Research Solutions | University of Colorado Boulder

Academic Case Study

How The University Of Colorado Boulder Transformed Budget Constraints Into Strategic Collection Intelligence

Using Article Galaxy Scholar To Make Data-Driven Collection Decisions

Photo by Glenn Asakawa/University of Colorado

Photo by Patrick Campbell/University of Colorado

Background

The University of Colorado Boulder (CU Boulder) is the flagship research institution within the University of Colorado System, serving nearly 38,000 students and faculty across diverse academic disciplines. CU Boulder has long grappled with the fundamental challenge facing research libraries nationwide: providing comprehensive access to scholarly content while managing increasingly constrained budgets.

Over a decade ago, CU Boulder Libraries adopted an innovative organizational structure that combined collection development, acquisitions, and interlibrary loan operations into a single, integrated department. While this structure encouraged the library to approach content access strategically through a “buy it or borrow it” framework, it also underscored the need for more advanced tools to replace the manual, time-consuming processes underpinning that evidence-based philosophy.

Challenge

CU Boulder found itself navigating the familiar challenges facing today’s academic libraries: evolving budget priorities, increasing content costs, and researchers who expect immediate access to a vast and growing body of scholarly literature.

As part of its ongoing collection management strategy, the library took the opportunity to evaluate how best to balance affordability, access, and sustainability. For years, CU Boulder had maintained an expansive collection providing access to thousands of titles. As part of a broader collection review, CU Boulder evaluated subscription holdings and explored complementary access models to ensure sustainable coverage.

This transition created immediate operational challenges:

Workflow Complexity: The existing system for accessing content outside the library’s primary collections was cumbersome, requiring users to navigate multiple steps across different platforms. Individual article requests also carried significant administrative overhead when processed through traditional channels.

User Experience: Faculty and students who had long enjoyed seamless access to journal collections suddenly encountered barriers that could affect research productivity and satisfaction.

Resource Allocation: Unfulfilled requests were routed entirely through interlibrary loan, creating an unsustainable workload for ILL staff and separating collection development decisions from acquisitions.

Limited Data Visibility: The library lacked insight into usage patterns and costs, making it difficult to make data-driven decisions about which titles warrant continued investment or on-demand access.

Solution

Through collaboration with consortia partners, including the Colorado Alliance of Research Libraries and the Greater Western Library Alliance (GWLA), CU Boulder adopted Article Galaxy Scholar (AGS) as document delivery solution to bridge the gaps between subscription access, interlibrary loan, and open access. By activating titles that were no longer available via subscription, they were able to continue to support broad, reliable access to essential scholarly content. However, they discovered it offered far more strategic value than a simple replacement for traditional individual article acquisition processes.

> Article Galaxy Scholar (AGS) aligned perfectly with our existing collection development approach. We've always been strategic about choosing the most cost-effective pathway to content. What AGS gave us was the infrastructure to execute that philosophy efficiently at scale."

Gabrielle Wiersma
Director of Collection & Archival Strategy at University of Colorado Boulder University Libraries

Phase 1. Strategic Implementation

Instead of rushing into full deployment, CU Boulder began with a carefully controlled rollout focused on configuring the journal package in transition. The library started with a "freemium" model, providing unmediated access to gauge actual user demand without imposing barriers that might skew usage data.

Key implementation decisions included:

Workflow Integration: AGS was embedded directly into the library's link resolver, creating a seamless user experience where access requests could be automatically routed to open access sources, purchase options, interlibrary loan, or based on pre-configured rules.

Threshold Configuration: The library established purchase thresholds and notification systems, enabling real-time monitoring of costs and usage patterns through the AGS dashboard.

User Communication Strategy: The library prioritized messaging around access assurance, promising users they would receive requested content, typically within the same day of submission.

Transparency Balance: The library carefully calibrated how much cost information to share with users, ultimately deciding to emphasize access speed and reliability over price transparency to encourage adoption.

