



# hanapin marketing

## *Excel PPC Heat Mapping 101*

*Written by Eric Couch  
previous Senior Account Manager*

Data Driven Reach. Human Driven Impact.

# Excel PPC Heat Mapping 101

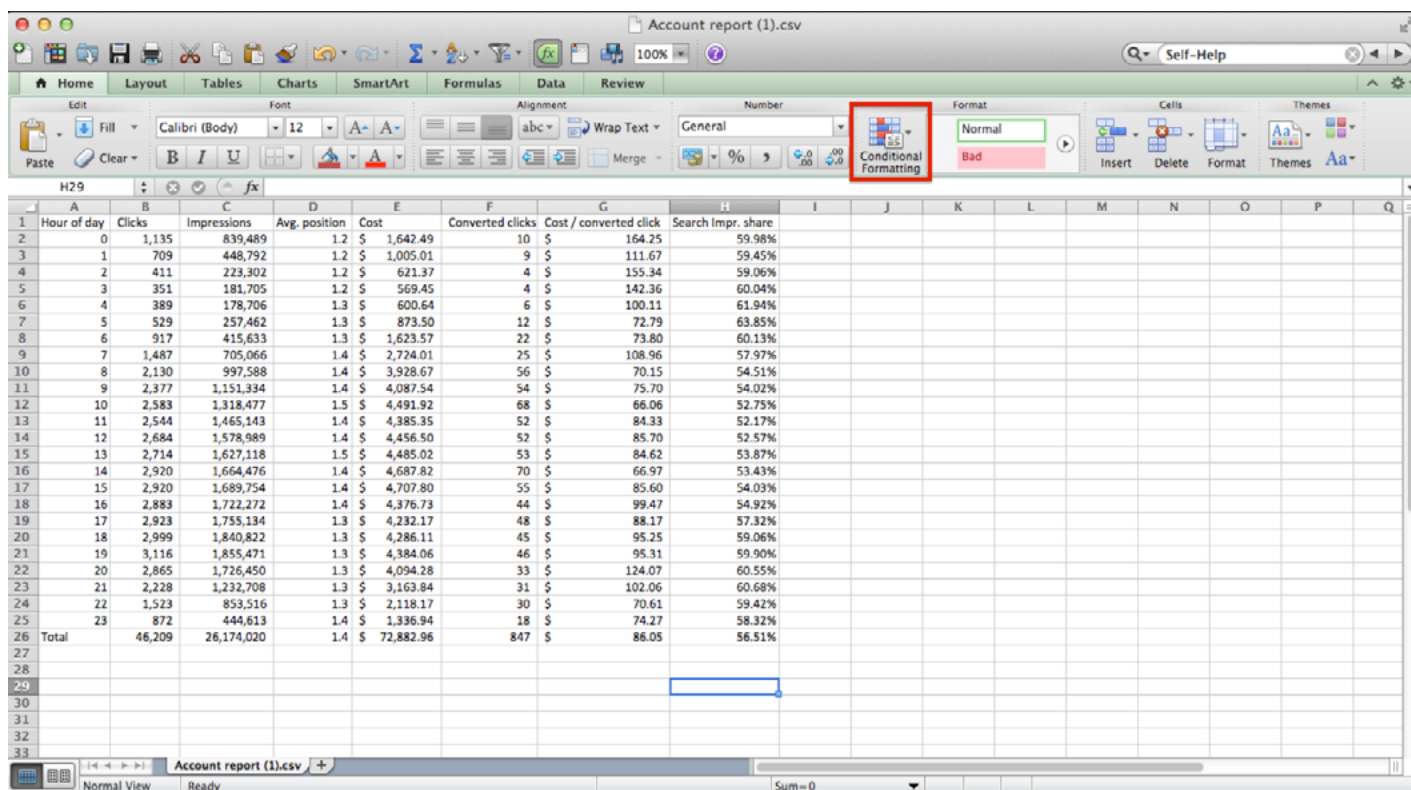
## WHY HEAT MAPPING?

Spreadsheets are hard. For the uninitiated, diving in to an AdWords or Bing-generated Excel file can be an incredibly daunting task. With the number of potential rows and columns in play, you might have to dig through hundreds, thousands, or even millions of cells to find actionable insights in these reports. You can certainly do this, but why would you want to?

There's an easier way to analyze that kind of data. Best of all is that it's fast, it's simple to use, and it's informative– it's an Excel feature called conditional formatting. In this whitepaper, I'll show you how to use it to make a PPC heat map with just a few clicks.

