

用户反馈挖掘

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用户反馈,留言有很高的价值. 我们往往能发现

产品设计反馈

潜在用户需求

度量产品吸引力



ebaytm

Tell us what you think



响应迅速

示例反馈收集页面



eBay Buyer Protection [Learn more](#)

Thank you for taking the time to complete this short survey! To help us protect your privacy, please do not include personal information, such as your e-mail or eBay user IDs. For support, please visit [Help Center](#).

How effective was this page in helping you find items or information that you are interested in?

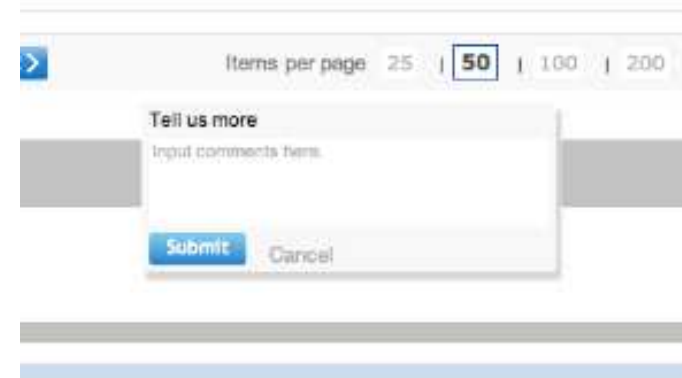
Very Ineffective	Somewhat Ineffective	Neither Effective Nor Ineffective	Somewhat Effective	Very Effective	Don't Know / N/A
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Tell us how we can improve:

