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# EXECUTIVE SUMMARY

The Coca-Cola Company (Coca-Cola) is the largest global producer and marketer of beverages. Coca-Cola has a portfolio of more than 500 brands of sparkling and still beverages that are sold in more than 200 countries worldwide. In this report, we first start by doing primary and secondary research. The insights that we find from our research will then form the basis for the recommendations that we would propose to Coca-Cola to improve its competitive position in Singapore's market.

There are 2 main aims for our primary research. Firstly, it is to better understand the public's opinion of Coca-Cola. To do so, we collected tweets which contained the keyword "cocacola". We also collected comments from 2 categories of YouTube videos: Coca-Cola "fact" videos and the most popular uploaded videos by the official Coca-Cola YouTube channel. From analyzing the text of these tweets and comments, we found out that most associate Coca-Cola with just the soft drink brand and not the company's other products. It is also not uncommon knowledge that Coca-Cola is unhealthy. In addition, mentions of Coca-Cola where the focus is not on the product, and together with food/ publicity events/ popular culture (e.g. film) seem to generate positive opinions. Additionally, we also wanted to identify the successes and shortcomings (if any) of Coca-Cola's most recent marketing campaign, "Taste The Feeling", in creating or changing others perceptions of the company. Hence, we collected tweets which contained the keyword "tastethefeeling" and extracted comments from several official videos released exclusively by Coca-Cola for this campaign. We found out that the campaign was quite successful in getting people to relate to the brand (Coca-Cola). Moreover, videos in the campaign which have a familial theme setting or is about/ incorporates the use of ("catchy") songs seem to be most effective in generating positive emotions.

Next, the second aim of our primary research is to find out how Coca-Cola compares to its competitors. Here, we collected and analyzed the reviews of Amazon's (US) 25 best-selling beverages in the "Soda Soft Drink" category. In the time period the reviews were collected, we found out that Coca-Cola's products occupy the majority of the spots in the list and have the highest average percentage of 4/5 star ratings. There were also frequent mentions of Coca-Cola products in rival companies' products reviews. This affirms the fact that Coca-Cola has a significant, dominating presence in the (online retail) soda soft drinks market. Furthermore, an important similarity that we found across all products is the importance of taste. Other than which, packaging, price and delivery are also other important factors that influence a consumer's opinion. We also collected the most recent tweets from the Twitter accounts of Coca-Cola and the company's rivals. Unsurprisingly, Coca-Cola is quite active in its Twitter account usage. One similarity that we found among the companies was the consistent use of Twitter to connect with the public by showing their appreciation. However, each company also has a distinctive and unique style of tweeting. In general, we found that the usage of videos and celebrity mentions in the tweet's contents is effective in generating positive public interest.

Moving on to secondary research, we were concerned with trends in the global beverage industry that can pose as threats or opportunities for Coca-Cola. Statistics show that Coca-Cola is the market share leader in terms of volume and promisingly, revenue in the global beverage industry is projected to grow continuously. However, Coca-Cola should be concerned with the increased attention governments have given to unhealthy products, such as the implementation of a sugar tax, and the increasing health consciousness of consumers. On the flipside, there are also opportunities in the bottled water, sports and energy drink segments, packaging and the increased prominence of convenience stores in supporting beverage sales. As we are focusing our recommendations on the Singapore market, we also did necessary research on trends in Singapore's beverage industry, key local players, and the current actual "localized" presence of Coca-Cola in Singapore. Customer demographics are undoubtedly important as well and in particular, we want to focus on the youth and young adults who are well-connected.

Taking into account findings and insights gleaned from our primary and secondary research, we came up with a recommendation that has 3 distinctive portions. Firstly, with regards to the Carbonated Soft Drinks (CSD) segment, we felt that it would be beneficial to focus on making related Coca-Cola CSD products stand out from direct CSD products from rival companies. This can be done through modifications in marketing focused on creating an enviable image associated with the drinks, emphasizing on "food and drink" pairings and offering related Coca-Cola merchandise. Coca-Cola could also refresh their packaging to be more in tune with consumers shifting demands, and which can also invite greater consumer engagement. Secondly, we felt that is a large market potential in the Ready-To-Drink (RTD) segment of the coffee industry in Singapore. As recently done/ planned for in other regions, Coca-Cola should consider to similarly introduce its RTD coffee brands in Singapore's market. Finally, we also have a few general solutions that are applicable to both segments such as promotions which are more location specific and that take advantage of Coca-Cola's diverse brand portfolio. In conclusion, while these recommendations are not all-encompassing, we do believe that at the very least, they would serve to be helpful guidelines for Coca-Cola to improve its competitive position in Singapore.

# COMPANY PROFILE

## INTRODUCTION

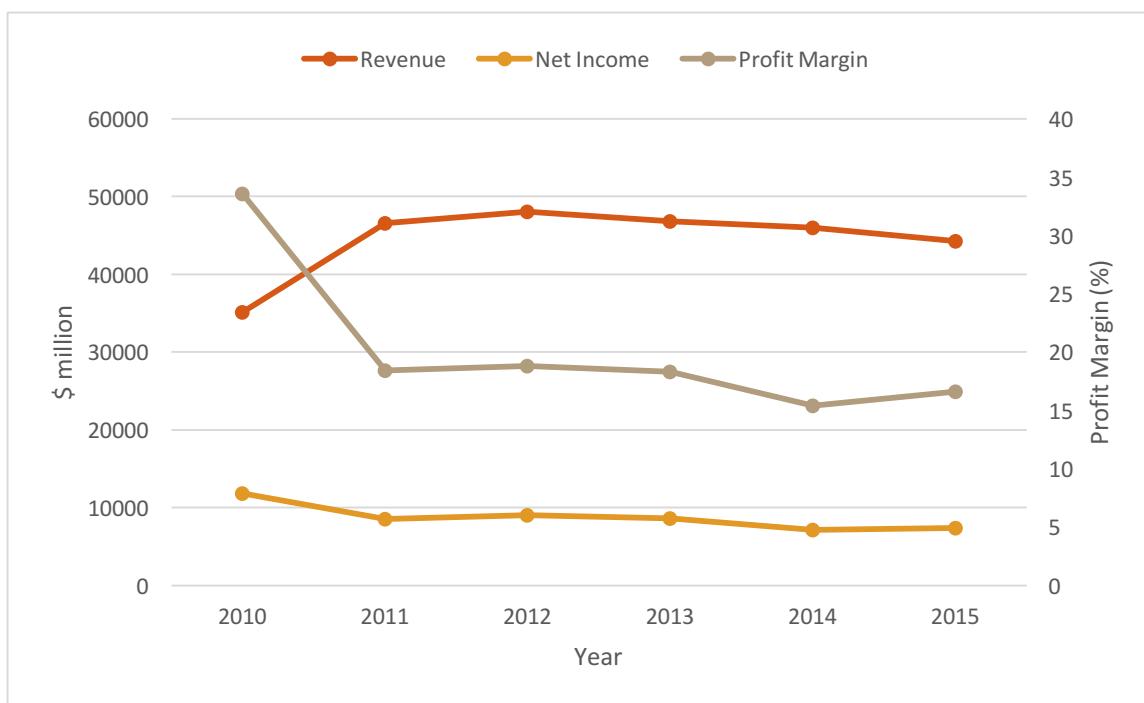
Headquartered in Atlanta, GA, The Coca-Cola Company (Coca-Cola) is the largest global producer and marketer of beverages. Coca-Cola has a portfolio of more than 500 brands of sparkling (carbonated) as well as still (non-carbonated) beverages like water, enhanced water, juices and juice drinks, ready-to-drink teas and coffees, and energy and sports drinks. Popular sparkling beverage brands include Coke, Diet Coke, Fanta and Sprite while still beverage brands include Minute Maid and Powerade. These beverages are sold in more than 200 countries worldwide.

Coca-Cola mostly engages in the manufacturing, distribution and marketing of non-alcoholic beverage concentrates and syrups that are sold to roughly 250 authorized independent bottling and canning partners around the world. These bottling partners then convert them into finished packaged products for sale to distributors and other customers. Its top bottlers are Coca-Cola European Partners.; Coca-Cola HBC AG; Coca-Cola FEMSA, S.A.B. de C.V. and Arca Continental.

Since 01 Aug 2016, Coca-Cola has five operating segments – Europe, Middle East and Africa; Latin America; North America; Asia Pacific; Bottling Investments. Coca-Cola's Asia Pacific business segment includes Association of South East Asian Nations (ASEAN) business unit, Greater China and Korea business unit, Japan business unit, South Pacific business unit, and India and Southwest Asia (INSWA) business unit. The bottling investments business segment operates through six business units: China, Malaysia and Singapore; Germany; India and Bangladesh; Latin America and Japan; Russia, the Middle East and Africa; and the Philippines.

## KEY FINANCIAL METRICS

Figure 1.1: The Coca-Cola Company: Revenues & Profitability



Source: Coca-Cola Financial Reports

As can be seen in Figure 1.1, Coca Cola's net income has fallen from 11,809 million in 2010 to 7,351 million in 2015. Barring a sharp increase of revenue from 35,119 to 46,542 million in 2010–2011, revenue has been falling since 2012 to 44,294 million in 2015. This has led profit margins to fall greatly from 33.6% in 2010 to 16.6% in 2015.

## STRENGTHS AND WEAKNESSES

Coca-Cola is able to maintain its leading position in soft drinks through extensive marketing. The 2 largest sporting events that the company sponsors are the Olympic Games (starting with the 1928 Amsterdam Games) and the FIFA World Cup (since 1978). Like most other soft drinks producers, the company seeks to gain the attention of young consumers. A successful campaign was its “Share a Coke” campaign, which allowed consumers to buy personalized bottles with names printed on them. More recently in 2016, Coca-Cola launched a new campaign titled “Taste The Feeling”.

In Coca-Cola’s annual report, the first risk factor mentioned is “Obesity concerns may reduce demand for some of our products”. Indeed, invested billions into research and advertising – such as low-calorie and low-sugar alternatives (diet and zero), and deflecting reports about the harmful effects of its best-selling products in the carbonated soft drinks category, have not resulted in a significant increase in its product sales. However, even though they are less recognizable, Coca-Cola has many other products in other non-alcoholic beverages category. This depth in portfolio allows for diversification to cater to shifts in consumer preferences resulting from growing health-consciousness.

## OVERVIEW OF REPORT

In this report, we will first do primary research by mining and analyzing data from several social networking sites. The aim of the primary research is to better understand the public’s opinion of Coca-Cola and how Coca-Cola compares to its competitors. Following which, we will do secondary research on trends in the global beverage industry and key characteristics of the Singapore market.

Taking into account findings and insights from both of our primary and secondary research, we will then propose recommendations for Coca-Cola to improve their competitive position in the Singapore market. These recommendations will be marketing and operations based and take advantage of Coca-Cola’s current range of products.

# FINDINGS

In this section, we are mainly interested to find out the general public's opinion of Coca-Cola (positive or/ and negative). In addition, we also wanted to identify the successes and shortcomings (if any) of Coca-Cola's most recent marketing campaign, "Taste The Feeling", in creating or changing others' perceptions of the company. To achieve these, we mined opinions of Coca-Cola from Twitter and YouTube and analyzed the collected tweets and comments.