Phase 2. Expansion & Optimization

Building on initial success, CU Boulder upgraded their account to the premium AGS service to take advantage of additional options to configure journal holdings and other administrative settings. After analyzing usage patterns and user needs, the library made strategic adjustments:

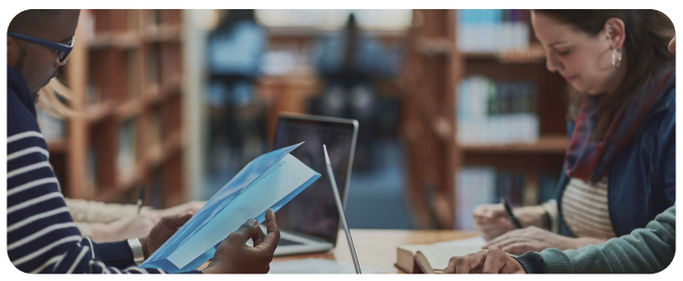
- Expanded AGS content coverage by activating journals from additional publishers.
- Added active AGS titles to our database A-Z list to transparently display journal coverage and fulfillment options.
- Customized holdings in AGS and our knowledge base to match the perpetual coverage dates and backfile access to prevent unnecessary purchases.
- Activated the LibKey Nomad browser to improve access to subscription content and seamlessly connect to AGS's unmediated document delivery services.

Results

The implementation of Article Galaxy Scholar delivered significant benefits across multiple dimensions of library operations and user experience.

Operational Efficiency

Real-Time Intelligence: The dashboard system provided unprecedented visibility into usage patterns and costs, enabling proactive collection development decisions rather than reactive responses to user complaints.



Evidence-Based Decision Making: The library now monitors which titles reach purchase thresholds, using this data to calculate ROI for future collection investments. This intelligence has proven invaluable for mid-year resource evaluations and assessing the value of high-impact journals across disciplines.

Workflow Automation: AGS eliminated the manual decision-making bottleneck in interlibrary loan operations, automatically routing requests to the most cost-effective fulfillment method based on pre-configured rules.

User Experience Enhancement

Initial data shows consistent growth in AGS adoption across campus, with usage distributed broadly across academic departments rather than concentrated in specific disciplines. While it is possible to limit requests to select user groups, CU Boulder opted to make these services available to all CU Boulder affiliates to gauge needs. In the first year, the usage between graduate students and faculty and staff was nearly an identical percentage, and showed healthy usage from undergraduate students.

Access Speed: Most document requests (95%) are fulfilled same day, matching, or even surpassing the library's fastest interlibrary loan processes.

Intuitive Integration: Users experience AGS as a natural extension of their existing research workflow rather than an additional barrier to content access.

Financial Impact

Cost Optimization: Comparative analysis with peer institutions highlighted how workflow configuration can significantly influence overall spend. By prioritizing automated routing, clear thresholds, and alignment with internal collection policies, CU Boulder ensured that requests were fulfilled through the most appropriate pathway based on availability and institutional goals. This strategic setup improved budget predictability and operational efficiency while maintaining reliable access for users.

Internal analysis comparing subscription costs versus AGS demonstrated the potential savings from adopting an integrated fulfillment approach. In the first full year of AGS adoption, CU Boulder had 2,050 completed requests. Of those 2,050 orders, 82 articles (4%) were filled from 51 open access journals at no cost. This provided CU Boulder with flexibility in allocating collection funds while maintaining reliable access to high-demand content.

Predictable Budgeting: The AGS dashboard and threshold alerts provide clear visibility into spending, supporting more accurate financial planning and eliminating surprise costs. In addition, CU Boulder is piloting a new pricing model that locks in annual costs based on prior-year usage patterns. This approach provides greater cost stability and removes month-to-month variability, allowing the library to align AGS spending more confidently with fiscal planning cycles. By consolidating transaction, platform, and article fees into a single annual structure, the model simplifies budgeting and reduces administrative overhead while preserving the flexibility and data transparency that underpin CU Boulder's demand-driven strategy.

Strategic Collection Development

CU Boulder now applies AGS data as a cornerstone of its evidence-based collection development strategy. The platform extends data-driven acquisition models from eBooks and databases to journal articles, allowing the library to balance broad access with smart investment decisions. By aligning collection priorities with actual user needs, CU Boulder continues to evolve its approach to sustainable, demand-driven access.

