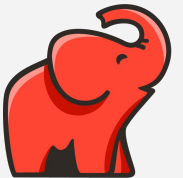


Making PostgreSQL accessible to your non-technical colleagues

Pavish Kumar R

Mathesar Foundation Inc.,



Plan for the talk

- Data management problems faced by non-technical employees.
- How it affects technical employees.
- What it means for the PostgreSQL ecosystem.
- Steps to help your non-technical colleagues.
- A new open source software project to address this problem: Mathesar.

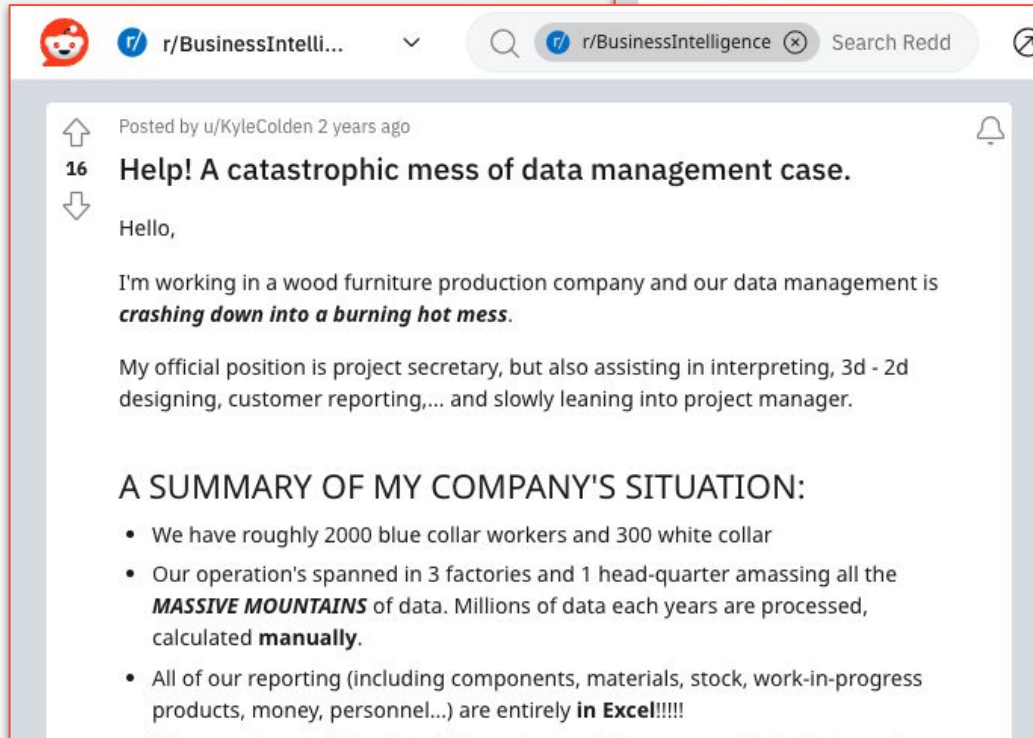
Terminology

This presentation uses “non-technical” to refer to “non-IT” people. This includes domain experts such as scientists, investment bankers etc.,



Data management problems faced by non-technical employees

[1]



