epics including the Dev requests and production bugs.
- Delivered SIS roster sync work.
- Upgraded Apache and Ubuntu in all our Unix servers

Upcoming Focus

- District configuration page which will allow district admins to add behaviors, staff etc for whole district. Decrease in cases for configuration as clients will be able to self-serve
- Production and Internal Bugs
- Lightweight Releases for production bugs
- Work with cloudops team to transfer some of infra work

Highlights

- Implemented SIS roster sync for customers which eliminates the use of clever, ultimately leading to cost saving.
- Working on District dashboard.
- Delivering end to end work including owning all Technical Designs, spikes by Teams in India.
- All the Devops, AWS, infra work is taken care by India Team

Lowlights

- Automate decommissioning work
- Automate few of the dev request work like updating student credentials in bulk, deleting extra school year.