NLP/Unsupervised Learning
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Due: Weds, May 25, 2021

Project Description:

Athletic apparel retailer Lululemon will be entering the athletic shoe market in 2022. Though not an exhaustive list, Nike, Adidas, and Under Armour will be three of their primary competitors in this segment. My proposed project is to look at Amazon reviews for these competitor's shoes, with similar expected purpose, and identify areas of strength and potentially weakness in an attempt to develop a focus and potential marketing campaign. As a majority of Lululemon's client base is female, the focus will only be on women's shoes in this analysis. Other themes and direction may emerge upon further analysis.

MVP:

Below is the Non-negative Matrix Factorization output of top 6 topics. 25 words are included for each. At this point many there is still some gray area and needs further analysis, but my initial reaction to the potential topics are as follows:

Topic 0 - activities
Topic 1 - comfort with focus on size
Topic 2 - combination of other five topics, don't see any uniqueness
Topic 3 - impact of wearing shoe
Topic 4 - looks
Topic 5 - fit

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Topic  0
shoe, wa, running, like, wear, support, walking, ve, just, good, new, look,
time, lace, arch, toe, wearing, worn, looking, don, buy, ha, really, tennis,
walk, need, sole, nice, run, light, bought, ankle, heel, slip, little, make,
right, week, pair, adidas, box, store, sock, disappointed, got, month, use,
quality, balance, thing

Topic  1
size, ordered, half, small, wa, wear, run, fit, order, true, toe, wide, big,
little, return, usually, like, review, just, smaller, normally, larger, sock,
got, normal, bigger, bit, cute, tight, sneaker, comfy, pair, bought, really,
way, did, new, definitely, sizing, perfect, narrow, snug, balance, box,
right, went, regular, exchange, returned, usual
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Topic 2
comfortable, light, wear, super, walking, day, cute, lightweight, sneaker,
weight, ve, running, recommend, really, work, perfect, good, extremely, walk,
long, stylish, use, easy, definitely, color, bought, true, slip, lot, buy,
supportive, nice, highly, working, don, looking, everyday, time, wearing,
owned, worn, little, casual, gym, hour, run, purchase, exercise, errand,
price

Topic 3
foot, day, like, wide, work, feel, support, wa, wear, don, pair, walking,
hurt, just, arch, hour, bought, sneaker, time, good, long, narrow, toe,
wearing, walk, pain, really, ve, make, look, lot, need, got, heel, mile,
asics, width, little, comfy, recommend, foam, didn, super, felt, right, bit,
wore, cute, shift, insole

Topic 4
love, pair, color, bought, second, wear, comfy, sneaker, just, super, look,
buy, black, different, absolutely, light, new, day, got, ve, year, perfect,
style, daughter, cute, slip, time, asics, purchased, feel, buying, don, easy,
comfort, adidas, work, lightweight, weight, wife, white, say, run, favorite,
amazon, price, brand, really, month, everyday, wore

Topic 5
fit, great, perfect, support, look, good, perfectly, sneaker, running, feel,
expected, price, like, walking, color, super, comfy, light, ordered, arch,
just, comfort, nice, asics, little, really, happy, wa, usually, right, wear,
quality, true, got, wide, buy, purchase, snug, product, workout, weight,
overall, style, working, looking, need, brand, lightweight, new, easy