Posted by u/KyleColden 2 years ago

16 Help! A catastrophic mess of data management case.

Hello,

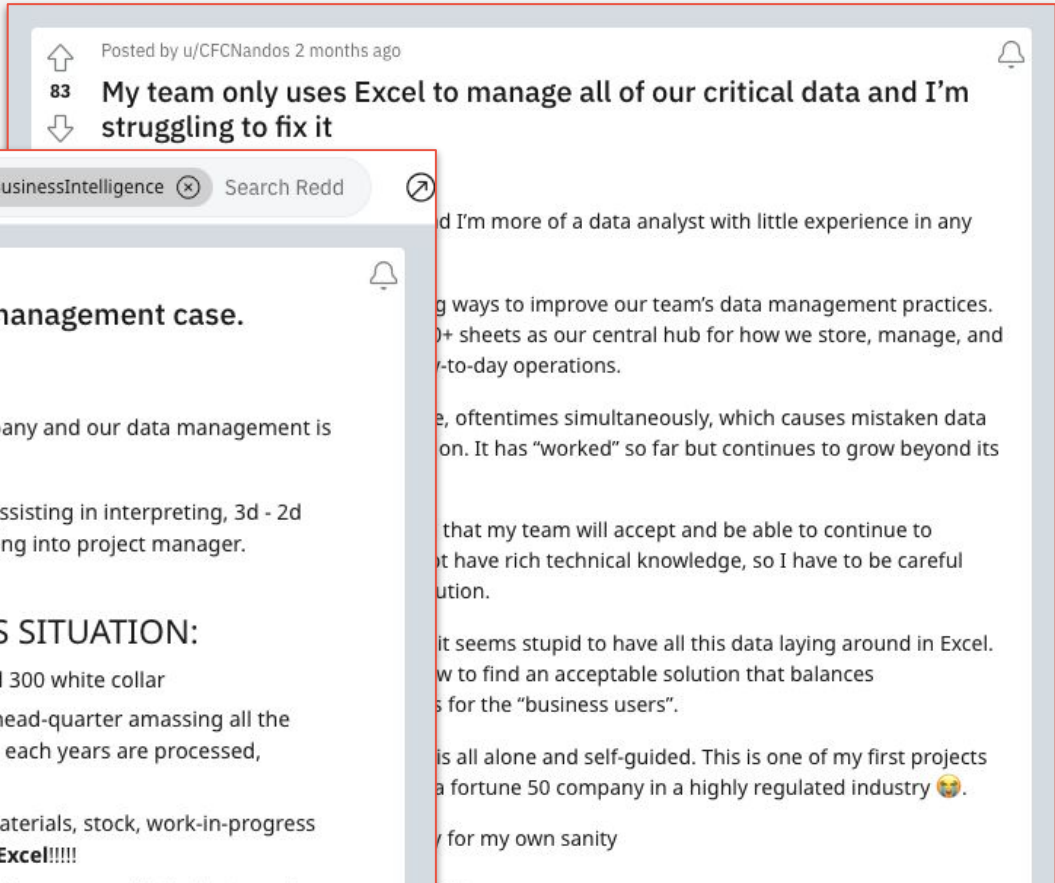
I'm working in a wood furniture production company and our data management is **crashing down into a burning hot mess.**

My official position is project secretary, but also assisting in interpreting, 3d - 2d designing, customer reporting,... and slowly leaning into project manager.

A SUMMARY OF MY COMPANY'S SITUATION:

- We have roughly 2000 blue collar workers and 300 white collar
- Our operation's spanned in 3 factories and 1 head-quarter amassing all the **MASSIVE MOUNTAINS** of data. Millions of data each years are processed, calculated **manually**.
- All of our reporting (including components, materials, stock, work-in-progress products, money, personnel...) are entirely **in Excel!!!!!!**

[2]



Posted by u/CFCNandos 2 months ago

83 My team only uses Excel to manage all of our critical data and I'm struggling to fix it

I'm more of a data analyst with little experience in any

g ways to improve our team's data management practices.

0+ sheets as our central hub for how we store, manage, and

r-to-day operations.

e, oftentimes simultaneously, which causes mistaken data

on. It has "worked" so far but continues to grow beyond its

that my team will accept and be able to continue to

ot have rich technical knowledge, so I have to be careful

ution.

it seems stupid to have all this data laying around in Excel.

w to find an acceptable solution that balances

s for the "business users".

is all alone and self-guided. This is one of my first projects

a fortune 50 company in a highly regulated industry 🤔.

y for my own sanity



Real-life example: Non-technical employee's perspective (1/6)

Reddit Thread: Help! A catastrophic mess of data management case.

r/BusinessIntelligence, u/KyleColden, Mar 2022, [1]

"...**working in a wood furniture production company** and our data management is crashing down into a burning hot mess ... My official position is project secretary ... slowly **leaning into project manager**"

"Our operation's spanned in 3 factories and 1 head-quarter amassing all the **MASSIVE MOUNTAINS of data**. Millions of data each year are processed, **calculated manually.**"



Real-life example: Non-technical employee's perspective (2/6)

"All of our reporting (including components, materials, stock, work-in-progress products, money, personnel...) are **entirely in Excel!!!!!!**"

"If there is something wrong ... **manually go and find the problems** in hundreds of excel files."

"The data between departments ARE NOT LINKED. We **send excel files to each other**"

"The managers, and also the majority of the staff, do not know where or what to start with."

"Tensions between and inside departments are growing."



Real-life example: Non-technical employee's perspective (3/6)

“What our company desperately needs right now:”

“A tool to **sync data from all the departments and branches**. We have warehouse, exporting team, importing team, factory, fittings, materials,... We really need a tool to sync the data from different teams **and keep them being editable.**”

“**Linked data**. When a data is updated, the others depending on that data will also be updated”

“Access to **history of data changes**, who changed it, at what time”



Real-life example: Non-technical employee's perspective (4/6)

Inferences:

- OP is a domain expert working in a managerial position.
- Doesn't have an IT background.
- Recognizes the need for better data management.
- Company relies heavily on spreadsheets to store and manage all their critical data.
- Data is decentralized and team coordination is tedious.
- High manual labour required to ensure data is valid, organized, and not-duplicated.



