

Topic Modeling Grouped Reviews

GCash App Store Reviews

Good Reviews Topics (4,5 Stars)

TOPIC 1 - Issues with logging in (MPIN and app crashes)

"0.067*"mpin*" + 0.059*"open*" + 0.043*"wrong*" + 0.038*"login*" + 0.037*"keeps*" + 0.036*"always*" + 0.030*"limit*" + 0.026*"crashing*" + 0.025*"still*" + 0.024*"tried*""

TOPIC 2 - Unavailable services (Cash / Bank / Load Services and PayPal)

"0.159*"cash*" + 0.082*"load*" + 0.063*"transaction*" + 0.043*"new*" + 0.037*"never*" + 0.036*"paypal*" + 0.031*"unavailable*" + 0.029*"days*" + 0.028*"bank*" + 0.028*"month*""

TOPIC 3 - Account verification and updates

"0.102*"cannot*" + 0.071*"account*" + 0.050*"update*" + 0.046*"fix*" + 0.036*"need*" + 0.036*"id*" + 0.029*"verify*" + 0.021*"verification*" + 0.021*"use*" + 0.020*"time*""

TOPIC 4 - Emails, tickets and codes (????)

"0.067*"money*" + 0.052*"number*" + 0.041*"get*" + 0.033*"email*" + 0.026*"code*" + 0.025*"account*" + 0.024*"sent*" + 0.024*"verified*" + 0.023*"ticket*" + 0.021*"phone*""

TOPIC 5 - Customer Support and Service

"0.140*"service*" + 0.101*"code*" + 0.064*"bad*" + 0.060*"add*" + 0.050*"support*" + 0.038*"log*" + 0.037*"tried*" + 0.035*"needs*" + 0.035*"transactions*" + 0.031*"everything*""

TOPIC 6 - Using the App and/or mentions of PayMaya

"0.038*"using*" + 0.035*"pay*" + 0.034*"use*" + 0.032*"bank*" + 0.032*"fully_verified*" + 0.032*"transfer*" + 0.031*"money*" + 0.028*"paymaya*" + 0.028*"bills*" + 0.022*"feature*""

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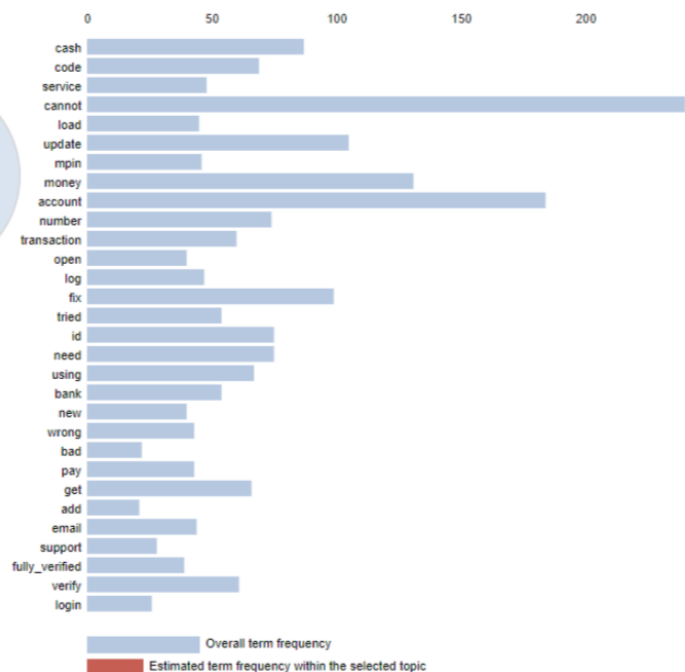
Selected Topic: Previous Topic Next Topic Clear Topic

Slide to adjust relevance metric:⁽²⁾
 $\lambda = 1$ 0.0 0.2 0.4 0.6 0.8 1.0

Intertopic Distance Map (via multidimensional scaling)



Top-30 Most Salient Terms¹



1. saliency(term w) = frequency(w) * [sum_t p(t | w) * log(p(t | w)/p(t))]] for topics t; see Chuang et. al (2012)
2. relevance(term w | topic t) = $\lambda * p(w | t) + (1 - \lambda) * p(w | t)/p(w)$; see Sievert & Shirley (2014)

Bad Reviews Topics (1,2,3 Stars)

TOPIC 1 - Login and System errors

"0.103*"error\" + 0.074*"log\" + 0.050*"system\" + 0.048*"easy\" + 0.043*"gcredit\" + 0.030*"anymore\" + 0.023*"unreliable\" + 0.023*"trash\" + 0.023*"useful\" + 0.022*"rebates\""

TOPIC 2 - Issues with linked bank and cash transactions and/or mentions of PayMaya

"0.121*"cash\" + 0.081*"bank\" + 0.058*"transaction\" + 0.043*"mpin\" + 0.041*"wala\" + 0.029*"transfer\" + 0.024*"linked\" + 0.020*"link\" + 0.020*"paymaya\" + 0.020*"paypal\""

TOPIC 3- Caveat statements (GCash is easy and useful HOWEVER...)

