Helpful Review

Recommendation

남지열

★★★★★ **This is a steal for $50 as long as you aren;t expecting a "Premium" experience.**

By Geoff Hulse on October 2, 2015

Digital Storage Capacity: 8 | Offer Type: With Special Offers | **Verified Purchase**

I pre-ordered this for my wife mostly to use as a Kindle E-reader as I figured the tablet would be slow and the display would be less than impressive. I was wrong. What a bargain this little beauty is! This model cost $49.00 but it comes with ad's displayed on the lock screen when your tablet is dormant. Once your screen times out, they disappear. You can pay $15.00 up front to get an ad free version so I assumed to unlock the tablet I'd have to spend 15 to 30 seconds looking at an ad for Amazon Prime, or a product from the daily specials section of Amazon.com I abstained from paying for Ad removal and was pleasantly surprised to find that the ads are only on the lock screen and that as soon as I unlock the tablet they disappear immediately.

▸ 95 comments | 6,897 people found this helpful. Was this review helpful to you? | Yes | No | Report abuse

★☆☆☆☆ **Useless**

By Amazon Customer on October 3, 2015

Digital Storage Capacity: 8 | Offer Type: With Special Offers | **Verified Purchase**

I was so excited to find out the new Fire had an SD card slot. Now I'll have plenty of room for my large Kindle library. Wrong. After wasting $50 I discovered that you cannot store your books on the SD card. You can only use the measly 5 GB on the device. Wish they would have said this in the description.

▸ 28 comments | 755 people found this helpful. Was this review helpful to you? | Yes | No | Report abuse

★★★★☆ **I am an 85 year old "BEGINNER" Your packaging was great.. The shipping carton was easy to open**
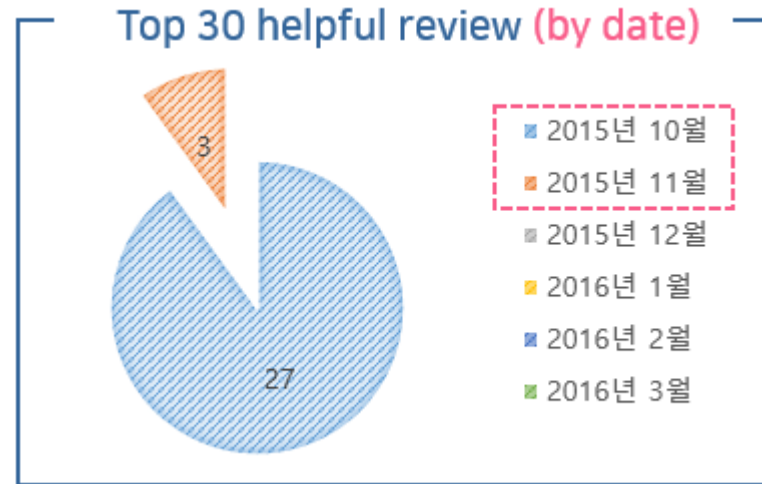
By Amazon Customer on October 9, 2015

Digital Storage Capacity: 8 | Offer Type: With Special Offers | **Verified Purchase**

Received the Tablet at 4:30 this Afternoon. I am an 85 year old "BEGINNER" Your packaging was great..The shipping carton was easy to open..The Red package opened easily with the tab revealing the wrapped Tablet and charger. My Grand=son is going to instruct me...I know I will enjoy using it..Some more printed instructionwould be nice..THANK YOU

▸ 6 comments | 772 people found this helpful. Was this review helpful to you? | Yes | No | Report abuse

What's wrong?

1. 최신 review는 노출수와 feedback 받은 시간이 부족하기 때문에 오래된 review가 상위에 표시된다

Top 30 helpful review (by date)

- 2015년 10월
- 2015년 11월
- 2015년 12월
- 2016년 1월
- 2016년 2월
- 2016년 3월

3

27

(※ 2016년 4월 조회)

2. 많은 추천을 받은 review도 내가 궁금한 내용이 없다

평소 태블릿 베터리 문제로 골머리를 앓고 있는 N군이 있습니다. 그런 N군이 신형 모델을 구매한다고 할 때 가장 유용한 review란 어떤 것일까요?

보기

① 베터리에 관한 review...
② 90% 땡처리, 어둠의 경로...
③ anywhere, anytime 죽지 않는 안테나 5개...