Real-life example: Non-technical employee's perspective (5/6)

Some comments on the reddit thread:



tech4ever4u · 2y ago

All this is possible with an in-house app developed by your requirements. At the first iteration, this could be a system that handles *existing* Excel files (import/export) and keeps one source of truth in the central database (most likely PostgreSQL can handle your volumes easily). Once you have all data in a single database, you can start using BI tool(s) to get rid of Excels that are used for data retrieval. Then, by writing data management UIs Excels may go away as a horrible dream.

Build an in-house app, with PostgreSQL as the DB.



Real-life example: Non-technical employee's perspective (5/6)

A common comment:

“Hire someone”



Mundane-Ad-9853 · 2y ago

It sounds like you need critical rework of how data is handled. Like everyone else has said you need to find a consultant or hire someone who will benefit you in the long run.

↑ 10 ↓ Reply Share ...



anynonus · 2y ago

In a "critical situation" you don't pick up books and start learning. You find someone who can help you now.

↑ 68 ↓ Reply Share ...



JohnHazardWandering · 2y ago

Short term, hire consultants to automate that.



Real-life example: Technical employee's perspective (1/5)

Reddit Thread: My team only uses Excel to manage all of our critical data and I'm struggling to fix it.

r/dataengineering, u/CFCNandos, Nov 2023, [2]

"My manager tasked me with finding ways to improve our team's data management practices. We use **one Excel workbook with 40+ sheets as our central hub** for how we store, manage, and interact with our **data critical to day-to-day operations.**"

"Most of our team uses this Excel file, oftentimes simultaneously, which causes **mistaken data entries, conflicting filtering**, and so on."



Real-life example: Technical employee's perspective (2/5)

"My issue is I need to find a solution that my team will accept and be able to continue to maintain should I leave. **They do not have rich technical knowledge.**"

"...I don't know how to find **an acceptable solution** that balances sophistication and **user-friendliness for the "business users"**.

"Btw, **this is a fortune 50 company in a highly regulated industry**"



Real-life example: Technical employee's perspective (3/5)

Inferences:

- OP is technical, works with a team that's non-technical.
- Team uses large spreadsheet as central hub for storage and for managing critical operations.
- Team coordination is tedious, there's conflicts, mistaken data entries etc.,
- Tasked with improving this process.
- Needs to find a solution that the team will accept.



Real-life example: Technical employee's perspective (4/5)

Some comments on the reddit thread:



techmavengeospatial · 3mo ago

I recommend switching to postgresql Developing proper tables and relationships

Then use nocode/lowcode solutions like APPSMITH or Budibase or Tooljet connected to those postgres tables to build search forms/screens and attribute table views And full CRUD apps

Also find nocodb to be useful since it also exposes REST API of the data And even webhooks

Move to a relational DB, PostgreSQL, and use available user-friendly tools to make it easier for the non-technical people.



Real-life example: Technical employee's perspective (5/5)

A common comment:

“Quit your job”



metis84 · 3mo ago

TBH - strongly consider leaving. You can nothing good nor useful there, and you need to start your career off on a good



nigelburke · 2 mo. ago

If you're working in a place that uses an excel spreadsheet for all it's data and you're making it up as you go along you might as well give up now before all these bad habits become ingrained

 **13**   Reply  Share 



BufferUnderpants · 2 mo. ago

Consider switching jobs. How could this job help you

 **58**   Reply  Share 



What do these exchanges tell us?

- Never ask for help on Reddit.*
- Spreadsheets are often the go-to tool for data management among non-technical employees.
- Spreadsheets end up being misused for scenarios that require a DBMS.
- People don't streamline their data management process until it's too late.

* I'm kidding. Reddit is a decent platform to ask for advice.



Why are Spreadsheets misused when DBMS have existed for 6+ decades?

- Non-technical employees are often the real owners of data in an organization.
- The typical ratio of IT to non-IT employees in a company is 1:27. ^[3]
- Spreadsheets are popular, familiar, and help users hit the ground running.
- There's limited knowledge of DBMS and data management best practices among non-technical employees.
- Spreadsheet companies build features that falsely mimic database functionality to satisfy the growing requirements of these users.



