



Buyer's Guide To Systematic Review Software



About This Guide

Our team has been developing systematic review software for the world's leading research organizations for more than 15 years. Though the software has evolved dramatically over that period, the questions we are asked about the features and benefits of review software haven't changed much.

In this guide, we present the most common questions we hear and provide a comprehensive list of things to consider when evaluating an systematic review software solution.

This guide will:

- Explain what systematic review software does and how it is used
- Discuss where systematic review software fits within the overall review process
- Provide a checklist of features to help you with the evaluation process

Who should read this guide?

If you are doing systematic reviews or other structured literature reviews today, you already know that they are the “gold standard” for research in many health and science-related fields. You also probably know that, while reviews sound simple on the surface, they are big projects that can consume significant amounts of time and resources. Doing reviews well can be a challenge.

This guide can benefit you if:



You are struggling with the amount of time it takes to conduct a review

Time spent organizing and tracking down references, collating screening and data extraction information from spreadsheets, checking for disagreements between reviewers, and creating reports by hand are not good uses of a researcher’s valuable time. Fortunately, software has been proven to remove much of this burden.



You’re concerned about manual errors compromising the quality of your review

Did I make a transcription error? Did we forget to review that paper by Nosyk? How can I be sure that my data is ready for analysis? Worries like these can keep a researcher up at night and can seriously impact the quality and integrity of your review.



You’re not sure which systematic review software is the best fit for you

With options that include everything from lightweight screening tools and open source software to robust, customizable solutions, choosing the right tools for the job can be difficult. This guide is designed to help you prioritize your wish list and make an informed decision.

What does systematic review software do?

Today's systematic review software evolved from the desire to automate the many manual tasks involved in conducting a review. Systematic reviews are process intensive and data heavy, and not so long ago they typically involved circulating paper copies of articles and screening forms to the review team.

Most systematic reviewers currently use some form of technology to help manage the information and data in their review projects. In fact, a recent survey showed that the vast majority of reviewers use spreadsheets at some stage of their review process.

Of course, it is possible to produce high quality results using spreadsheets, or even paper forms. That said, each of these methods has a number of drawbacks that can have significant impact on both the quality and the volume of research produced.

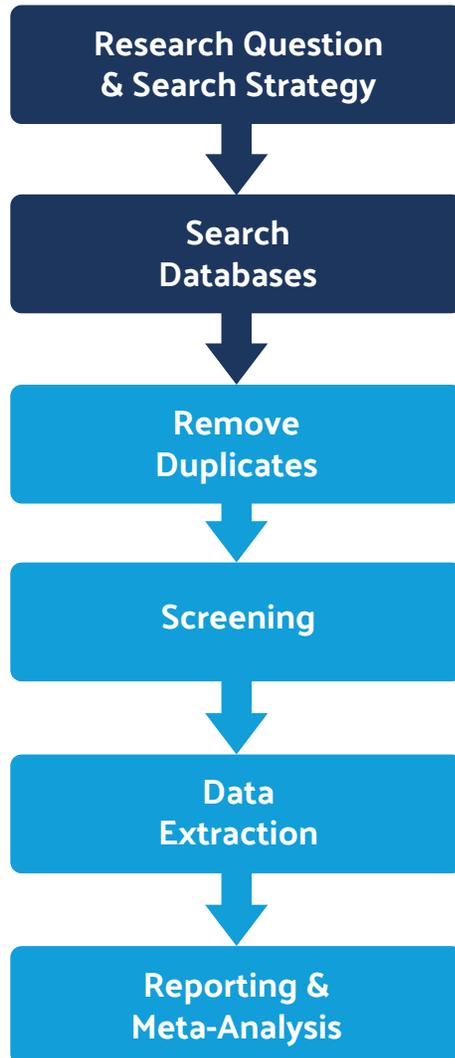
Spreadsheets were a great improvement over paper-based reviews, but they can only go so far. Luckily, there are now even better options.



Just Say No To Spreadsheets

When using spreadsheets for review tasks such as screening, data extraction, or storing references, you may find yourself dealing with some or all of the following:

- A reviewing “bottleneck” because each stage of the review must be completed before the next one is started
- Manual data entry errors that can be difficult or even impossible to catch
- Excessive manual work in checking for disagreements and creating reports
- Questions about the validity of your results due to lost files or undocumented processes



Where does systematic review software fit in the process?