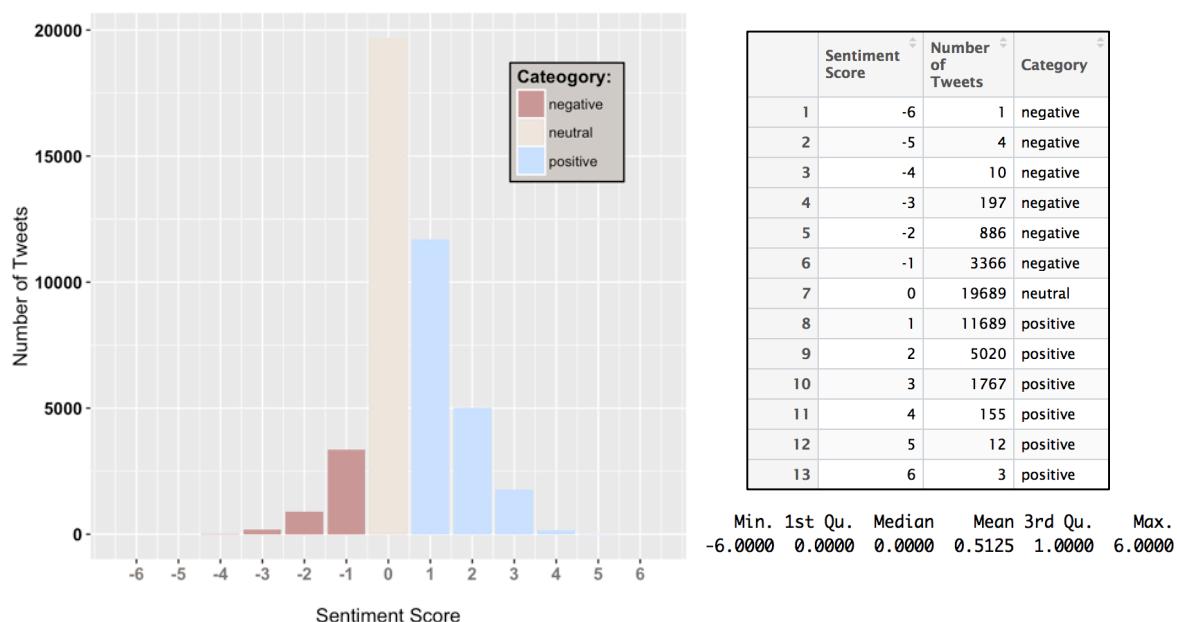
## GENERAL

## COLLECTED TWEETS: COCACOLA

We searched for tweets in the English language that had the keyword “cocacola” from 10 September 2016 till 5 October 2016 (inclusive). In this span of 26 days, we collected a total of 42,799 tweets. Using Hu & Liu’s (2004) opinion lexicon of positive and negative words, we then assigned a sentiment score to each tweet and depending on the tweet’s score, further classified the tweet into the “positive”, “neutral” and “negative” categories (see Appendix A).

## OVERALL

**Figure 2.1.1a:** Sentiment scores of collected tweets



**Figure 2.1.1b:** Word cloud of collected tweets  
(min freq: 300)



As summarized in Figure 2.1.1a, the sentiment score of the tweets ranged from -6 to 6, with the most common and median score being 0. However, we have to note that this does not necessarily mean the tweet is neutral but that the number of positive terms is equal to the number of negative terms found in our positive and negative term dictionary. Regardless, it is interesting to note that more tweets were categorized to be positive than negative.

We also formed a word cloud (Figure 2.1.1b, refer to Appendix B for methodology) of all text found in the collected tweets. It is surprising to see that some of the most common words are related to some sort of contest(s) (“win”, “prizes”, “chance”). We can also guess that tweets which are categorized as positive are likely to be tweets of people expressing that they enjoy the Coca-Cola product (“like”, “love”, “delicious”, “best”). Furthermore, it seems that most of the tweets are about the Coca-Cola product itself and not of Coco-Cola’s other brands and products as they are not among the most common words in the collected tweets.

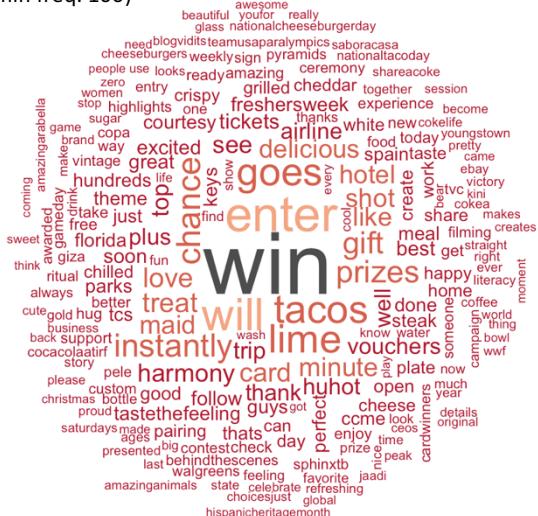
Next, we also identified the most favorited tweets among the collected tweets. As can be seen in Figure 2.1.1c, most of the tweets are tweeted by official Coca-Cola twitter accounts. This is perhaps unsurprising as such accounts have a larger number of followers compared to most other Twitter accounts. In addition, of these 10 tweets, most could be classified to fall under the category of “food and drink pairing” or content related to activities/ people that are supported or sponsored by Coca-Cola. It also seems that most of these tweets are positive.

**Figure 2.1.1c:** Top 10 most favorited tweets

<b>1. Coca-Cola</b>	<b>[Favorited 3150 times]</b>	Plate your crispy white cheddar grilled cheese and open a chilled Coca-Cola to create the perfect pairing. <a href="https://t.co/pNc08Qf6og">https://t.co/pNc08Qf6og</a>		#JourneyxJourney visits Terre Haute, IN - home to much @CocaCola history and plenty of future too: <a href="https://CokeURL.com/fmrs3">CokeURL.com/fmrs3</a>
<b>2. Amazing Arabella</b>	<b>[Favorited 1221 times]</b>	NEW BLOG&VID <a href="https://t.co/wVwrcYjmA4">https://t.co/wVwrcYjmA4</a> @wwf_uk its amazing! @CocaCola_GB @jaadindaho #animals #wwf #amazingarabella <a href="https://t.co/hmHNTXRhk6">https://t.co/hmHNTXRhk6</a>		#JourneyxJourney arrives in Springfield to find a family-run business that makes us all proud to work for @CocaCola: <a href="https://CokeURL.com/Springfield">CokeURL.com/Springfield</a>
<b>3. do(die)</b>	<b>[Favorited 971 times]</b>	New @CocaCola_GB vid! I do challenges with @conormaynard & @itwillmanning plus I meet the @CapitalLondon team #ad \n <a href="https://t.co/misqVaG9le">https://t.co/misqVaG9le</a>		Cheeseburgers and choices – just the way we like it. Happy #NationalCheeseburgerDay!
<b>4. Coca-Cola</b>	<b>[Favorited 847 times]</b>	Steak and Coke? That's a meal well done. <a href="https://t.co/epXHD7SDM4">https://t.co/epXHD7SDM4</a>		
<b>5. Coca-Cola GB</b>	<b>[Favorited 776 times]</b>	.@doddleodle and @MrGeorgeBenson practice their parachute techniques, but the question is did Dodie jump? Find out <a href="https://t.co/ztjKTgjhNZ">https://t.co/ztjKTgjhNZ</a>		.@TatyanaMcFadden proves again she's the fastest woman on three wheels! #1500M #TeamUSAParalympics
<b>6. The Coca-Cola Co.</b>	<b>[Favorited 557 times]</b>	#JourneyxJourney visits Terre Haute, IN - home to much @CocaCola history and plenty of future too: <a href="https://t.co/OmzUmm6lO4">https://t.co/OmzUmm6lO4</a>		Found these salt and pepper shakers! It's a shame they say CocaCola on them but we know what they really are! 😊 🍔
<b>7. The Coca-Cola Co.</b>	<b>[Favorited 533 times]</b>	#JourneyxJourney arrives in Springfield to find a family-run business that makes us all proud to work for @CocaCola <a href="https://t.co/AVYBbFgvEw">https://t.co/AVYBbFgvEw</a>		
<b>8. Coca-Cola</b>	<b>[Favorited 468 times]</b>	Cheeseburgers and choices just the way we like it. Happy #NationalCheeseburgerDay! <a href="https://t.co/pHMxiVPbkg">https://t.co/pHMxiVPbkg</a>		
<b>9. Coca-Cola</b>	<b>[Favorited 443 times]</b>	.@TatyanaMcFadden proves again she's the fastest woman on three wheels! #1500M #TeamUSAParalympics <a href="https://t.co/tVxN3ocxcc">https://t.co/tVxN3ocxcc</a>		
<b>10. CodeNamePizza</b>	<b>[Favorited 432 times]</b>	Found these salt and pepper shakers! It's a shame they say CocaCola on them but we know what they really are! <a href="https://t.co/dzzysl6te">https://t.co/dzzysl6te</a>		

## POSITIVE TWEETS

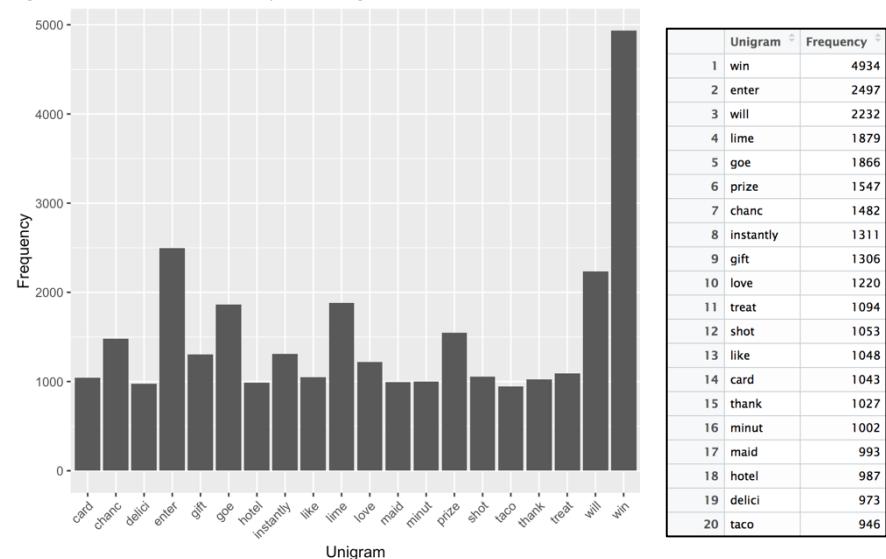
**Figure 2.1.2a:** Word cloud of “positive” tweets  
(min freq: 100)  awesome



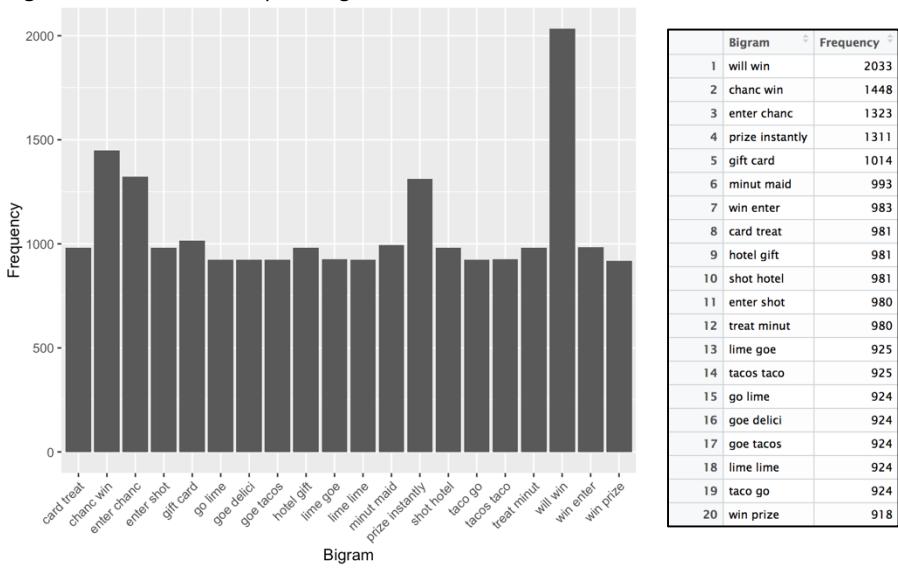
A word cloud (Figure 2.1.2a) formed using tweets that were classified to be positive reveals the set of words concerning contest(s) seems to be associated with tweets that are positive. Other than positive adjectives (“excited”, “delicious”, “best”, “amazing”) and verbs (“like”, “love”, “treat”), there are also certain words regarding values (“harmony”, “courtesy”) that users who tweet about Coca-Cola probably appreciate. Lastly, the term “tastethefeeling” is also significant because it is a campaign by Coca-Cola.

