

The Connected Spreadsheet

Tips for Moving from Chaotic to Connected

“Say goodbye to spreadsheets”

“The spreadsheet era is over”

“Goodbye spreadsheet chaos”

Headlines about the future of spreadsheets get written almost daily. “Say Goodbye to Spreadsheets,” “The Spreadsheet Era is Over,” “Goodbye Spreadsheet Chaos.” You get the picture. But the people making these statements are living in denial.

What makes us say that? There are over 1.5 billion Excel users. Throw in Google Sheets and the number is over 2 billion. Add in Apple’s Numbers, and you’re at 2 billion . . . and one. (We jest, of course, as we all clutch our iPhones a little tighter.)

Jokes aside, these numbers spell a clear contradiction to the headlines: Spreadsheets are not going anywhere any time soon.

Spreadsheets drive important decisions

Many companies have big expensive IT systems. But, most important decisions are the result of exporting data from those systems into Excel for analysis. Why? Spreadsheets are the only tools flexible enough to deliver results fast. Plus, because of the relatively low learning curve, users can easily take matters into their own hands. They can perform their tasks quickly and efficiently, longer waiting weeks for their IT team to deliver an answer.

The events of 2020 forced companies to make decisions quickly, often with little data. Previously, most companies built models based on their team's educated guesses about the future. Spreadsheets are made for this. There is no out-of-the-box ERP, CRM, or data warehouse that can be used to model scenarios as easily as Excel. As situations change, assumptions in the model can change on a dime. And so spreadsheet reporting became—and remains—even more crucial.

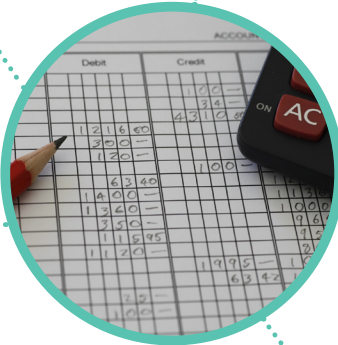
“ We’re always looking for ways to streamline processes with the best technology, and the finance team had experience with how cumbersome CSV imports can be. We chose CloudExtend Excel Data Management to streamline transactional activity and journal entries. It saves us about 30 hours a month or about 360 hours a year.

-Claudio Espinol, Financial Controller | Nanit

The Future of Spreadsheets is Connectivity

The problems with spreadsheets arise because most spreadsheets are isolated from the data users want to analyze. This could be due to security concerns, technological challenges (ODBC, SQL, OLAP cube, anyone?), or even simply a lack of knowledge.

To build a report, users typically have to resort to exporting data from a complex IT system into one or more CSV files. Then, they export to their desktop and open those files in Excel or copy and paste the data into an existing worksheet. Finally, all the relevant pivot tables, charts, etc. get updated. While this does work (and is still common), the organization's ability to make decisions relies on the spreadsheets having access to the most recent



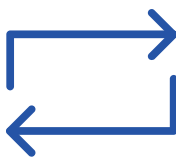
Spreadsheet Connectivity in Today's World?

Connectivity can be defined in both time and direction: Data can be pulled into the spreadsheet via connection APIs that allow the data to flow back and forth between the spreadsheet and the data source, as well a update on a schedule or on-demand basis. If you're using a modern ERP system like NetSuite or a CRM like Salesforce, you have a wealth of data available to you. While these systems have some built-in functionality for analysis—such as saved searches in NetSuite or reports in Salesforce—users often turn to Excel because it's such a familiar and easy-to-use environment. Connecting the two simply makes sense.



Time-related connectivity

Real-time, near real-time, batch mode. Which one is best? Most end-users will almost always say “real-time,” while most system admins will say “batch mode” because they know how expensive real-time is from a system resources perspective. If you're comparing product sales for the last 6 months and slicing and dicing by rep, region, store, etc., real-time is rarely critical for your analysis. If, on the other hand, you are analyzing stock prices, real-time updates may be required.

