# **EDA of JD data**

#### basic statistic of JD data

#### user info

### id unique

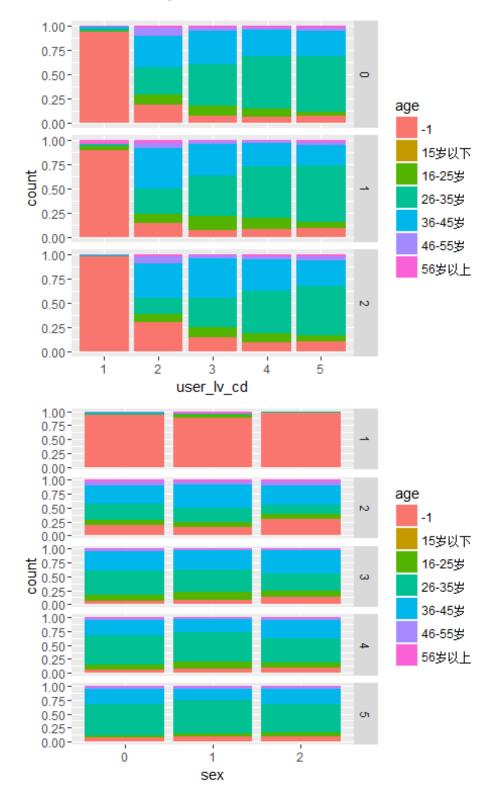
```
## [1] TRUE
```

### data sample

user_id	age	sex	user_lv_cd	user_reg_dt
54	-1	2	1	2016-01-26
79	36-45 岁	2	2	2016-01-27
100	16-25 岁	2	3	2016-01-27
266	15 岁以下	2	2	2016-01-29
333	-1	2	4	2016-01-30
605	26-35 岁	2	2	2016-02-01

## basic summary

```
user id
##
                                           user_lv_cd
                        age
                                  sex
## Min.
                 -1
                       :12803
                                  0:45547
                                           1: 2328
## 1st Qu.: 25905 15 岁以下: 6
                                  1: 7585
                                           2: 7519
## Median: 51809 16-25岁: 7999 2:50484
                                           3:21689
##
                  26-35 岁 :46525
   Mean : 51809
                                           4:32205
                  36-45 岁 :30828
   3rd Qu.: 77712
                                           5:39875
##
## Max. :103616
                  46-55 岁 : 3407
                  56 岁以上: 2048
##
##
   user_reg_dt
   Min. :2003-06-12
   1st Qu.:2011-11-12
##
## Median :2013-06-04
## Mean :2013-04-11
   3rd Qu.:2015-01-05
##
## Max. :2016-11-29
```



#### comments info

### id unique

## [1] FALSE

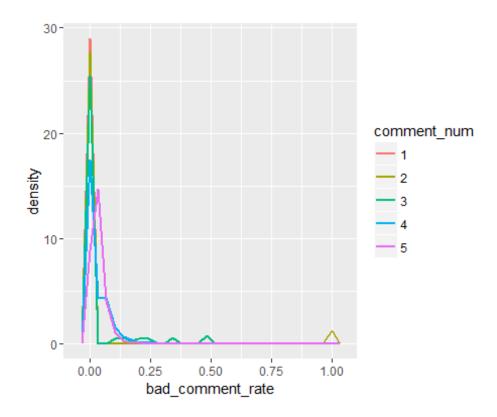
#### data sample

dt	sku_id	comment_num	has_bad_comment	bad_comment_rate
NA	166731	1	0	0
NA	143220	1	0	0
NA	145770	1	0	0
NA	68950	1	0	0
NA	88805	1	0	0
2016-02-01	115070	3	1	0

#### basic summary

```
##
         dt
                                       comment_num has_bad_comment
                           sku id
## Min.
                                                  0:124684
          :2016-02-01
                       Min.
                                       1:124684
## 1st Qu.:2016-02-13
                       1st Qu.: 43764
                                       2:107403
                                                  1:284736
   Median :2016-03-06
                       Median : 85949
                                       3:117270
## Mean :2016-03-05
                       Mean : 85902
                                       4: 41719
   3rd Qu.:2016-03-26
                       3rd Qu.:127914
##
                                       5: 18344
                       Max. :171230
   Max.
        :2016-04-15
## NA's
        :124684
## bad comment rate
##
   Min.
         :0.00000
##
   1st Qu.:0.00000
## Median :0.00000
## Mean :0.02589
## 3rd Qu.:0.00000
## Max. :1.00000
##
```

```
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```



# product info

## id unique

## [1] TRUE

## data sample

sku_id	attr1	attr2	attr3	cate	brand	popbrand
166731	1	-1	-1	8	545	545
146488	2	2	-1	8	812	812
70546	3	1	1	8	214	214
92487	2	2	-1	8	812	812
113065	2	2	-1	8	812	812
80307	2	2	-1	8	812	812

### basic summary