Plotting a bar graph of the 20 most frequent unigrams and bigrams of stemmed words (Figure 2.1.2b and 2.1.2c respectively) clarifies that there is indeed some sort of ongoing contest that is particularly popular among users. Another interesting finding is that the “Minute Maid” brand of drink, which is one of Coca-Cola’s other product, is also frequently mentioned in these positive tweets. Finally, as the 13<sup>th</sup> to 19<sup>th</sup> most popular bigrams have the approximately the same frequency count, they seem to be part of the same tweet (regarding tacos) that got retweeted many times.

**Figure 2.1.2b:** 20 most frequent unigrams



**Figure 2.1.2c:** 20 most frequent bigrams



From Figure 2.1.2d, we can see that most of the most favorited positive tweets have previously appeared in the most favorited tweets (all), which affirms the previous observation that the most favorited tweets (see Figure 2.1.1c) seem to be positive (as compared to negative). Several of the positive favorited tweets are “food and drink pairings” and it is interesting to note that tweets regarding Coca-Cola related merchandise and events are also well-liked. We can also attribute the most frequent 13<sup>th</sup> to 19<sup>th</sup> bigrams to be due to the 7<sup>th</sup> tweet, which implies that it is widely retweeted in addition to being well-liked (favorited).

**Figure 2.1.2d:** Top 10 most favorited “positive” tweets

<b>1. Coca-Cola</b>	<b>[Favorited 3150 times]</b>	Plate your crispy white cheddar grilled cheese and open a chilled Coca-Cola to create the perfect pairing. <a href="https://t.co/pNc08Qf6og">https://t.co/pNc08Qf6og</a>	Plate your crispy white cheddar grilled cheese and open a chilled Coca-Cola to create the perfect pairing.	.@TatyanaMcFadden proves again she's the fastest woman on three wheels! #1500M #TeamUSAParalympics
<b>2. Amazing Arabella</b>	<b>[Favorited 1221 times]</b>	NEW BLOG&VID <a href="https://t.co/wVwrcYjmA4">https://t.co/wVwrcYjmA4</a> @wwf_uk its amazing! @CocaCola_GB @jaadindaho #animals #wwf #amazingarabella\211\333 <a href="https://t.co/hmHNTXRhk6">https://t.co/hmHNTXRhk6</a>		
<b>3. Coca-Cola</b>	<b>[Favorited 847 times]</b>	Steak and Coke? That\211\333\252s a meal well done. \_331\324\215 <a href="https://t.co/epXHD7SDM4">https://t.co/epXHD7SDM4</a>	NEW BLOG&VID <a href="https://goo.gl/0JCIEH">goo.gl/0JCIEH</a> @wwf_uk its amazing! @CocaCola_GB @jaadindaho #animals #wwf #amazingarabella\211\333 #jaadinthekid	Coke goes with tacos. Tacos go with lime. And lime goes with Coke. What delicious #NationalTacoDay harmony! 🌮
<b>4. The Coca-Cola Co.</b>	<b>[Favorited 533 times]</b>	#JourneyxJourney arrives in Springfield to find a family-run business that makes us all proud to work for @CocaCola\211\333 <a href="https://t.co/AVYBbFgvEw">https://t.co/AVYBbFgvEw</a>		
<b>5. Coca-Cola</b>	<b>[Favorited 468 times]</b>	Cheeseburgers and choices \211\333\322 just the way we like it. Happy #NationalCheeseburgerDay! <a href="https://t.co/pHMxiVPbkq">https://t.co/pHMxiVPbkq</a>	Steak and Coke? That's a meal well done. 👍	Like your @CocaCola ice cold? Well, do we have a treat for you! <a href="http://CokeURL.com/bers">CokeURL.com/bers</a>
<b>6. Coca-Cola</b>	<b>[Favorited 443 times]</b>	.@TatyanaMcFadden proves again she\211\333\252s the fastest woman on three wheels! #1500M #TeamUSAParalympics <a href="https://t.co/tVxN3ocxcc">https://t.co/tVxN3ocxcc</a>		
<b>7. Coca-Cola</b>	<b>[Favorited 398 times]</b>	Coke goes with tacos. Tacos go with lime. And lime goes with Coke. What delicious #NationalTacoDay harmony! \_331\316\250 <a href="https://t.co/lhTq9nG9Fj">https://t.co/lhTq9nG9Fj</a>	#JourneyxJourney arrives in Springfield to find a family-run business that makes us all proud to work for @CocaCola: <a href="http://CokeURL.com/Springfield">CokeURL.com/Springfield</a>	What's 7 feet tall, cute, cuddly & coming soon to #DisneySprings? The @CocaCola Polar Bear! <a href="http://di.sn/6011BAmCW">di.sn/6011BAmCW</a>
<b>8. The Coca-Cola Co.</b>	<b>[Favorited 382 times]</b>	Like your @CocaCola ice cold? Well, do we have a treat for you! <a href="https://t.co/JteFGShx93">https://t.co/JteFGShx93</a> <a href="https://t.co/CISQa6kCiR">https://t.co/CISQa6kCiR</a>		
<b>9. Disney Springs</b>	<b>[Favorited 354 times]</b>	What\211\333\252s 7 feet tall, cute, cuddly & coming soon to #DisneySprings? The @CocaCola Polar Bear! <a href="https://t.co/jOs4PxNLSz">https://t.co/jOs4PxNLSz</a> <a href="https://t.co/NTtKMCUzg6">https://t.co/NTtKMCUzg6</a>		Express yourself with personalized t-shirts and @CocaCola bottles straight from #ShareaCoke <a href="http://CokeURL.com/j5kvu">CokeURL.com/j5kvu</a>
<b>10. The Coca-Cola Co.</b>	<b>[Favorited 322 times]</b>	Express yourself with personalized t-shirts and @CocaCola bottles straight from #ShareaCoke <a href="https://t.co/iB21SAaDF5">https://t.co/iB21SAaDF5</a> <a href="https://t.co/CESSdvHJoA">https://t.co/CESSdvHJoA</a>		

## NEGATIVE TWEETS

**Figure 2.1.3a:** Word cloud of “negative” tweets  
(min freq: 50)

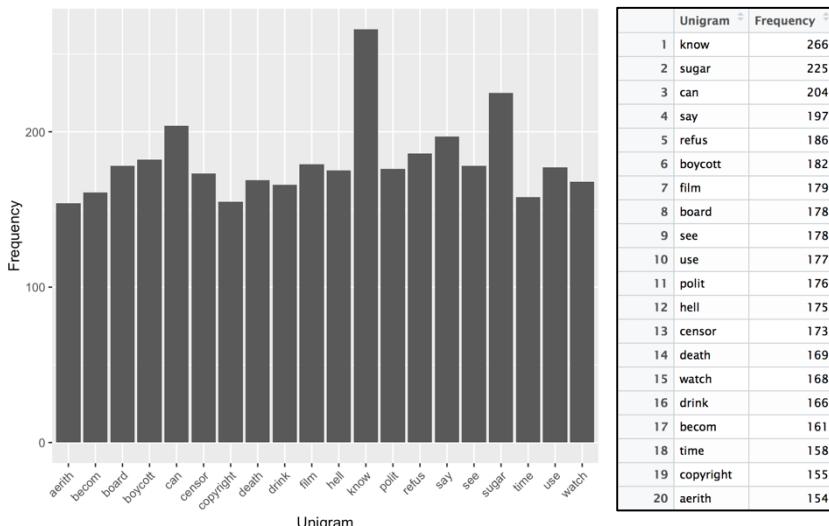


The word cloud (Figure 2.1.3a) formed from tweets that were classified to be negatives contains numerous negative adjectives (“shocking”, “disheartening”, “bad”) and verbs (“refuses”, “boycott”, “censor”).

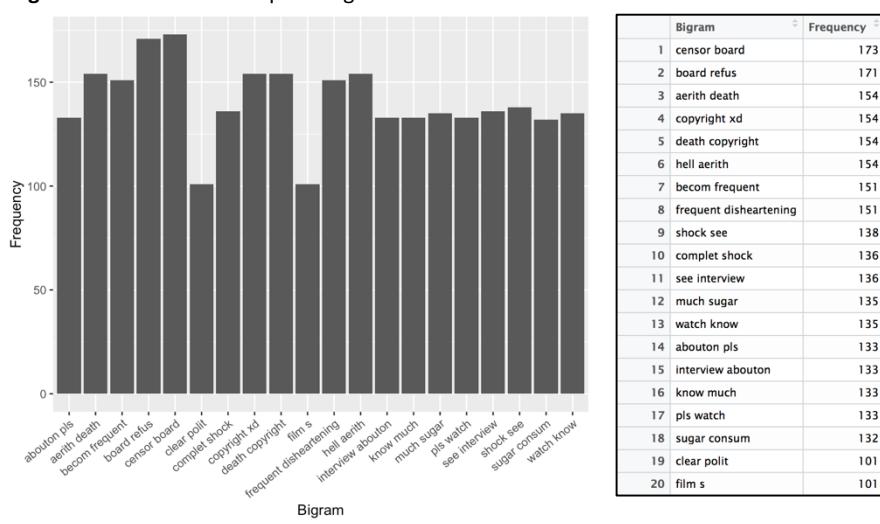
Most significantly, the high frequency of words “know” and “sugar” can be inferred to imply that the most frequent negative content in these tweets is likely to be about letting others be aware of the unhealthy levels of sugar in the company’s product(s).

Similarly, we plotted a bar graph of the 20 most frequent unigrams (Figure 2.1.3b) and bigrams (Figure 2.1.3c) of stemmed words found in the set of tweets that were classified to be negative. In Figure 2.1.3b, words like “censor”, “film” and “copyright” does not seem to really make sense as Coca-Cola’s main business is in the food and beverage industry. The high frequency of these words could be due to Twitter users responding to a particular Coca-Cola advertisement that was considered to be distasteful. Similarly, the most frequent bigrams in Figure 2.1.3c that contain these words do not particularly make sense. However, the bigrams “much sugar” and “sugar consum” further verify our suspicion that there is a number of tweets that make reference to unhealthy levels of sugar content.

**Figure 2.1.3b:** 20 most frequent unigrams



**Figure 2.1.3c:** 20 most frequent bigrams



Upon examining the most favorited negative tweets (see Figure 2.1.3d), we can see that many of these most favorited negative tweets are either not accurately categorized to be negative (1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 10<sup>th</sup>) or not targeted towards Coca-Cola (5<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>). The 2 tweets that are criticizing Coca-Cola are the 6<sup>th</sup> and 9<sup>th</sup> tweet. The 6<sup>th</sup> tweet highlights the high sugar content of the drink while the 9<sup>th</sup> tweet criticizes one of Coca-Cola's "race-mixing" advertisement in addition to the sugar content of the Coca-Cola drink. Both of these tweets mention the unhealthy sugar content and probably contributed to the frequency of the word "sugar". The 4<sup>th</sup> tweet also clears our confusion as to why there are film related words in the collected tweets.