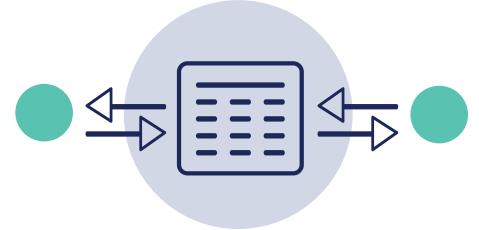


Directional connectivity

Most end-users will think of connectivity as data flowing into Excel from their ERP/CRM where all their slicing, dicing, charting, and modeling occurs. While this remains true even today, the popularity of Excel has elevated it as a data source that can be used for other applications or even to update your ERP/CRM. In this scenario, data is flowing out of Excel, and sometimes data is flowing bi-directionally. At a minimum, a connected spreadsheet should provide the capability for end users to refresh data from the data source on demand or on a scheduled basis with minimal user intervention. It should also allow users to send data from their spreadsheet back to their ERP/CRM.

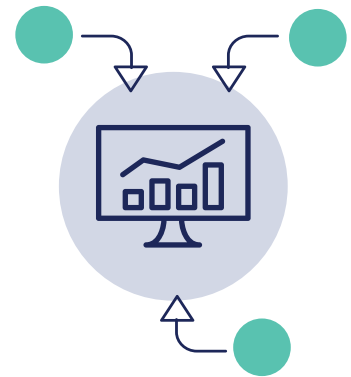
The Middleman Model

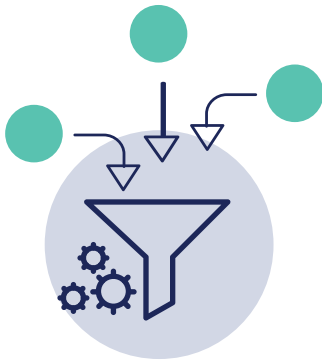
Due to Excel's popularity, most software vendors already have integrations available for Excel. With the advent of inexpensive business intelligence tools such as Microsoft Power BI, your spreadsheet can act as a middleman. You probably already have a way to get data out of your ERP or CRM system into Excel, whether it's with CSV export (below) or a direct connection. In turn, Excel is tightly integrated with business analysis solutions such as Microsoft Power BI. This middleman approach gives you the best of both worlds. You can use Excel for quick and dirty analysis of your data or you can take it a step further and use your Excel workbooks as your source file for Power BI.



Why Power BI

You might have several worksheets in your workbook: customers, sales orders, and items, for example. Linking all these together in Excel could require Vlookup, Index, Xlookup, etc., to combine all of the data. Power BI allows you to create relationships between all these worksheets; i.e., each worksheet is linked as a table in Power BI and tables can now be related via key fields. For example, the Sales Order will have fields for customer and item that can correspond to the customer record and the item record. Now it's easy to generate a report such as sales by region, sales by item class, what's the top-selling item in a region, top 10 customers, etc. Simply update your Excel spreadsheet with new data and Power BI will refresh in seconds with a fresh new view of your data. As an alternative to Power BI, you could even use Excel Power Query and Power Pivot (Windows only).





The Data Entry Model (introducing the tipping point)

If you've ever tried to create or update records in the UI of your ERP or CRM, you have likely experienced the tipping point. The tipping point occurs when it's faster to update your data outside of the UI by using the import feature of your ERP or CRM. Examples would include updating one or more transactions with a large number of lines where it would be tedious to edit each line one at a time in a web-based UI. Creating new records in bulk is another example. It might be fine to have someone manually enter sales orders, but what if you receive hundreds of orders from an external party? In this case, you will want to use the import component of your ERP or CRM. For example, both NetSuite and Salesforce provide the ability to import data via CSV.



Bypass CSV and Do All Your Data Entry in Excel

There are many advantages to working entirely in Excel instead of using a manual or CSV import process. For starters, you can quickly query your ERP/CRM for just the data that needs to be changed. An example of one popular use case is an accountant who needs to update the class field on every line of all the journal entries from the last 30 days. A connected spreadsheet lets the accountant use Excel to bring the data directly into the workbook, change the classification, and then push the changes back up to the ERP.

Error management also plays a big role. If you're not using a connected spreadsheet, then data validation only occurs during the CSV upload process. After the CSV is submitted, errors are only visible when you get an email or alert in the system you are uploading to. This email usually includes yet another CSV as an attachment containing the lines with errors. The user then has to go through an iterative process of uploading until all errors are resolved. With a connected spreadsheet, errors are quickly spotted and marked for correction so they can be prevented before they are submitted.