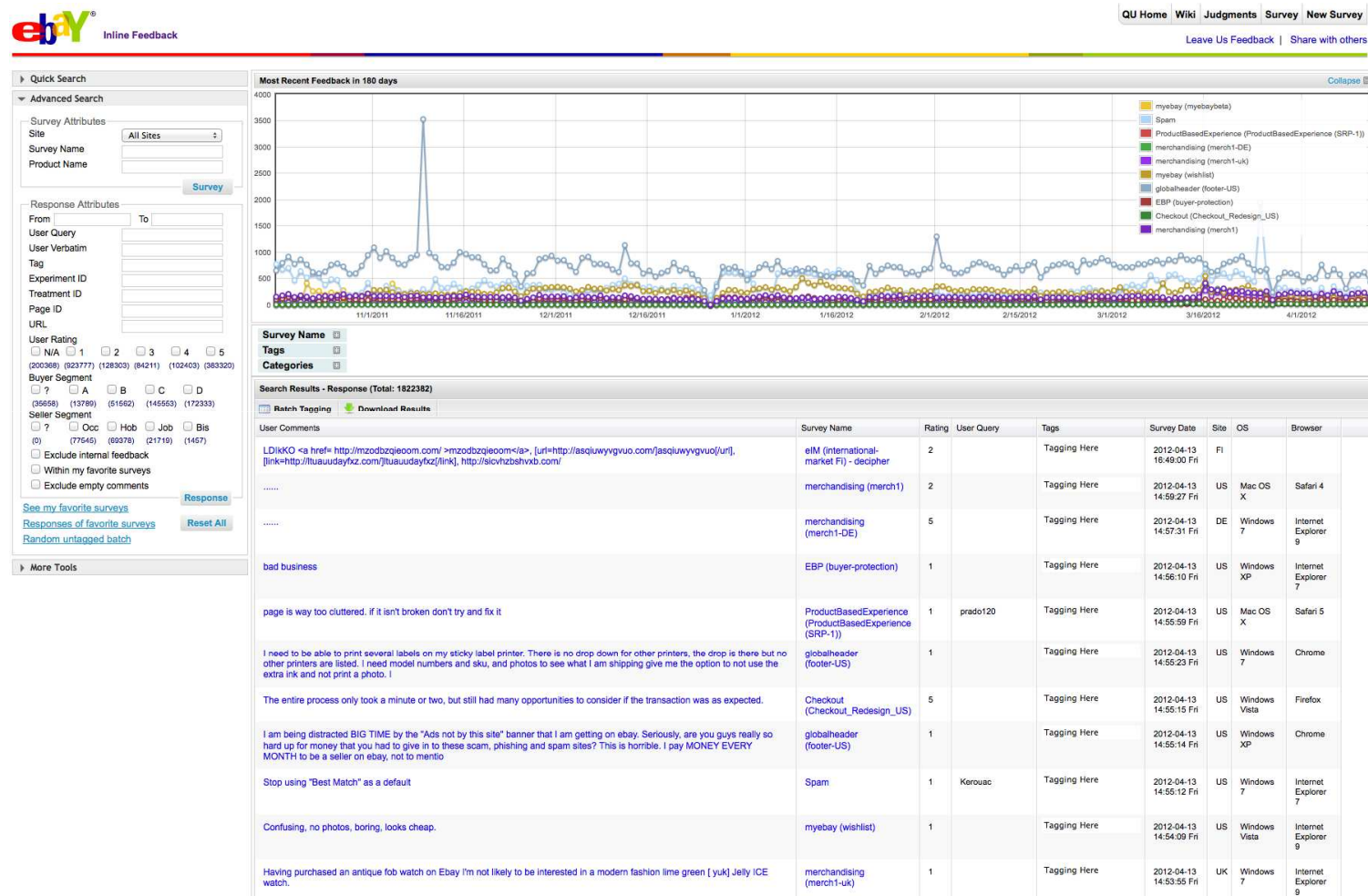
2000 characters left

By using this feature and submitting feedback, suggestions or enhancements, you assign to eBay all right, title and interest to all associated proprietary rights worldwide, including without limitation, all patent, copyright, trade secret, trademark, moral right, rights of publicity, or other intellectual property rights.

Finish



用户意见中心



用户意见详细信息

Response Detail

qu/surveyresponse/response.jsp#respld=5012678352

ebay

Inline Feedback

Share with others

QUHome

Survey(Old)

Judgment

Garden

Wholepage

SideBySide

HeatMap

Wiki

About us

search

inline

Show Related Session

Survey Response

Jan 25, 2012 1:20:46 PM

How effective was this eBay search results page in helping you accomplish what you came to the page to do?

★★★★★

What can ebay do to make it easier for you to look for items?

The completed items search needs to go back much more in time than it does. It is one of the best tools we have to determine actual value of an item before we buy inventory to sell on ebay.

Survey Specific Info:

IP Address

184.174.135.244

User Location

User Agent

OS Windows XP
Browser Chrome
Device Desktop

User Query

320p4w

Survey Date

2012-01-25 13:20:46

User Information

All DW data collected within last 12 months

Buyer Segment

Primary Buying Category

GMB

B

Sporting Goods

2628.2

Seller Segment

Primary Selling Category

GMV

.JohnSlr

Business (Office & Industrial)

48496.96

User Experiment Information

MORE

Experiment

Treatment

BM_12_1A Playground

MLR SaleOrBMScore FullRecall 3

Shopping Cart - US Beta

No layer BIN buttons

OCS_DISABLE_VA_US

Survey widget / Text ads test

With Survey

Tagging

Select a Tag Type: Categories

Input Tag Name: Tagging Here

Source Page

Page

Snapshot

http://www.ebay.com/cso/i.html?_nkw=320p4w&_in_kw=1&_ex_kw=&_sacat=See-All-Categories&_okw=320p4w&_oekw=&_adv=1&LH_Complete=1&_udlo=&_udhi=&_samilow=&_samihl=&_sads=200&_fpos=Zip code&_fsc=&LH_SALE_CURRENCY=0&_sop=12&_dmd=1&_jpg=50

Go My eBay Sell

ebay

Hi, barrettradingcompany! (Sign out)

