

FREE RESOURCE GUIDE

Spreadsheet vs. Access Database vs. MySQL

A plain-language guide to choosing the right data tool for your organization

Published by Rila Group Inc | rilagroup.com | Data Analytics & Business Intelligence for Mission-Driven Organizations

Which Data Tool Is Right for You?

One of the most common questions we hear from organization staff is: “Should we be using Excel, Access, or a database like MySQL?” The honest answer is: it depends. Each tool exists for a reason, and choosing the wrong one creates real problems lost data, slow reports, frustrated staff, and wasted budget.

This guide gives you a clear, jargon-free framework for making that decision based on your organization’s actual needs.

Section 1: Spreadsheets (Excel & Google Sheets)

Spreadsheets are the most familiar tool in the room. They’re flexible, visual, and require almost no setup. But that flexibility can become a liability as your data grows.

Use a Spreadsheet When...

- You need to do a one-time calculation, model, or analysis
- You’re working alone or with one other person
- Your dataset is relatively small (under 50,000 rows)
- You need to create a chart or visual for a presentation or board report
- You’re collecting quick survey responses or temporary tracking
- Speed and simplicity matter more than structure

Watch Out For...

- Multiple people editing the same file at the same time causes version conflicts and lost data
- Files growing past 10MB spreadsheets slow down dramatically
- Copy-paste errors that corrupt your data silently

- No audit trail you can't see who changed what or when
- Formulas breaking when rows are inserted or deleted

✓ Real-World Example

A development associate at a theater tracks monthly grant disbursements in Google Sheets. She shares it with one colleague who reviews it once a week. The file has 400 rows and generates a summary chart for board meetings. This is a perfect spreadsheet use case.

Section 2: Microsoft Access Database

Access sits in the middle more structured than a spreadsheet, but accessible enough that non-technical staff can use it with some training. It's a local desktop database that works well for small teams managing shared data within one office or network.

Use Access When...

- Multiple staff need to enter and view data without overwriting each other
- You have related data that should be connected (e.g., customers linked to purchases linked to products or promotions)
- Your data has grown beyond what a spreadsheet can handle cleanly
- You want built-in forms for non-technical staff to enter data safely
- Your organization uses Microsoft Office and budget is a constraint
- You need basic reporting but don't need real-time dashboards

Watch Out For...

- Access is local remote teams working from home may struggle to connect
- It doesn't scale well beyond a few hundred thousand records
- Limited integration with modern web tools and dashboards
- If your IT person leaves, Access databases can become "orphaned" and unmaintainable
- Microsoft has signaled Access is a legacy product with limited future development

✓ Real-World Example

A retail business uses Access to manage its sales and customer records. Several employees enter order and customer data through forms, and the store manager runs monthly sales and inventory reports. The database has around 30,000 records and is stored on a shared office network drive. Access works well in this scenario.

Section 3: MySQL (Server Database)


MySQL is a professional-grade relational database designed to handle large volumes of data, multiple simultaneous users, and connections to web applications and dashboards. It runs on a server not your desktop and is accessed through software rather than opened like a file.

Use MySQL When...

- Your data exceeds 500,000 records or grows rapidly
- Multiple systems need to read and write to the same data (your website, your CRM, your dashboard)
- You need real-time dashboards that pull live data
- Your team works remotely and needs access from anywhere
- Data integrity is critical you need transactions, rollbacks, and audit logs
- You're building automation, APIs, or ETL pipelines
- You need to join and query data across multiple related tables at speed

Watch Out For...

- MySQL requires server setup and ongoing maintenance it's not plug-and-play
- Someone on your team (or a consultant like Rila Group) needs to manage it
- Direct access requires SQL knowledge but front-end tools can shield end users from this
- Over-engineering: if your data is small and simple, MySQL adds unnecessary complexity

 **Real-World Example**

A mid-sized museum uses MySQL to power their membership portal, ticketing system, and donor dashboard—all three pull from the same database. Staff access a web-based form to update records, and the executive director views live KPI dashboards. With 2 million records and 15 concurrent users, this is exactly what MySQL is built for.

 **Quick Decision Guide**

Use this table to find your scenario and see which tool fits best.

| Scenario | Spreadsheet | Access Database | MySQL |
|---|-------------|-----------------|------------|
| You need to track monthly event revenue | ✓ Best fit | Possible | Overkill |
| 5 staff share and edit the same file | Risky | ✓ Best fit | Possible |
| You collect 50,000+ donation records/year | Too slow | Manageable | ✓ Best fit |

| Scenario | Spreadsheet | Access Database | MySQL |
|---|-------------|-----------------|-----------------|
| You need charts for a board presentation | ✓ Best fit | Limited | Needs front-end |
| Multiple apps need to read the same data | No | Limited | ✓ Best fit |
| A volunteer needs to enter survey results | Accessible | ✓ Best fit | Requires setup |
| You run complex SQL queries across tables | No | Possible | ✓ Best fit |
| You need a quick one-time calculation | ✓ Best fit | Overkill | Overkill |
| Your dashboard pulls live data | No | Limited | ✓ Best fit |

Side-by-Side Comparison

| Feature | Spreadsheet (Excel/Google Sheets) | Access Database | MySQL |
|-----------------------------|-----------------------------------|-----------------------------|-----------------------------|
| Best for | Personal & small team analysis | Small org shared data entry | Scalable production systems |
| Max comfortable rows | ~50,000 | ~500,000 | Tens of millions+ |
| Multi-user editing | Limited / risky | Yes (local network) | Yes (anywhere) |
| Skill level needed | Low | Moderate | Moderate–High |
| Cost | Free–\$12/mo | Included w/ MS Office | Free (open source) |
| Connected dashboards | Manual export | Limited | Real-time |
| Data relationships | Manual VLOOKUP | Built-in tables | Full relational |
| Automation/scripting | Macros (basic) | VBA | Full SQL + triggers |
| Best file format | .xlsx / .csv | .accdb | Server-based |

The Typical Progression Path

Most organizations don't start with MySQL. They grow into it. Here's the arc we see most often:

| Stage | What It Looks Like |
|---------|---|
| Stage 1 | Everything lives in spreadsheets. A few people share files over email or Google Drive. This works fine until it doesn't. |
| Stage 2 | The spreadsheets get messy. Someone considers Access or a simple database to organize shared data and enable better reporting. |
| Stage 3 | The organization is growing. Data comes from multiple sources. They need real-time dashboards, remote access, and integrations. MySQL (or PostgreSQL) becomes the right answer. |

When to Call Rila Group

You don't have to figure this out alone. Rila Group helps mission-driven organizations assess their data infrastructure and implement the right solution without overbuilding or under-investing.

We typically help when:

- Your spreadsheets are getting unwieldy and you're not sure what comes next
- You want dashboards but your data isn't in a format that supports them
- You inherited a system you don't fully understand
- You're migrating from one tool to another and need it done cleanly
- You need someone to set up MySQL, build the tables, and train your team

Ready to get your data organized?

Rila Group offers free 30-minute discovery calls for organizations of all types, including nonprofits, arts organizations, educational institutions, and businesses.

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