한마디로, helpful review가 '그렇게' helpful하지 않다.

그럼 직접 helpful review를 classify하는 model을 만들어보자

우선, helpful review 정의하기!

helpful review

- length: 너무 짧지 않은 **길이**로
- topic: 대상에 대한 주요 **토픽**을 (디스플레이, 버그, 베터리..)
- sentiment: 자신의 **감정**을 담아서 (호평, 혹평 모두 중요)
- readability: **읽기 쉽게** 쓴 것

★☆☆☆☆ **Lousy Product, Lousy Support**, Nov. 3 2015

By **Grandma Sue**

Verified Purchase (What's this?)

Battery will not charge any longer. Customer support no help. They want to hook up to my computer to diagnose the problem. Amazon refusing to allow product to be returned as final return date 3 days ago on October 31. So unhappy, I will probably be cancelling my Prime membership as well over the lousy product, support, and return policy.

우선, helpful review 정의하기!

helpful review
- length: 너무 짧지 않은 길이로
- topic: 대상에 대한 주요 토픽을 (디스플레이, 버그, 베터리..)
- sentiment: 자신의 감정을 담아서 (호평, 혹평 모두 중요)
- readability: 읽기 쉽게 쓴 것

	X_Length		X_Topic				X_Sentiment			X_Readability		y_Result
	문장	단어	토픽	연관 단어	무관한 문장	순위	긍정 토픽	부정 토픽	감정 문장	문장/단어	음절	
Sample 1	60	5	2	42	1	0.13	0	1	0.5	12	1.52	Helpful

※ review 본 사용자 5명 중에 4 명 이상의 비율로 (80%↑) 'helpful' 하다고 평가한 review

train

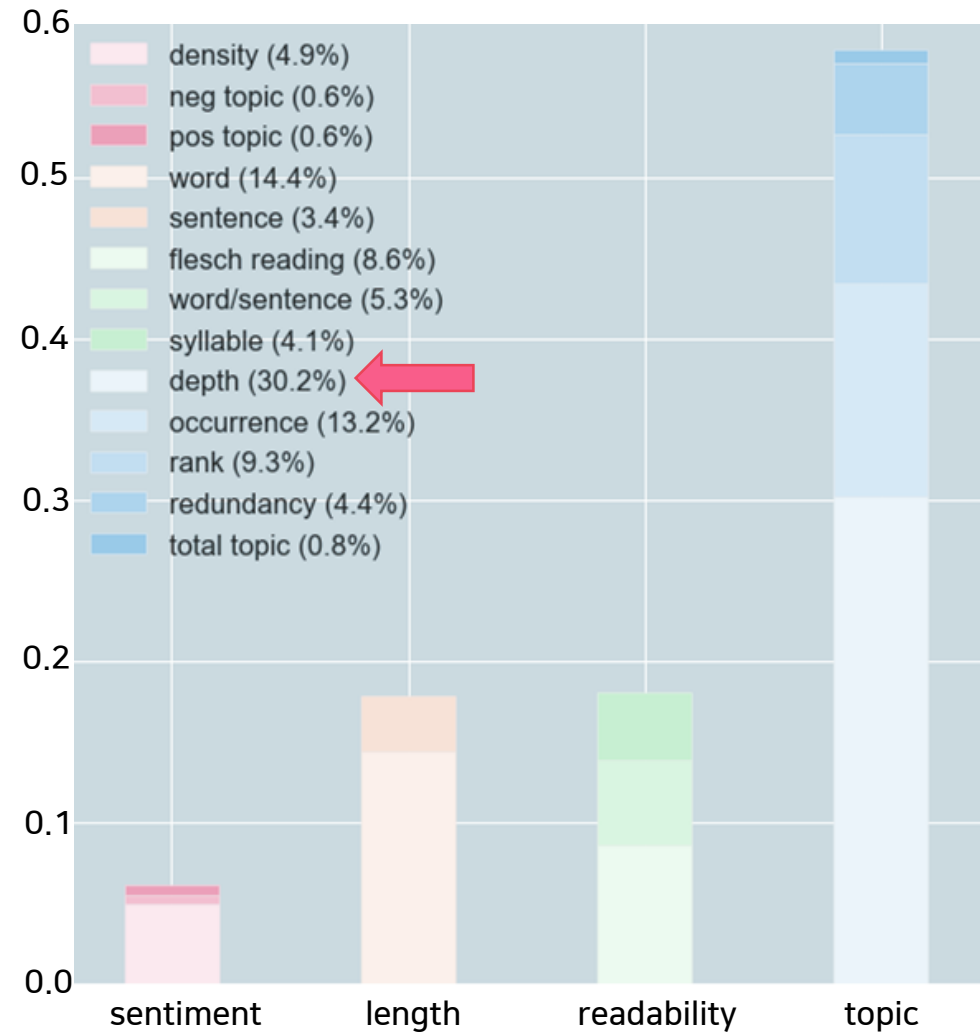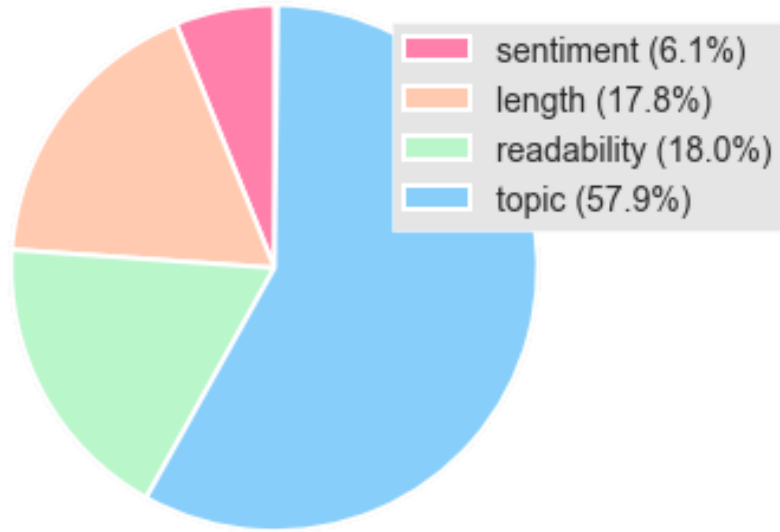|	X_length		X_Readability		X_Topic				X_Sentiment			y_Result
	문장	단어	문장/단어	음절	토픽	연관 단어	잉여 문장	순위	긍정 토픽	부정 토픽	감정 문장	
Sample 1	44	720	16.36	1.36	9	493	21	0.74	3	1	0.44	Helpful
Sample 2	8	90	11.25	1.31	3	79	2	0.35	2	1	1	Unhelpful
Sample 3	9	138	15.33	1.27	3	91	3	0.24	1	0	0.33	Helpful
Sample 4	2	36	18	1.35	1	36	0	0.11	0	0	0	Helpful