CATEGORIES ELECTRONICS FASHION MOTORS TICKETS DEALS CLASSIFIEDS

320p4w All Categories

2 results found for 320p4w Save search

Preferences: Completed listings See only active listings Edit preferences Clear preferences

Categories

Business & Industrial (2)

Electrical & Test Equipment (2)

Clear all refinements

Condition

New (2) Choose more

Price

\$ to \$

Seller

eBay Top-rated sellers Specify sellers

Buying formats

Auction Buy It Now Choose more

Show only

Expedited shipping Returns accepted Free shipping

Completed listings Choose more Clear

All items Auctions only Buy It Now

View as: Grid List

Sort by: Find Date

"NEW" Hubbell Pin&Sleeve HBL320P4W Plug 20A 125vac 2Pole 3Wire

Top-rated seller

Returns: Accepted within 7 days View similar active items | Sell one like this





Leviton Pin & Sleeve 20A 125V Watertight Plug 3W 320P4W

Top-rated seller

Returns: Accepted within 30 days View similar active items | Sell one like this

Page 1 of 1

通过挖掘用户反馈得到的产品改进意见

	时尚频道 – 用户希望增加某些搜索过滤选项	产品部门重新设计和发布此项功能
	购物车支付过程复杂	用户反馈帮助产品部门重新设计了流程
	调整了物品页面图片大小	用户反馈用于验证此改进是否受用户欢迎
	重新设计的汽车频道易用性有问题	通过用户反馈分析,找到原因

摘取部分用户反馈

Be more item specific on searches, was looking for a specific **truck bed** and had to surf over 50 pages due to **unnecessary accessories** that I did not want to start with.

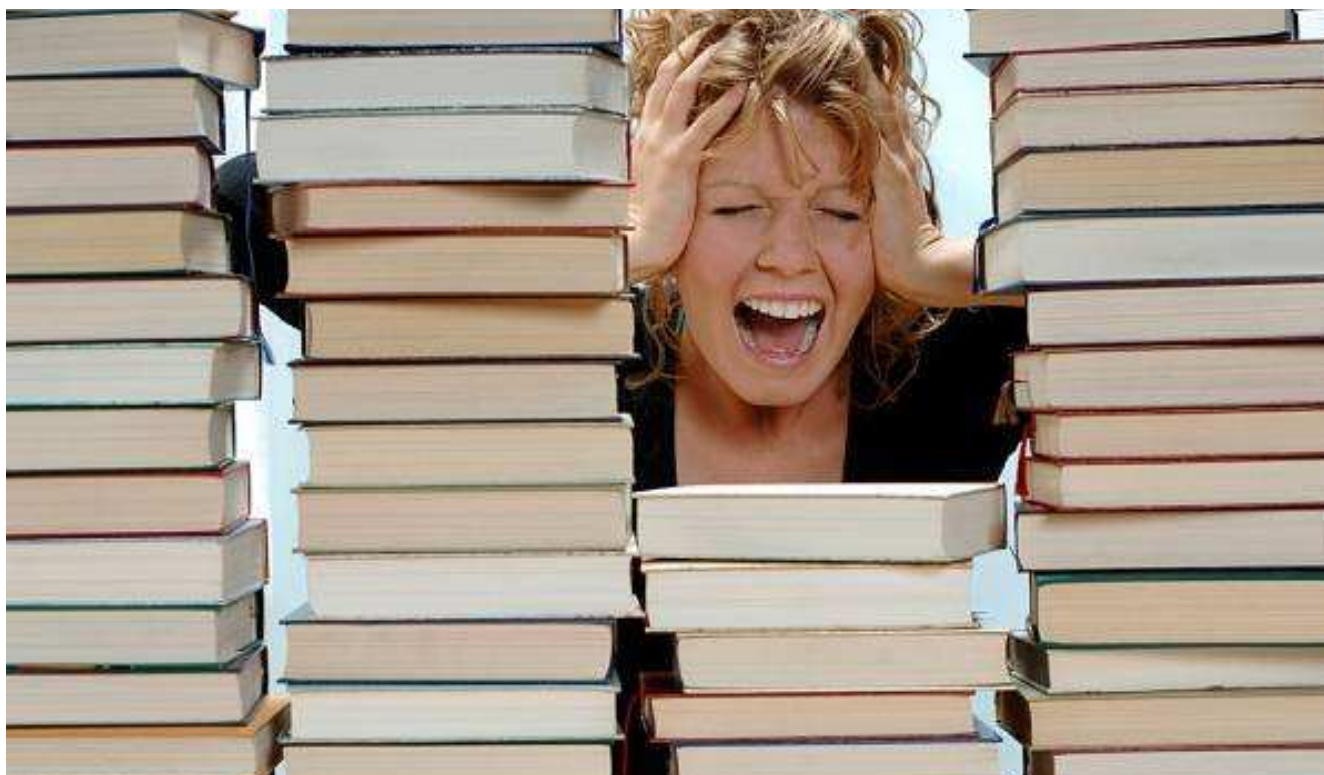
i was disappointed that every time i put in a search for a aroma **rice cooker** glass cover or lid i got listings for the entire cooker instead of the **replacement lid**. i searched for several hours. (to no avail)