Future Possibilities

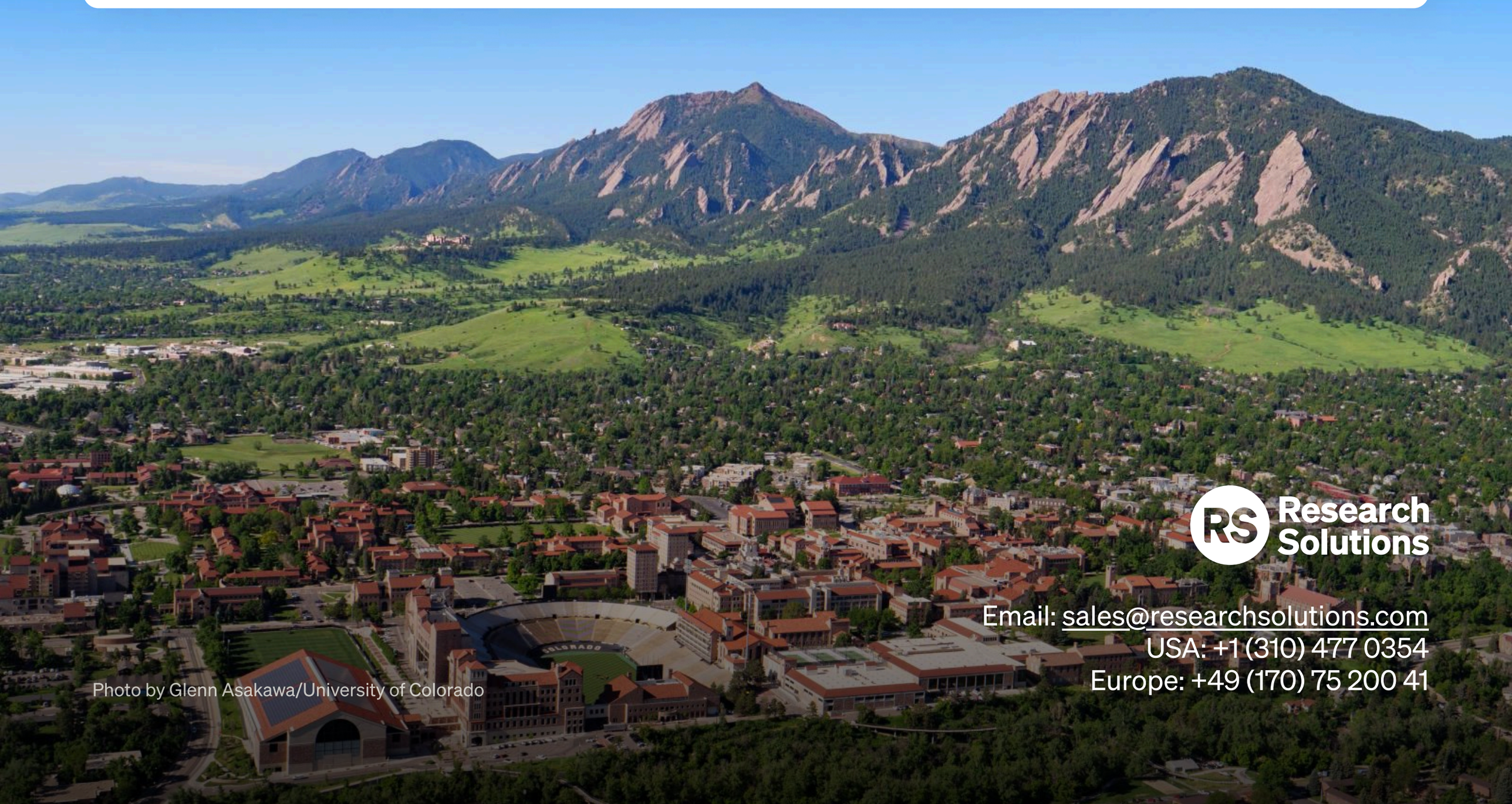
CU Boulder continues to refine its AGS implementation, with areas identified for potential enhancement including enhanced analytics integration, expanded content types like book chapters, and workflow optimizations. These areas represent collaborative development opportunities between CU Boulder and Research Solutions as the platform refines its capabilities with shifts in how users seek and evaluate information.

About The University Of Colorado Boulder

The University of Colorado Boulder, founded in 1876, stands as one of the nation's leading public research universities. CU Boulder is renowned for its academic excellence across diverse disciplines, from aerospace engineering and environmental sciences to business and the humanities.

The university's commitment to research excellence is reflected in its membership in the Association of American Universities (AAU) and its consistent ranking among the top public research universities nationwide. CU Boulder's research enterprise generates hundreds of millions of dollars in research expenditures annually, supporting groundbreaking work across multiple disciplines.

Located in Boulder, Colorado, the university attracts top-tier faculty and students from around the globe.



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