Exploratory Sales Trends - Christophers

Allocate Analytics

July 10, 2018

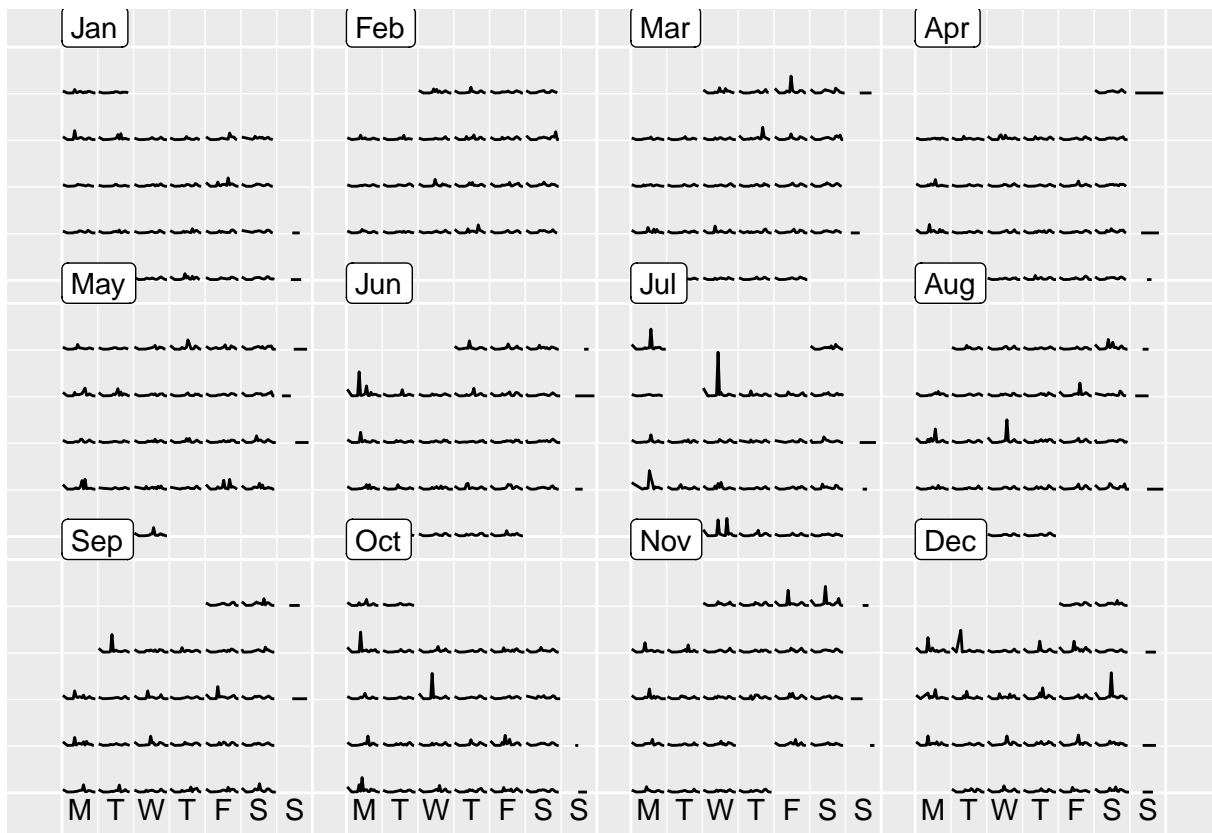**Original Calendar Plot from sales**

```
##   X EMPLOYEE CHECK PERIOD TYPE TYPEID AMOUNT OPENHOUR OPENMIN ORDERHOUR
## 1 1      766     0      0   22      0   0.00        0       0        16
## 2 2      160     0      0   22      0   0.00        0       0        14
## 3 3      160     0      0   21      1  64.65        0       0        00
## 4 4      160 20002      1    1      0   0.00        8      10        08
## 5 5      160 20002      1   10      0   7.00        8      10        08
## 6 6      160 20002      1   11      0   1.00        8      10        08
##   ORDERMIN CLOSEHOUR CLOSEMIN SHIFT COUNT REVENUE TIPEMP UNIT        DOB
## 1       10         3        0     1     0       0    766    1 2017-01-01
## 2       23         2        0     1     0       1    160    1 2017-01-02
## 3       00         0        0     1     0       1    160    1 2017-01-02
## 4       11         8       49     1     1       2    160    1 2017-01-02
## 5       11         8       49     1     7       2    160    1 2017-01-02
## 6       11         8       49     1     1       2    160    1 2017-01-02
##   TYPEID2 OCCASION REVID2 TIPEMPSHFT DRAWERID          Date.Time
## 1       1        1      0          1        0 2017-01-01 16:10:00
## 2       1        1      0          1        0 2017-01-02 14:23:00
## 3       0        1      0          1        0 2017-01-02 00:00:00
## 4       0        1      0          1        0 2017-01-02 08:11:00
## 5       0        1      0          1        0 2017-01-02 08:11:00
## 6       0        1      0          1        0 2017-01-02 08:11:00
##            Date.Round       Date
## 1 2017-01-01 16:00:00 2017-01-01
## 2 2017-01-02 14:00:00 2017-01-02
## 3 2017-01-02 00:00:00 2017-01-02
## 4 2017-01-02 08:00:00 2017-01-02
## 5 2017-01-02 08:00:00 2017-01-02
## 6 2017-01-02 08:00:00 2017-01-02

##               X EMPLOYEE CHECK PERIOD TYPE TYPEID AMOUNT OPENHOUR OPENMIN
## 1389964 1389964     1224 30091      3   51      6  25.80       16      41
## 1389965 1389965     1224 30091      3   52      6  