Internal Id	Tran Date	Tran Id	Vendor	Expense List: Line	Expense List: Account	Expense List: Location	Expense List: Amount
34876	2020-05-21		UPS	6170 Postage &	East Coast Warehouse	344.25	
34877	2020-05-21		Superio	6268 Telephone	East Coast Warehouse	345	
34877	2020-05-21		Superio	6268 Telephone	East Coast Warehouse	400	
34878	2020-05-21		Americ	6020 Automobile	East Coast Warehouse	333	
34878	2020-05-21		Americ	6020 Automobile	East Coast Warehouse	1000	
34879	2020-05-21		AllTesla	6022 Automobile	East Coast Warehouse	100	
34879	2020-05-21		AllTesla	PST Payable BC	East Coast Warehouse	100	
34880	2020-05-21		Chevro	PST Payable BC	East Coast Warehouse	569	
34880	2020-05-21		Chevro	6022 Automobile	East Coast Warehouse	450	
34880	2020-05-21		Chevro	PST Payable BC	East Coast Warehouse	389	
6885671	2020-05-21		Best	6885671	East Coast Warehouse	156	
34881	2020-05-21		Bausch	PST Payable BC	East Coast Warehouse	44	
34882	2020-05-21		Merlin	6022 Automobile	East Coast Warehouse	5690	
34883	2020-05-21		Bausch	PST Payable BC	East Coast Warehouse	23	
34884	2020-05-21		Chevro	6022 Automobile	East Coast Warehouse	113	
34885	2020-05-21		Cannon	PST Payable BC	East Coast Warehouse	356	
5578989	2020-05-21		Bob	5578989	East Coast Warehouse	33	
34886	2020-05-21		Alexan	PST Payable BC	East Coast Warehouse	78	
34886	2020-05-21		Alexan	6022 Automobile	East Coast Warehouse	6	
34886	2020-05-21		Alexan	PST Payable BC	East Coast Warehouse	5	
34887	2020-05-21		AllTesla	6022 Automobile	East Coast Warehouse	100	
34887	2020-05-21		AllTesla	PST Payable BC	East Coast Warehouse	100	
34888	2020-05-21		Compu	PST Payable BC	East Coast Warehouse	99	
34889	2020-05-21		Boston	PST Payable BC	East Coast Warehouse	100	
34889	2020-05-21		Boston	PST Payable BC	East Coast Warehouse	22	
34890	2020-05-21		Wesley	PST Payable BC	East Coast Warehouse	124	
34890	2020-05-21		Wesley	PST Payable BC	East Coast Warehouse	1655	
34891	2020-05-21		Herma	PST Payable BC	East Coast Warehouse	775	
34892	2020-05-21		UPS	PST Payable BC	West Coast	456	
34892	2020-05-21		UPS	PST Payable BC	West Coast	87	

Putting it all Together with CloudExtend Apps

A connected spreadsheet can (and should) complement your ERP system. Users that connect Excel to their ERPs and other data sources via integration can now analyze their data in near real-time giving them the best of both worlds. In addition, enabling Excel to update your ERP allows expensive resources to work faster.

ExtendInsights is the next evolution in Excel integration. Built on the robust framework of CloudExtend Excel for NetSuite (which is now part of the ExtendInsights brand), this powerful app expands our capabilities to connect Excel with your favorite business data sources, starting with HubSpot, Salesforce, Stripe, Chargebee, and more, ExtendInsights allows you to work in your familiar Excel environment to:

- **Access and refresh data effortlessly:** Bypass native report capacity caps, eliminate manual reporting errors, and put CSV exports in your rearview mirror.
- **Automate and streamline reports:** Run complex reports with ease and update them on demand or automatically on a schedule.
- **Connect multiple data sources:** Leveraging the powerful capabilities of Excel Power Query, users can import data from multiple data sources, transform the data, and then link the tables together, providing an even more complete picture of your company.

When used with NetSuite, ExtendInsights enables users to manage their NetSuite data directly in Excel, including creating new records en masse. Users can leverage their existing saved searches or use our proprietary data filter to retrieve just the data they need to update. Once the data is in Excel, users automatically get a huge speed boost due to the fact they are no longer working the web UI.

ExtendInsights ensures you stay in the familiar environment of Excel while driving opportunities through seamless integration with your business data sources.

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