would be nice to be able to search just completed listings that sold so we could skip all the overpriced crap that expires unsold over and over again

i am looking for **a doll** artist named martha thompson. i am looking in dolls. so why does it keep showing me **sheets**? i martha stewart sheets? if i wanted bed linens i wouldn't be looking in dolls!

产品部门面临的挑战

- 为数众多的用户反馈信息,以百万为单位记的增长,工作量大
- 如何抽取真正有价值的信息



分类结果

Product:SFE

(2012-07-30 - 2012-08-06)

[Features](#) [Relevance](#) [Usability](#) [Survey](#) [Dash Board](#)


▼ Feature Request

Thne wasted space taken up by the huge pictures obfuscates the title and subtitle of the auction, very much making my eyes angry. Please, for the love of all things holy, make this stop before I mail you people a bag of dog mess.

☆☆ 2012-08-05 23:38 1 day ago

I like how the completed listings and sold listings are separate now. However, I liked it much more when it showed the average price an item sells for. Example: Playstation 3 games. You could look up a title.. check an auction.. it would say sell similar item then under that the average it sells for. Since the new search page has come I no longer see this and I've checked multiple game listings.. would definitely be nice to have this feature back! Also when searching game listings... I have to click the *see all* just so I can choose playstation 3... why on the left does it show ps1 and ps2 but not 3 unless I put see all? Playstation 3 is much hotter then the ps1 and ps2 titles... I would think that would be in the quick search feather over those titles... Just my thoughts! I'd love it more tho if the average selling price was put back on!

