Monthly Maturity Report: August 2025

Prepared by:
Christian Taylor
Head of Open Source Office, Intersect
&
Terence “Tex” McCutcheon
Open Source Program Manager, Intersect

Date:
October 14, 2025

Organization:
Open Source Committee
Intersect Member Based Organization
Cardano Ecosystem

Review Process	Approval
1st Pass: Tex M, OS Program Manager	✅**Approved**
2nd Pass: Christian T, Head of OSO	✅**Approved**

Summary

In **August 2025**, the Cardano open-source ecosystem entered a stabilization and refinement phase following July's record-setting expansion. Total contributions declined across most metrics, with **commits decreasing (−45.4%)**, **pull requests contracting (−51.1%)**, and **issues easing (−18.8%)**. Code volume normalized, with **modified files down (−23.2%)** and **lines added dropping (−65.5%)**, marking a shift from feature delivery to post-integration optimization. **IOHK** remained the ecosystem's central engineering driver, while **Intersect MBO** and **Unknown** contributors saw expected declines after July's onboarding surge. Despite lower throughput, participation breadth remained strong, sustaining ecosystem maturity and distributed activity across organizations.

Governance-related development maintained steady momentum through continued engagement in repositories such as ***govtool***. Protocol-level projects (***cardano-ledger***, ***ouroboros-consensus***, and ***cardano-node***) remained active, while tooling and API workstreams entered maintenance cycles. Contributor participation was globally distributed, with activity rebalancing toward European and Asian time zones (**UTC+1**, **UTC+2**) after July's surge from the Americas.

General Observations

Organizational Contributions

- **IOHK** led with **593 contributions** and **44 authors** — a **−45.4% reduction** from July yet maintaining ecosystem dominance.
- **Intersect MBO** activity contracted **−96.6%** as internal integration work transitioned into steady-state participation.
- **Unknown** contributors fell **−42.1%**, consistent with normalization of unaffiliated inputs following prior mapping adjustments.
- **Dquadrant (−26.1%)** and **Tweag (−21.1%)** sustained moderate engagement across specific protocol and R&D efforts.
- **Liqwid Labs (−60%)** concluded active delivery cycles after a high-output July phase.

Repository Activity

- Core protocol repositories (***cardano-ledger***, ***ouroboros-consensus***, ***cardano-node***) maintained steady development cadence despite lower commit volume.
- Governance tooling (***govtool***, ***formal-ledger-specifications***) remained active focal points, underscoring Cardano's continued governance infrastructure buildup.
- Tooling and API repositories (***plutus***, ***cardano-api***) entered maintenance phases, reflecting the completion of major integration workstreams.

Pull Requests

- **216 PRs** were submitted (−51.1%) across 22 repositories by 58 contributors.
- **IOHK** maintained leadership with 161 PRs, while **Intersect MBO** (10 PRs) and **Unknown** contributors (22 PRs) aligned with broader contraction trends.
- **Liqwid Labs** and **Tweag** demonstrated continuity through smaller but consistent PR throughput.

Issue Lifecycle

- Total issues declined (−18.8%) to 108, while unique submitters rose (+20.5%) and repository coverage expanded (+23.1%), indicating distributed engagement.
- Average open duration lengthened slightly (+31%) to 11.2 days, suggesting deeper issue complexity during refinement phases.
- High-activity repositories included ***govtool***, ***cardano-ledger***, and ***formal-ledger-specifications***, reflecting continued testing and validation.

Contributor Participation

- Active contributor counts held at 71 (−14.5%), underscoring durable participation despite reduced throughput.
- Author diversity persisted across organizations, maintaining decentralized engagement across the Cardano ecosystem.

Geographic Representation

- European and Asian time zones (**UTC+1 to +3**) retained the highest activity volumes, accounting for most commits.
- Western Hemisphere time zones (**UTC−5 to −4**) contracted significantly after July's spike, normalizing global distribution.
- Overall, geographic balance remained healthy, reaffirming ecosystem diversity and decentralized participation.

Conclusion

August 2025 reflected a natural post-integration cooldown across the Cardano open-source ecosystem. While overall volumes contracted, engagement remained broad, consistent, and globally distributed. **IOHK** continued to anchor engineering activity, while governance tooling and specification workstreams advanced steadily. The **decline in raw metrics** marked a strategic normalization phase — consolidating the major gains from July's acceleration and preparing the ecosystem for the next cycle of structured, incremental growth.

1. Github Overview

This section provides a comprehensive overview of activities and dynamics within the Github platform. It encompasses various metrics and statistics concerning the usage, engagement, and performance of projects and contributors.

Summary:

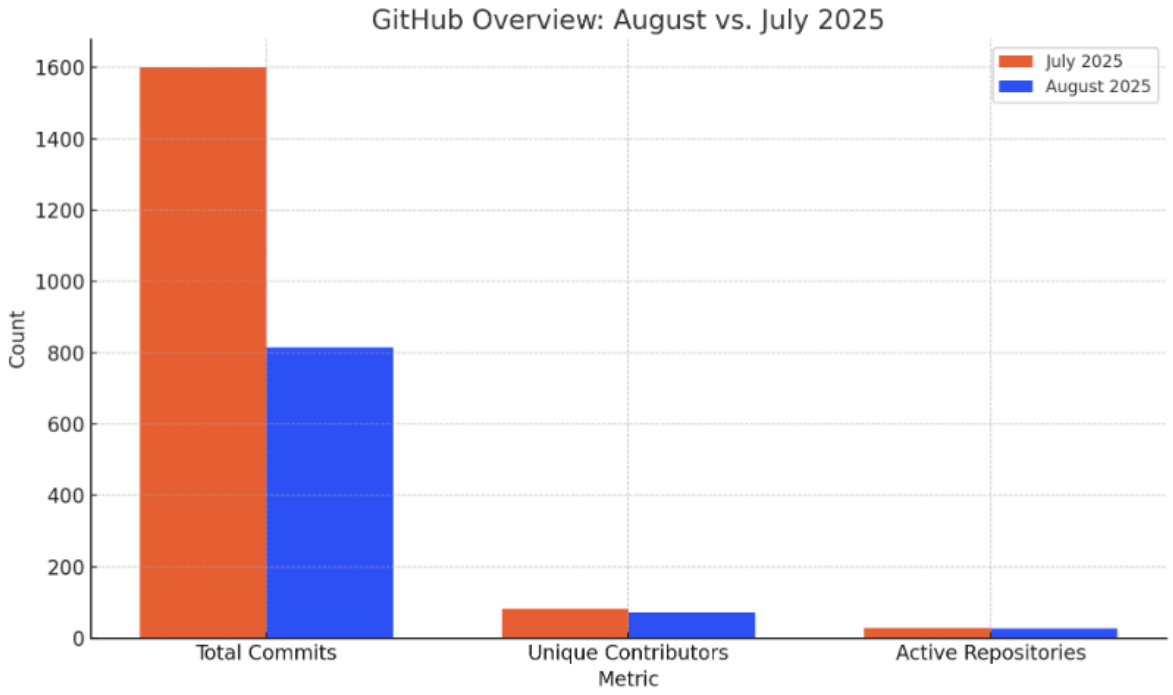
In August 2025, the Cardano open-source ecosystem entered a cooldown phase following July's intense delivery cycle. Total commits dropped nearly in half (−49.1%), and the number of active repositories and unique contributors fell slightly. This contraction likely reflects a transition from sprint-driven integration work to smaller, ongoing refinement tasks — a normal rhythm in ecosystem-scale development. Despite the decline in headline activity, repo coverage remained broad, and contributor engagement stayed strong.

Comparative Table: July vs. August 2025

Metric	August 2025	July 2025	Δ (%)
Total Commits	815	1,600	−49.1%
Unique Contributors	72	83	−13.3%
Active Repositories	27	29	−6.9%

Insights

1. **Commit volume dropped −49.1%**, reflecting a likely shift from high-output feature delivery to maintenance and polish across core projects.
2. **Contributor participation declined moderately (−13.3%)**, but remained well above the June baseline — suggesting the ecosystem is retaining newly onboarded contributors.
3. **Repo activity remained broad**, with only a slight decline in the number of active repositories (−6.9%), indicating ongoing work across most of the codebase.


