Christopher's: Vizualizing Sales Throughout 2016

Allocate Analytics
July 25, 2018

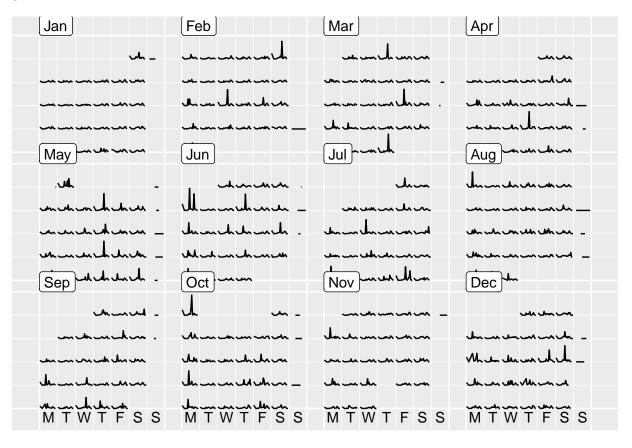
Headline: This document shows sales each hour each day of 2016. It shows them in 3 ways: dollars, checks/tables, and items ordered. Here are the largest takeaways from these charts:

- The biggest trend is the way sales change across a week, i.e. the way a Friday is different from a Thursday is more important than the difference between February and July.
- Based on dollars, dinners are bigger, but based on the number of checks and on the number of items sold lunch is bigger. To a server, the busy-ness might be measured based on tables per hour (checks). To a cook, busy-ness might be measured by the number of individual items prepared. And to a manager, busy-ness might be measured by \$ per hour.
- There are infrequent, large transactions that make most other hours look tiny. I suspect these are catering orders but haven't found anything that distinguishes them that would allow them to be filtered out.

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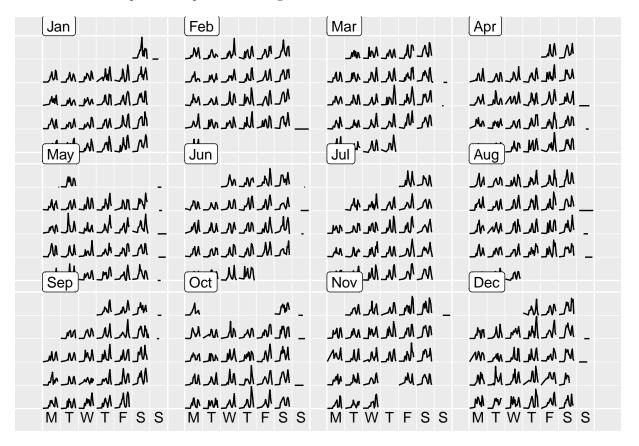
Original Calendar Plot from sales - Plot 1

Some large transactions make certain hours throughout the year so large that everything looks flat. This plot may be helpful in identifying when those huge days and hours are, but isn't helpful in seeing what the regular trends are.



Plot by \$ Without Outliers - Plot 2

Plot 2 is the same as plot 1 except that the largest 1% of checks are removed.



Plot showing volume based on checks - Plot 3

This plot is based on how many checks were entered each hour regardless of the amount of the check.

• This shows that the vast majority of days have more checks entered during lunch than during dinner

Jan	Feb	Mar	Apr
. Vh_	MMMMMM	MMMMMM	[Apr]
MMMMMM	MMMMMM	- WMMMMM	MMMMMM
MMMMMM	MMMMMM	. Mh. Mu Mu Mu Mu Mu	_ MMMMMM_
MMMMMM	_ MMMMMMM_	MMMMMM	- MMMMMM.
May MMMM	Jun	JulhMM	Aug
.M	July M.	MM	MMMMMM
MMMMM -	_ whhhem_	MMMMM	_ whithhim_
_ MMMMMM _	. MMMMMM.	MMMMMM	- MMMMMAL
_ MMMMMM_	MMMMMM	muhhhhm	_ whenever
Sep MMMM.	Oct	Nov	Dec
MMM.	ν ν ₋	_ MMMMM	MMM
. WWW.m.	_ MMMMMM_	MMMMM	_ www.m.m.
MMMMMM	MMMMMM	MMMMMMM	_ MMMMM_
MMMMMMM	_ www.mhm.	NW WILL	MMMMMM
MMMMM MTWTFSS	MMMMMM MTWTFSS	MMM MTWTFSS	MMMMM MTWTFSS

Plot showing volume based on items sold - Plot 4

This plot shows how many items were ordered by hour, and it largely follows the shape of Plot 3, based on number of checks.

[Jan]	Feb	Mar	[Apr]
<u> </u>	MMMLMM	MMMMM	Apr MM
MMMMMM	MMMMMAN	. MMMMMM	MMMMMM
MMMMMM	MNMMLM	. MMMMMM	_MMMMMM
MMMMMM	_MMMMMM_	MMMMMM	. MMMMMM
MayMMMM	Jun	Jul M.M.M	Aug
	MMMM	MM	MMMMMM
MMMMMM	_ MMMMMM	MMMLM	_mmmmm_
- MMMMMM	. MMMMMM.	MMMMMM	- MMMMMM
_ MMMMM	MMMMMM	MMMMM	_ MMMMMM
Sep MMMM.	Oct	MMMM	Dec M
- MMM	Λ	_ MMMMM	MMM
. MMMMM	- MMMMMM	MMMMMM	- MMMMMM
MMMMMM	MMMMMM	MMMMMM	_MMMMMM
MMMMMM	_MMMMMM	nn nh	ramana
MAMAM MTWTFSS	MMMMM MTWTFSS	MAM MTWTFSS	MMMMM MTWTFSS
MTWTFSS	MTWTFSS	MTWTFSS	MTWTFSS