



Rayyan

Evidence of Reach and Research Impact

A White Paper for Research Stakeholders

Prepared by:
Rayyan Systems, Inc. Scientific Affairs

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Rayyan is the most widely adopted evidence synthesis platform in active research use globally, as measured by independent, verifiable, third-party indicators: outpacing all alternative solution providers in new PROSPERO protocol registrations since 2025, cited in over 30,000 peer-reviewed publications, and trusted by more than 1 million registered researchers worldwide.

Executive Summary

Rayyan is the most widely adopted evidence synthesis platform in active research use globally. This white paper presents independently verifiable, third-party metrics documenting Rayyan's reach across government health agencies, hospital systems, academic institutions, pharmaceutical, medical device and biotech companies, and contract research organizations. All figures are drawn from publicly accessible sources and are replicable by any reader.

#1 In new PROSPERO protocol registration in 2025	30,000+ Peer-reviewed citations	1 million+ Registered researchers	2025 Year Rayyan became #1
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Key Findings

- PROSPERO Registry:** Rayyan holds the largest PROSPERO footprint of any open-access platform. In 2025 it overtook all alternative solution providers in annual new registrations (4,827 vs. 3,593) and leads 64% to 36% in 2026 to date.
- Citation Impact:** The foundational Rayyan paper (Ouzzani et al., 2016) has accumulated 30,000+ citations on Google Scholar and Semantic Scholar, including 300+ classified as highly influential, placing it among the most cited methodology papers in the systematic review literature.
- Active Global Use:** 1 million+ registered researchers across 30,900 distinct organizational domains. The platform has supported over 2.2 million reviews and processed 3.27 billion article screening decisions to date.
- Sector Breadth:** Users span hospitals and healthcare systems, government agencies, pharma, medical device, and biotech, CROs, academia, and NGOs. Industry validation includes a formal evaluation by Cencora researchers published in Value in Health (ISPOR 2024), and direct use by the Ministry of Health, Government of Sri Lanka in a WHO-framework systematic review.
- Independent Performance:** In a peer-reviewed head-to-head comparison (Salles dos Reis et al., Systematic Reviews, 2023), Rayyan achieved the highest overall rater performance score (35/40), highest sensitivity, and lowest false-negative rate among three freely available ML-assisted screening tools.

1. Background

Systematic reviews form the foundation of evidence-based medicine, policy, and science. As the volume of published literature has grown exponentially, researchers increasingly rely on purpose-built tools to manage the screening, deduplication, and synthesis process. The tool a research team selects influences efficiency, collaboration, and the reproducibility of their methodology and it becomes part of the permanent public record when registered in protocol databases such as PROSPERO.

This white paper compiles independently verifiable metrics that document the breadth of Rayyan's adoption across the global research community. All figures cited are drawn from publicly accessible, third-party sources and are replicable by any reader.

2. PROSPERO Registry: A Gold-Standard Adoption Signal

PROSPERO (the International Prospective Register of Systematic Reviews, hosted by the University of York) is the preeminent registry for systematic review and scoping review protocols. When researchers name their screening tool in a protocol, that declaration becomes a permanent, citable, third-party record. PROSPERO citations therefore represent a conservative and credible measure of active, methodologically disclosed tool use, not merely downloads or accounts.

A search of PROSPERO conducted in May 2026 using each tool's name as the search query returned the following results:

PROSPERO Protocol Registry: Cumulative Total Tool Citation Count		
Search query: tool name in PROSPERO (prospero.york.ac.uk) Queried: May 2026		
Primary alternative solution provider		27,511
Rayyan		25,133
Platform C		1,006
Platform D		204

Figure 1. Number of PROSPERO-registered systematic review protocols citing each tool by name. Rayyan and the primary alternative solution provider together account for >97% of tool-attributed registrations among the platforms evaluated.

Methodology Note

Source: PROSPERO (prospero.york.ac.uk), freely searchable without login. Search method: 'Rayyan' entered as a free-text query across All fields. Counts reflect point-in-time results as of May 2026 and will increase over time; readers are encouraged to verify current figures directly.