GitHub Overview: August vs. July 2025
July 2025
August 2025
Count
1600
1400
1200
1000
800
600
400
200
0
Total Commits
Unique Contributors
Active Repositories
Metric

1.a) Organization Activity

Here is the data for how different organizations within the Cardano ecosystem were contributing to open-source projects during the current timeframe. Complete data available here in Bitergia.

Summary

August 2025 marked a period of consolidation following July's explosive expansion. Total organizational activity declined across nearly all major contributors as teams transitioned from large-scale integrations to refinement and stabilization. IOHK's commit volume fell −45.4%, signaling the close of major feature cycles, while Intersect MBO saw a −96.6% reduction as internal integration milestones were likely completed. Unknown contributions decreased −42.1%, likely reflecting re-attribution of contributors now mapped to known organizations. Despite the slowdown, author counts remained largely stable, indicating continued multi-team engagement rather than disengagement. This contraction phase aligns with typical post-release normalization after July's record throughput.

Comparative Table: July vs. August 2025

Organization	August Commits	July Commits	Δ Commits (%)	August Authors	July Authors	Δ Authors (%)
Input Output (IOHK)	**593**	**1,086**	**−45.4%**	**44**	**46**	**−4.3%**
Intersect MBO	**4**	**116**	**−96.6%**	**3**	**3**	**0.00%**
Unknown	**66**	**114**	**−42.1%**	**14**	**18**	**−22.2%**
Dquadrant	**65**	**88**	**−26.1%**	**2**	**2**	**0.00%**
Tweag	**56**	**71**	**−21.1%**	**4**	**4**	**0.00%**
Liqwid Labs	**14**	**35**	**−60.0%**	**1**	**1**	**0.00%**

Insights

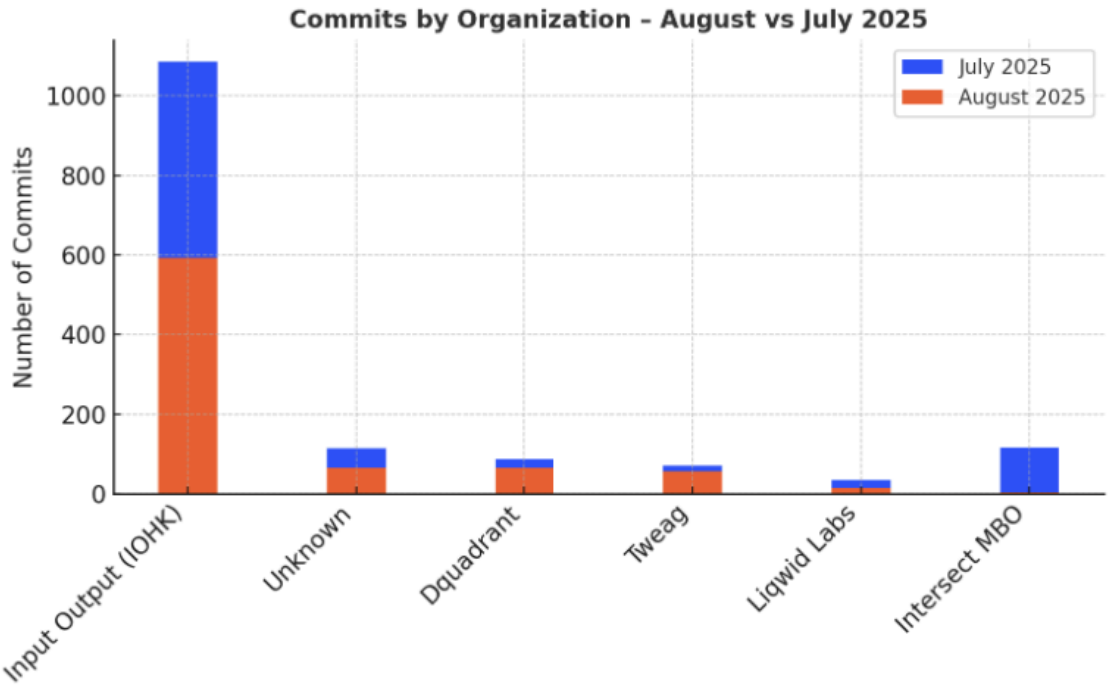
1. **Post-integration cooldown —** The sharp declines across most organizations, particularly IOHK (−45%) and Intersect MBO (−96%), reflect stabilization after July's major integration surge rather than a structural pullback.

2. **Stable contributor base —** Despite commit reductions, author counts stayed constant, confirming sustained engagement levels and continuity of active teams.

3. **Normalization in unaffiliated activity —** The drop in "Unknown" (−42%) suggests contributors are now better attributed or temporarily inactive following high-velocity onboarding.

4. **Selective focus —** Tweag and Dquadrant showed moderate decreases, implying a pivot

to maintenance and optimization tasks rather than net disengagement.



1.b) Commits by Timezone

Here is the data for commits per timezone. This view is important to understand how the contributors are spread geographically. Complete data available here in Bitergia.

Summary

In August 2025, Cardano's global commit distribution shifted sharply back toward European and Asian time zones following July's Americas-led surge. UTC +2 (Continental Europe) and UTC +1 (South / Central Europe) saw the largest absolute declines (−49.2% and −70.7% respectively), indicating a cooldown among core engineering teams after July's release push. North and South American zones (UTC −4 and −5) also fell significantly (−77% and −61%), marking the end of the mid-summer sprint cycle. In contrast, small but notable upticks occurred in UTC −7 (+150%) and UTC −3 (+600%), suggesting localized activity from specific contributors or new regional engagements. Overall, August represented a post-integration stabilization phase with fewer high-volume commits and broader geographic balance.

Comparative Table: July vs. August 2025

Timezone (UTC ±)	August Commits	July Commits	Δ Commits (%)
−7	15	6	1.5
−6	51	46	0.109
−5	26	67	−61.2%
−4	32	140	−77.1%
−3	7	1	6
0	130	170	−23.5%
1	86	294	−70.7%
2	369	727	−49.2%
3	57	62	−8.1%
5	34	45	−24.4%
10	6	33	−81.8%
12	1	9	−88.9%

Insights

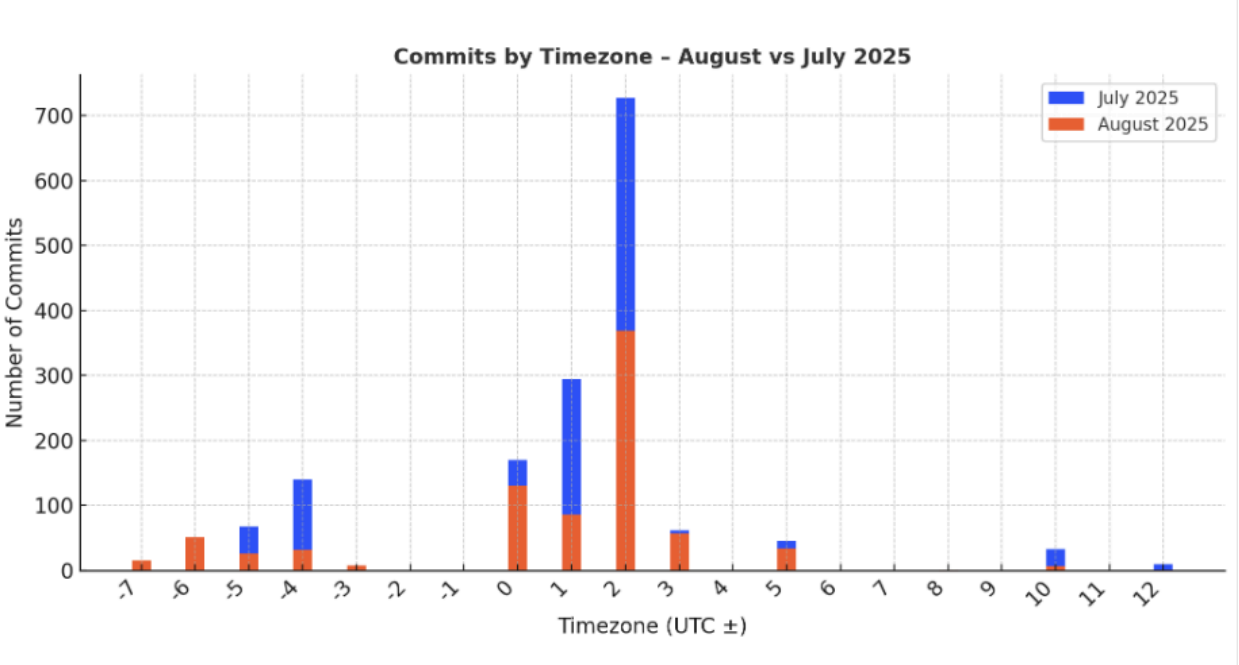
1. **Post-release deceleration in core zones —** European time zones (+1 and +2) saw a combined drop of over 60%, indicating a shift from active development to maintenance after major July deliverables.