Some popular news stories

- Scientists rename human genes to stop Excel from misreading them as dates. ^[4]
 - Spreadsheets used to track scientific research and conduct clinical trials.
 - Study from 2016: 1/5th of published papers with genetic data contain Excel errors.
 - Data Integrity & Consistency were missing here.
- Uncontrolled data lead to 16000 UK Covid-19 test results being lost for a week. ^[5]
 - Size limit in Excel lead to losing over 16k test results.
 - Situations like these affect government policy and is potentially life threatening.
 - Data Durability was missing here.



How it affects technical employees

- Technical employees are:
 - Hired to solve problems with data management.
 - Expected to solve problems with the organizational process.
- All “acceptable” solutions tend to revolve around spreadsheets.
 - Affects technical decisions and goes against good practices.
- Intermediary to data rather than maintainers of technical infrastructure.
 - Querying data to answer questions, producing reports, building inhouse tools.
- Assisting non-technical employees doesn't get recognized as a role of its own.



If non-technical employees used databases directly

- Reduced dependency on IT teams for their day-to-day work.
- Improved communication with IT teams:
 - Effective discussions about data requirements, constraints, and capabilities.
 - People who model the business process will also be able to model the data.
- Better management:
 - Feasible requirements, realistic expectations for timelines and capabilities.
 - Better understanding of system limitations and capabilities
- Technical employees can focus on building technical infrastructure.



What it means for the PostgreSQL ecosystem

- PostgreSQL has existed for 35+ years:
 - Popular, favoured, and loved among technical people.
 - Unrecognized by non-technical people.
- Primary focus of the ecosystem has been on technical audience, and for good reason.
- Huge unrealized potential among non-technical users.
- Not enough **general purpose tools** that provide **direct access** to PostgreSQL's power and functionality to non-technical users.



A bit of history: Ingress during the database wars (1/3)

- Ingress was a database that started as a research project in UC Berkeley.
- Ingress used QUEL.
- In the early 80s, commercial version of Ingress gained popularity.
- Oracle was losing market share to Ingress.
- Oracle 4 introduced a new query language, SQL: A seQUEL to QUEL?
- SQL gained recognition and acceptance. ANSI accepted SQL as the standard and databases followed suit.
- Oracle regained market share. Ingress was out of the database race in a few years.



A bit of history: PostgreSQL comes into existence (2/3)

- In 1985, Michael Stonebraker returned to Berkeley, began work on a post Ingress database. **Post Ingress = POSTGRES.**
- POSTGRES introduced several improvements and used PostQUEL.
- In 1995, POSTQUEL was replaced by SQL, creating Postgres95.
- In 1996, the Postgres95 project was renamed to PostgreSQL to reflect it's support for SQL.
- SQL was so important, several popular relational database projects have `SQL` explicitly mentioned in their names.



A bit of history: QUEL vs SQL (3/3)

- QUEL was considered superior by many.
 - It closely followed Edgar Codd's relational model than SQL.
- QUEL was super composable, SQL was not.
- Why did SQL prevail?
 - SQL was more “english” than QUEL.
 - Did not require mentioning how to query something, only what to query.
 - Welcome by novice users and experienced technical users alike.
 - In other terms, SQL was more accessible.



Addressing the next accessibility concern

- The power of databases needs to be in the hands of users of all skill levels.
- The PostgreSQL ecosystem is best suited to take leaps in this direction.
- Here are some things we can do:
 - More advocacy towards database literacy
 - Community driven **general purpose user-friendly interfaces** to PostgreSQL
 - Training and documentation aimed towards non-technical people
 - Simplifying migration from existing spreadsheet based workflows to databases
 - MS Access deserves a shoutout.



Steps to help your non-technical colleagues

- Raise awareness:
 - Conduct events, talks, and workshops in your organization.
 - Create content focusing on your non-technical colleagues.
 - Explain when to use databases and when to use spreadsheets.
- Advocate for database literacy:
 - Talk to your management on the cost and benefits of database literacy.
 - Use real-life examples to showcase the dangers of using misusing spreadsheets.
 - Target non-technical managers.



For the enthusiastic

- Help them set up a PostgreSQL database on their machine.
 - EDB offers installers for Mac and Windows. Postgres.app is a simple app for Mac.
 - The options are all clearly documented on the PostgreSQL site.
- Provide them with easy instructions to connect to the database and start querying.
- Here's the hard part: **Get them to learn SQL.**
 - Getting started with SQL is easier compared to the excel formulas they're used to.
 - Help setup an initial data model for their use case and provide common queries.
 - Resources on SQL are abundant, reducing their dependency on you.