## WHAT IS CONDITIONAL FORMATTING?

Conditional formatting is a function that allows you to automatically change the format of a cell based on its values and the parameters that you define. It can modify text color and format, cell colors, as well as adding data bars and other graphics. For this whitepaper, we're interested in the “cell color” function, but I guarantee that you can find PPC-specific uses for all of them.



The screenshot shows an Excel spreadsheet titled "Account report (1).csv". The ribbon is set to "Home", and the "Conditional Formatting" button in the "Styles" group is highlighted with a red box. The spreadsheet contains data for a PPC campaign, with columns for "Hour of day", "Clicks", "Impressions", "Avg. position", "Cost", "Converted clicks", "Cost / converted click", and "Search Impr. share". The "Cost / converted click" column (G) is highlighted in light blue, indicating that a conditional formatting rule has been applied. The data is organized into rows, with a "Total" row at the bottom of the data set.

Hour of day	Clicks	Impressions	Avg. position	Cost	Converted clicks	Cost / converted click	Search Impr. share
0	1,135	839,489	1.2	\$ 1,642.49	10	\$ 164.25	59.98%
1	709	448,792	1.2	\$ 1,005.01	9	\$ 111.67	59.45%
2	411	223,302	1.2	\$ 621.37	4	\$ 155.34	59.06%
3	351	181,705	1.2	\$ 569.45	4	\$ 142.36	60.04%
4	389	178,706	1.3	\$ 600.64	6	\$ 100.11	61.94%
5	529	257,462	1.3	\$ 873.50	12	\$ 72.79	63.85%
6	917	415,633	1.3	\$ 1,623.57	22	\$ 73.80	60.13%
7	1,487	705,066	1.4	\$ 2,724.01	25	\$ 108.96	57.97%
8	2,130	997,588	1.4	\$ 3,928.67	56	\$ 70.15	54.51%
9	2,377	1,151,334	1.4	\$ 4,087.54	54	\$ 75.70	54.02%
10	2,583	1,318,477	1.5	\$ 4,491.92	68	\$ 66.06	52.75%
11	2,544	1,465,143	1.4	\$ 4,385.35	52	\$ 84.33	52.17%
12	2,684	1,578,989	1.4	\$ 4,456.50	52	\$ 85.70	52.57%
13	2,714	1,627,118	1.5	\$ 4,485.02	53	\$ 84.62	53.87%
14	2,920	1,664,476	1.4	\$ 4,687.82	70	\$ 66.97	53.43%
15	2,920	1,689,754	1.4	\$ 4,707.80	55	\$ 85.60	54.03%
16	2,883	1,722,272	1.4	\$ 4,376.73	44	\$ 99.47	54.92%
17	2,923	1,755,134	1.3	\$ 4,232.17	48	\$ 88.17	57.32%
18	2,999	1,840,822	1.3	\$ 4,286.11	45	\$ 95.25	59.06%
19	3,116	1,855,471	1.3	\$ 4,384.06	46	\$ 95.31	59.90%
20	2,865	1,726,450	1.3	\$ 4,094.28	33	\$ 124.07	60.55%
21	2,228	1,232,708	1.3	\$ 3,163.84	31	\$ 102.06	60.68%
22	1,523	853,516	1.3	\$ 2,118.17	30	\$ 70.61	59.42%
23	872	444,613	1.4	\$ 1,336.94	18	\$ 74.27	58.32%
Total	46,209	26,174,020	1.4	\$ 72,882.96	847	\$ 86.05	56.51%



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## WHY HEAT MAPPING?

Conditional formatting is a standard feature on the home ribbon in most versions of Excel.