2. **Americas activity normalization —** After driving July's growth, North and South

America zones (−4 / −5) contracted sharply, aligning with broader commit reductions across organizations.

3. **Localized resilience —** Isolated growth in UTC −7 and −3 suggests specific team initiatives or the re-emergence of community contributors outside core engineering hubs.

4. **Global balance restored —** With declines evenly distributed across regions, the ecosystem maintains geographic diversity despite reduced volume.



1.c) Per Repository Activity

This section shows activity for each repository in Cardano open-source. Complete data available here in Bitergia.

Summary:

In August 2025, repository-level activity normalized following July's surge. Nearly all core repositories recorded moderate to steep declines in commit volume, reflecting a transition from major integration and governance tooling efforts to refinement and stabilization. *ouroboros-consensus* (−33.7%), *cardano-node* (−22.5%), and *cardano-ledger* (−41.5%) maintained leadership in volume, underscoring sustained protocol-level engagement. Tooling-focused projects such as *plutus* (−54.7%) and *cardano-api* (−39.6%) saw sharper contractions, suggesting a pause in delivery cycles after intensive mid-year updates. Despite the pullback, development remained broadly distributed, signaling ecosystem stability through the post-release phase.

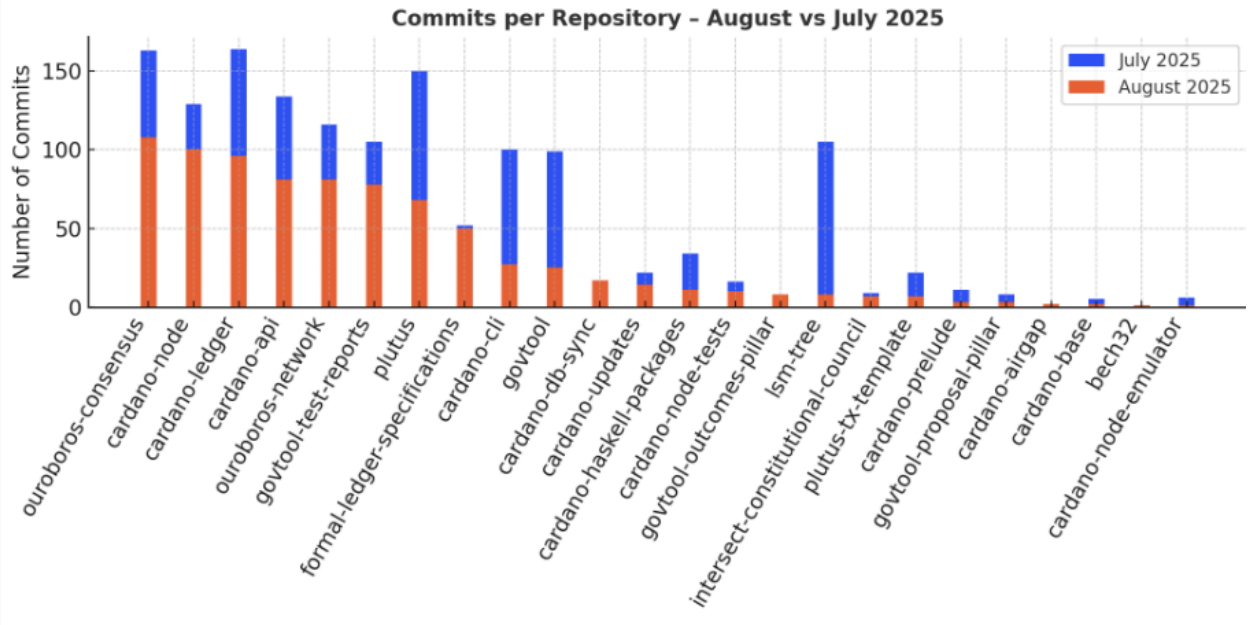
Comparative Table: July vs. August 2025

Repository	August Commits	July Commits	Δ Commits (%)
ouroboros-consensus	**108**	**163**	**−33.7%**
cardano-node	**100**	**129**	**−22.5%**
cardano-ledger	**96**	**164**	**−41.5%**
cardano-api	**81**	**134**	**−39.6%**
ouroboros-network	**81**	**116**	**−30.2%**
govtool-test-reports	**78**	**105**	**−25.7%**
plutus	**68**	**150**	**−54.7%**
formal-ledger-specifications	**50**	**52**	**−3.8%**
cardano-cli	**27**	**100**	**−73.0%**
govtool	**25**	**99**	**−74.7%**

Insights

1. **Post-integration stabilization —** All major repositories declined, aligning with the ecosystem-wide cooldown after July's record development month.
2. **Protocol focus persists —** *ouroboros-consensus*, *cardano-node*, and *cardano-ledger* remain dominant, underscoring continued investment in the protocol's core.
3. **Governance tooling slowdown —** *govtool* and *govtool-test-reports* fell by roughly three-quarters, reflecting the completion of initial feature sprints.
4. **Minimal contraction in specifications —** *formal-ledger-specifications* showed the

smallest decline (−3.8%), suggesting ongoing review and validation cycles even as coding activity eased.



2. Areas of Code

This category outlines the diverse areas and aspects of code development and management within the Github environment.

Summary

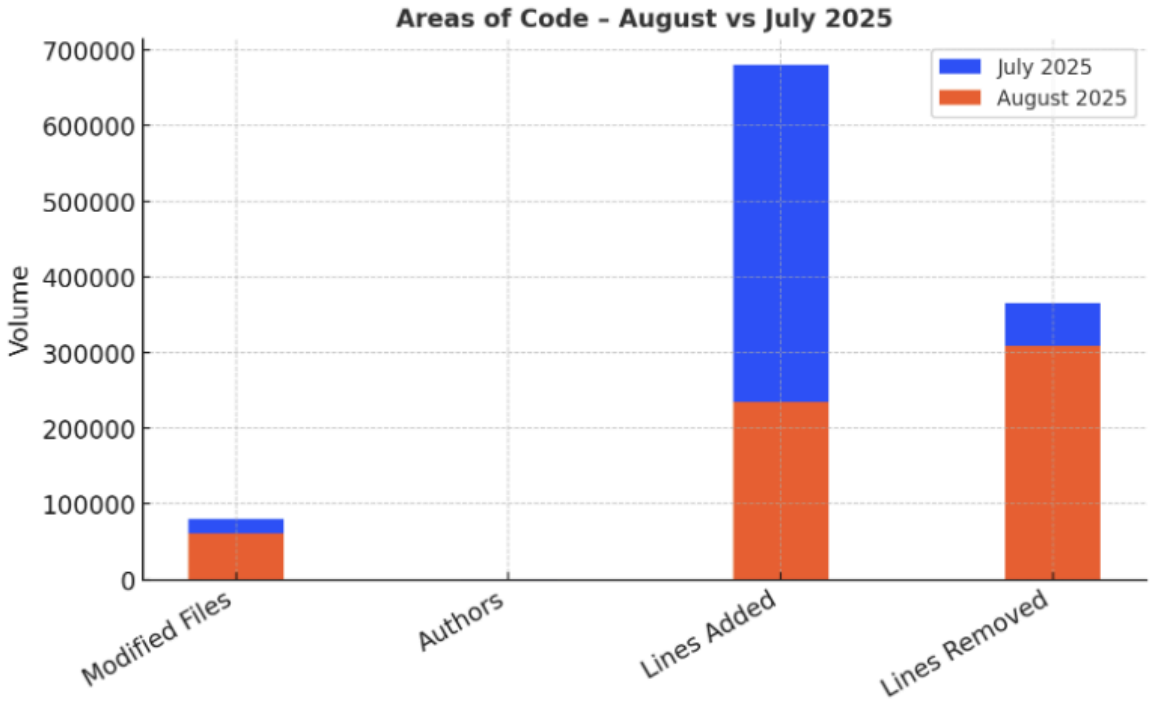
In August 2025, Cardano's open-source codebase activity transitioned from large-scale expansion to targeted refinement. The number of modified files dropped −23.2%, reflecting a slowdown after July's massive restructuring phase. Lines added declined substantially (−65.5%), showing fewer large feature merges and more stabilization or cleanup work. However, lines removed only fell by −15.3%, indicating ongoing refactoring efforts. The total number of active authors decreased by −14.5%, consistent with the broader contraction across organizations. Overall, August represented a normalization period — a shift from broad architectural changes to incremental improvements and codebase optimization.

