

# Datamaker User's Guide<sup>1</sup>

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## 1.1 GETTING STARTED

This User's Guide describes how to use the [Datamaker](#) software to convert data from [WRDS](#) into *eVal*'s standardized format. [WRDS](#) stands for Wharton Research Data Services and provides access to many financial databases. *eVal* is our equity valuation and analysis software. To learn more about *eVal*, click [here](#). To learn more about how to conduct a comprehensive equity analysis and valuation, refer to our accompanying textbook, [Equity Valuation and Analysis](#).

If you haven't already downloaded a copy of *Datamaker* you can do so by clicking [here](#). *Datamaker*, is basically an Excel workbook with a series of sheets that allow you to convert data from several standardized financial statement data providers into *eVal*'s standardized format. Throughout the remainder of this guide, we will assume that you have a basic level of proficiency with Excel. When you first open *Datamaker*, it should open on the **Intro** worksheet, which is basically a cover sheet. If you look at the tabs at the bottom of the workbook, you will see the following sheets:

**Intro:** This is the introductory cover sheet.

**Convert WRDS Output:** This sheet contains a template for converting the standardized financial statement data provided by WRDS into *eVal*'s standardized data format. The remainder of this guide focuses on how to use this sheet.

**Create Standardized Data:** This sheet provides a generic template that helps you to map data from any set of standardized or as-reported financial statements into *eVal*'s standardized data format. We include this sheet for convenience. Its use requires a detailed knowledge of the input data being used, and so we don't provide further instructions or support.

**Convert S&P Market Insight:** This sheet contains template for converting standardized financial statement data provided by S&P Market Insight to *eVal*'s standardized data format. This sheet is included for legacy reasons and is no longer supported or updated.

**Convert Thompson Output:** This sheet contains template for converting standardized financial statement data provided by Thompson to *eVal*'s

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standardized data format. This sheet is included for legacy reasons and is no longer supported or updated.

**Convert MG 2009 Output:** This sheet contains template for converting standardized financial statement data provided by Market Guide to *eVal*'s standardized data format. This sheet is included for legacy reasons and is no longer supported or updated.

**Legacy Translation:** This sheet contains a template for converting standardized financial statement data from versions of *eVal* pre-dating version 4 to *eVal*'s current standardized data format.

Unless you are a long-time legacy user of *eVal*, you should only be interested in the '**Convert WRDS Output**' sheet. We provide detailed instructions for using this sheet below. The remaining sheets are legacy sheets that are no longer actively supported, and you should use them only if you have experience with them from previous versions of *eVal*.

The use of the '**Convert WRDS Output**' sheet presupposes that you have login access to the [WRDS website](#). WRDS stands for Wharton Research Data Services and provides access to many financial databases. Most business schools subscribe to this service and can provide their students with a login. If you are a student, check you institution's electronic library resources to see if your institution has a subscription and how to get a login. Once you have a login, you are ready to go.

## 1.2 CONVERTING WRDS OUTPUT

The ultimate objective of *Datamaker* is to convert standardized financial statement data into the format of *eVal*'s 'Raw Data Input Block' that can then copied and pasted into the bottom of *eVal*'s **Financial Statements** worksheet. Figure 1 below shows the raw data input block for Salesforce.com through fiscal 2016.