"0.087*"always\" + 0.072*"service\" + 0.046*"thing\" + 0.035*"login\" + 0.033*"everytime\" + 0.033*"something\" + 0.032*"convenient\" + 0.029*"however\" + 0.026*"user\" + 0.024*"services\""

TOPIC 4 - Updates and requesting the fixing of app issues

"0.102*"cannot\" + 0.053*"fix\" + 0.043*"update\" + 0.036*"use\" + 0.027*"using\" + 0.026*"issue\" + 0.024*"time\" + 0.023*"try\" + 0.022*"problem\" + 0.021*"still\""

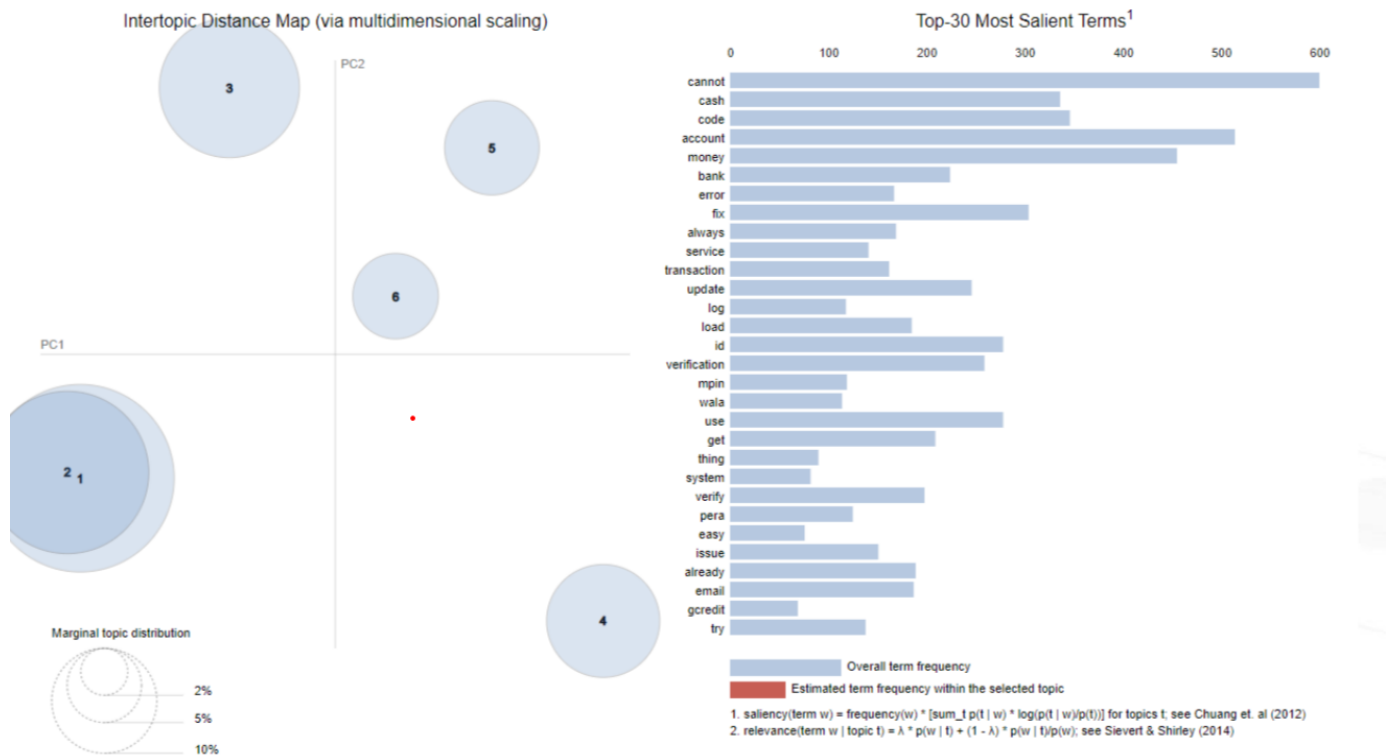
TOPIC 5 - User registration and verification

"0.067*"account\" + 0.059*"money\" + 0.036*"id\" + 0.034*"verification\" + 0.027*"get\" + 0.026*"verify\" + 0.025*"already\" + 0.024*"email\" + 0.020*"customer_service\" + 0.016*"keep\""