Comparative Table: July vs. June 2025

Metric	August 2025	July 2025	Δ (%)
Modified Files	**61,164**	**79,677**	**−23.2%**
Authors	**71**	**83**	**−14.5%**
Lines Added	**234,748**	**681,049**	**−65.5%**
Lines Removed	**308,790**	**364,527**	**−15.3%**

Insights

1. **Post-expansion slowdown —** The −23% decline in modified files and −65% drop in added lines highlight a shift from large-scale integrations to stabilization.
2. **Ongoing refactoring —** Despite fewer new features, high line removal counts suggest continued focus on technical debt reduction and cleanup.
3. **Smaller, tighter teams —** The slight drop in author participation reflects a normal recalibration phase following July's heavy cross-team collaboration.
4. **Efficiency focus —** The smaller delta in removed vs. added lines indicates that work in August prioritized optimization over new delivery.


Areas of Code - August vs July 2025
July 2025
August 2025
Volume
700000
600000
500000
400000
300000
200000
100000
0
Modified Files
Authors
Lines Added
Lines Removed

2.a) Organizations

Summary

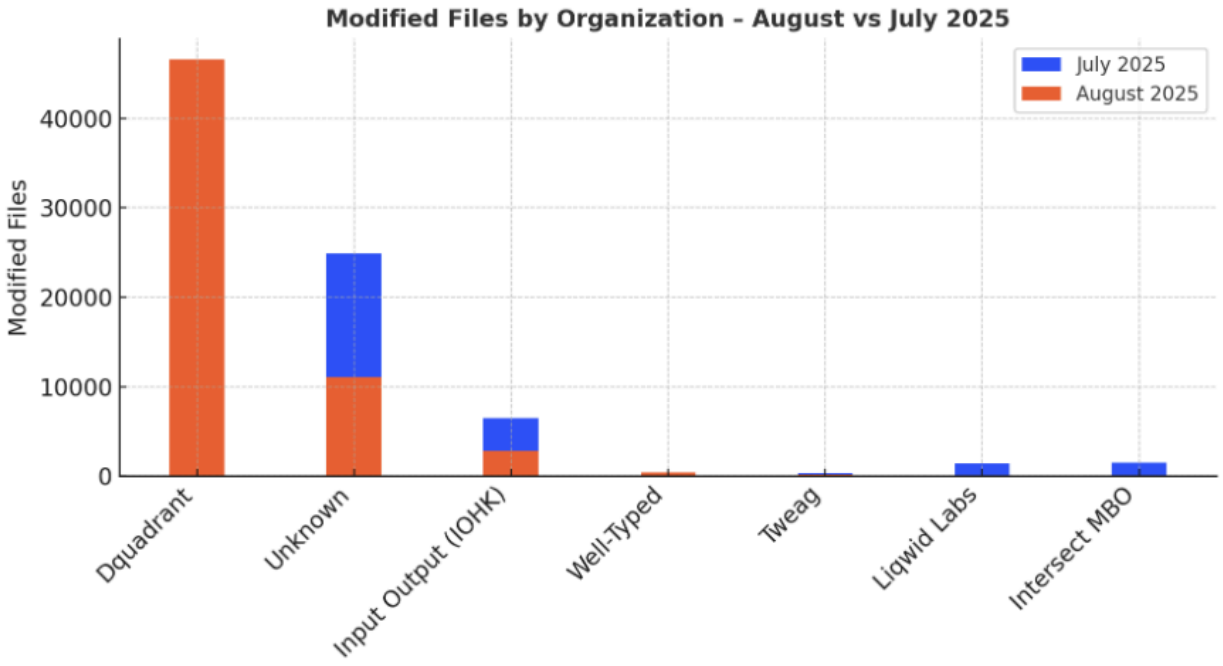
August 2025 reflected a pronounced contraction in code modification activity across nearly all organizations, following July's record-breaking expansion. Input Output (IOHK) and Unknown contributors both reduced file modification volumes by over 55%, marking a clear cooldown after heavy architectural integration cycles. Intersect MBO's output dropped −94.2% as its July onboarding surge normalized into routine participation. Smaller entities like Liqwid Labs (−93.2%) and Tweag (−57.2%) also decelerated, signaling a phase shift from delivery to maintenance. Dquadrant was the only organization to record a modest increase (+4.3%), maintaining steady developer presence. Overall, August was defined by **codebase stabilization, cleanup, and selective refinement** rather than new delivery.

Comparative Table: July vs. August 2025

Organization	August Files	July Files	Δ Files (%)	August Developers	July Developers	Δ Devs (%)
Dquadrant	**46,637**	**44,718**	**0.043**	**2**	**2**	**0.00%**
Unknown	**11,034**	**24,906**	**−55.7%**	**14**	**18**	**−22.2%**
Input Output (IOHK)	**2,790**	**6,446**	**−56.7%**	**43**	**46**	**−6.5%**
Well-Typed	**381**	**208**	**0.832**	**1**	**3**	**−66.7%**
Tweag	**127**	**297**	**−57.2%**	**4**	**4**	**0.00%**
Liqwid Labs	**96**	**1,422**	**−93.2%**	**1**	**1**	**0.00%**
Intersect MBO	**85**	**1,466**	**−94.2%**	**3**	**3**	**0.00%**

Insights

1. **Normalization after July peak —** All major contributors contracted, consistent with a system-wide post-release stabilization phase.
2. **IOHK and Unknown still lead —** Despite large declines, both categories remained primary sources of file-level change volume.
3. **Intersect MBO realignment —** The sharp −94% reduction reflects the completion of integration milestones and transition into steady-state operations.
4. **Isolated growth pockets —** Dquadrant (+4%) and Well-Typed (+83%) suggest targeted activity on specific research or validation tasks rather than broad development.
5. **Stable developer base —** Nearly all organizations maintained their author counts, emphasizing continuity amid reduced code throughput.


Modified Files by Organization - August vs July 2025
July 2025
August 2025
Modified Files
40000
30000
20000
10000
0
Dquadrant
Unknown
Input Output (IOHK)
Well-Typed
Tweag
Liqwid Labs
Intersect MBO

3. Issues

This segment revolves around the identification, tracking, and resolution of issues within Github projects. It encompasses discussions on problem-solving methodologies, issue management practices, and related metrics.