Company Name	SALESFORCE.COM INC		CRM		
Common Shares Outstanding	707,460				
Fiscal Year End (YYYY-MM)	1/31/2013	1/31/2014	1/31/2015	1/31/2016	1/31/2017
Sales (Net)	3,050,195	4,071,003	5,373,586	6,667,216	8,391,984
Cost of Goods Sold	(483,130)	(643,972)	(903,643)	(1,207,036)	(1,702,463)
R&D Expense	(429,479)	(623,798)	(792,917)	(946,300)	(1,208,127)
SG&A Expense	(2,036,925)	(2,727,672)	(3,372,359)	(3,910,910)	(4,772,489)
Depreciation & Amortization	(211,371)	(361,635)	(450,300)	(528,300)	(631,668)
Interest Expense	(33,348)	(77,211)	(73,237)	(72,485)	(88,988)
Non-Operating Income	16,264	5,350	5,785	62,094	37,134
Income Taxes	(142,651)	125,760	(49,603)	(111,705)	154,249
Minority Interest in Earnings	0	0	0	0	0
Other Income (Loss)	0	0	0	0	0
Ext. Items & Disc. Ops.	0	0	0	0	0
Preferred Dividends	0	0	0	0	0
Operating Cash and Marketable Securities	867,621	838,774	995,429	1,341,381	2,208,887
Receivables	872,634	1,438,205	1,949,666	2,524,929	3,230,820
Inventories	0	0	0	0	0
Other Current Assets	275,625	403,273	604,977	481,017	557,120
PP&E (Net)	604,669	1,240,746	1,125,866	1,715,828	1,787,534
Investments	942,349	592,914	1,072,076	1,904,810	848,686
Intangibles	1,799,927	4,410,816	4,561,908	4,503,340	8,558,104
Other Assets	166,131	228,202	383,060	299,467	393,772
Current Debt	521,278	572,159	0	15,402	19,594
Accounts Payable	14,535	64,988	95,537	71,481	115,257
Income Taxes Payable	120,341	153,026	184,844	205,781	239,699
Other Current Liabilities	2,261,470	3,190,015	4,109,722	5,324,341	6,883,803
Long-Term Debt	0	1,342,101	1,495,981	1,490,658	2,209,102
Other Liabilities	240,087	765,426	831,715	648,653	593,070
Deferred Taxes	0	0	0	11,587	24,271
Minority Interest	0	0	0	0	0
Preferred Stock	53,612	26,705	0	0	0
Paid in Common Capital	2,411,478	3,363,987	4,605,136	5,706,057	8,040,878
Retained Earnings	(93,845)	(325,477)	(629,953)	(703,188)	(540,751)
Common Dividends	0	0	0	0	0

**Figure 1. Raw Data Input Block for Salesforce Through Fiscal 2016**

The first couple of rows contain some basic company information. This is followed by data for the income statement, the balance sheet and common dividends.

WRDS has a tool that allows you to download complete financial statement for the company and time period of your choice into an Excel spreadsheet. You will first download this data and then cut and paste it into the **Convert WRDS Output** sheet, which will then convert it into the format of the raw data input block above. Here are the steps that you need to follow to do this:

1. Log in to the WRDS site at <https://wrds-web.wharton.upenn.edu/wrds/> (check your business school's electronic library resources to see if it subscribes to WRDS and for log in credentials).
2. Navigate to <https://wrds-web.wharton.upenn.edu/wrds/ds/comp/fundafinstat/index.cfm>

3. Enter the most recently available 5 fiscal years in Step 1 (e.g., 2012 to 2016) and the company ticker in Step 2, and then click 'Submit Query'.
4. Open the resulting output file in Excel and copy the block of cells A1:I386 (note that columns H and I should be blank, but you still need to include them).
5. Open *Datamaker*, select the **Convert WRDS Output** sheet and paste the data block into cell A7 (note that this is equivalent to pasting the block into the range A7:I392). If you did this correctly, the company name should now appear in cell C7, and all the related financial statement data should have copied over too.
6. Now, scroll over to the right of the **Convert WRDS Output** sheet, and you will see the standardized data input block for *eVal* in the range R9:V43. Copy this block of data, open *eVal*, select cell B82 of the **Financial Statements** sheet, and then use the 'Paste Special' command along with the 'Values' option to paste the data block into *eVal* (note that you must use 'Paste Special'-'>'Values' command and not the regular 'Paste' command, as the latter will paste the formulas into *eVal*, which won't work).

If everything went plan, you should be done. We suggest that you scroll back up through *eVal*'s Financial Statements sheet to check that everything looks OK. Is 'Net Income' the same as reported in the corresponding 10-K? Does the balance sheet balance? If so, you are good to go. If not, you will need to revisit steps 1 through 6 to figure out where things went wrong.