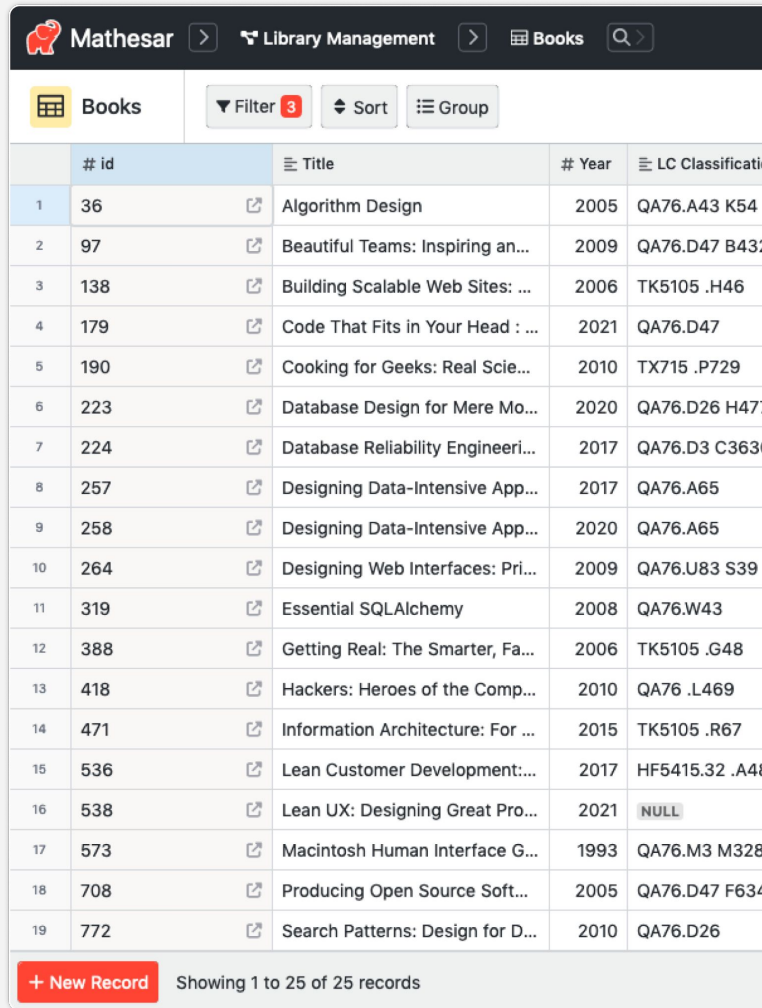
For the less enthusiastic

- The best way to tackle them is to install and manage the database yourself.
- Rely on FOSS tools and the PostgreSQL ecosystem. Do not build custom solutions.
- Do not simplify database terminology, **let them get familiar with the terms.**
- Some tools for reports/visualization:
 - Metabase, Evidence, Apache Superset
- Some tools for Dashboards/UI/Data entry:
 - Mathesar, NocoDB, AppSmith, Budibase
- Find a list of tools [here](#).



Mathesar

- Powered by PostgreSQL, aims to make databases accessible to users of all skill levels.
- Mascot is a young and friendly elephant, symbolic of what we're trying to do. :)
- Open source, Community-led, Non-profit.
- Connect to your PostgreSQL database and it works right away!



The screenshot shows the Mathesar web interface. At the top, there is a navigation bar with the Mathesar logo, 'Library Management', and 'Books'. Below this, there are controls for 'Books', including a 'Filter' button with a red badge showing '3', a 'Sort' button, and a 'Group' button. The main content is a table with 19 rows and 5 columns: '# id', 'Title', '# Year', and 'LC Classification'. Each row has a small icon to the left of the title. At the bottom, there is a '+ New Record' button and a status bar indicating 'Showing 1 to 25 of 25 records'.

# id	Title	# Year	LC Classification
1	36	Algorithm Design	2005 QA76.A43 K54
2	97	Beautiful Teams: Inspiring an...	2009 QA76.D47 B43
3	138	Building Scalable Web Sites: ...	2006 TK5105 .H46
4	179	Code That Fits in Your Head : ...	2021 QA76.D47
5	190	Cooking for Geeks: Real Scie...	2010 TX715 .P729
6	223	Database Design for Mere Mo...	2020 QA76.D26 H47
7	224	Database Reliability Engineeri...	2017 QA76.D3 C363
8	257	Designing Data-Intensive App...	2017 QA76.A65
9	258	Designing Data-Intensive App...	2020 QA76.A65
10	264	Designing Web Interfaces: Pri...	2009 QA76.U83 S39
11	319	Essential SQLAlchemy	2008 QA76.W43
12	388	Getting Real: The Smarter, Fa...	2006 TK5105 .G48
13	418	Hackers: Heroes of the Comp...	2010 QA76 .L469
14	471	Information Architecture: For ...	2015 TK5105 .R67
15	536	Lean Customer Development:...	2017 HF5415.32 .A48
16	538	Lean UX: Designing Great Pro...	2021 NULL
17	573	Macintosh Human Interface G...	1993 QA76.M3 M328
18	708	Producing Open Source Soft...	2005 QA76.D47 F63
19	772	Search Patterns: Design for D...	2010 QA76.D26