Summary

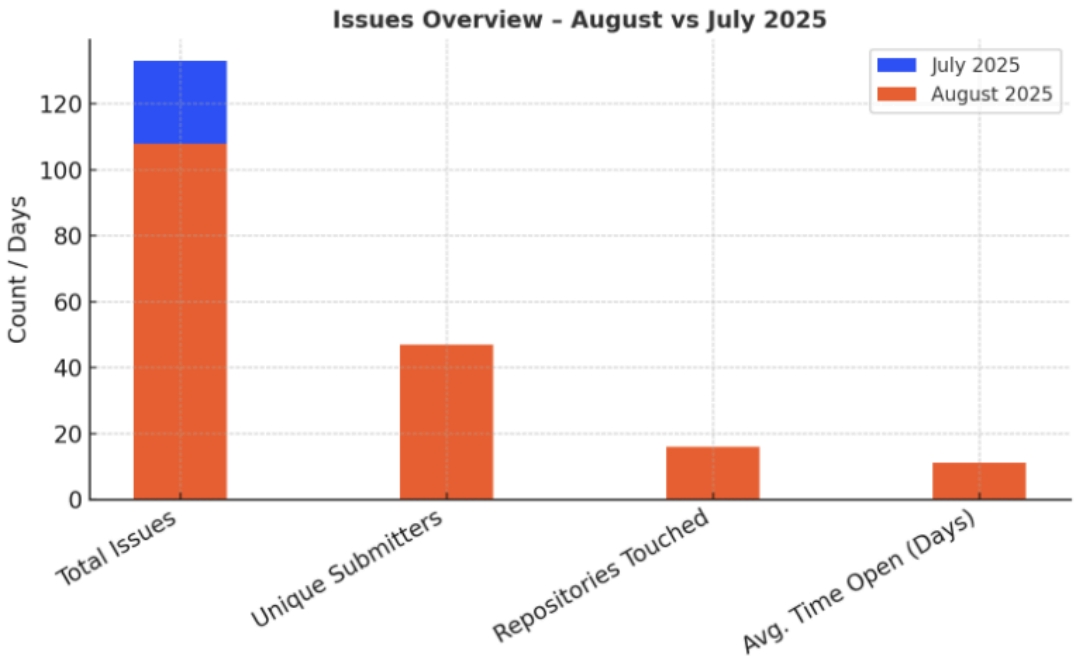
In August 2025, Cardano's issue activity contracted moderately following July's post-integration spike. Total issues fell −18.8%, reflecting reduced code delivery volume across repositories. However, engagement broadened — unique submitters rose +20.5% and repository coverage expanded +23.1%, signaling that even as overall issue volume declined, participation became more distributed. Average open time increased +31.0%, indicating slightly slower triage or the emergence of more complex issues tied to stabilization and testing efforts. This period marks a transition from rapid development to refinement and verification.

Comparative Table: August vs. July 2025

Metric	August 2025	July 2025	Δ (%)
Total Issues	108	133	−18.8%
Unique Submitters	47	39	0.205
Repositories Touched	16	13	0.231
Avg. Time Open (Days)	11.16	8.52	0.31

Insights

1. **Reduced volume, wider engagement —** Fewer total issues but more submitters and repositories indicate broader QA participation across smaller teams.
2. **Longer resolution times —** The +31% rise in average open time suggests more in-depth review cycles as repositories stabilize after major updates.
3. **Transition toward quality focus —** With new features slowing, issue activity increasingly reflects testing, refinement, and documentation review.
4. **Sustained contributor diversity —** The growing number of submitters aligns with continued decentralization of QA across the ecosystem.


Issues Overview – August vs July 2025
July 2025
August 2025
Count / Days
0
20
40
60
80
100
120
Total Issues
Unique Submitters
Repositories Touched
Avg. Time Open (Days)

3.a) Organizations

Summary:

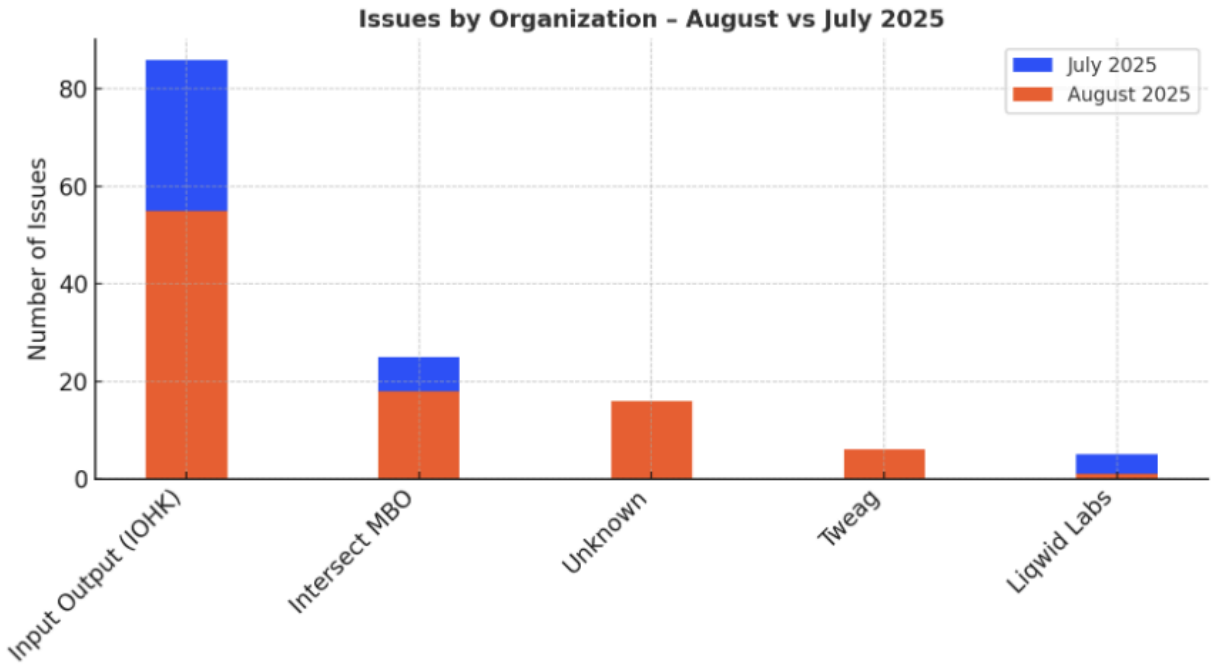
August 2025 showed a mixed landscape in issue activity across contributing organizations. IOHK's issue volume dropped −36.0%, aligning with its overall slowdown in commits, while its median open time rose +27%, suggesting extended triage cycles for remaining items. Intersect MBO's issue count also fell −28.0%, consistent with the conclusion of its July integration phase. In contrast, "Unknown" and Tweag both more than doubled their issue counts (+167% and +100%), with significantly longer open durations, reflecting increased participation from external or research-oriented teams. Liqwid Labs' issue output contracted sharply (−80%), likely completing its prior sprint cycle. Overall, August marked a pivot from volume-driven QA to sustained stabilization across fewer, more complex items.

Comparative Table: July vs. August 2025

Organization	August Issues	July Issues	Δ Issues (%)	August Median Open (Days)	July Median Open (Days)	Δ Median Open (%)
Input Output (IOHK)	**55**	**86**	**−36.0%**	**13.48**	**10.62**	**0.27**
Intersect MBO	**18**	**25**	**−28.0%**	**5.69**	**4.02**	**41.50%**
Unknown	**16**	**6**	**1.667**	**12.86**	**8.89**	**0.447**
Tweag	**6**	**3**	**1**	**18.84**	**3.77**	**3.993**
Liqwid Labs	**1**	**5**	**−80.0%**	**6.95**	**6.01**	**0.156**

Insights

1. **Core organizations in consolidation —** IOHK and Intersect MBO both reduced issue creation, indicating a shift toward internal refinement rather than new QA cycles.
2. **External and research growth —** "Unknown" and Tweag more than doubled activity, revealing wider community and research-driven participation.
3. **Complexity increasing —** Median open times rose across all organizations, showing issues now require deeper analysis and cross-team review.
4. **Cycle completion at Liqwid Labs —** The sharp drop in issues and stable resolution times suggest the end of an active delivery phase.


Issues by Organization – August vs July 2025
July 2025
August 2025
Number of Issues
0
20
40
60
80
Input Output (IOHK)
Intersect MBO
Unknown
Tweag
Liqwid Labs

3.b) Projects

Summary:
In August 2025, issue activity across repositories declined moderately from July's high-velocity release cycle. *Govtool* retained the top position with 28 issues (+7.7%), indicating sustained governance-tooling QA momentum. *Cardano-ledger* fell −15.4% as major ledger updates stabilized, while *formal-ledger-specifications* dropped −50%, suggesting a transition from intensive specification review to maintenance. *Cardano-node* remained active (+12.5%), maintaining its core-infrastructure focus. In contrast, *plutus* (−80%) and *cardano-api* (−72.7%) experienced steep pullbacks following the completion of July feature sprints. Overall, August marked a shift from broad validation toward selective, long-tail testing of core repositories.