predict

	X_length		X_Readability		X_Topic				X_Sentiment			
Sample 5	14	136	9.71	1.18	3	96	7	0.29	1	1	0.67	**?**

Tree t=1 'helpful' **+** t=2 'helpful' **+** t=3 'unhelpful' ➡ 'helpful' (ensemble)
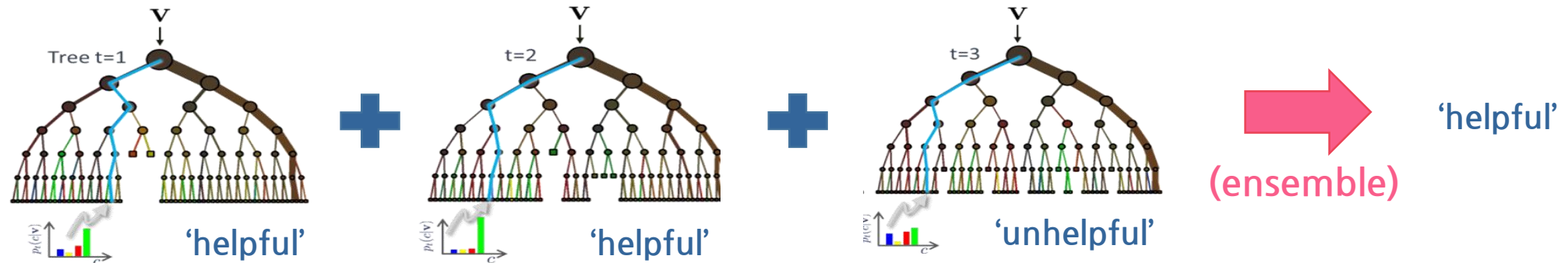
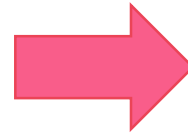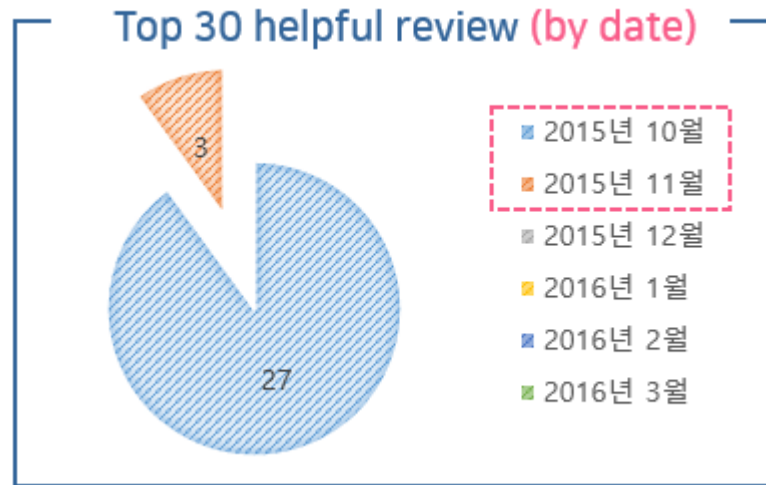# Key Factor of Helpful Review