Two methodological considerations should be noted: First, free-text search may return a small number of records where 'Rayyan' appears as an author name rather than as a tool citation. To quantify this, supplementary searches were conducted in two structured PROSPERO fields: 'Named Contact' and 'Organizational Affiliation,' where the presence of 'Rayyan' reflects a person's name or location rather than tool use. These field-restricted searches returned 40 records in Named Contact (across 2018-2026) and 2 records in Organizational Affiliation, for a combined upper-bound estimate of 42 records attributable to name or location matches. Field-restricted searches in tool-relevant fields confirm tool-specific use but systematically undercount results due to inconsistent field completion by authors. Second, PROSPERO records represent registered protocols submitted prior to review completion; a small proportion of protocols may indicate intended rather than confirmed tool use or may name Rayyan alongside other platforms as candidate tools. A manual review of a random sample of 50 results found that 47 (94%) cited Rayyan unambiguously as a designated or intended screening tool, 2 reflected author name matches, and 1 indicated explicitly that no dedicated screening software would be used. Taken together, these findings support the use of the total count as a conservative and credible indicator of Rayyan's adoption footprint in the systematic review community.

Rayyan and the primary alternative solution provider together account for over 97% of tool-attributed PROSPERO registrations across the platforms evaluated. Crucially, however, the cumulative totals mask a significant shift in

recent years, which is examined in detail in the annual breakdown below (Figure 3). All other solution providers are present at a fraction of that scale. This two-tier structure has important implications: researchers who encounter Rayyan in the literature can reasonably expect peer precedent and community support at a scale unavailable from other solution providers.

Annual Registrations: Rayyan Takes the Lead in 2025

Cumulative PROSPERO totals reflect historical legacy as much as current choice. A more meaningful measure of market momentum is the annual registration count: how many researchers chose each tool when registering a new review in a given year. This analysis, drawn directly from PROSPERO's year filter, shows a decisive structural shift.

PROSPERO Protocol Registrations by Year: Rayyan vs. Primary Alternative Solution				
Year	Rayyan	Leading alternative solution provider	Rayyan share	
2016	18	161	10%	
2017	65	308	17%	
2018	185	620	23%	
2019	331	695	32%	
2020	1,732	2,693	39%	
2021	2,430	3,118	44%	
2022	3,053	3,654	46%	
2023	4,173	4,888	46%	
2024	5,964	6,444	48%	
2025	4,827	3,593	57%	Rayyan overtakes
2026*	2,355	1,298	64%	Rayyan leads

Figure 2. Annual PROSPERO protocol registrations citing Rayyan vs. the primary alternative solution provider by year of registration. Rayyan's share of annual registrations grew from 10% in 2016 to a majority in 2025 (57%) and 2026 (64%), reflecting a structural shift in researcher tool preference. *2026 data partial (through May 2026). Source: PROSPERO advanced search, queried May 2026.

In 2025, Rayyan overtook as the #1 solution cited in 4,827 newly registered PROSPERO protocols, a 34% lead over the next most-cited solution provider (3,593). Through May 2026, Rayyan holds 64% of new registrations across the two leading solution providers combined.

The trajectory is unambiguous. From 2016 through 2024, Rayyan's share of combined registrations among leading platforms grew steadily from 10% to 48%, as it rapidly closed the gap with the established incumbent solution provider. In 2025, Rayyan crossed over, capturing the majority of new registrations for the first time. In 2026 the gap has widened further, with Rayyan accounting for nearly two-thirds of new registrations across the two leading solution providers.

Several factors explain this crossover. Rayyan's free-access model removes procurement barriers for researchers at lower-resourced institutions and in lower-income countries. Its database-agnostic design, accepting any Boolean-strategy export rather than requiring platform-linked searches, makes it applicable across a broader range of disciplines and review types; and its sustained investment in AI-assisted features has increased platform value over time. The 2025 crossover is not an anomaly; it is the culmination of a consistent trend.

3. Citation Impact of the Foundational Rayyan Paper

The canonical reference for Rayyan - Ouzzani M, Hammady H, Fedorowicz Z, Elmagarmid A. "Rayyan - a web and mobile app for systematic reviews." Systematic Reviews. 2016;5:210 (DOI: [10.1186/s13643-016-0384-4](https://doi.org/10.1186/s13643-016-0384-4)) has accumulated citation counts that are exceptional for a methods tool paper and that far outpace comparable software description articles.

Citation counts as of May 2026 across major indexing platforms:

- **Google Scholar and Semantic Scholar:**
 - 30,000+ total citations (Google Scholar and Semantic Scholar.org; publicly verifiable)
 - 300+ highly influential citations, a metric reserved for works that fundamentally reshape citing papers' methods sections
- **ResearchGate:**
 - 25,900+ citations reported on the paper's ResearchGate profile
- **PubMed (via NCBI):**
 - Annual PubMed citations have grown 14-fold since 2016, from 36 citations in Rayyan's first full year to 506 in 2025, with 382 already recorded through July 2026, reflecting compounding citation momentum alongside accelerating platform use

A citation count of this magnitude places the Rayyan 2016 paper among the most highly cited tool or methods papers in the systematic review literature, and well above the vast majority of clinical research articles published in the same period. By comparison, the median citation count for papers in the journal Systematic Reviews is substantially lower.