25.80       16      41
## 1389966 1389966     1224 30091      3   53      6  27.67       16      41
## 1389967 1389967     1224 30091      3    1     22   0.00       16      41
## 1389968 1389968      681     0      0   22      0   0.00        0       0
## 1389969 1389969      783     0      0   22      0   0.00        0       0
##         ORDERHOUR ORDERMIN CLOSEHOUR CLOSEMIN SHIFT COUNT REVENUE TIPEMP
## 1389964        16       42        17        7     1     1       1   1224
## 1389965        16       42        17        7     1     1       1   1224
## 1389966        16       42        17        7     1     1       1   1224
## 1389967        16       42        17        7     1     1       1   1224
## 1389968        15       11         3        0     1     0       0    681
## 1389969        08       53         3        0     1     0       0    783
##         UNIT        DOB TYPEID2 OCCASION REVID2 TIPEMPSHFT DRAWERID
## 1389964    1 2017-12-30       1        1      0          1        0
```

```
## 1389965    1 2017-12-30        0         1        0         1        0
## 1389966    1 2017-12-30        0         1        0         1        0
## 1389967    1 2017-12-30        0         1        0         1        0
## 1389968    1 2017-12-31        1         1        0         1        0
## 1389969    1 2017-12-31        1         1        0         1        0
##                     Date.Time           Date.Round         Date
## 1389964 2017-12-30 16:42:00 2017-12-30 16:00:00 2017-12-30
## 1389965 2017-12-30 16:42:00 2017-12-30 16:00:00 2017-12-30
## 1389966 2017-12-30 16:42:00 2017-12-30 16:00:00 2017-12-30
## 1389967 2017-12-30 16:42:00 2017-12-30 16:00:00 2017-12-30
## 1389968 2017-12-31 15:11:00 2017-12-31 15:00:00 2017-12-31
## 1389969 2017-12-31 08:53:00 2017-12-31 08:00:00 2017-12-31
```



```
##           Date.Round       Date    AMOUNT
## 1 2017-07-05 10:00:00 2017-07-05 121058.70
## 2 2017-12-16 11:00:00 2017-12-16  72022.35
## 3 2017-10-11 09:00:00 2017-10-11  70249.21
## 4 2017-06-05 08:00:00 2017-06-05  66544.05
## 5 2017-08-16 13:00:00 2017-08-16  63036.32
## 6 2017-12-05 06:00:00 2017-12-05  60654.45
```