☆☆☆ 2012-08-05 23:15 1 day ago

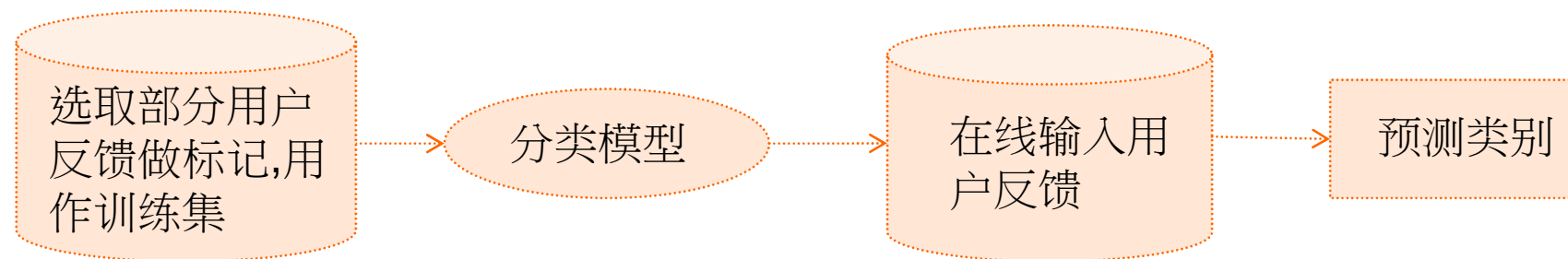


文本分类问题－流程

按照预定的话题分类

- 通过和各个产品部门沟通,预先设定了感兴趣的话题
- 初步阅读随机抽取的部分用户反馈,对预定话题做调整
- 目标是
 - 将所有的用户反馈内容分成数类,包括
 - 用户的功能要求
 - 搜索排序问题
 - 产品易用性
 - ...

多重标签分类 – 第一阶段



I hate when you change the format-makes shopping too confusing and I tend not to visit eBay as much. Please either give the option of using the new or old.

- 多重标记: “可用性”, “功能需求”
- 对每个类别做二元分类

id	verbatim	spam	feature	relevance	usability	m2m	bug	policy	transaction	cs	item	emotion
1314504	have you got a current driving licence? <a href=	1	0	0	0	0	0	0	0	0	0	0
1314506	i'm on holiday <a href= http://ayliusopo.d	1	0	0	0	0	0	0	0	0	0	0
1314508	i'm a partner in <a href= http://www.bha	1	0	0	0	0	0	0	0	0	0	0
1314510	other amount <a href= http://yfuusuyj.de.tl &g	1	0	0	0	0	0	0	0	0	0	0
5018665436	i am not able to send a message to the seller. i kee	0	0	0	0	0	0	0	0	1	0	0
5018666047	at least we can email to listen what other people h	0	0	0	0	0	0	0	0	0	0	0
5018667160	i want to buy this item , what should i do?	0	0	0	0	1	0	0	0	0	0	0
501866775	when delivering to a foreign country, in order to m	0	0	0	0	0	0	0	0	1	0	0

多标记分类模型

- 将标记数据表示为

$$(x_1, y_1) \dots (x_m, y_m)$$

x 为用户反馈文本的特征信息; y 是类别标记

初始标记数据 – 万条数量级

- 寻找预测函数 – 充分利用计算能力, 选择random forest

$$f: x \rightarrow y$$

- 定义文本 x 的特征 *



理解反馈具体内容 – 文本特征生成

R 中文本的处理

$f(\text{Hey once I figured it out, it's pretty cool....disregard my other crappy comment}) = y$

$f(\text{hey, once, I, figured, it, out, it's, pretty, cool, disregard, my, other, crappy, comment}) = y$

单词分割, 处理大小写, 取出无意义单词, 词根

特征抽取

- 词频 – 寻找出现频率较高的词作为特征词
- 句长 – 长句子更有实际价值
- 强烈语气词 (连续标点, 大写), 能反映用户满意度
 - AWESOME!!!
- 垃圾信息检验 – 去除无效信息
 - Have you got a current driving licence?
 - “<http://xnnx.createblog.com>”