**Figure 2.1.3d:** Top 10 most favorited "negative" tweets

#### 1. **CodeNamePizza**

**[Favorited 432 times]**

Found these salt and pepper shakers! It's a shame they say CocaCola on them but we know what they really are! \n\nhttps://t.co/dzzysl6te

#### 2. **Coca-Cola**

**[Favorited 252 times]**

Already time for all the Fall feelings? Bring 'em on. #FirstDayOfFall https://t.co/PHNxI4Y8IU

#### 3. **The Coca-Cola Co.**

**[Favorited 204 times]**

When one @CocaCola bottler couldn't figure out a problem, they realized little things can make a huge difference:\nhttps://t.co/nkpnPoVZ4R

#### 4. **Dean WereWeiss**

**[Favorited 177 times]**

Why the hell is Aerith's death copyrighted by CocaCola? XD https://t.co/aKCjXCvWyz

#### 5. **Dr. Milton Wolf**

**[Favorited 119 times]**

SAD DAY: KC @Chiefs protest American flag. I'm done.\nWhat say you, @Sprint, @AnheuserBusch, @CocaCola & @HyVee? https://t.co/faa6qxHlkx

#### 6. **Lalit Kumar Modi**

**[Favorited 110 times]**

Completely #shocking to see this #interview about @CocaCola on @BBC - pls watch & know how much #sugar 1 is\211\333\_ https://t.co/Em4r7PGz4f

#### 7. **Dr. Milton Wolf**

**[Favorited 96 times]**

KC @Chiefs protest America\344\363\_on 9/11.\n\nNFL sponsors @Sprint @AnheuserBusch @CocaCola @HyVee should drop 'em.\n\nAgree? https://t.co/aejGgTlvDq

#### 8. **Attractions Magazine**

**[Favorited 67 times]**

The Coke Polar Bear is doing limited meet & greets today at the @CocaCola Store at @DisneySprings. Debuts soon. https://t.co/exUUpsQkv9

#### 9. **Spectre (account suspended)**

**[Favorited 64 times]**

Take your race-mixing propaganda and filthy sugar water and fuck right off. \n\nPS: Coke's CEO is a turkroach. https://t.co/fpvMz1b4Yn (in response to picture on right)

#### 10. **Alexander Cardinale**

**[Favorited 44 times]**

If you missed #MadeForYou Live At Shazam in NYC then CLICK HERE: https://t.co/c8Q3Yk3lPh TY to @AtlanticRecords\211\333\_ https://t.co/Fj9vkTBtKu

Found these salt and pepper shakers! It's a shame they say CocaCola on them but we know what they really are! 😊 🍔

Completely #shocking to see this #interview about @CocaCola on @BBC - pls watch & know how much #sugar 1 is #consuming in 1 glass. 🥣



Already time for all the Fall feelings? Bring 'em on. #FirstDayOfFall



When one @CocaCola bottler couldn't figure out a problem, they realized little things can make a huge difference: CokeURL.com/v5hf4



The Coke Polar Bear is doing limited meet & greets today at the @CocaCola Store at @DisneySprings. Debuts soon.



Share a lil somethin' sweet. #CokeLife CokeURL.com/wx3nm



SAD DAY: KC @Chiefs protest American flag. I'm done.

What say you, @Sprint, @AnheuserBusch, @CocaCola & @HyVee?



If you missed #MadeForYou Live At Shazam in NYC then CLICK HERE: facebook.com/atlanticrecords ... TY to @AtlanticRecords @Shazam @CokeMusic @CocaCola



## KEY FINDINGS

From analyzing tweets that are linked to the keyword “cocacola”, we can gather that:

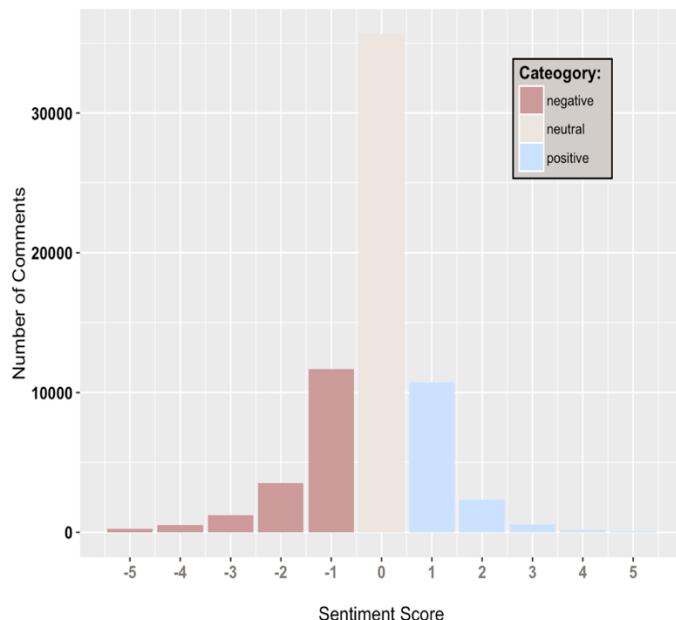
1. These tweets are made by both official Coca-Cola Twitter accounts and non-Coca-Cola related organizations and users.
  2. Tweets about Coca-Cola generally express more positive opinions as compared to negative opinions.
  3. Most favorited positive tweets are mainly made from official Coca-Cola Twitter accounts. They tend to be about food and drink pairings or Coca-Cola related figures/ merchandise.
  4. Logically, most negative tweets are made by public users and are mainly about how Coca-Cola is unhealthy, specifically due to its (high) sugar content.
  5. One of the most favorited negative tweet by a public user reveals that advertisements which incorporate sensitive race-related issues and push for a certain (ideal) perspective might not be so well-received. This example highlights the importance of considering the social context of the tweet's target audience.

## COLLECTED YOUTUBE COMMENTS – COCACOLA “FACT” VIDEOS

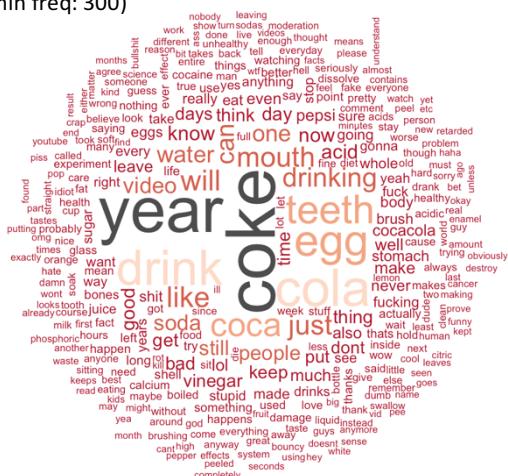
From YouTube, we extracted a total of 66,989 comments from the 4 most viewed “fact videos” about Coca-Cola (see Appendix C). A majority of the comments (57,497) was from the video titled “Still drinking coca cola? Watch this!”, which shows how the shell of an un-peeled boiled egg dissolves after being left in Coca-Cola for a year. We then classified these comments into “positive”, “neutral” and “negative” categories using Hu & Liu’s (2004) opinion lexicon.

## OVERALL

**Figure 2.2.1a:** Sentiment scores of collected comments



**Figure 2.2.1b:** Word cloud of collected comments  
(min freq: 300)



Sentiment Score	Number of Comments	Category	Sentiment Score	Number of Comments	Category
1	-48	1 negative	18	-3	1232 negative
2	-32	1 negative	19	-2	3503 negative
3	-21	2 negative	20	-1	11688 negative
4	-18	1 negative	21	0	35659 neutral
5	-17	1 negative	22	1	10727 positive
6	-15	3 negative	23	2	2315 positive
7	-14	1 negative	24	3	575 positive
8	-13	3 negative	25	4	160 positive
9	-12	6 negative	26	5	80 positive
10	-11	3 negative	27	6	29 positive
11	-10	11 negative	28	7	11 positive
12	-9	12 negative	29	8	4 positive
13	-8	26 negative	30	9	4 positive
14	-7	58 negative	31	10	2 positive
15	-6	111 negative	32	12	1 positive
16	-5	238 negative	33	16	1 positive
17	-4	519 negative	34	20	1 positive

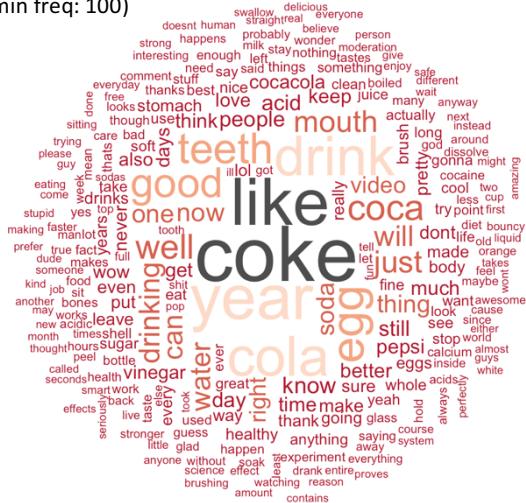
Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
-48.00000	-1.00000	0.00000	-0.1344	0.00000	20.00000

As summarized in Figure 2.2.1a, even though the sentiment score of the comments ranged from -48 to 20, a large majority of the comments (99.6%) were in the range of -5 to 5. Similarly, the most common and median score is 0. On the other hand, more tweets were categorized to be negative than positive.

A word cloud (Figure 2.2.1b) formed from all text found in the collected comments reveals that the most popular word found were directly related to the content of the most commented video (“egg”, “teeth”, “year”). Generally, based on the most common words, it seems that the comments are mostly about how drinking Coca-Cola is bad. It is also interesting to see that a rival brand, “pepsi” is commonly mentioned in these comments.

## **POSITIVE COMMENTS**

**Figure 2.2.2a:** Word cloud of “positive” comments  
(min freq: 100)

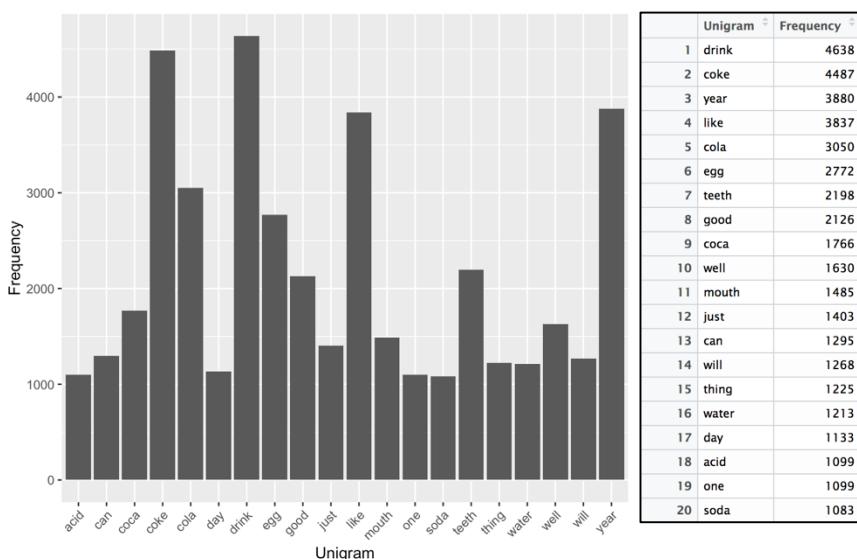


Some might be surprised that a word cloud (Figure 2.2.2a) of the most common words found in the positive comments reveals that viewers comment on how they enjoy drinking coke (“drink”, “like”, “coke”) despite the information found in the videos. Furthermore, “pepsi” is a common term found among these positive comments, which can imply that consumers have a tendency to compare between the two brands and treat them as substitutes (example of actual comments: “1: Coca cola is better than pepsi :)”, “Pepsi tastes better than Coke.”, “fact number 1 coca cola is extremely more successful, which wouldn’t happen if Pepsi tasted better.^^”, “I like coke, but i prefer pepsi. I’m not sure why.”).

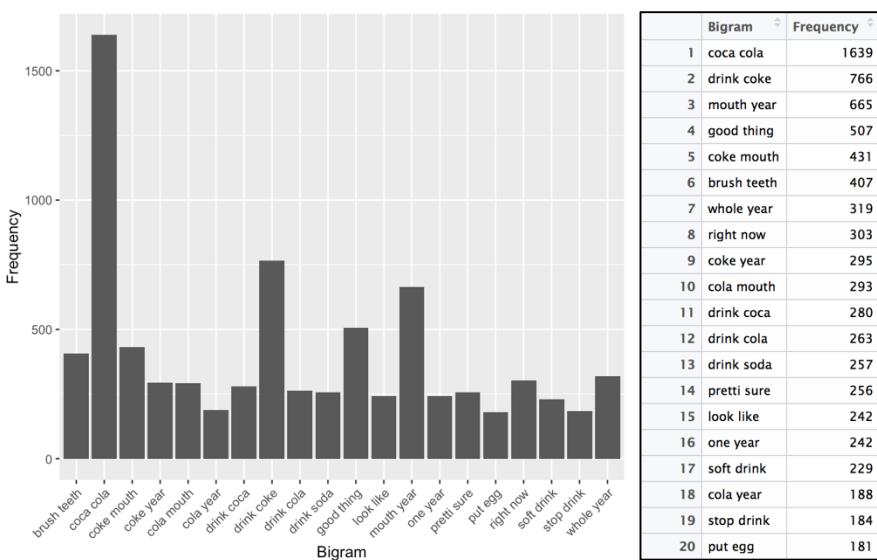
However, it must also be noted that these positive comments need not be positive because of their opinion of Coca-Cola, but because the commenters were complimenting the videos and the new knowledge they learnt from them. As such, it may be misleading to relate these positive comments to be because people have a positive opinion of Coca-Cola.