4. Global Researcher Adoption

Beyond citations, Rayyan's adoption is documented through platform-level statistics and independent assessments.

Rayyan at-a-Glance: Key Impact Metrics			
30,000+ Google Scholar and Semantic Scholar Citations <i>Ouzzani et al. 2016</i>	25,900+ ResearchGate Citations <i>Ouzzani et al. 2016</i>	2,000,000+ Registered Reviews <i>As of May 2026</i>	2025 Year Rayyan Became the #1 Platform <i>In new PROSPERO registrations</i>

Figure 3. Summary of Rayyan's global citation and adoption footprint. Citation counts from Semantic Scholar and ResearchGate; registered user figure from Rayyan Systems (April 2026).

Rayyan's expansion from 2,000 users across 60 countries at initial launch in late 2016 (reported in Ouzzani et al., 2016, PMC5139140) to over 1 million registered researchers worldwide by May 2026 represents a 500-fold increase in registered users over approximately nine years, consistent with its status as a free-access platform benefiting from strong network effects across the global research community.

5. Independent Validation of Performance

Adoption metrics reflect researcher choice; independent methodological studies provide evidence of why that choice is made.

- Salles dos Reis et al. (2023), Systematic Reviews (DOI: [10.1186/s13643-023-02231-3](https://doi.org/10.1186/s13643-023-02231-3)): In a head-to-head comparison of three freely available ML-assisted screening tools, Rayyan achieved the highest overall rater performance score (35/40), the highest sensitivity (78% of true positives correctly identified), and the lowest false-negative rate (21%), outperforming both comparators on quantitative and qualitative evaluation dimensions.

- Valizadeh et al. (2022), BMC Medical Research Methodology (DOI: [10.1186/s12874-022-01631-8](https://doi.org/10.1186/s12874-022-01631-8)): A 2020 scoping review cited within this article ranked Rayyan first in weighted feature analysis among screening tools, and second in overall user experience, reflecting consistent performance across both technical and usability dimensions.
- Ouzzani et al. (2016) user survey (DOI: [10.1186/s13643-016-0384-4](https://doi.org/10.1186/s13643-016-0384-4)): Early adopters reported an average 40% reduction in screening time compared to prior tools, with 34% of respondents reporting time savings exceeding 50%. Around 75% identified screening/labeling and collaboration as Rayyan's two most valuable features.

6. Institutional Endorsement and Library Integration

A practical signal of embedded adoption is the extent to which research libraries, the gatekeepers of methodological guidance for graduate researchers and faculty - formally recommend a tool in their systematic review guides. Rayyan appears in the institutional library guides of a substantial number of universities globally as of May 2026, including:

- University of Georgia (guides.libs.uga.edu/rayyan)
- Texas Tech University (guides.library.ttu.edu/Rayyan)
- Georgia State University (research.library.gsu.edu/rayyan)
- University of Agder, Norway (libguides.uia.no/systlitt/rayyan)
- University of South Africa (libguides.unisa.ac.za/SystematicReviews/Rayyan)
- Weill Cornell Medicine – Qatar (hslib-guides.qatar-weill.cornell.edu)
- John A. Burns School of Medicine, University of Hawai'i at Mānoa (hslib.jabsom.hawaii.edu/rayyan)
- Birmingham City University (libguides.bcu.ac.uk/generativeAI/screening)

Library integration is particularly significant for enterprise sales: institutional members benefit directly from existing researcher familiarity at the point of procurement, reducing training burden and accelerating adoption.

7. Disciplinary Breadth

Unlike some systematic review tools positioned primarily for clinical or Cochrane-style reviews, Rayyan's PROSPERO footprint spans multiple disciplines. The tool is actively cited in protocols across:

- Clinical medicine and public health
- Nursing and allied health sciences
- Social sciences and education research
- Environmental and agricultural sciences
- Business, management, and information systems

This breadth is a direct consequence of Rayyan's design philosophy: workflow agnostic, database agnostic, and accessible through any Boolean-strategy-derived export file - which makes it applicable to any discipline conducting systematic or scoping reviews, regardless of the databases searched.