Plot by $ Without Outliers

```
##   CHECK        DOB  AMOUNT TRANSACTIONID
## 1     0 2017-01-01    0.00             1
## 2     0 2017-01-02 7808.20             2
```

```
## 3 10001 2017-01-02 118.63              3
## 4 10003 2017-01-02  71.74              4
## 5 10004 2017-01-02 145.72              5
## 6 10005 2017-01-02  65.68              6

##      99%
## 2485.095

## [1] 77384     4

## [1] 113873

## [1] 76610     4

## [1] 2483.65

##   CHECK         DOB AMOUNT TRANSACTIONID
## 1     0 2017-01-01   0.00             1
## 2 10001 2017-01-02 118.63             3
## 3 10003 2017-01-02  71.74             4
## 4 10004 2017-01-02 145.72             5
## 5 10005 2017-01-02  65.68             6
## 6 10006 2017-01-02 158.73             7

##    CHECK        DOB      X EMPLOYEE PERIOD TYPE TYPEID AMOUNT OPENHOUR
## 1      0 2017-01-01      1      766      0   22      0      0        0
## 2      0 2017-01-08  23936      783      0   22      0      0        0
## 3      0 2017-01-15  48827      783      0   22      0      0        0
## 4      0 2017-01-22  75799      783      0   22      0      0        0
## 5      0 2017-01-22  75798      766      0   22      0      0        0
## 6      0 2017-01-22  75797      681      0   22      0      0        0
## 7      0 2017-01-29 100784      681      0   22      0      0        0
## 8      0 2017-01-29 100783      206      0   22      0      0        0
## 9      0 2017-01-29 100785      766      0   22      0      0        0
## 10     0 2017-01-29 100786      783      0   22      0      0        0
## 11     0 2017-02-05 125391      783      0   22      0      0        0
## 12     0 2017-02-12 151462      783      0   22      0      0        0
## 13     0 2017-02-19 178213      766      0   22      0      0        0
## 14     0 2017-02-26 205923      783      0   22      0      0        0
## 15     0 2017-03-05 232789      480      0   22      0      0        0
## 16     0 2017-03-05 232790      783      0   22      0      0        0
## 17     0 2017-03-12 261049      783      0   22      0      0        0
## 18     0 2017-03-19 287862      681      0   22      0      0        0
## 19     0 2017-03-26 314399      681      0   22      0      0        0
## 20     0 2017-03-26 314400      783      0   22      0      0        0
##    OPENMIN ORDERHOUR ORDERMIN CLOSEHOUR CLOSEMIN SHIFT COUNT REVENUE
## 1        0        16       10         3        0     1     0       0
## 2        0        10       13         3        0     1     0       0
## 3        0        10       00         3        0     1     0       0
## 4        0        10       33         3        0     1     0       0
## 5        0        15       43         3        0     1     0       0
## 6        0        15       45         3        0     1     0       0
## 7        0        16       57         3        0     1     0       0
## 8        0        09       49         3        0     1     0       0
## 9        0        16       57         3        0     1     0       0
## 10       0        09       33         3        0     1     0       0
## 11       0        08       19         3        0     1     0       0
```
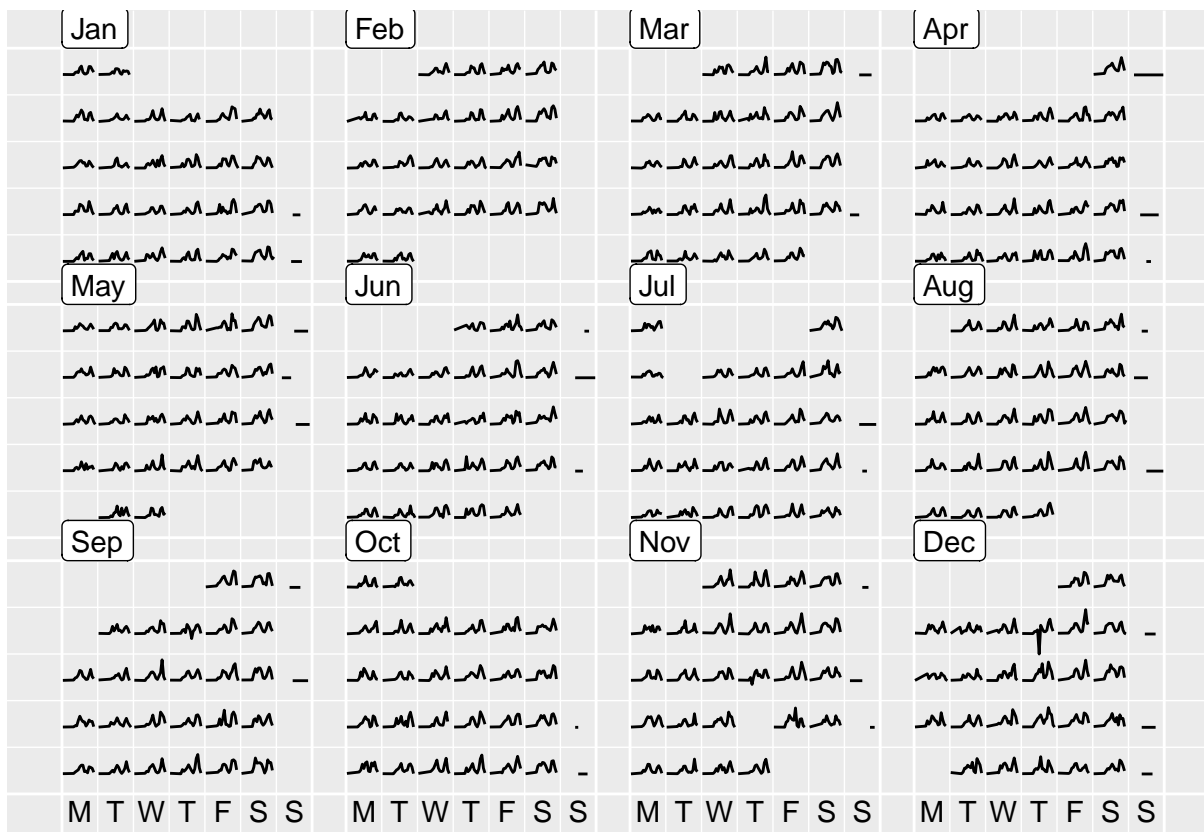
```