If we were to examine the 20 most common unigrams from the positive comments (Figure 2.2.2b), it would seem that it is insensible how some of the unigrams explain why those who commented have a positive opinion of Coca-Cola (“egg”, “teeth”, “soda”). This proves that the positivity in some of these comment was targeted towards the videos (creator) instead. The 20 most common bigrams found in these comments (Figure 2.2.2c) also do not give us much insight as to what the user comments are positive about (other than they are commonly found in comments that are categorized to be positive).

**Figure 2.2.2b:** 20 most frequent unigrams

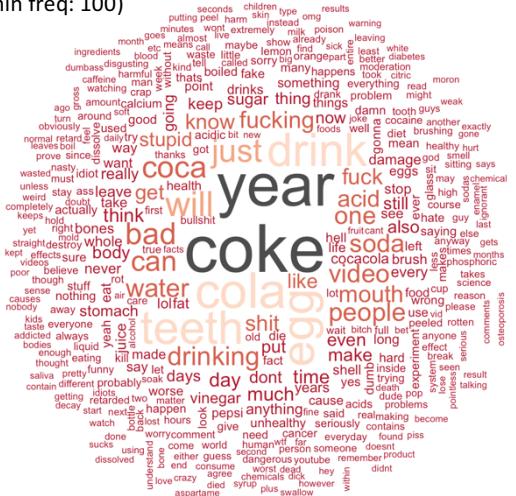


**Figure 2.2.2c:** 20 most frequent bigrams



## **NEGATIVE COMMENTS**

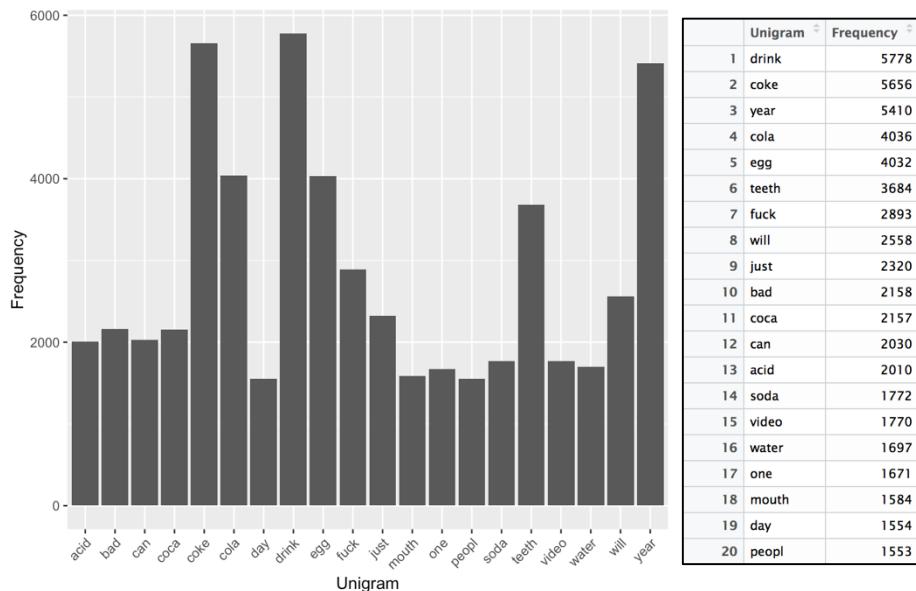
**Figure 2.2.3a:** Word cloud of “negative” comments  
 (min freq: 100)



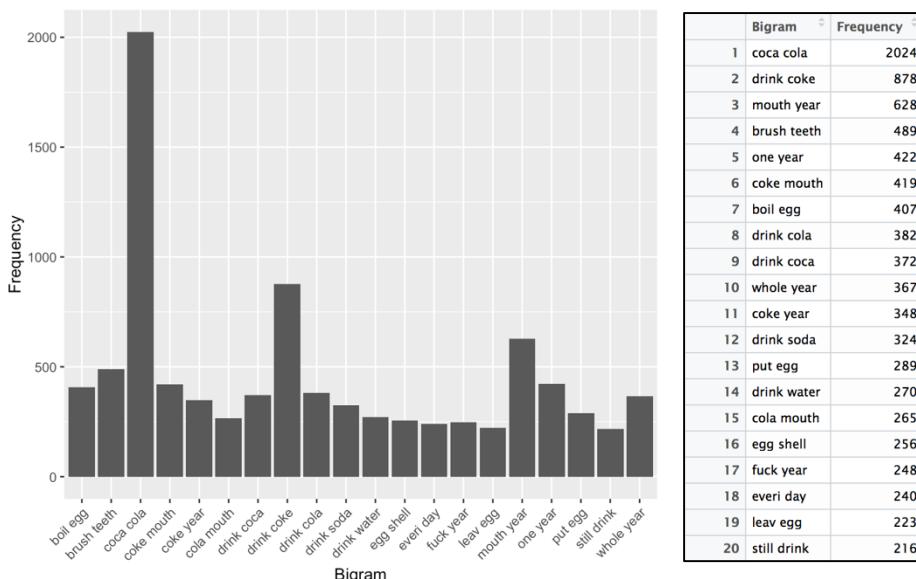
Expectedly, the most common words (see Figure 2.2.3a) found in the negative comments are adjectives (“unhealthy”, “bad”, “acidic”) and verbs (“damage”, “destroy”, “rot”) describing about how Coca-Cola is harmful. This is because content found in the videos are mostly “negative” facts about Coca-Cola.

From Figure 2.2.3b, we can make out that the most common theme in the negative collected comments is how Coca-Cola is harmful to our teeth. It is interesting to see there are several bigrams that are common to both the positive and negative bigrams (Figure 2.2.3c) lists (e.g. “coca cola”, “drink coke”, “whole year”). This shows that several of these bigrams are inherently neutral and that different people interpret the information found in the videos differently (and make their comments).

**Figure 2.2.3b:** 20 most frequent unigrams



**Figure 2.2.3c:** 20 most frequent bigrams



## KEY FINDINGS

The following summarizes the key insights gleaned from the analysis of comments extracted from the 4 “fact videos”:

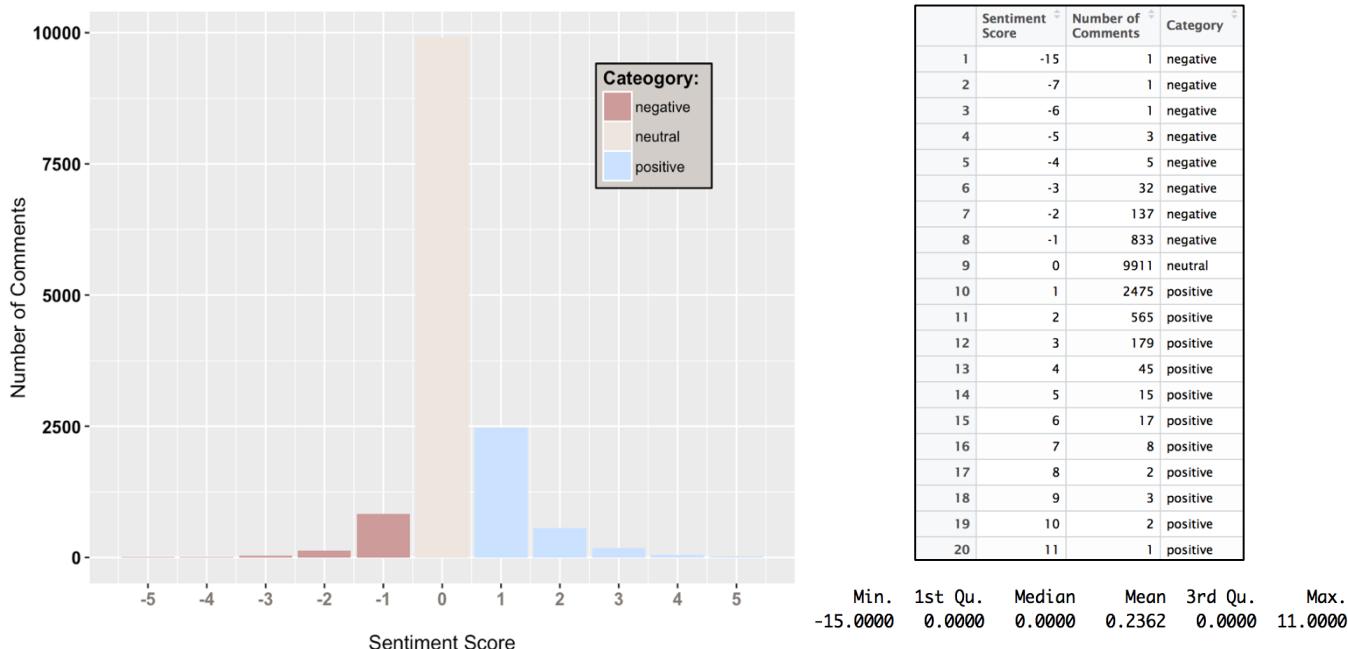
1. Most of the comments express a negative opinion and this is probably because most/ some of the content in these videos highlight the (“lesser known”) negative aspects of Coca-Cola. In particular, the harmful effect of Coca-Cola on one’s dental health is emphasized in the comments.
  2. Even though all of these videos are only about Coca-Cola, it is noteworthy that a rival company’s (Pepsi) product is frequently mentioned and comparisons are made between the two.

COLLECTED YOUTUBE COMMENTS – MOST POPULAR UPLOADED VIDEOS BY COCA-COLA

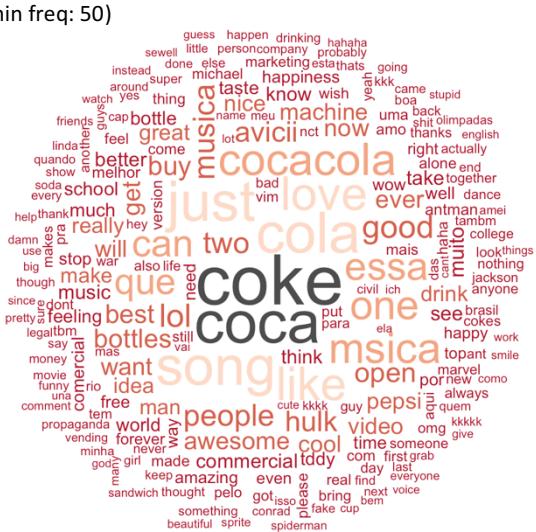
From the official Coca-Cola channel in YouTube, we searched among the videos that were uploaded and extracted 14,236 comments (made before and including 05/10/2016) from the 7 most popular English videos (see Appendix C). In these 7 videos, at least 2,000 comments were extracted (each) from 4 videos while less than 500 comments were extracted (each) from the remaining 3 videos. We also classified these comments into “positive”, “neutral” and “negative” categories using Hu & Liu’s (2004) opinion lexicon.

## **OVERALL**

**Figure 2.3.1a:** Sentiment scores of collected comments



**Figure 2.3.1b:** Word cloud of collected comments  
(min freq: 50)

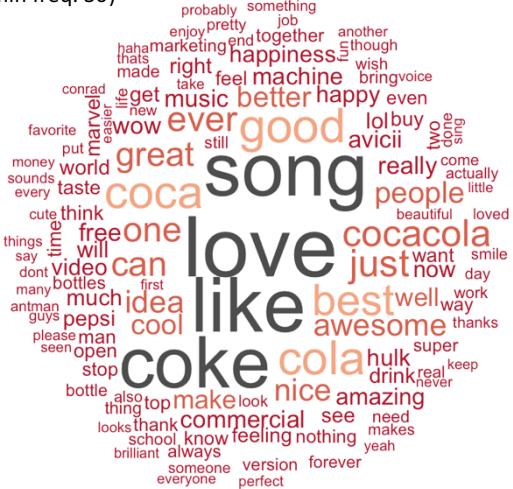


As summarized in Figure 2.3.1a, the sentiment score of the comments ranges from -15 to 11 but most of the comments (99.7%) had a sentiment score in the range of -5 to 5. The most common and median score is 0. Generally, there were also more tweets that were categorized to be positive than negative.