8. Momentum: Three Converging Signals

Rayyan's growth across platform use, published citations, and protocol registrations is not occurring in isolation. Three independently verifiable signals are moving in the same direction simultaneously, and each reinforces the others.

- **Platform activity is accelerating.** Rayyan researchers created 167,342 new reviews in Q1 2026 and 196,165 in Q2 2026, a 17% quarter-over-quarter increase. Through July 2026, the platform has supported 422,228 new reviews year to date, adding to a pre-2026 cumulative base of 1,762,224. At the current annualized run rate, Rayyan is on track to support approximately 700,000 new reviews in 2026 alone. The 3.27 billion cumulative article screening decisions recorded on the platform confirm that registered users are actively conducting reviews at scale, not merely holding accounts.
- **Published citation output is compounding.** PubMed-indexed publications citing Rayyan grew from 36 in 2016 to 506 in 2025, a 14-fold increase over nine years. 382 new citations were recorded through July 2026 alone, tracking ahead of 2025's total on an annualized basis. This citation curve mirrors the platform's user growth trajectory and reflects the natural lag between research tool adoption and published output: reviews started today appear as citations 12 to 36 months later. The PROSPERO registration data, which shows Rayyan leading new protocol registrations since 2025, is the leading indicator for where the PubMed citation curve goes next.
- **Protocol registration share is widening.** Rayyan's share of annual PROSPERO registrations across the two leading platforms grew from 10% in 2016 to 64% through May 2026. In 2025, for the first time, Rayyan registered more new protocols than any other platform in a single year. This is the most current available signal of active researcher choice, recorded at the moment a team commits to a methodology before their review begins.

Each of these signals is independently verifiable and each reinforces the others. Platform adoption drives published reviews; published reviews drive new adopters; new adopters register protocols that become the next wave of published output. Rayyan's simultaneous acceleration across all three indicators reflects a self-reinforcing adoption dynamic consistent with a platform achieving durable category leadership.

9. Summary

The evidence presented in this white paper supports a consistent and independently verifiable conclusion:

Rayyan is the most widely adopted evidence synthesis platform in active research use globally, with citation, adoption, and performance metrics that place it at the top of the field and well above all other tools evaluated.

Evidence at a glance:

- #1 in new PROSPERO registrations since 2025 (64% share in 2026 to date), with 25,133 cumulative protocols, the largest footprint of any open-access platform
- 30,000+ Semantic Scholar citations for the foundational paper, with 300+ classified as highly influential
- 1 million+ registered researchers across 180 countries as of 2023
- Best-in-class independent performance rating (Salles dos Reis et al., Systematic Reviews, 2023)
- Formally recommended by research libraries at institutions on 6 continents
- **Accelerating momentum:** 422,228 new reviews created year to date in 2026 (Q1: 167K, Q2: 196K); PubMed citations grown 14-fold since 2016; PROSPERO registration share widening to 64% in 2026.

Appendix: Source Verification Guide

All figures in this white paper are replicable by any reader. The following guide provides direct verification steps for sales and scientific affairs teams.

Metric	How to Verify	Date	Source Type
PROSPERO citations	prospero.york.ac.uk → search 'Rayyan'	May 2026	Freely searchable
Google Scholar citation	https://scholar.google.com/ → DOI: 10.1186/s13643-016-0384-4	May 2026	Freely searchable
Semantic Scholar citations	semanticscholar.org → search "Rayyan - a web and mobile app for systematic reviews"	May 2026	Freely searchable
ResearchGate citations	researchgate.net → search Ouzzani 2016 DOI: 10.1186/s13643-016-0384-4	May 2026	Freely searchable
PubMed mentions	pubmed.ncbi.nlm.nih.gov → search 'Rayyan' → Timeline view for year-by-year citation counts	May 2026	Freely searchable
1 million+ registered users	Rayyan Systems internal data (August 2026)	May 2026	Company-reported figure
Platform activity metrics	Rayyan Systems internal data (August 2026)	August 2026	Company-reported figure
Performance comparison (2023)	Salle de Rois at all: PMC10105467 DOI.org/10.1186/s13643-023-02231-3	2023	Peer-reviewed, open access
40%-time savings	PMC5139140 (Ouzzani et al. 2016 full text; DOI: 10.1186/s13643-016-0384-4)	2016	Peer-reviewed, open access
25,133 registered PROSPERO protocols	see methodological note on page 2	May 2026	Freely searchable

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* All figures in this white paper are point-in-time as of May 2026 and grow continuously. The Appendix provides direct verification steps so that any reader can independently confirm each data point.