TOPIC 6 - Errors in account balance

"0.081*"code\" + 0.044*"load\" + 0.029*"pera\" + 0.022*"could\" + 0.021*"received\" + 0.018*"make\" + 0.018*"able\" + 0.018*"php\" + 0.017*"balance\" + 0.016*"first\""

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GCash Play Store Reviews

Good Reviews Topics (4,5 Stars)

TOPIC 1 - Customer satisfaction

"0.286*\"nice\" + 0.178*\"great\" + 0.074*\"excellent\" + 0.049*\"amazing\" + 0.027*\"hassle\" + 0.024*\"far\" + 0.022*\"satisfied\" + 0.020*\"much\" + 0.018*\"application\" + 0.017*\"wow\""

TOPIC 2 - Payments, wallet, savings

"0.090*\"awesome\" + 0.071*\"thank\" + 0.043*\"transaction\" + 0.038*\"account\" + 0.038*\"paying\" + 0.033*\"very\" + 0.027*\"hope\" + 0.017*\"payments\" + 0.017*\"wallet\" + 0.015*\"savings\""

TOPIC 3 - Easy to use and convenience

"0.309*\"good\" + 0.084*\"easy\" + 0.083*\"use\" + 0.078*\"convenient\" + 0.066*\"ok\" + 0.066*\"love\" + 0.043*\"helpful\" + 0.042*\"bills\" + 0.037*\"pay\" + 0.021*\"useful\""

TOPIC 4 - Transfer money + bank services (in a positive context [fast etc])

"0.090*\"money\" + 0.041*\"fast\" + 0.040*\"bank\" + 0.040*\"service\" + 0.036*\"transfer\" + 0.031*\"payment\" + 0.029*\"update\" + 0.025*\"happy\" + 0.023*\"problem\" + 0.021*\"send\""