Perform data entry

The screenshot displays the Mathesar application interface. At the top, the navigation bar includes the Mathesar logo, the current database name 'Mathesar Library Sample Data', and the table name 'Library Management'. On the right, there are options for 'Shortcuts' and a settings gear. Below the navigation bar, a toolbar contains a 'Books' icon, a 'Filter' dropdown, 'Sort' and 'Group' buttons, a 'Share' button, and an 'Inspector' button.

The main area features a table with the following columns: Title, Author, Publisher, # Publication Year, Dewey Decimal, and Media. The 'Publication Year' column is highlighted with a blue border, and the value '2013' in the second row is selected. The table contains 16 rows of book records.

On the right side, the 'Inspector' panel is open, showing the 'Properties' section for the selected cell. It includes a 'Name' field with the value 'Publication Year', a 'Description' field, and checkboxes for 'Restrict to Unique' and 'Disallow NULL Values'. Below this, the 'Data Type' section shows the 'Data Type' set to '# Number', the 'Database Type' as 'INTEGER', and the 'Number Type' as 'Integer'. The 'Integer Data Size' is set to 'Default (4 bytes)'.

At the bottom of the interface, a status bar shows '+ New Record' and 'Showing 1-500 of 1410 records'. On the right, there are navigation arrows, a page indicator showing '1' of 3 pages, a '500' dropdown, and a 'Refresh' button.

	Title	Author	Publisher	# Publication Year	Dewey Decimal	Media
1	500 Lines or Less	Amy Brown	lulu.com	2016	NULL	2
2	Abaddon's Gate	James S.A. Cor...	Orbit	2013	813.6	2
3	A Beautiful Constrai...	Mark Barden	Wiley	2015	650.1	1
4	Abhorsen	Garth Nix	HarperTeen	2003	823.914	1
5	A Borrowed Man	Gene Wolfe	Tor Books	2015	813.54	1
6	About Face: The Ess...	Alan Cooper	Wiley	2014	5.438	2
7	A Brief History of Ti...	Stephen Hawking	Bantam Books	1990	523.1	2
8	A Brief History of Ti...	Stephen Hawking	Bantam Books	1996	523.1	2
9	Academ's Fury	Jim Butcher	Ace Books	2006	813.6	2
10	Accidental Empires: ...	Robert X Cring...	Da Capo Press	1992	338.470040979473	2
11	A Ceiling Made of E...	Gail Carson Lev...	Quill Tree Books	2020	813.6	1
12	A Civic Technologist...	Cyd Harrell	Five Seven Five...	2020	NULL	2
13	A Civil Campaign: A ...	Lois McMaster ...	Baen	1999	813.54	1
14	A Civil Contract	Georgette Heyer	Sourcebooks C...	2011	813	2
15	A Civil Contract	Georgette Heyer	Sourcebooks C...	2017	813	2
16	A Connecticut Yanke...	Mark Twain	Simon & Brown	2011	813.4	2



Filter, sort, and group your data

The screenshot displays the Mathesar application interface. At the top, the header shows 'Mathesar' and 'Mathesar Library Sa'. Below the header, there are navigation and control elements: 'Books', 'Filter', 'Sort', and 'Inspector'. The main area contains a table of records with columns for '# id', 'Author', and 'Title'. The author 'Joe Abercrombie' is highlighted in several rows. A modal window titled 'Pick a Record from Authors' is open, showing a search results table with columns for '# id', 'First Name', 'Last Name', and 'Website'. The 'Last Name' field contains the text 'ad'. The sidebar on the right shows 'Properties' and 'Links' sections, with 'Authors' linked via 'Author' and 'Publishers' linked via 'Publisher'.

# id	First Name	Last Name	Website
8	Douglas	Adams	https://www.douglasadams.com/
9	John Joseph	Adams	https://www.johnjosephadams.com/
10	Richard	Adams	NULL
11	Katherine	Addison	https://www.katherineaddison.com/
12	Mortimer Jerome	Adler	NULL
73	Ray	Bradbury	NULL
148	Apostolos	Doxiadis	NULL
162	Tony	Fadell	NULL
227	Eiko	Kadono	NULL

Showing 1-500 of 1410 records



Set up data models

The screenshot displays the Mathesar web application interface. At the top, the navigation bar includes the Mathesar logo, the current database 'Mathesar Library Sample Data', the table 'PGConf India 2024', and the specific table 'Attendees'. On the right side of the navigation bar, there are 'Shortcuts' and a settings icon.