```
sku_id
##
                   attr1
                             attr2
                                        attr3
                                                  cate
                             -1: 4050
                                        -1: 3815
                                                  8:24187
##
   Min.
                   -1: 1701
##
   1st Qu.: 42476
                   1 : 4760
                             1:13513
                                        1:8394
   Median : 85616
##
                   2:3582
                             2:6624
                                        2:11978
   Mean : 85399
                   3:14144
##
   3rd Qu.:127774
##
##
   Max. :171224
##
```

```
## brand popbrand

## 489 :6637 214 :6444

## 214 :6444 489 :6637

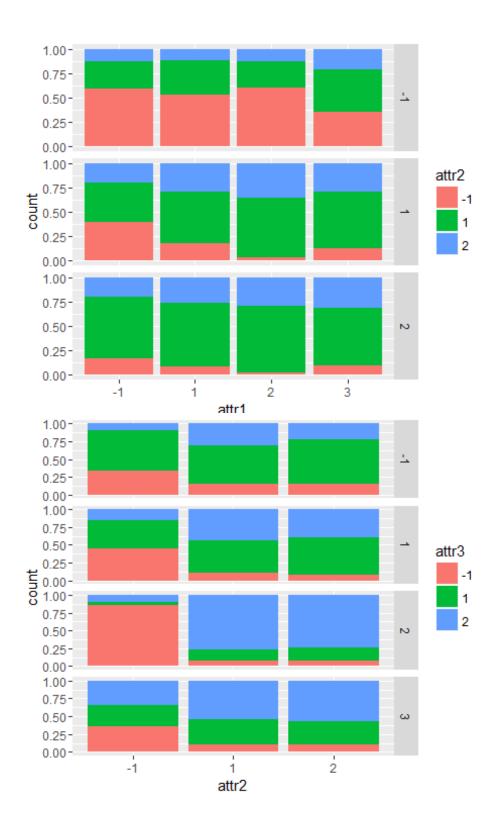
## 623 :1101 545 : 945

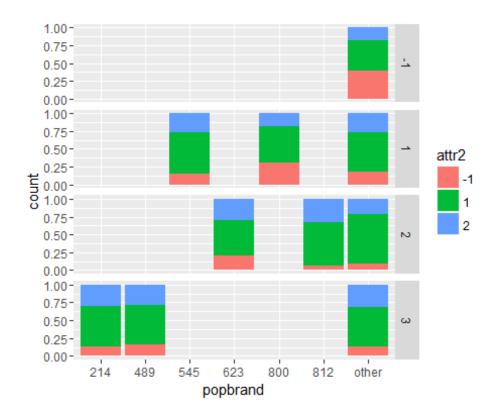
## 812 :1061 623 :1101

## 800 :1015 800 :1015

## 545 : 945 812 :1061

## (Other):6984 other:6984
```





act info
str(JData\_Action\_201603) ###data sample

	user_id sku_id		time	model_id	type	cate	brand	popbrand
1	70062	168043	2016-03-01	nothit	点击	6	269	other
2	70062	168043	2016-03-01	nothit	点击	6	269	other
3	70062	168043	2016-03-01	nothit	点击	6	269	other
4	70062	168043	2016-03-01	nothit	点击	6	269	other
6	70062	168043	2016-03-01	nothit	点击	6	269	other
7	70062	168043	2016-03-01	nothit	点击	6	269	other

# basic summary

##	user	`_:	id	skı	ı_i	ld	ti	lme	mode	el_id
## 488	Min.	:	1	Min.	:	2	Min.	:2016-02-29	nothit	:2451
## 581	1st Qu.	:	26043	1st Qu.	:	41009	1st Qu.	:2016-03-02	0	:1874
## 172	Median	:	50260	Median	:	79636	Median	:2016-03-04	216	: 711
##	Mean	:	51274	Mean	:	83455	Mean	:2016-03-04	217	: 549

413											
##	3rd Qu.	.: 76	723	3rd Qu	.:1269	58 3r	d Qu.:2	2016-03-06	218	: 478	
449											
##	Max.	:103	616	Max.	:1712	25 Ma:	x. :2	2016-03-08	27	: 242	
338											
##									(Other	^):1027	
896											
##		typ	e		cat	cate		brand	popbrand		
##	点击	:4	498997	1 8	:3	3005654	214	: 943264	489	: 826	
176											
##	购物车册	削除:	44177	7 4	:1	298803	489	: 826176	545	: 3957	
75											
##	关注	:	2179	9 6	:	881628	306	: 733816	640	: 204	
122											
##	加购	:	10368	0 5	:	743506	545	: 395775	693	: 193	
327											
##	浏览	::	216850	9 9	:	687693	800	: 321297	800	: 321	
297											
##	下单	:	720	1 7	:	627958	885	: 302303	885	: 302	
303											
##				(0	ther):	90095	(Oth	ner):3812706	othe	er:5092	
337											