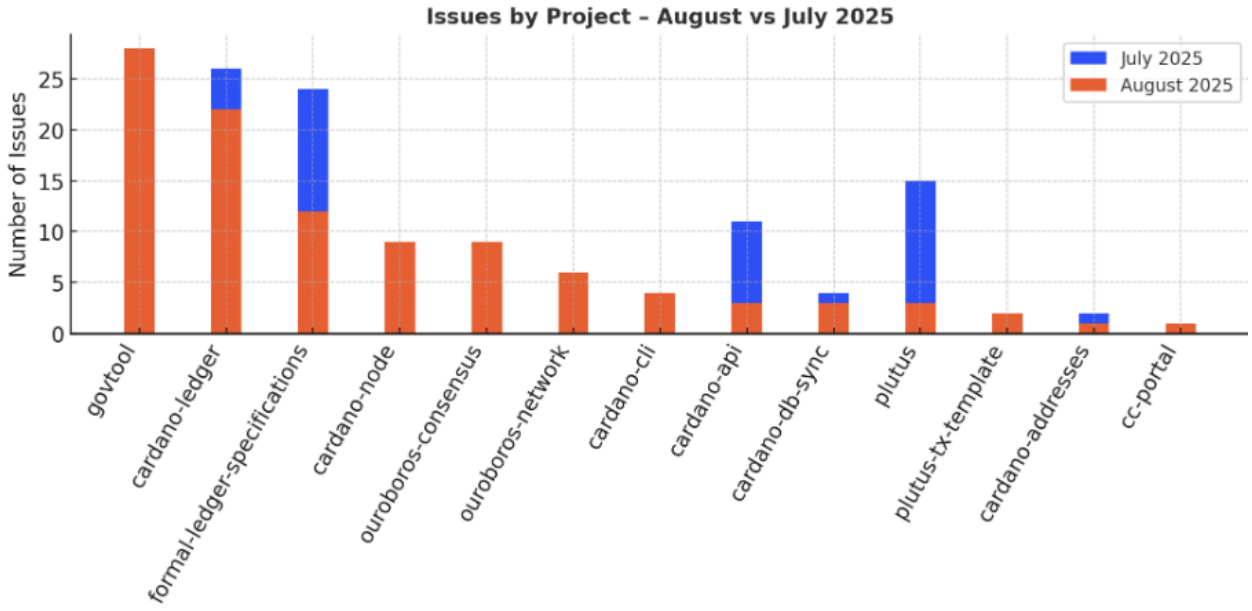
Comparative Table: July vs. August 2025

Repository	August Issues	July Issues	Δ Issues (%)	August Median Open (Days)	July Median Open (Days)	Δ Median Open (%)
govtool	28	26	0.077	3.16	4.04	−21.8%
cardano-ledger	22	26	−15.4%	15.83	9.38	68.80%
formal-ledger-specs.	12	24	−50.0%	3.23	7.23	−55.3%
cardano-node	9	8	0.125	13.28	14.37	−7.6%
ouroboros-consensus	9	9	0.00%	8.1	10.3	−21.4%
ouroboros-network	6	3	1	13.37	2.48	439.90%
cardano-cli	4	3	0.333	31.48	21.51	0.463
cardano-api	3	11	−72.7%	44.58	14.04	2.174
cardano-db-sync	3	4	−25.0%	22.64	9.88	1.292
plutus	3	15	−80.0%	5.07	7.49	−32.4%

Insights

1. **Governance tooling sustains momentum —** *Govtool* retained the highest issue volume, confirming ongoing feature validation and testing cycles in governance development.
2. **Core protocol stabilization —** *Cardano-ledger* and *formal-ledger-specifications* showed large declines, signaling a shift from heavy code updates to final validation work.
3. **Testing depth rising —** Increases in median open times across key repos (*cardano-api*, *cardano-db-sync*) indicate longer, more complex QA cycles.
4. **Network-layer activity returns —** *Ouroboros-network* doubled issue volume, suggesting renewed attention to infrastructure and consensus performance.

5. **Reduced tooling turnover —** Sharp declines in *plutus* and *cardano-api* reflect the completion of major tooling initiatives and transition to maintenance.



4. Pull Requests

Summary:

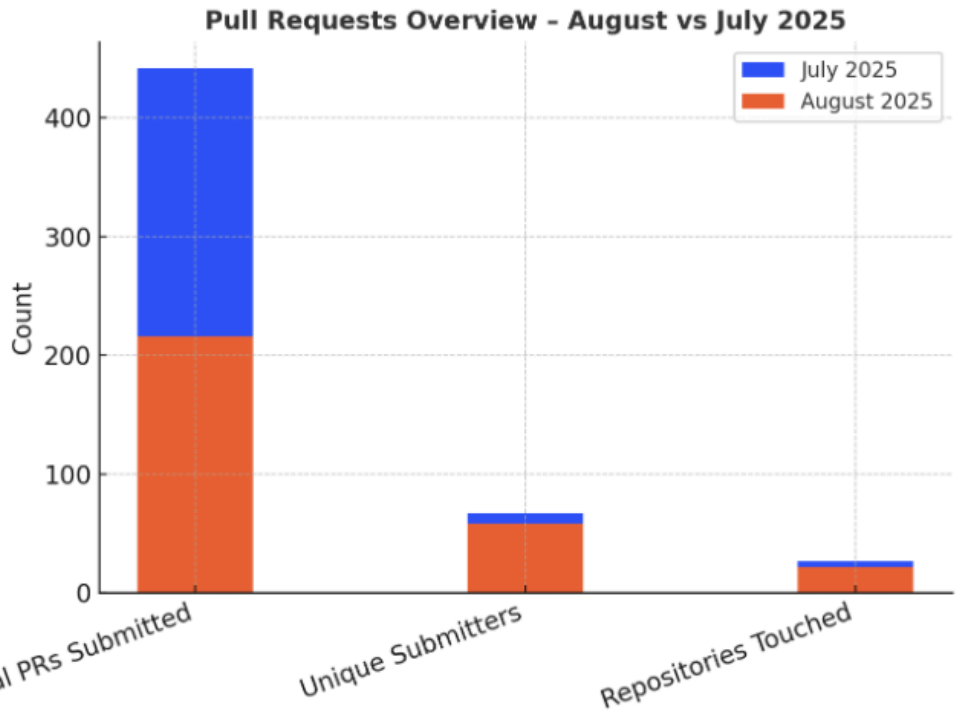
In August 2025, pull request activity declined sharply from July's record-high submission levels. Total PRs fell −51.1%, reflecting a cooldown after extensive mid-year integrations. Unique submitters decreased −13.4%, while repository coverage narrowed −18.5%, signaling fewer parallel development streams. The contraction aligns with the ecosystem's transition toward testing, refactoring, and performance stabilization. Despite reduced volume, PR activity remained broad, spanning 22 repositories and confirming sustained engagement across the codebase.

Comparative Table: July vs. August 2025

Metric	August 2025	July 2025	Δ (%)
Total PRs Submitted	216	442	−51.1%
Unique Submitters	58	67	−13.4%
Repositories Touched	22	27	−18.5%

Insights

1. **Normalization after July spike —** The 51% drop in PR volume reflects a reversion to normal post-release cadence following a heavy integration phase.
2. **Contributor retention strong —** Only a minor decline in submitters (−13%) indicates teams remained active even as throughput slowed.
3. **Broader focus consolidation —** Fewer repositories receiving PRs (−18.5%) suggest development concentrated on core components and bug fixes.
4. **Sustained collaboration base —** Over 20 active repositories and nearly 60 submitters underscore the ecosystem's depth despite reduced activity.