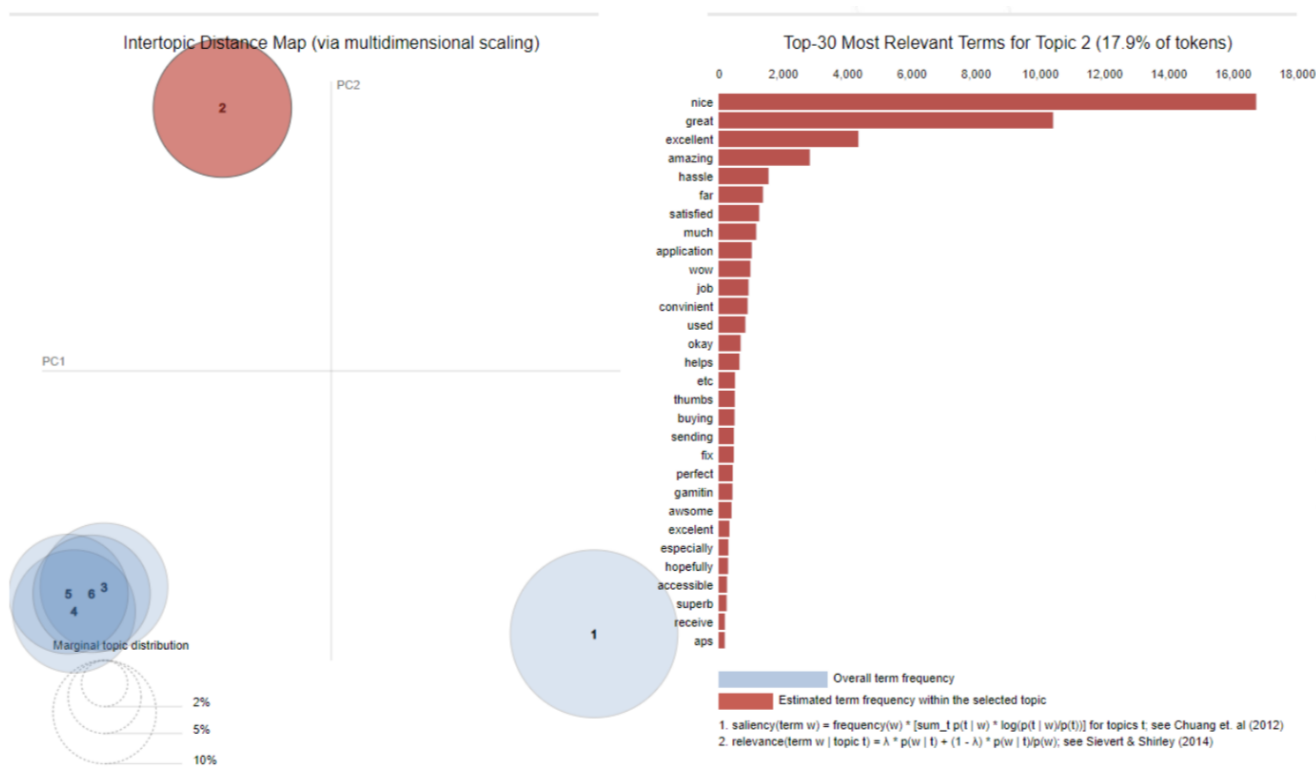
TOPIC 5 - GCash being the *best* app

"0.147*\"useful\" + 0.142*\"apps\" + 0.059*\"best\" + 0.044*\"thanks\" + 0.039*\"really\" + 0.034*\"transactions\" + 0.033*\"cannot\" + 0.033*\"help\" + 0.030*\"need\" + 0.027*\"time\""

TOPIC 6 - Gcredit, Buying load, Online experience

"0.088*\"load\" + 0.052*\"cash\" + 0.037*\"free\" + 0.037*\"using\" + 0.036*\"buy\" + 0.029*\"online\" + 0.026*\"experience\" + 0.019*\"gcredit\" + 0.019*\"always\" + 0.016*\"access\""

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Bad Reviews Topics (1,2,3 Stars)

TOPIC 1 - App updates

"0.053*\update\" + 0.051*\use\" + 0.049*\money\" + 0.039*\cash\" + 0.038*\load\" + 0.028*\time\" + 0.026*\need\" + 0.023*\using\" + 0.022*\already\" + 0.022*\get\""

TOPIC 2 - Logging in problems w/ MPIN

"0.060*\fix\" + 0.040*\problem\" + 0.038*\mpin\" + 0.032*\says\" + 0.030*\tried\" + 0.028*\code\" + 0.026*\id\" + 0.024*\log\" + 0.021*\card\" + 0.019*\register\""

TOPIC 3 - Mixed sentiment reviews (Gcash is good BUT...)

"0.044*\good\" + 0.042*\gcredit\" + 0.028*\issue\" + 0.024*\support\" + 0.022*\working\" + 0.017*\really\" + 0.015*\transactions\" + 0.013*\want\" + 0.012*\make\" + 0.012*\available\""

TOPIC 4 - App maintenance

"0.157*\cannot\" + 0.095*\account\" + 0.067*\always\" + 0.046*\still\" + 0.036*\error\" + 0.029*\open\" + 0.017*\balance\" + 0.017*\verify\" + 0.015*\days\" + 0.014*\work\""

TOPIC 5 - Account verification

"0.041*\verified\" + 0.032*\apps\" + 0.032*\wala\" + 0.031*\try\" + 0.029*\fully\" + 0.025*\peral\" + 0.020*\link\" + 0.016*\nice\" + 0.015*\almost\" + 0.015*\hard\""

TOPIC 6 - Poor customer service

"0.055*\service\" + 0.040*\customer\" + 0.038*\pay\" + 0.030*\help\" + 0.029*\email\" + 0.022*\bills\" + 0.019*\poor\" + 0.018*\got\" + 0.017*\anymore\" + 0.016*\receive\""

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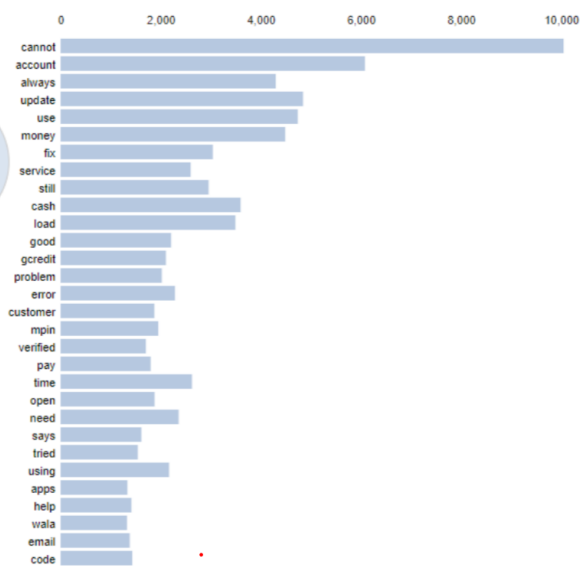
Intertopic Distance Map (via multidimensional scaling)



Marginal topic distribution



Top-30 Most Salient Terms⁽¹⁾



Overall term frequency
Estimated term frequency within the selected topic

1. saliency(term w) = frequency(w) * [sum_t p(t | w) * log(p(t | w)/p(t)) for topics t, see Chuang et. al (2012)
2. relevance(term w | topic t) = $\lambda * p(w | t) + (1 - \lambda) * p(w | t)/p(w)$; see Sievert & Shirley (2014)