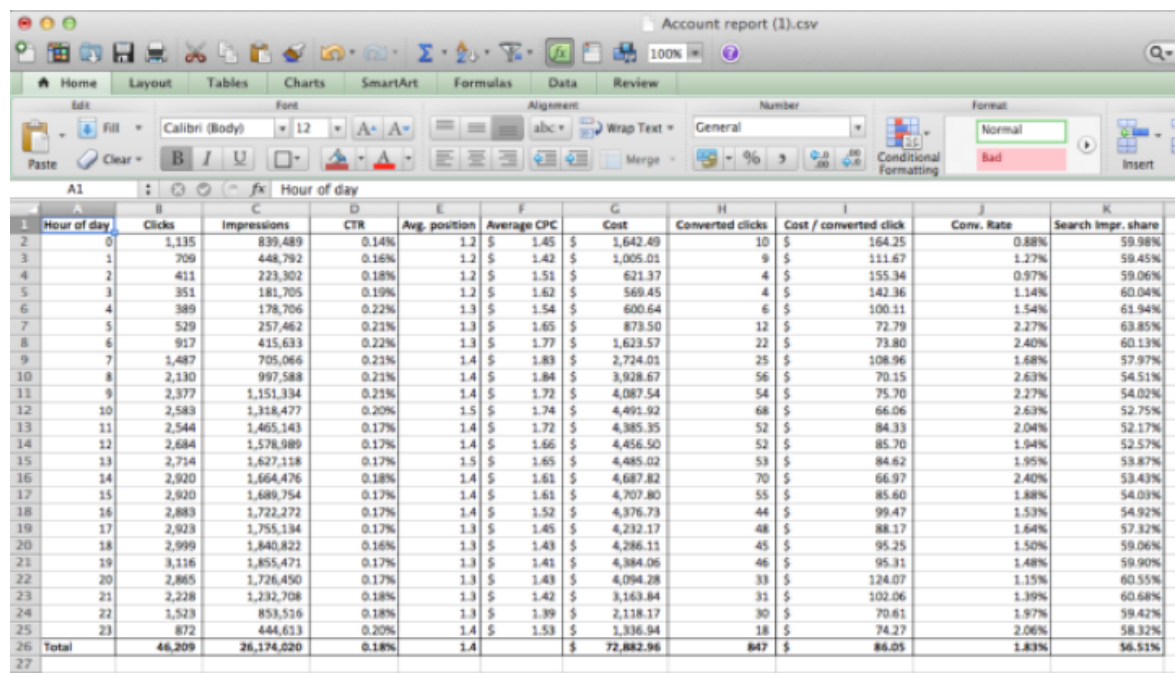
By clicking on the highlighted button above, you are presented with the following options:

- **Highlight Cells Rules:** highlight cells based on their values using Greater Than, Less Than, Equal To, and other parameters. It can also highlight cells with duplicates, dates, and cells that contain specific strings of text.
- **Top/Bottom Rules:** highlight cells that fall in your top and bottom 10 values or percentiles, as well as your above and below average cells.
- **Data Bars:** fill your cells with data bars. The higher the value, the longer the bar. Comes in both gradient and solid bar colors.
- **Color Scales:** change the color of each cell in a gradient scale. You can select which colors you'd like to use, as well as the way in which the color scale progresses (e.g. higher is better, or lower is better).
- **Icon Sets:** much like Color Scales, you can insert colored icons inside your highlighted cells.

These are all of your pre-built options. In each case, you can create custom rules for each formatting variation, or create entirely customized rules that don't conform to any of the ones mentioned above.

## CREATING THE HEAT MAP

To create a heat map, use the following Hour of Day report from the AdWords Dimensions tab as a base:



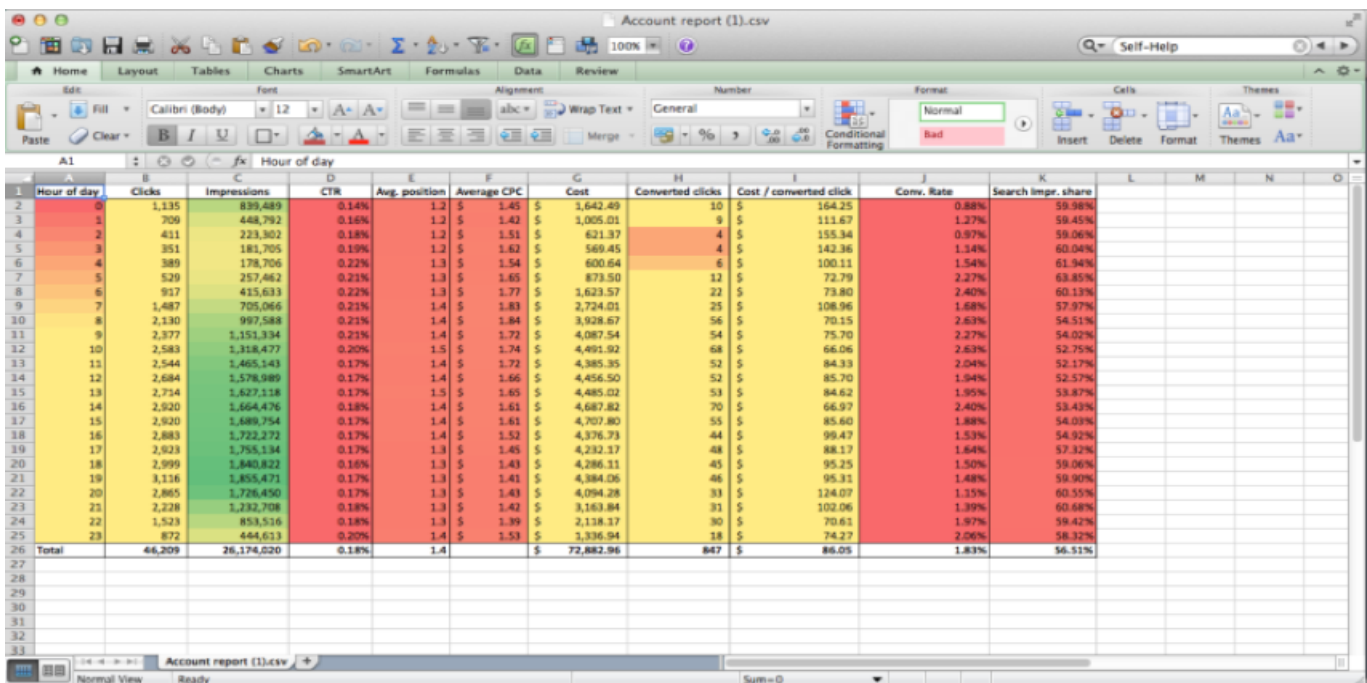
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1	709	448,792	0.16%	1.2	\$ 1.42	\$ 1,005.01	9	\$ 111.67	1.27%	59.45%
2	411	223,302	0.18%	1.2	\$ 1.51	\$ 621.37	4	\$ 155.34	0.97%	59.06%
3	351	181,705	0.19%	1.2	\$ 1.62	\$ 569.45	4	\$ 142.36	1.14%	60.04%
4	389	178,706	0.22%	1.3	\$ 1.54	\$ 600.64	6	\$ 100.11	1.54%	61.94%
5	529	257,462	0.21%	1.3	\$ 1.65	\$ 873.50	12	\$ 72.79	2.27%	63.85%
6	917	415,633	0.22%	1.3	\$ 1.77	\$ 1,623.57	22	\$ 73.80	2.40%	60.13%
7	1,487	705,066	0.21%	1.4	\$ 1.83	\$ 2,724.01	25	\$ 108.96	1.68%	57.97%
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23	872	444,613	0.20%	1.4	\$ 1.53	\$ 1,336.94	18	\$ 74.27	2.06%	58.32%
Total	46,209	26,174,020	0.18%	1.4	\$	\$ 72,882.96	847	\$ 86.05	1.83%	56.51%

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## WHY HEAT MAPPING?

Next, use the Color Scales option found in the conditional formatting interface to apply different colors based on your success metrics for each column.

Word of Caution: Don't highlight and format everything all at once! If you do, it'll look like this:



The screenshot shows an Excel spreadsheet with the following data:

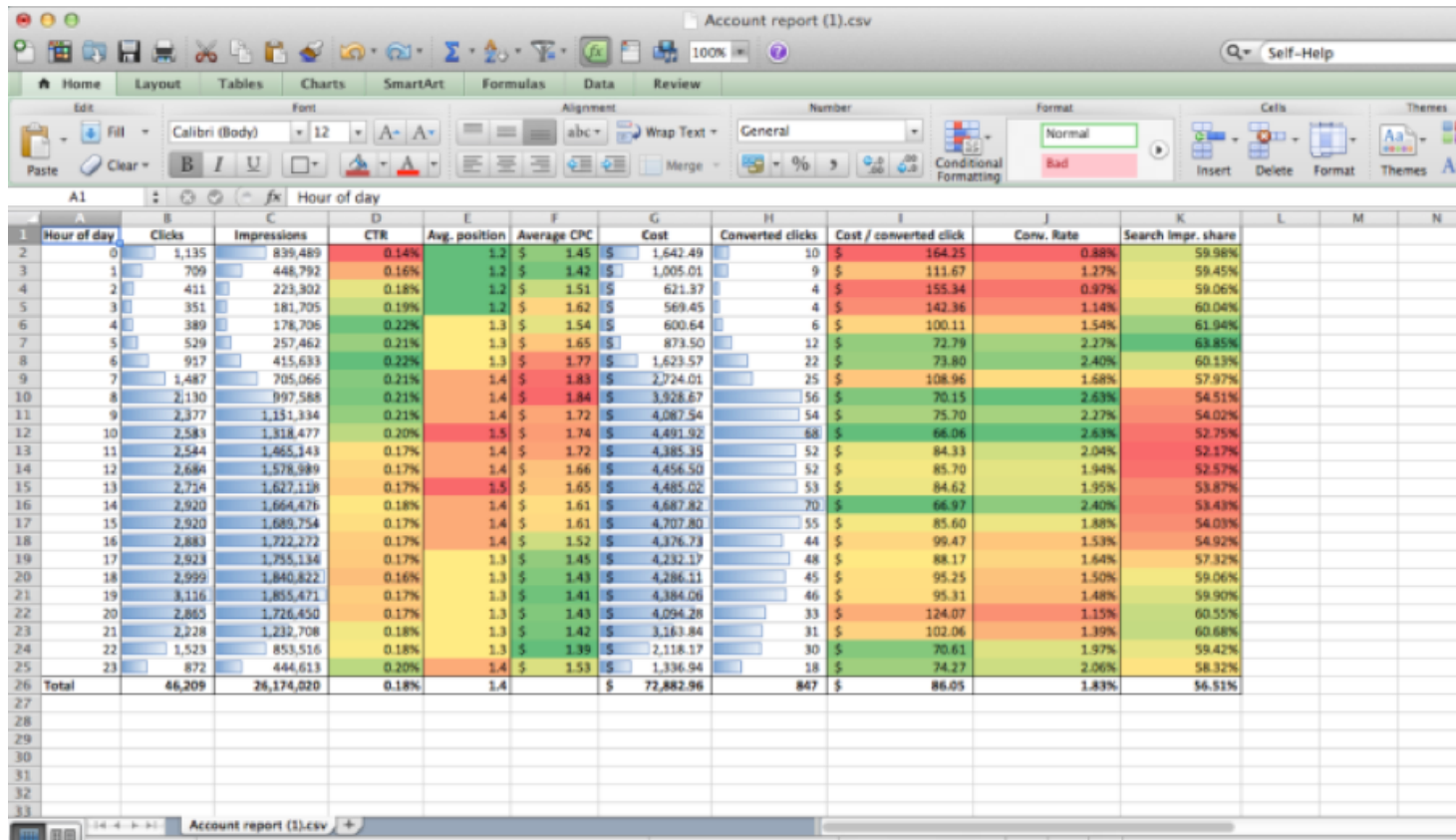
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13	2,734	1,627,118	0.17%	1.5	\$ 1.65	\$ 4,485.02	53	\$ 84.62	1.95%	53.87%
14	2,520	1,664,476	0.18%	1.4	\$ 1.61	\$ 4,687.82	70	\$ 66.97	2.40%	53.43%
15	2,920	1,889,754	0.15%	1.4	\$ 1.81	\$ 4,707.80	55	\$ 85.60	1.88%	54.03%
16	2,883	1,722,272	0.17%	1.4	\$ 1.52	\$ 4,376.73	44	\$ 99.47	1.53%	54.92%
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23	872	444,613	0.20%	1.4	\$ 1.53	\$ 1,336.94	18	\$ 74.27	2.06%	58.32%
Total	44,209	26,174,020	0.18%	1.4	\$	\$ 72,882.96	847	\$ 86.05	1.83%	56.51%

## What NOT To Do When Using Conditional Formatting

If your metrics are on entirely separate scales in comparison to one another – your impressions will dwarf every other number on that sheet, and it won't tell you anything. Some of your success metrics are actually better when they're lower, for instance, like your Cost Per Conversion or Average CPC. Instead, you'll want to highlight each column individually and choose the color scale based on what you're looking for – whether a higher or lower number is better.

# Excel PPC Heat Mapping 101

When done correctly, it should look like this:



Right away, you can identify an immediate opportunity to implement some positive bid modifiers in the hours of 8:00 AM – 11:00 AM. The search impression share takes a hit in those hours, and we see the average CPC rise... and then quickly fall as the average position increases. The competition appears to be heating up then, but the conversion metrics are at their best in these hours, so you can afford to press your advantage.

Conversely, you would probably want to stop advertising from midnight to 4:00 AM. Based on this example, those hours are not good.

## EXCEL HEAT MAPPING MAKES YOUR LIFE EASIER

You could have found those same insights with a little bit of digging, but it is easy to go spreadsheet blind when looking at too many stark white spreadsheets in a row. With this function, you can create an actionable (and presentable) report in a matter of minutes. This can be applied to just about any report– hour of day, day of week, device reports, pivot tables, anything. Start experimenting and see what you can find!

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» SOLUTIONS BLUEPRINT



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