## 12         0         10        08         3         0         1         0         0
## 13         0         11        50         3         0         1         0         0
## 14         0         12        00         3         0         1         0         0
## 15         0         17        46         2         0         1         0         0
## 16         0         09        22         3         0         1         0         0
## 17         0         13        16         3         0         1         0         0
## 18         0         11        47         3         0         1         0         0
## 19         0         03        00         1         0         1         0         0
## 20         0         09        06         3         0         1         0         0
##    TIPEMP UNIT TYPEID2 OCCASION REVID2 TIPEMPSHFT DRAWERID
## 1     766    1       1        1      0          1        0
## 2     783    1       1        1      0          1        0
## 3     783    1       1        1      0          1        0
## 4     783    1       1        1      0          1        0
## 5     766    1       1        1      0          1        0
## 6     681    1       1        1      0          1        0
## 7     681    1       1        1      0          1        0
## 8     206    1       1        1      0          1        0
## 9     766    1       1        1      0          1        0
## 10    783    1       1        1      0          1        0
## 11    783    1       1        1      0          1        0
## 12    783    1       1        1      0          1        0
## 13    766    1       1        1      0          1        0
## 14    783    1       1        1      0          1        0
## 15    480    1       1        1      0          1        0
## 16    783    1       1        1      0          1        0
## 17    783    1       1        1      0          1        0
## 18    681    1       1        1      0          1        0
## 19    681    1       1        1      0          1        0
## 20    783    1       1        1      0          1        0
##               Date.Time          Date.Round       Date TRANSACTIONID
## 1  2017-01-01 16:10:00 2017-01-01 16:00:00 2017-01-01             1
## 2  2017-01-08 10:13:00 2017-01-08 10:00:00 2017-01-08          1318
## 3  2017-01-15 10:00:00 2017-01-15 10:00:00 2017-01-15          2707
## 4  2017-01-22 10:33:00 2017-01-22 10:00:00 2017-01-22          4191
## 5  2017-01-22 15:43:00 2017-01-22 15:00:00 2017-01-22          4191
## 6  2017-01-22 15:45:00 2017-01-22 15:00:00 2017-01-22          4191
## 7  2017-01-29 16:57:00 2017-01-29 16:00:00 2017-01-29          5603
## 8  2017-01-29 09:49:00 2017-01-29 09:00:00 2017-01-29          5603
## 9  2017-01-29 16:57:00 2017-01-29 16:00:00 2017-01-29          5603
## 10 2017-01-29 09:33:00 2017-01-29 09:00:00 2017-01-29          5603
## 11 2017-02-05 08:19:00 2017-02-05 08:00:00 2017-02-05          6980
## 12 2017-02-12 10:08:00 2017-02-12 10:00:00 2017-02-12          8430
## 13 2017-02-19 11:50:00 2017-02-19 11:00:00 2017-02-19          9925
## 14 2017-02-26 12:00:00 2017-02-26 12:00:00 2017-02-26         11465
## 15 2017-03-05 17:46:00 2017-03-05 17:00:00 2017-03-05         12978
## 16 2017-03-05 09:22:00 2017-03-05 09:00:00 2017-03-05         12978
## 17 2017-03-12 13:16:00 2017-03-12 13:00:00 2017-03-12         14564
## 18 2017-03-19 11:47:00 2017-03-19 11:00:00 2017-03-19         16064
## 19 2017-03-26 03:00:00 2017-03-26 03:00:00 2017-03-26         17541
## 20 2017-03-26 09:06:00 2017-03-26 09:00:00 2017-03-26         17541
```

Jan   Feb   Mar   Apr

May   Jun   Jul   Aug

Sep   Oct   Nov   Dec

M T W T F S S   M T W T F S S   M T W T F S S   M T W T F S S

Plot showing volume based on checks