The main content area is titled 'Attendees' with the subtitle 'List of attendees'. It features a table with columns '# id' and 'Name'. The first row contains the value '1' for the ID and 'Pavish Kumar R' for the Name. A modal dialog is open over the table, allowing the user to add a new column. The dialog has a 'Column Name' field with 'Email' entered, and a 'Select Type' dropdown menu with options: Date, Date & Time, Duration, Email (selected), Money, and Number. There are 'Cancel' and 'Add' buttons at the bottom of the dialog.

On the right side of the interface, there is an 'Inspector' panel. It has tabs for 'Table', 'Column', 'Record', and 'Cell'. The 'Table' tab is active, showing the following configuration:

- Properties:** Name is 'Attendees', Description is 'List of attendees'.
- Links:** A message states 'This table does not link to any other tables' with a '+ Create Link' button.
- Record Summary:** A section for summarizing the current record.
- Actions:** Includes 'Explore Data' and 'Delete Table' buttons.
- Advanced:** A section for advanced table settings.

At the bottom of the interface, there is a footer bar. On the left, it says '+ New Record' and 'Showing 1-1 of 1 record'. On the right, it shows a page number '1', a limit of '500', and a 'Refresh' button.



Establish relationships

Create Link

Links are stored in the database as foreign key constraints, which you may add to existing columns via the "Advanced" section of the table inspector.

Link **Authors** to **Books**

Type of Link to **Books**:

- Many to One**

Multiple **Authors** records can link to the same **Books** record.
- One to Many**

One **Authors** record can be linked from multiple **Books** records.
- Many to Many**

Multiple **Authors** and **Books** records can link to each other through a new **Linking Table**.

We'll add a column in **Authors** which links to **Books**.

Column Name

# id	First Name
1	Edw
2	M.A
3	Joe
4	Dan
5	NUL
6	Chir
7	Diar
8	Dou
9	Joh
10	Rich
11	Kath
12	Mor
13	Sala
14	Joar
15	Jose
16	Julie

+ New Record Showing 1-377 of 377 records 1 500 Refresh



Perform schema migrations

The screenshot shows the Mathesar web application interface. At the top, the navigation bar includes the Mathesar logo, the current database 'Mathesar Library Sample Data', and the 'Library Management' section with a 'Books' sub-section. The main area displays a table of books with columns for Title, Author, Publisher, ISBN, and Publication Year. A modal dialog box titled 'Extract Columns Into a New Table' is open, allowing the user to create a new table named 'ISBNs' and extract columns 'ISBN', 'Dewey Decimal', and 'Dewey Wording' from the 'Books' table. A purple informational box explains that the selected columns will be moved to the new table and a new 'ISBN' column will be added to the original 'Books' table. The dialog has 'Cancel' and 'Create Table and Move Columns' buttons.

Mathesar > Mathesar Library Sample Data > Library Management > Books

Books | Filter | Sort | Group | Share | Inspector

	Title	Author	Publisher	ISBN	Publication Year
1	500 Lines or Less	Amy Brown			
2	Abaddon's Gate	James S.A. Cor...			
3	A Beautiful Constrai...	Mark Barden			
4	Abhorsen	Garth Nix			
5	A Borrowed Man	Gene Wolfe			
6	About Face: The Ess...	Alan Cooper			
7	A Brief History of Ti...	Stephen Hawkin			
8	A Brief History of Ti...	Stephen Hawkin			
9	Academ's Fury	Jim Butcher			
10	Accidental Empires: ...	Robert X Cring...			
11	A Ceiling Made of E...	Gail Carson Lev...			
12	A Civic Technologist...	Cyd Harrell			
13	A Civil Campaign: A ...	Lois McMaster ...			
14	A Civil Contract	Georgette Heyer			
15	A Civil Contract	Georgette Heyer	Sourcebooks C...	978-12-3-671481-6	2017
16	A Connecticut Yanke...	Mark Twain	Simon & Brown	1-6138-2047-X	2011