Generally, based on the word cloud of text in the collected comments (Figure 2.3.1b), we can see that there were more positive words (“awesome”, “wow”, “nice”) used as compared to negative words (“fake”, “shit”, “bad”). Furthermore, we can also infer from several specific words that users seem to be inclined to express their thoughts on videos with “music” (“song”, “musica”, “avicii”) or “film” (“hulk”, “antman”, “spiderman”) themes.

## **POSITIVE COMMENTS**

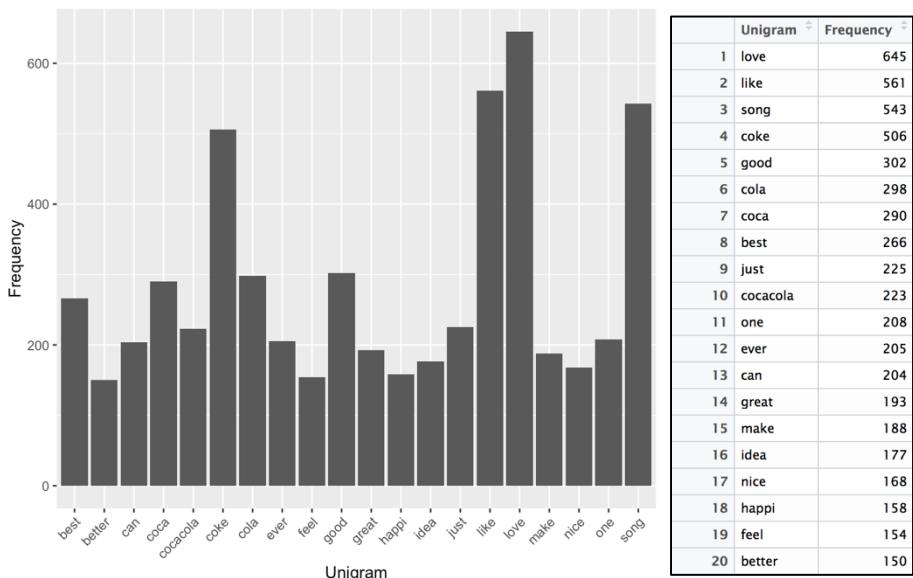
**Figure 2.3.2a:** Word cloud of “positive” comments  
(min freq: 30)  something



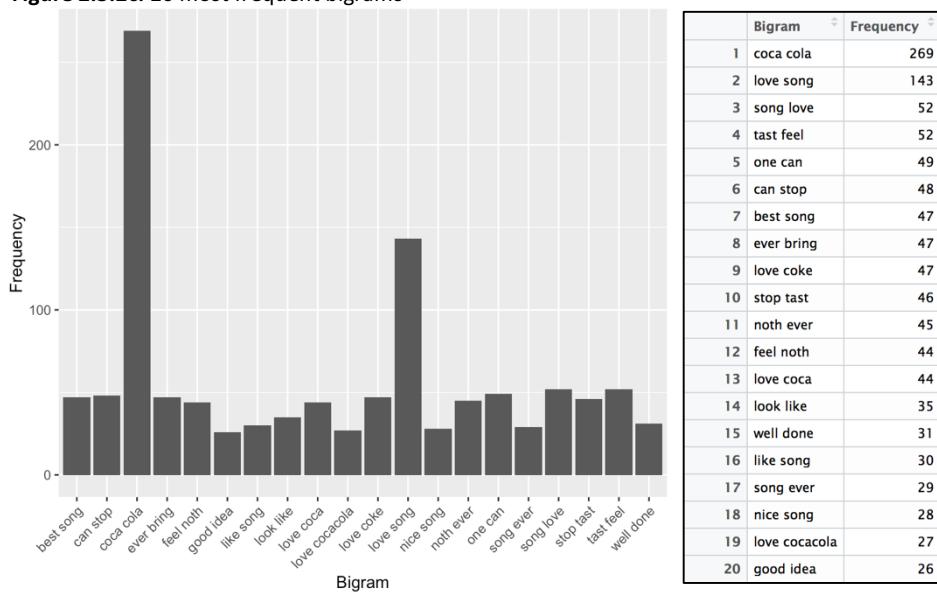
Indeed, the most common words found in comments that were categorized to be positive (Figure 2.3.2a) are words to express a person's enjoyment of the Coca-Cola product, video, or both.

From the relative frequency of the 20 most frequent unigrams found in positive comments (Figure 2.3.2b), we can gather that there is greater emphasis on the enjoyment of the song (video) more than the Coca-Cola product. If we look at the most frequent bigrams (Figure 2.3.2c), the number of “love song” bigram (143) was more than the number of “love coke” (47), “love coca” (44) and “love cocacola” (27) bigrams added together.

**Figure 2.3.2b:** 20 most frequent unigrams

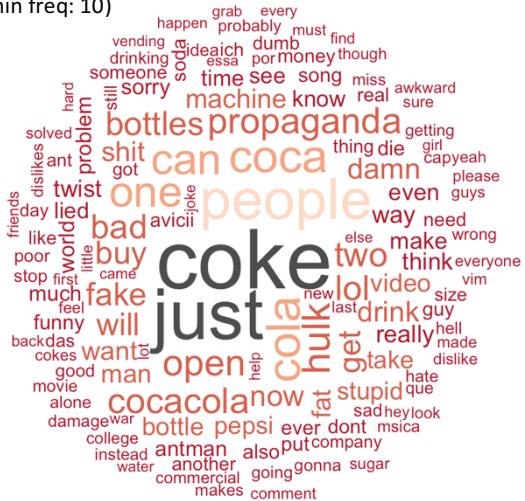


**Figure 2.3.2c:** 20 most frequent bigrams



## NEGATIVE COMMENTS

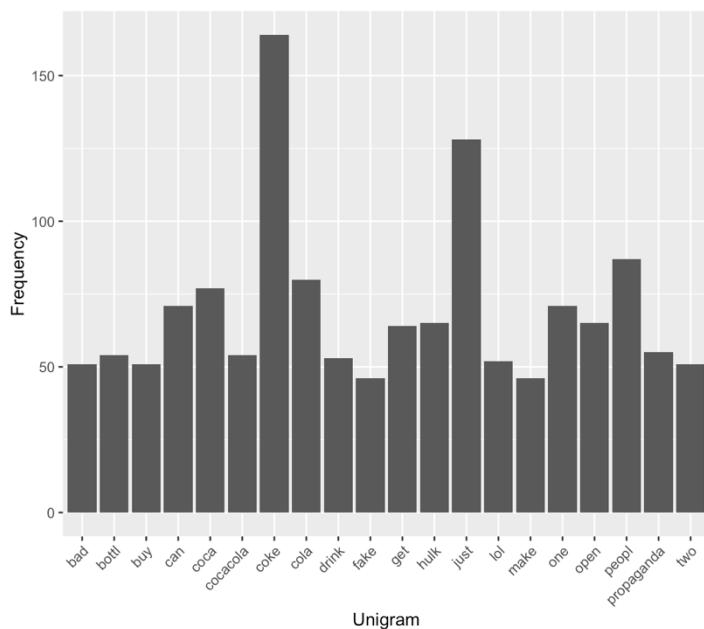
**Figure 2.3.3a:** Word cloud of “negative” comments  
(min freq: 10)



It would perhaps be more interesting to look at the most words in the negative comments instead. From Figure 2.3.3a, we can identify 3 terms that seem to stand out: “propaganda”, “buy” and “fake”. These words seem to be targeted more at the video(s) instead of the Coca-Cola product, and specifically, that the videos are misrepresenting or “over-promoting” the product.

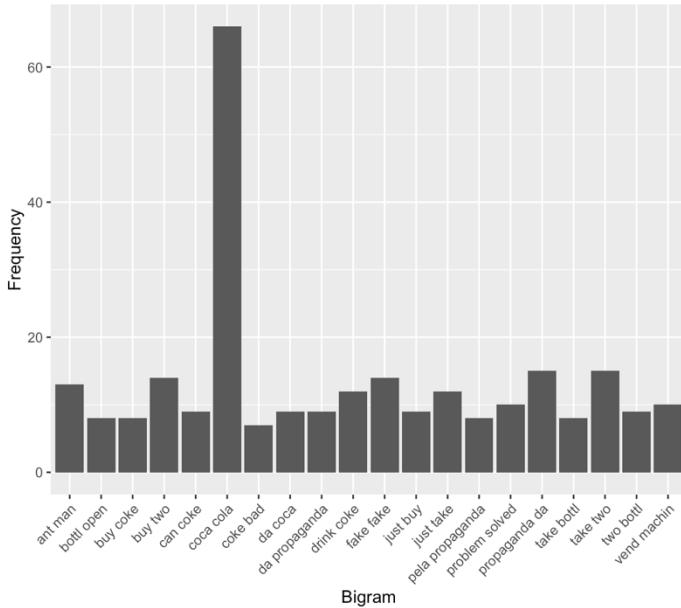
The fact that “hulk” is one of the most frequently occurring unigrams in the comments that were categorized to be negative (see Figure 2.3.3b) also implies that a recognizable character can be quite significant in forming a person’s opinion of a product that is quite unrelated. It is also noteworthy that the frequency of even the most popular bigrams (see Figure 2.3.3c) are relatively low, which indicate the reasons for one’s negative opinion vary quite a bit.

**Figure 2.3.3b:** 20 most frequent unigrams



Unigram	Frequency
1 coke	164
2 just	128
3 peopl	87
4 cola	80
5 coca	77
6 can	71
7 one	71
8 hulk	65
9 open	65
10 get	64
11 propaganda	55
12 bottl	54
13 cocacola	54
14 drink	53
15 lol	52
16 bad	51
17 buy	51
18 two	51
19 fake	46
20 make	46

**Figure 2.3.3c:** 20 most frequent bigrams



Bigram	Frequency
1 coca cola	66
2 propaganda da	15
3 take two	15
4 buy two	14
5 fake fake	14
6 ant man	13
7 drink coke	12
8 just take	12
9 problem solved	10
10 vend machin	10
11 can coke	9
12 da coca	9
13 da propaganda	9
14 just buy	9
15 two bottl	9
16 bottl open	8
17 buy coke	8
18 pela propaganda	8
19 take bottl	8
20 coke bad	7

## KEY FINDINGS

The following summarizes the key insights gleaned from the analysis of comments extracted from the 4 “fact videos”:

1. Videos which make reference to recognizable characters in popular movie culture are particularly well received. However, care has to be taken to not “misrepresent” these characters that are against social perception e.g. depict heroic characters as weak. The usage of “catchy” songs also help to gain public’s interest.
  2. While there are no specific main reasons why people have a negative opinion, it seems that people do not like it when they feel they are being “told to buy Coca-Cola”. It would be best to avoid explicit references to the Coca-Cola product in videos and let people “draw” the links themselves.

## CAMPAIGN ANALYSIS: TASTE THE FEELING

“Taste The Feeling” was Coca-Cola’s new global creative campaign launched in 2016, uniting all their trademark brands and preaching a commitment to choice, and the simple pleasures of life in everyday moments. This is in contrast to the previous campaign “Open Happiness”, which had a more lofty, ideals based campaign that appealed to people’s optimism and comfort.

Key features of the “Taste the Feeling” campaign include TV ads, audio signature and photos rooted in compelling visual storytelling that highlights authentic and personal stories. Delivered through emotional product communication, the use of vibrant colours emphasises on Coca-Cola’s role in intensifying the emotion and feeling of the imagery, with the product in the central focus all the time (Moyle, 2016).

The images are shot by reputable fashion photographers Guy Aroch and Nacho Ricci, which show a wide variety of people across the globe enjoying Coke in simple day-to-day moments. The campaign exhibits youths in striking poses, with Coke bottles and emotion in focus. The audio signature associates with the upbeat sounds of enjoying a Coca-Cola, symbolising refreshment and heightening the sensory experience through hearing the sound of fizz and ice clinking. The campaign anthem, the main track for the “Taste The Feeling”, is produced by Swedish singer Avicii and Conrad Sewell. Multiple versions of the track are created for different events, such as the Coke’s UEFA EURO 2016 and Rio Olympic Games 2016 Campaign.