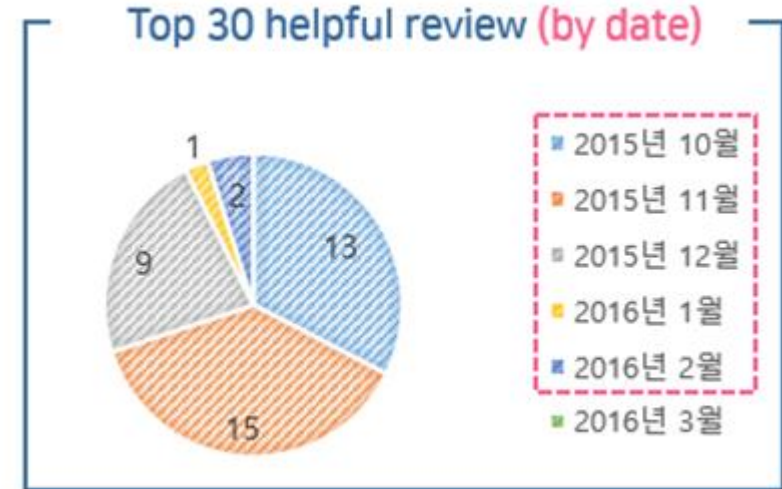Helpful review의 가장 '중요한' 요소: topic과 관련된 내용

Problem Solved?

✅ 최신 review는 노출수와 feedback 받은 시간이 부족하기 때문에 오래된 review가 상위에 표시된다

(※ 2016년 4월 조회)

- 상품 등록일 1주일 이내 양질의 review 등록: True
- 하지만, 최신 review에게 진입장벽으로 작용: True

Model 적용하면 review 작성 일시에 영향 받지 않고, 내용 그 자체로만 helpful 한지 예측할 수 있다.
(Recall 75%)

Problem Solved?

☑ 많은 추천을 받은 review도 내가 궁금한 내용이 없다

| Sort by: | Top ⬍ | Filter by: | All reviewers ⬍ | All stars ⬍ | All formats ⬍ | All topics ⬍ | 🔍 Keyword | **Search** |

- ☑ display
- ☐ price
- ☑ battery
- ☐ sound
- ☐ bug
- ☐ wifi

- Topic modeling을 통해 각 review가 어떤 topic을 다루고 있는지 파악 가능
- 'One click'으로 관심 있는 topic(s)에 대한 helpful review만 조회 가능

Summary

Helpful review 문제

- 최신 review는 노출수와 feedback 받은 시간이 부족하다
- 많은 추천을 받은 review도 내가 궁금한 내용이 없다

Helpful review 정의

- length: 너무 짧지 않은 길이로
- topic: 대상에 대한 주요 토픽을
- sentiment: 자신의 감정을 담아서
- readability: 읽기 쉽게 쓴 것

머신러닝 알고리즘으로 해결!

감 사 합 니 다

남지열