Extract Columns Into a New Table

Name of New Table: ISBNs

The new table that will be linked to: Books

Columns to Extract: ISBN, Dewey Decimal, Dewey Wording

Select the columns you want to extract into: ISBNs

The columns above will be removed from Books and added to ISBNs

A new column will be added to Books

Column Name: ISBN

Buttons: Cancel, Create Table and Move Columns

Footer: + New Record | Showing 1-500 of 1410 records | Page 1 of 500 | Refresh



Join tables, explore data, and construct reports

Mathesar > Mathesar Library Sample Data > Library Management / Data Explorer

Shortcuts ⌵ ⚙ ⌵

Exploring from Checkouts ? Start Over Save Undo Redo Inspector

Build your Exploration

Select Columns Transform Results

Check In Time +
Item +
Patron +

Linked from Base Table

Items
via Item
id +
Barcode +
Acquisition Date +
Acquisition Price +

Books
via Book
id +
Title 1 +
Publication Year +

Result Refresh

	Books_Title group	Publishers_Name g...	Checkout times list		
1	500 Lines or Less	lulu.com	11/02/2022 19:16	03/09/2022 19:05	05/10/2022 19:05
2	Abaddon's Gate	Orbit	07/07/2020 16:18	26/09/2020 18:31	31/10/2020 18:31
3	A Beautiful Constrai...	Wiley	02/01/2021 17:08	27/01/2022 18:43	08/07/2022 18:43
4	Abhorsen	HarperTeen	12/10/2020 13:02	11/11/2020 16:57	23/02/2021 16:57
5	A Borrowed Man	Tor Books	23/07/2020 13:56	10/08/2020 12:55	06/09/2020 12:55
6	About Face: The Ess...	Wiley	20/12/2020 11:38	24/04/2021 13:11	29/10/2021 13:11
7	A Brief History of Ti...	Bantam Books	03/07/2020 17:59	23/07/2020 10:55	23/07/2020 10:55
8	Academ's Fury	Ace Books	29/07/2020 19:36	07/10/2020 18:55	25/10/2020 18:55
9	Accidental Empires: ...	Da Capo Press	21/06/2020 15:36	02/08/2020 14:24	28/10/2020 14:24
10	A Ceiling Made of E...	Quill Tree Books	20/08/2020 13:47	06/10/2020 18:38	28/10/2020 18:38
11	A Civic Technologist...	Five Seven Five Books	10/01/2021 14:34	17/05/2021 15:44	10/08/2021 15:44
12	A Civil Campaign: A ...	Baen	22/07/2020 14:14	03/11/2020 19:39	23/02/2021 19:39
13	A Civil Contract	Sourcebooks Casabl...	08/07/2021 18:41	02/08/2021 17:34	05/10/2021 17:34
14	A Connecticut Yanke...	Simon & Brown	09/02/2022 10:24	18/05/2022 12:46	24/07/2022 12:46
15	A Conspiracy of Kings	Greenwillow Books	25/06/2020 15:26	07/09/2020 15:56	13/09/2020 15:56

Showing 1-100 of 1258 < 1 2 3 4 5 6 7 ... 13 > 100 ⌵

Column Cell

Properties

Name
Checkout times list

Aggregated from
Checkouts_Checkout Time

Source Column
Checkout Time from
Checkouts

Actions



Emphasis on Interoperability

- General purpose, direct interface to PostgreSQL.
- Works on top of your existing infrastructure.
- High degree of interoperability with other tools on the ecosystem.
- Does not have its own set of abstractions.
- Does not reinvent terminologies.



Our journey so far

- In active development for 2+ years.
 - **~2100 GitHub stars, 90+ contributors.**
- Launched our MVP on Hacker News in March 2023.
 - **24 hours on front page, 75k+ views.**
- We're still in our alpha stage, with 5 releases.
- We've been talking to early adopters and users from all sorts of backgrounds.
- Inching closer towards our beta.



How you can help

- Check out Mathesar.
 - Install it, attempt to use it, star us on GitHub if you appreciate it.
- Talk to us.
 - Tell us if you think Mathesar can help solve a problem for you.
 - Every comment helps us understand your use case and prioritize our work.
- Let us know if you'd like a new feature.
- Become an early adopter.
- Contribute to the repo.



Thank you!

Pavish Kumar R
pavish@mathesar.org



References

1. https://www.reddit.com/r/BusinessIntelligence/comments/tbke1f/help_a_catastrophic_mess_of_data_management_case/
2. https://www.reddit.com/r/dataengineering/comments/186zm6c/my_team_only_uses_excel_to_manage_all_of_our/
3. <https://workforce.com/news/ratio-of-it-staff-to-employees>
4. <https://www.theverge.com/2020/8/6/21355674/human-genes-rename-microsoft-excel-misreading-dates>
5. <https://www.bbc.co.uk/news/technology-54423988>
6. <https://eusprig.org/research-info/horror-stories/>