The TV advertisements and YouTube videos showcase people enjoying Coca-Cola while having intimate, everyday moments. At the end of each video, there is an iconic red Coca-Cola disc that brings together the Coca-Cola family of products, which includes Coca-Cola Light/Diet Coca-Cola, Coca-Cola Zero and Coca-Cola Life. These advertisements are produced in many variants using local actors and different culture illustrations.

To understand the actual impact of this campaign, we did the following:

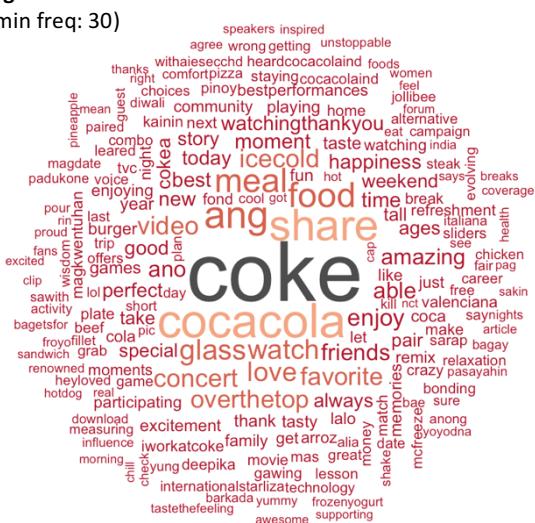
1. Collected and analyzed tweets which contained the keyword “tastethefeeling”
  2. Collected and analyzed comments from the campaign’s YouTube videos

## COLLECTED TWEETS: TASTETHEFEELING

We searched for tweets in the English language that had the keyword “tastethefeeling” from 10 September 2016 till 5 October 2016 (inclusive). In this span of 26 days, we collected a total of 3,664 tweets.

**Figure 2.4.1a:** Word cloud of collected tweets

(min freq: 30)



We then formed a word cloud based on the words found in the tweets. As can be seen from Figure 2.4.1a, “coke” and “cocacola” were the most common words found. This indicates that most of tweets that were collected are associated with Coca-Cola. This is not necessary as the usage of the “tastethefeeling” keyword can be used by anyone for their own purposes.

Examining the most favorited tweets of these collected tweets (see Figure 2.4.1b) reveal that most of these tweets are related to Coca-Cola (only exception is the 10<sup>th</sup> tweet). In addition, these most favorited tweets were mainly made by official Coca-Cola twitter accounts and in particular, Coca-Cola PH. This could be because in the time period that the tweets were collected, Coca-Cola PH mentions the keyword the most or/ and that the audience of the Coca-Cola PH account appreciates and favorites this Twitter account's tweets more so than others. Furthermore, it can be observed that these tweets can be categorized into either of 2 broad categories: "activities" and "food and drink pairings".

**Figure 2.4.1b:** Top 10 most favorited tweets

**1. Coca-Cola PH**

**[Favorited 543 times]**

Best bonding activity ang playing video games! Ano ang perfect meal with COKE for this moment? #TasteTheFeeling  
<https://t.co/UyAnw20JUo>

Best bonding activity ang playing video games!  
 Ano ang perfect meal with COKE for this moment? #TasteTheFeeling

Staying home for the weekend? Gawing mas special ang family time w/ Pinoy Beef Sliders + COCA-COLA. #TasteTheFeeling



**2. Ylona Garcia**

**[Favorited 541 times]**

I was able to #TasteTheFeeling of #OverTheTop happiness after watching \344\235\\_245\237\217\\_364\315\273THANKYOU THIS IS AMAZING\\_364\273\353\\_364\217\351 @Jollibee\344\363\_ <https://t.co/1jiWsfanvs>

I was able to #TasteTheFeeling of #OverTheTop happiness after watching ❤️❤️THANKYOU THIS IS AMAZING! @Jollibee @CocaColaPH



**3. Coca-Cola PH**

**[Favorited 505 times]**

Mag-date with bae sa @McDo\_PH with the new Coke McFreeze paired with Chicken Fillet Italiana! #TasteTheFeeling  
<https://t.co/OMyBMFWz36>

BaiLona PEters @BaiLona\_Peters  
 We did this for you Ylona\_garcia and @OfficialBaileyM!  
 Jollyhotdog and Coke project you tube/GBWxPbjpkjc

Mag-date with bae sa @McDo\_PH with the new Coke McFreeze paired with Chicken Fillet Italiana! #TasteTheFeeling

Make your family bonding more fun with a tasty meal! Ano kaya ang bagay kainin with COCA-COLA? #TasteTheFeeling



**5. Coca-Cola PH**

**[Favorited 433 times]**

Magkwentuhan about your fond memories while enjoying COKE & Arroz Valenciana. #TasteTheFeeling  
<https://t.co/ZVAJyRjHHS>

Thank you for participating in the community remix! Enjoy the best @JustDanceGame performances on #TasteTheFeeling.

Food & Coke – a love story for the ages. #TasteTheFeeling



**6. Coca-Cola PH**

**[Favorited 364 times]**

Completely #shocking to see this #interview about @CocaCola on @BBC - pls watch & know how much #sugar 1 is\211\333\_ <https://t.co/Em4r7PGz4f>

Magkwentuhan about your fond memories while enjoying COKE & this tasty plate of Arroz Valenciana. #TasteTheFeeling

#tanning feels so good to be back to the gym! #fitness #gym #TasteTheFeeling



**7. Coca-Cola PH**

**[Favorited 359 times]**

Staying home for the weekend? Gawing mas special ang family time w/ Pinoy Beef Sliders + COCA-COLA. #TasteTheFeeling

<https://t.co/4WJ0vwk1JC>

Magkwentuhan about your fond memories while enjoying COKE & this tasty plate of Arroz Valenciana. #TasteTheFeeling

Arroz Valenciana Yummier with Coke



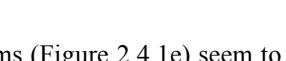
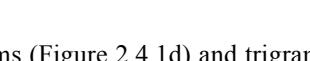
**8. Coca-Cola PH**

**[Favorited 143 times]**

Anong bagay kainin with COCA-COLA after watching an awesome concert? #TasteTheFeeling <https://t.co/QQArFOtQF0>

Arroz Valenciana Yummier with Coke

Tanning feels so good to be back to the gym! #fitness #gym #TasteTheFeeling



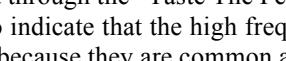
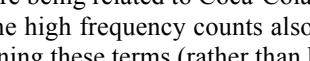
**9. Coca-Cola**

**[Favorited 141 times]**

Food & Coke \344\363\361 a love story for the ages. #TasteTheFeeling <https://t.co/GmkOjYx9Ji>

Arroz Valenciana Yummier with Coke

#tanning feels so good to be back to the gym! #fitness #gym #TasteTheFeeling



**10. HarperShay**

**[Favorited 102 times]**

#tanning feels so good to be back to the gym! #fitness #gym #TasteTheFeeling <https://t.co/XiEbtNS4QQ>

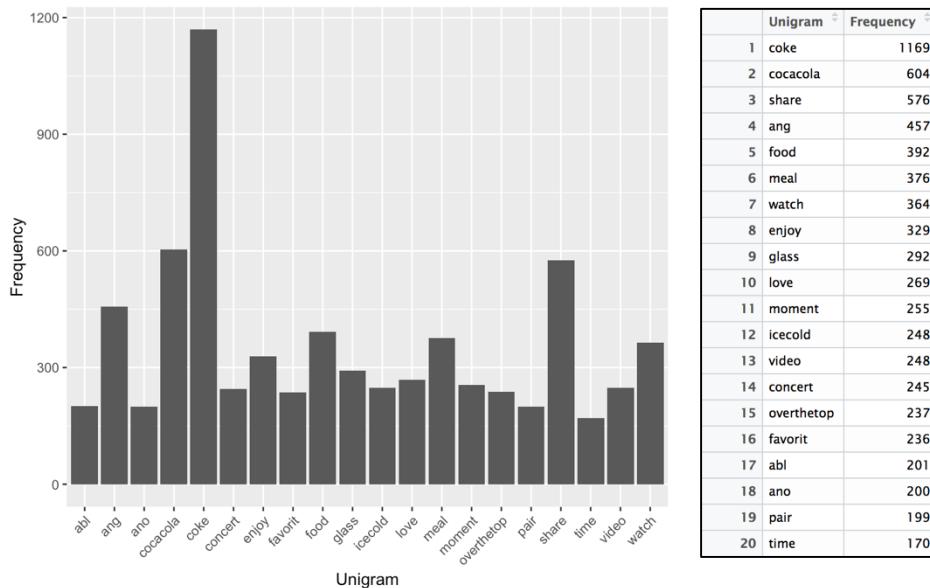
Arroz Valenciana Yummier with Coke

#tanning feels so good to be back to the gym! #fitness #gym #TasteTheFeeling



The results of the 20 most frequent unigrams (Figure 2.4.1c), bigrams (Figure 2.4.1d) and trigrams (Figure 2.4.1e) seem to imply that the content of most of these tweets are enjoyable moments that are being related to Coca-Cola through the "Taste The Feeling" campaign. In addition, several bigrams and trigrams sharing the same high frequency counts also indicate that the high frequency of many of these terms are due to multiple retweets of a tweet containing these terms (rather than because they are common among different tweets).

**Figure 2.4.1c:** 20 most frequent unigrams



**Figure 2.4.1d:** 20 most frequent bigrams

	Bigram	Frequency
1	icecold coke	228
2	ano ang	184
3	abl overthetop	160
4	happi watchingthankyou	160
5	overthetop happi	160
6	watchingthankyou amazing	160
7	cokea love	144
8	food cokea	144
9	love storri	144
10	storri ages	144
11	cocacola watch	133
12	ang meal	131
13	tall glass	129
14	glass icecold	126
15	coke share	121
16	time w	120
17	share video	119
18	play video	103
19	communiti remix	96
20	enjoy bestperform	96

**Figure 2.4.1e:** 20 most frequent trigrams

	Trigram	Frequency
1	abl overthetop happi	160
2	happi watchingthankyou amazing	160
3	overthetop happi watchingthankyou	160
4	cokea love stori	144
5	food cokea love	144
6	love stori ages	144
7	glass icecold coke	126
8	tall glass icecold	122
9	communiti remix enjoy	96
10	particip communiti remix	96
11	remix enjoy bestperform	96
12	thank particip communiti	96
13	amazing abl overthetop	93
14	watchingthankyou amazing abl	93
15	coke tasti plate	87
16	enjoy coke tasti	87
17	fond memori enjoy	87
18	magkwentuhan fond memori	87
19	memori enjoy coke	87
20	plate arroz valenciana	87