Pull Requests Overview – August vs July 2025
July 2025
August 2025
Count
400
300
200
100
0
Total PRs Submitted
Unique Submitters
Repositories Touched

4.a) PR by Organizations

Summary:

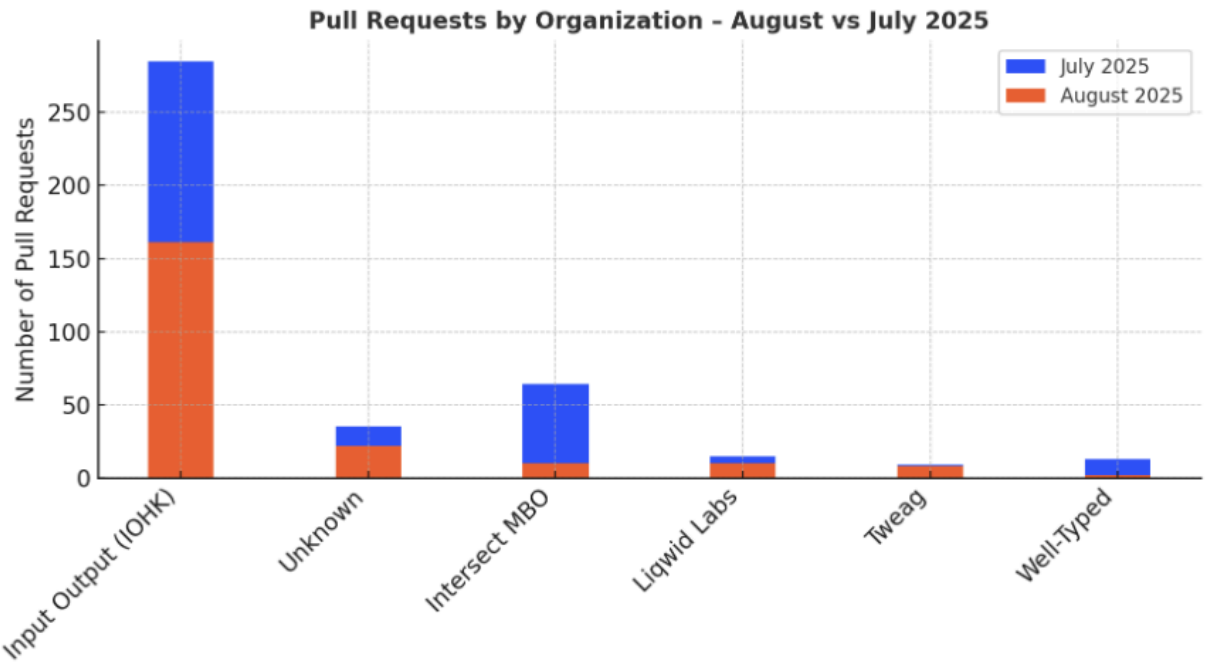
August 2025 reflected a broad decline in pull request activity across nearly all major organizations. IOHK remained the leading contributor with 161 PRs (−43.5%), sustaining the largest proportional share of overall ecosystem throughput. Intersect MBO's submissions dropped sharply (−84.4%) as its July integration projects reached completion, while "Unknown" contributors also declined (−37.1%), consistent with the overall reduction in unaffiliated participation this month. Liqwid Labs (−33.3%) and Well-Typed (−84.6%) recorded substantial slowdowns, while Tweag posted the mildest contraction (−11.1%), maintaining stable delivery. These shifts align with the ecosystem's transition from heavy release activity to stabilization and maintenance.

Comparative Table: July vs. August 2025

Organization	August PRs	July PRs	Δ PRs (%)
Input Output (IOHK)	**161**	**285**	**−43.5%**
Intersect MBO	**10**	**64**	**−84.4%**
Unknown	**22**	**35**	**−37.1%**
Liqwid Labs	**10**	**15**	**−33.3%**
Tweag	**8**	**9**	**−11.1%**
Well-Typed	**2**	**13**	**−84.6%**

Insights

1. **Post-release contraction —** All organizations showed lower PR throughput, reflecting the completion of July's high-output integration phase.
2. **IOHK remains dominant —** Despite a 43% drop, IOHK still accounted for the majority of ecosystem PR activity, maintaining leadership in active development.
3. **Intersect MBO normalization —** The steep decline aligns with its shift from onboarding and infrastructure setup to steady-state contribution cycles.
4. **Stable research output —** Tweag's minimal decline suggests continued focus on specific technical or R&D-oriented repositories.
5. **Reduced external volume —** Fewer PRs from "Unknown" and Well-Typed indicate temporarily lower engagement from smaller or unaffiliated teams.


Pull Requests by Organization – August vs July 2025
July 2025
August 2025
Number of Pull Requests
0
50
100
150
200
250
Input Output (IOHK)
Unknown
Intersect MBO
Liqwid Labs
Tweag
Well-Typed

4.b) PR by Projects

August 2025 saw a broad pullback in repository-level pull request activity following July's record development surge. *Cardano-ledger* led with 36 PRs (+5.9%), maintaining consistent throughput and confirming its role as the central protocol repository. *Plutus* declined −45.5%, marking a cooldown after major feature releases. *Govtool* experienced the sharpest contraction (−75.6%) as early-stage governance development stabilized. *Ouroboros-consensus* (−19.4%) and *cardano-node* (−25%) both moderated, reflecting a shift from integration-heavy cycles to optimization and testing. Despite lower volume, PR coverage remained broad, indicating ongoing maintenance and review work across key infrastructure components.

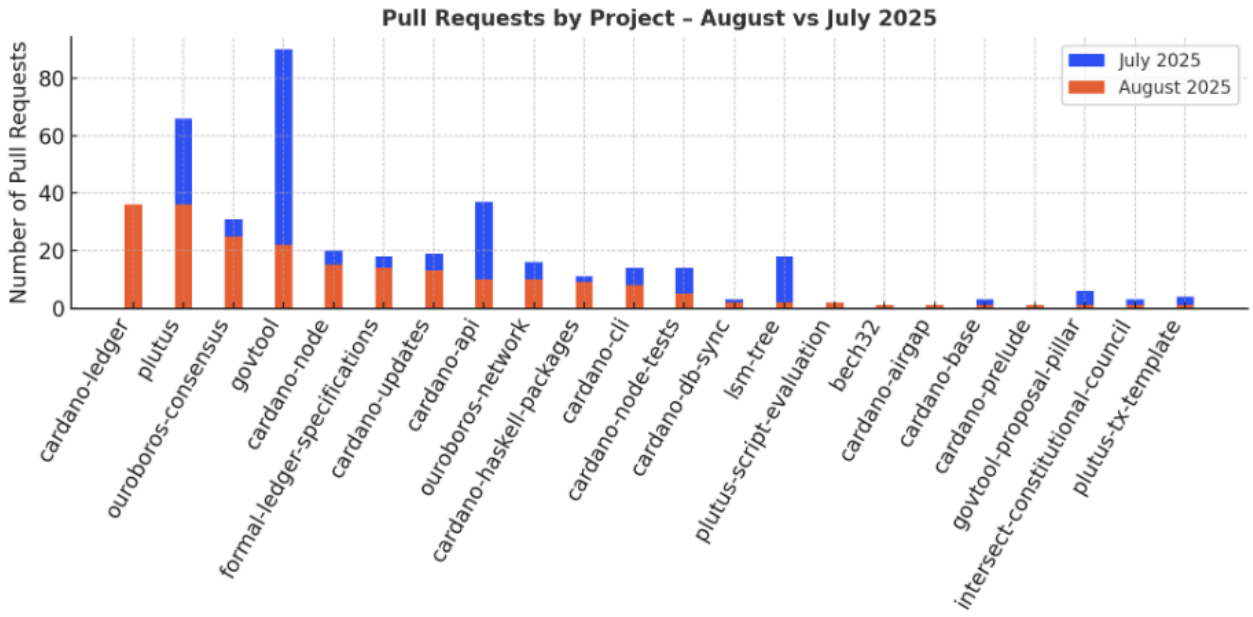
Comparative Table: July vs. August 2025

Repository	August PRs	July PRs	Δ PRs (%)
cardano-ledger	**36**	**34**	**0.059**
plutus	**36**	**66**	**−45.5%**
ouroboros-consensus	**25**	**31**	**−19.4%**
govtool	**22**	**90**	**−75.6%**
cardano-node	**15**	**20**	**−25.0%**
formal-ledger-specifications	**14**	**18**	**−22.2%**
cardano-updates	**13**	**19**	**−31.6%**
cardano-api	**10**	**37**	**−73.0%**
ouroboros-network	**10**	**16**	**−37.5%**
cardano-haskell-packages	**9**	**11**	**−18.2%**

Insights

1. **Protocol repos steady —** *Cardano-ledger* maintained growth despite ecosystem-wide slowdown, showing enduring protocol-level focus.
2. **Governance cooldown —** *Govtool*'s −75% drop reflects the end of its initial integration and stabilization phase after July's heavy sprint cycle.
3. **Smart contract deceleration —** *Plutus* activity halved as teams transitioned from feature delivery to testing and refinement.
4. **Stable consensus progress —** *Ouroboros-consensus* and *cardano-node* posted moderate declines, signaling continued refinement rather than disengagement.

5. **Sustained project breadth —** Despite declines, over ten repositories remained active, underscoring ecosystem resilience.