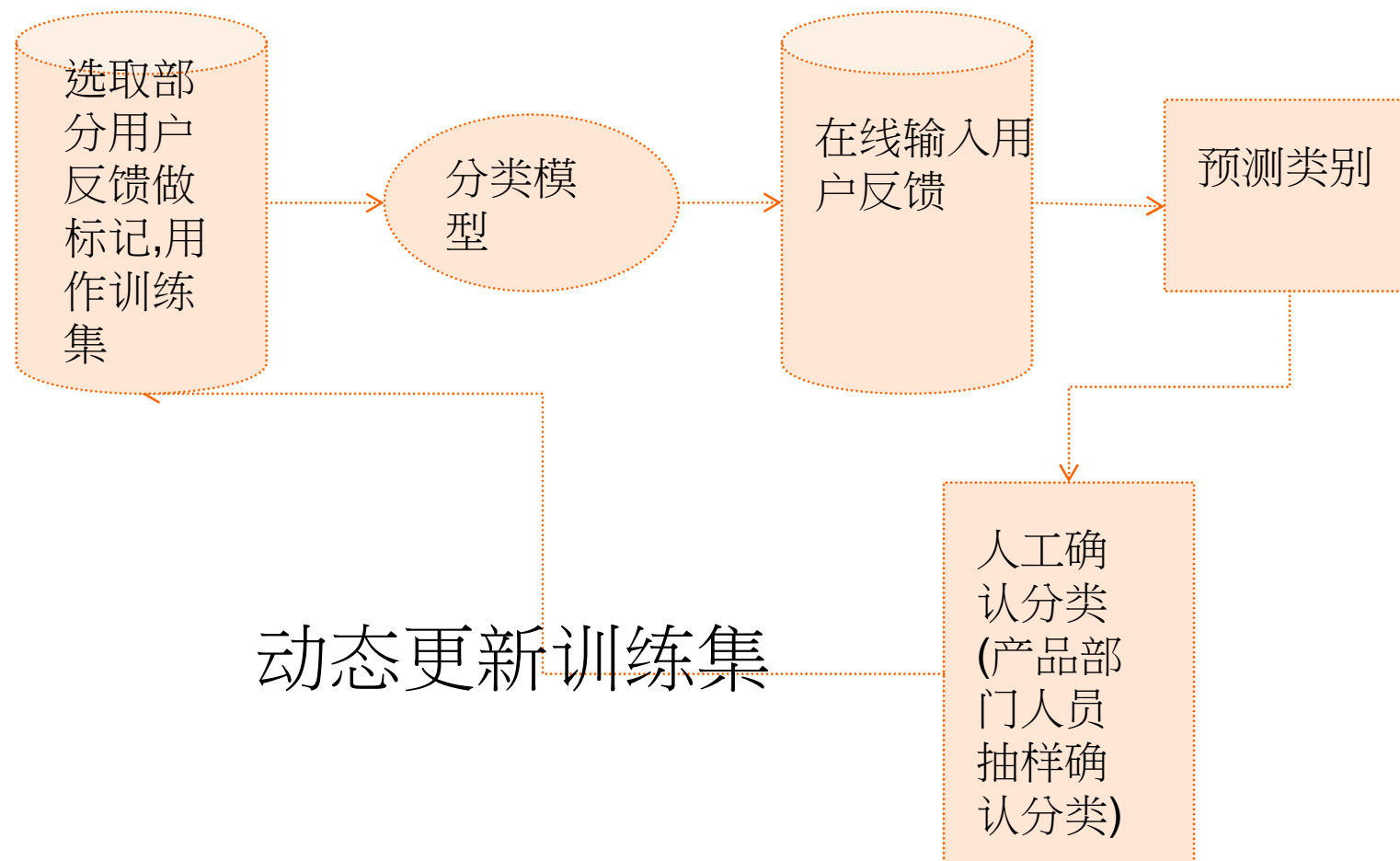
在R中实现


- R 2.14
- Random forest
 - <http://cran.r-project.org/web/packages/randomForest/index.html>
 - `rf.model <- randomForest(y=all.data.train[,c(classvar)],
x=train.data[,setdiff(names(train.data), c(classvar))], ntree=40, data =
train.data, do.trace=20)`
- 结果
 - 比较容易的分类
 - 产品可用性: I can not find the auction only button.
 - 搜索相关性: You have no clue on what I'm looking for.
 - 较为难的分类
 - 产品缺陷: I am putting the correct VIN number to sell my jeep and over and over I am being told to use a correct VIN



持续更新训练集

递进训练模型 - 第二阶段- 提高精度,反映最新动向





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