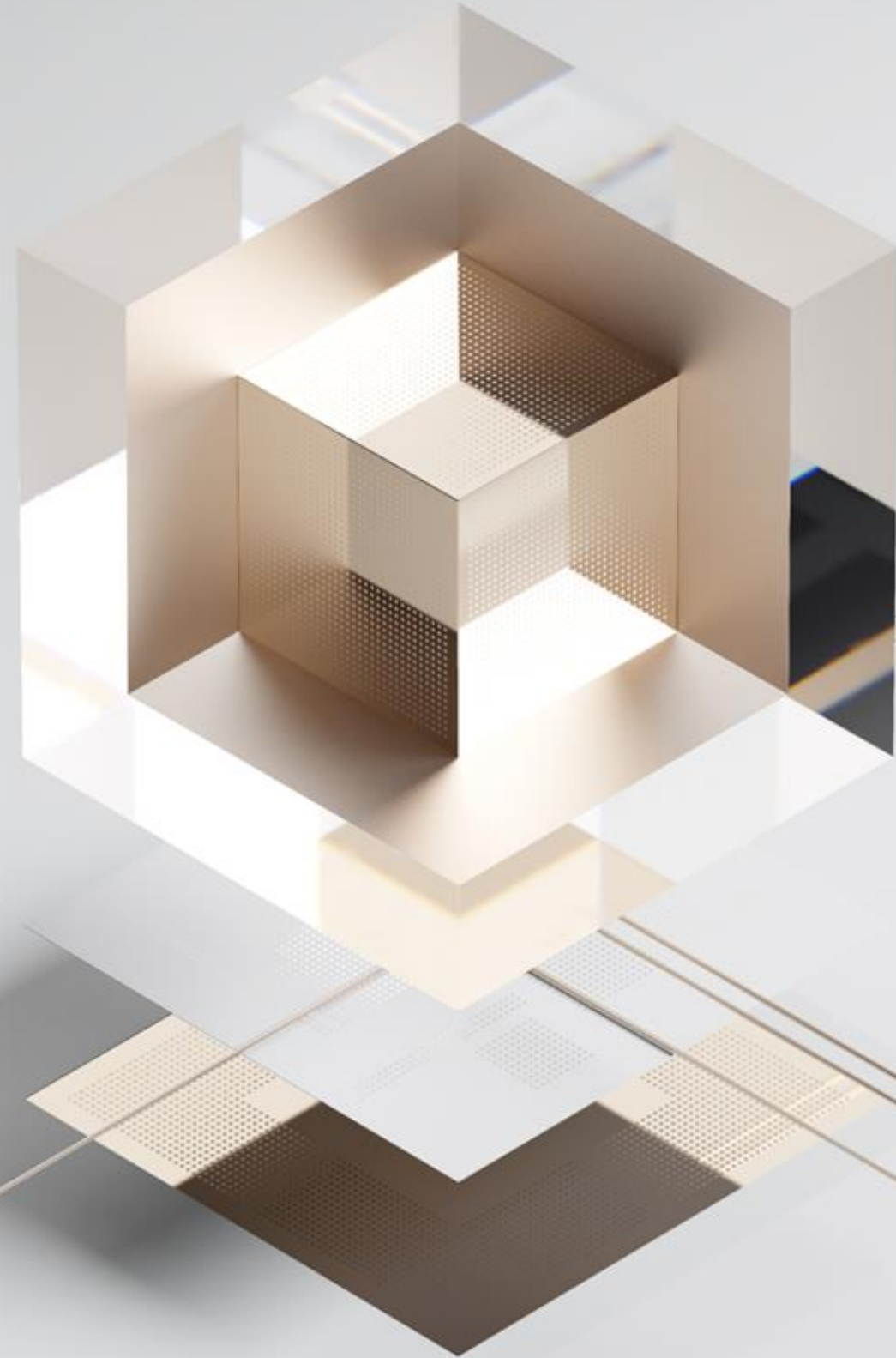


November 11-14, 2024

# Root Cause Analysis & Mitigation Plan



# Agenda

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Incident summary

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Incident impact

---

Root cause analysis

---

Incident timeline

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Piano solutions

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# Summary

**Incident date**

November 11-14, 2024

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**Affected software modules**

Content, CCE, Search

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**Affected environment or location**

US / EU / AP / AU

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**Incident scope**

partial outage

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**Incident duration**

4500 minutes

# Impact

## Incident severity

Major

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## Impact description

Newly published articles of some clients were not included in the search index, and, as a result, did not appear in recommendations and search results.

## Root cause

On November 11, 2024 Piano deployed changes to fix a bug related to the removal of profiles for sites with "forever" retention periods from the search index.

As a result, newly published articles for those sites were not included in the search index.

To fix the issue, Piano rolled back the update that caused the incident (November 13, 2024) and re-crawled and published the missing profiles in the search index (November 14, 2024).