As mentioned above, systematic review software is designed to reduce the manual work involved in conducting reviews. But how does it do this?

Once you've defined your research question and completed your search of relevant databases, you can typically import your search results into your systematic review software, where a deduplication feature can automatically and efficiently identify and remove any duplicate references.

Next, you'll be tackling one of the most time consuming aspects of a systematic or literature review: the screening and data extraction processes.

“Why input data twice when it only needs to be done once?”

Similar to the paper forms used in the past, systematic review software uses electronic forms to record the answers to inclusion/exclusion questions. More involved forms can be configured for data extraction. One of the main advantages that these electronic forms provide is that they collect all your review data in one place, eliminating the need to manually cut and paste individual responses into a single file for analysis. Why input data twice when it only needs to be done once?

Because the forms are digital, they can be reused an unlimited number of times. Depending on the form and the reviewer, they can usually be completed faster than writing or typing since they can incorporate easy-to-use answer formats like checkboxes or radio buttons. They can also validate your data before you submit it, giving you cleaner results and fewer errors.

Screening and data extraction are the most commonly addressed review elements facilitated by systematic review software, but there are other valuable features such as direct connection to popular databases, automated report generation, and reviewer roles and permissions management.

With the growing popularity of living reviews, having your entire review project and all its data, references, full text articles and audit trail stored within your systematic review software can be a huge time saver when it comes time for updates.

Top 5 Ways Systematic Review Software Can Help You

#1 Speed

If there's one thing that almost every reviewer wishes for, it's more time. In our 2017 Survey on Literature Reviews, approximately onequarter of those who answered the narrative survey question about their greatest review challenge mentioned the time involved in completing a review - to conduct searches, remove duplicates and irrelevant articles, complete screening, extract data, and prepare reports.

The good news is that systematic review software can improve your efficiency in all of those areas of the review process.

#2 Accuracy

Mistakes happen. Duplicate references, transcription errors, and data entry errors can skew, or even invalidate, your results. Systematic review software can provide built-in automation and validation tools that dramatically reduce the potential for errors in your reviews.

#3 Automation

Manually compiling data that has been extracted to produce summary tables, PRISMA flow charts, and other visual representations of your data can be extremely time consuming. Systematic review software can complete these manual processes for you, automatically compiling your information into readable, ready-to-use charts and diagrams, making your life easier.

Top 5 Ways Systematic Review Software Can Help You

#4 Transparency

It's increasingly important to be able to show when, how and why inclusion and exclusion decisions were made in your review. When questions arise about the origin of your data, systematic review software can help you with features such as a detailed audit log that records every user interaction and data version control with rollback capabilities

#5 Collaboration

Systematic review software packages today are typically cloud-based, allowing them to be used from any browser on any device. With a centralized, shared data set, your team can collaborate in real time, regardless of location.



Your Systematic Review Software Checklist (1/2)

Deciding to adopt systematic review software is more than just a monetary investment - it's a commitment to a new way of doing things. And just like any significant purchase, it's always a good idea to do your research first.

Make sure you conduct a thorough assessment of each of the available options to choose the software that is the best fit for your needs. Below is a list of features that may be offered by systematic review software packages.

I need/want:	Check All That Apply	Software 1	Software 2
Keyword highlighting for faster screening	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Artificial intelligence-based screening automation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To produce PRISMA, KAPPA, or Exclusion reports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Advanced data extraction capabilities including capturing and reporting of repeating data sets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Capability to restrict permissions for specific users	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customizable workflows, forms and project templates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Your Systematic Review Software Checklist (2/2)

I need/want:	Check All That Apply	Software 1	Software 2
Real-time reviewer compatibility and performance monitoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Import/export data in Word, Excel, CSV, RIS, and PDF formats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Integrated de-duplication engine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Live customer support and training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Custom reporting capabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unlimited projects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Add any features that your project uniquely requires on the blank lines above. Use this list to pinpoint what features to look for and to compare your options



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The best systematic review software for your needs is out there...
we hope this guide helps you find it!

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