5. Analysis of Contributors by Organization

Summary

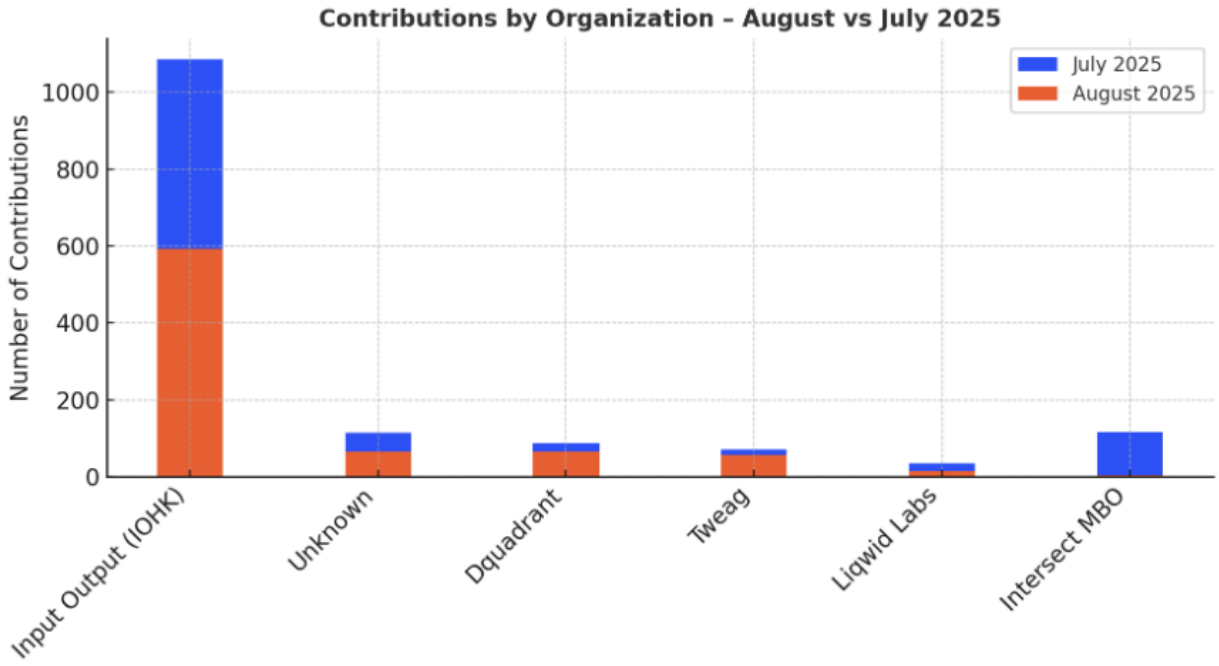
August 2025 marked a normalization period for ecosystem contributions after July's exceptional expansion. Total organizational activity declined sharply across all major contributors as projects shifted from integration to stabilization. IOHK remained the dominant force with 593 contributions (−45.4%), maintaining broad engineering leadership despite the slowdown. Intersect MBO's output dropped −96.6% as its July onboarding surge tapered into maintenance. "Unknown" contributors declined −42.1%, likely reflecting attribution adjustments and reduced unaffiliated activity. Smaller organizations, including Dquadrant (−26.1%), Tweag (−21.1%), and Liqwid Labs (−60.0%), also moderated, signaling ecosystem-wide recalibration toward sustained, lower-velocity collaboration.

Comparative Table: July vs. August 2025

Organization	August Contributions	July Contributions	Δ (%)	August Authors	July Authors	Δ Authors (%)
Input Output (IOHK)	**593**	**1,086**	**−45.4%**	**44**	**46**	**−4.3%**
Intersect MBO	**4**	**116**	**−96.6%**	**3**	**3**	**0.00%**
Unknown	**66**	**114**	**−42.1%**	**14**	**18**	**−22.2%**
Dquadrant	**65**	**88**	**−26.1%**	**2**	**2**	**0.00%**
Tweag	**56**	**71**	**−21.1%**	**4**	**4**	**0.00%**
Liqwid Labs	**14**	**35**	**−60.0%**	**1**	**1**	**0.00%**

Insights

1. **System-wide contraction —** All major contributors recorded declines, consistent with the ecosystem's post-integration stabilization phase.
2. **IOHK remains the core driver —** Despite a 45% reduction, IOHK continues to account for the bulk of ecosystem commits and PRs.
3. **Intersect MBO realignment —** Its −96% drop reflects the transition from setup and integration to sustained contribution operations.
4. **Smaller teams stabilizing —** Tweag and Dquadrant show moderate declines but stable author counts, signifying retained capacity.
5. **Attribution shift in Unknown contributors —** Reduced unmapped activity suggests better organizational identification and data accuracy.


Contributions by Organization – August vs July 2025
July 2025
August 2025
Number of Contributions
0
200
400
600
800
1000
Input Output (IOHK)
Unknown
Dquadrant
Tweag
Liqwid Labs
Intersect MBO

Glossary

Report Technical Definitions:

- **Repository(Repo):** In Git, a repository, often abbreviated as "repo," is a storage space where your project's files and their entire revision history are stored. It typically includes various files such as source code, documentation, images, and more. Repositories can be either local (on your computer) or remote (hosted on a server like GitHub, GitLab, Bitbucket, etc.).
- **Issue:** An issue is a feature request, bug report, task, or any other item that needs to be tracked within a project. In Git repositories hosted on platforms like GitHub or GitLab, issues are commonly used for discussing and tracking tasks or problems related to the project. They can include labels, assignees, comments, and other metadata to facilitate collaboration and organization.
- **Pull Request (PR):** A pull request is a proposed change that a user wants to merge into a target branch of a repository. It's commonly used in distributed version control systems like Git to facilitate code review and collaboration. When a developer completes a feature or fixes a bug in a separate branch of the repository, they can initiate a pull request to merge their changes into the main branch or another designated branch. Pull requests often include a summary of the changes, discussions, reviews, and automated checks.
- **Contributor:** A contributor is anyone who participates in a project by making contributions such as code changes, documentation improvements, bug fixes, feature enhancements, etc. Contributors can be individuals or organizations, and their contributions can take various forms, from writing code to providing feedback, reporting issues, or reviewing pull requests.
- **Git:** Git is an open-source distributed version control system designed to handle everything from small to very large projects with speed and efficiency. It allows multiple developers to work on the same project simultaneously, coordinating their work through branching, merging, and version tracking. Git is widely used in software development for managing source code revisions and collaborating on projects.
- **GitHub:** GitHub is a web-based platform that provides hosting for Git repositories and offers collaboration features such as issue tracking, pull requests, code review, and project management tools. It's one of the most popular platforms for hosting Git repositories and facilitating collaboration among developers and teams. GitHub also provides additional features like wikis, continuous integration, and deployment services.
- **Commit:** In Git, a commit is a snapshot of the changes made to the files in a repository at a specific point in time. It represents a single revision or change set and includes a unique identifier (SHA-1 hash), a commit message describing the changes, and a pointer to the previous commit(s). Commits are fundamental to version control in Git, as they allow developers to track changes, revert to previous states, and collaborate on code changes.
- **Organization:** In Git and GitHub, an organization refers to a group or entity that can own repositories, manage access permissions, and collaborate on projects. Organizations are often used by companies, open-source projects, or groups of developers to

centralize their repositories and manage their collective work. Organizations on GitHub can have multiple members with varying levels of access, allowing for collaborative development within a structured environment.

- **Project:** A project in the context of Git and GitHub typically refers to a specific software development endeavor or initiative. It encompasses all the related tasks, code, documentation, issues, and resources needed to achieve a particular goal. Projects are often organized within repositories on GitHub, where developers can collaborate, track progress, manage tasks, and share code. A project may involve multiple contributors working together to develop and maintain software, with each contributor contributing to different aspects of the project.
- **Community:** In the Git and GitHub ecosystem, a community refers to the collective group of developers, users, contributors, and other stakeholders who are involved in a particular project, organization, or open-source initiative. Communities are essential for fostering collaboration, sharing knowledge, providing support, and driving the growth and sustainability of projects. They often gather around shared interests, goals, or values, and may interact through various channels such as forums, mailing lists, chat platforms, and social media. A strong and engaged community can contribute to the success and longevity of a project by providing feedback, contributing code, reporting issues, and supporting fellow members.