To prevent this from happening in the future, Piano will isolate content processing and content profile storage. Work on this topic was already underway before the incident.

# Incident timeline

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Hrs/days	Date / Time (UTC)	Description
-	2024-11-11 13:00:00	Deployment of changes to search index population.
3 days	2024-11-13 19:00:00	Found a bug preventing publishing new documents if 'search retention' = forever. Rollback to previous version.
4 days	2024-11-14 16:00:00	Articles re-crawled and missing profiles published to search index.

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# Piano solutions and corrective measures

Fixing a bug with missing profiles in the search index

**Status**

Done

**Estimated delivery date**

November 13, 2024

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Restoring missing profiles

**Status**

Done

**Estimated delivery date**

November 14, 2024

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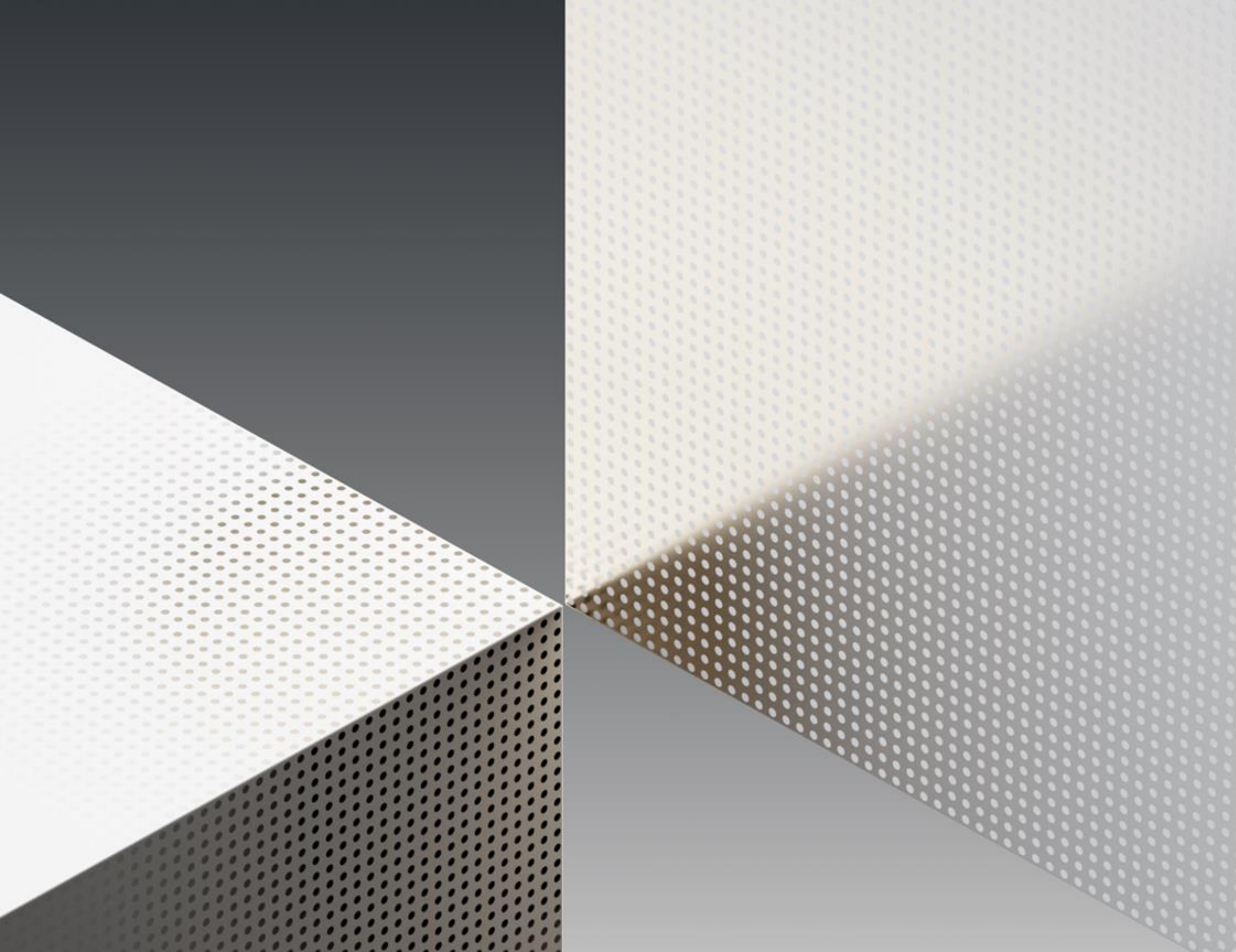
Isolation of content processing and content profile

**Status**

In Progress

**Estimated delivery date**

2025 Q1 (aligned with CX platform Epic)



**piano**

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