COLLECTED YOUTUBE COMMENTS – VIDEOS IN COCACOLA’S TASTETHEFEELING PLAYLIST

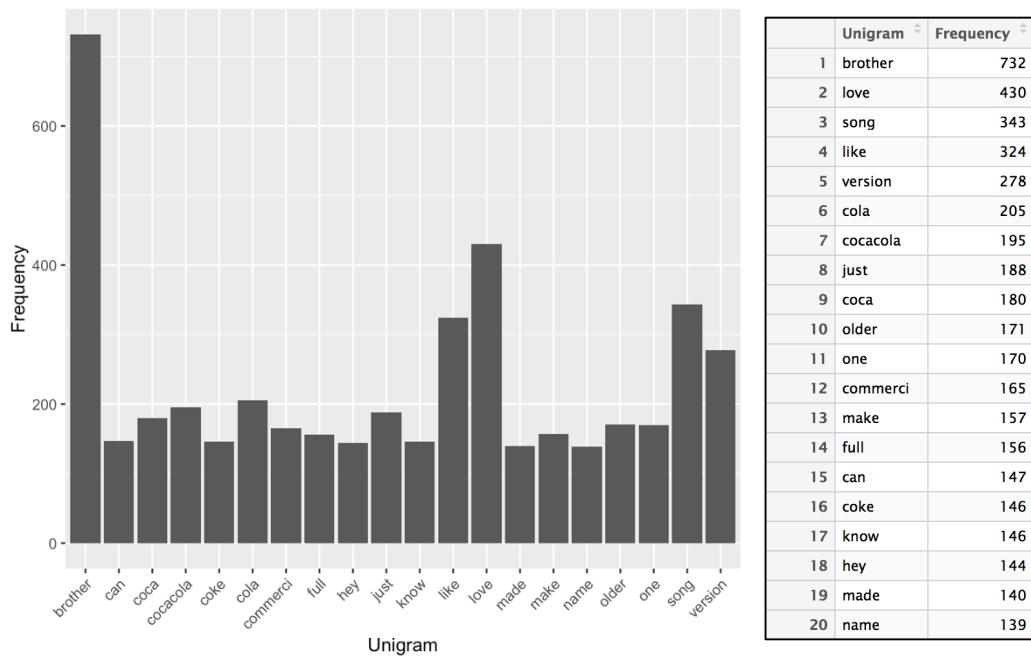
We also extracted a total of 4,032 comment from 7 English videos in the “Taste The Feeling” playlist of the official Coca-Cola channel in YouTube (See Appendix C). 2 of the videos “Antarctic Summer” and “Empty Bottles” were released on 18 Apr 2016, while the rest of the videos were released on 19 Jan 2016. A majority of the comments (3,159) was from the video titled “Brotherly Love”

**Figure 2.4.2a:** Word cloud of collected comments

From Figure 2.4.2a, we can see from the popularity of various words (“coke”, “cocacola”, “coca”, “cola”) that the commenters are able to relate what they see in the videos to their feelings about Coca-Cola (even if the content of the video did not have explicitly mention Coca-Cola). In addition, “brother” and “song” were 2 of the most mentioned words, which can indicate that these themes were most effective in making viewers feel about the video. Even though one might argue that it is because there was a disproportionate amount of comments extracted from “Brother Love”, this proves that this video attracted more “reactions” (comments) from the public within the same period of time. Furthermore, even though the videos seem to generate a range of emotions (“cry”, “cute”, “love”, “best”), these emotions are generally positive.

As more clearly shown in Figure 2.4.2b, “brother” was the most frequently mentioned unigram (by a clear margin) in the extracted comments. Furthermore, the 20 most frequently mentioned bigrams (see Figure 2.4.2c) also show the usage of the term “brother” as part of a song title (“hey brother”), to refer to relationships (“older brother”, “younger brother”) and emotions (“brother love”). Finally, the most frequently occurring trigrams seem to be about the song used in the video(s).

**Figure 2.4.2b:** 20 most frequent unigrams



**Figure 2.4.2c:** 20 most frequent bigrams

Bigram	Frequency
1 coca cola	176
2 older brother	127
3 full version	119
4 hey brother	111
5 litt brother	64
6 antonio hidalgo	62
7 version song	59
8 look like	56
9 big brother	49
10 brother love	45
11 younger brother	44
12 freeih freeih	43
13 made cry	36
14 conrad sewell	33
15 tast feeling	32
16 hidalgo antoniohidg	31
17 commerci ever	27
18 cover song	25
19 la cancin	25
20 love ad	25

**Figure 2.4.2d:** 20 most frequent trigrams

Trigram	Frequency
1 freeih freeih freeih	42
2 antonio hidalgo antoniohidg	31
3 full version song	30
4 releas full version	21
5 version hey brother	21
6 hey brother avicli	20
7 best commerci ever	16
8 full version cover	16
9 como se llama	15
10 make full version	15
11 brother look like	13
12 hey brother conrad	13
13 song hey brother	12
14 brother conrad sewell	11
15 antoniohidg victor silvester	10
16 hidalgo antoniohidg victor	10
17 love commerci much	10
18 se llama la	10
19 avicli hey brother	9
20 older brother look	9

## KEY FINDINGS

The key insights from analyzing the comments of videos released for the “Taste The Feeling” campaign can be summarized to be:

1. The videos are effectively able to make viewers relate the content of these videos to the Coca-Cola brand/ product.
2. Comparing across the different videos that the comments were extracted from, videos which contents are based on a familial theme setting or is about/ incorporates the use of (“catchy”) songs seem to be most effective in generating positive emotions.

# COMPETITOR ANALYSIS

In this portion of the report, we want to better understand Coca-Cola's standing among its competitors currently. First of all, we went to Amazon's website and analyzed the comments of the 25 best-selling beverages in the "Soda Soft Drinks" category. While Coca-Cola has products in this list, their products do not fill the whole list. Hence, based on the limited information that we can gather from each product's reviews and ratings, we wanted to see how Coca-Cola measures to its competitors (in this list).

Next, we also analyzed the most recent tweets of "Coca-Cola", "Pepsi" and "Dr Pepper" twitter accounts. All of these twitter accounts are based in the United States and the reason for this choice was because these accounts have the largest number of followers (as compared to other region's accounts), an established presence in this market (country), and the tweets are in English. Through which, we hope to both understand and compare each company's usage of their Twitter account, and the reactions to their tweets (i.e. how often are they favorited).

## COLLECTED AMAZON REVIEWS: TOP 25 BESTSELLING BEVERAGES IN SOFT DRINKS CATEGORY

The following rankings of best-seller products were accurate as of 12:00 on 06 Oct 2016 (GMT +08:00) at Amazon's US website. We collected a total of 10,226 sets of ratings and reviews (made before 06 Oct 2016) of the 25 best-selling products in the "Soda Soft Drinks" category. We also determined that reviews that were made together with a 4/ 5-star rating, 3-star rating, or 1/ 2-rating would be considered as "positive", "neutral" and "negative" respectively.

### OVERALL

Figure 3.1.1a: Summary of collected Amazon product reviews

Rank	Product	No. of Reviews	Brand	Parent Company	Number of Positive Reviews	Number of Negative Reviews
1	Diet Coke Fridge Pack Cans, 12 Count, 12 fl oz	229	Coca-Cola	Coca-Cola	202	23
2	Coca-Cola Fridge Pack Cans, 12 Count, 12 fl oz	354	Coca-Cola	Coca-Cola	302	34
3	Coca-Cola Zero Fridge Pack Cans, 12 Count, 12 fl oz	129	Coca-Cola	Coca-Cola	115	6
4	Coca-Cola, 8 ct, 7.5 FL OZ Mini-Can	525	Coca-Cola	Coca-Cola	442	45
5	Sprite Fridge Pack Cans, 12 Count, 12 fl oz	177	Coca-Cola	Coca-Cola	95	3
6	Seagram's Ginger Ale Fridge Pack Cans, 12 Count, 12 fl oz	76	Coca-Cola	Coca-Cola	58	12
7	Pepsi Made with Real Sugar Cans (12 Count, 12 Fl Oz Each)	156	Pepsi	Pepsi	135	15
8	Diet Coke, 8 ct, 7.5 FL OZ Mini-Can	525	Coca-Cola	Coca-Cola	442	45
9	Diet Pepsi Cans - 12 Count, 12 Fl Oz Each	107	Pepsi	Pepsi	81	19
10	Mountain Dew Cans (12 Count, 12 Fl Oz Each)	114	Mountain Dew	Pepsi	104	3
11	Zevia Zero Calorie Soda, Rainbow Variety Pack, Naturally Sweetened, (Pack of 24)	884	Zevia	Zevia	590	204
12	Pepsi Cola 1893, Original Cola, Certified Fair Trade Sugar, Real Kola Nut Extract (Pack of 12)	182	Pepsi	Pepsi	138	25
13	SURGE, 12 ct, 16 FL OZ Cans	5215	Surge	Coca-Cola	4781	271
14	Diet Mountain Dew Cans (12 Count, 12 Fl Oz Each)	95	Mountain Dew	Pepsi	90	4
15	Pepsi Cola 1893, Ginger Cola, Certified Fair Trade Sugar, Real Kola Nut Extract (Pack of 12)	185	Pepsi	Pepsi	140	26

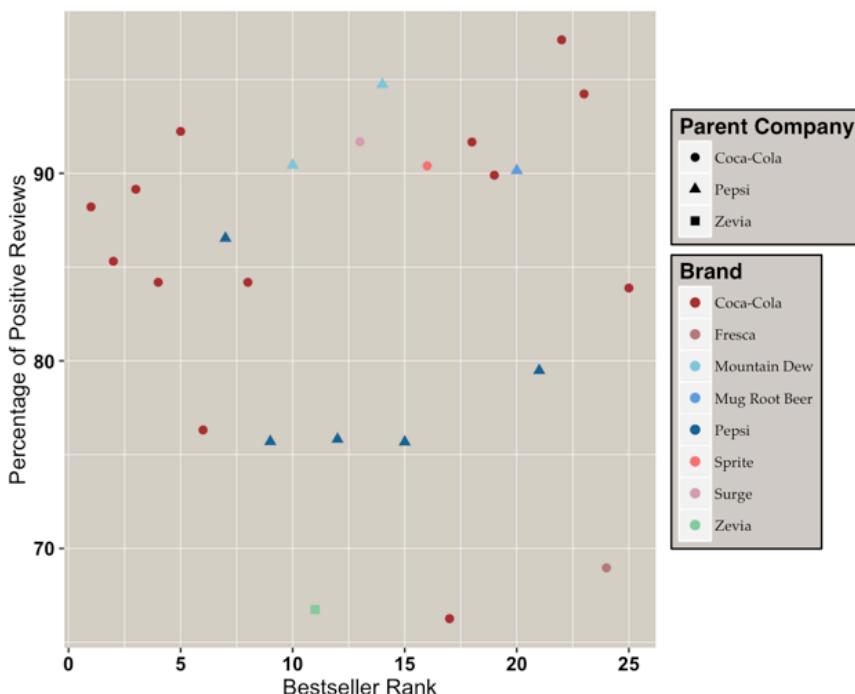
16	Sprite, 8 ct, 7.5 FL OZ Mini-Can	177	Sprite	Coca-Cola	160	7
17	Coca-Cola Life Cans, 12 Fluid Ounce (Pack of 6)	163	Coca-Cola	Coca-Cola	108	34
18	Caffeine Free Diet Coke Fridge Pack Cans, 12 Count, 12 fl oz	36	Coca-Cola	Coca-Cola	33	3
19	Coca-Cola Bottle (8 Count, 12 Fl Oz Each)	99	Coca-Cola	Coca-Cola	89	6
20	Mug Root Beer Cans (12 Count, 12 Fl Oz Each)	132	Mug Root Beer	Pepsi	119	5
21	Diet Pepsi Bottles (Aspartame Free) – 8 Count, 12 Fl Oz Each	39	Pepsi	Pepsi	31	4
22	Diet Coke Bottle (8 Count, 12 Fl Oz Each)	104	Coca-Cola	Coca-Cola	101	2
23	Coca-Cola Cherry Zero Fridge Pack Cans, 12 Count, 12 fl oz	52	Coca-Cola	Coca-Cola	49	1
24	FRESCA Black Cherry Fridge Pack Cans, 12 Count, 12 fl oz	29	Fresca	Coca-Cola	20	7
25	Coca-Cola Zero, 8 ct, 7.5 FL OZ Mini-Can	515	Coca-Cola	Coca-Cola	432	45

As can be seen from Figure 3.1.1a, only 3 different (parent) companies have products in the top 25 bestseller list: Coca-Cola, Pepsi and Zevia. Of these, Coca-Cola has the most products (16) in the list, and has significantly more products than both Pepsi (8) and Zevia (1). This shows that Coca-Cola is quite dominant in this “Soda Soft Drinks” market. In terms of individual brand, the Coca-Cola product (13) is also the most popular, followed by Pepsi (5) and Mountain Dew (2).

As the range of the number of reviews for these product list is quite large, it would perhaps be more accurate to use the percentage of positive reviews to compare between the products. We can see from Figure 3.1.1b that a majority of the products have a relatively high percentage of positive reviews of at least 80%. In general, Mountain Dew’s products have the highest average percentage of positive reviews although it has to be noted that the brand only has 2 products in the best seller list.

If we were to look at the percentage of positive reviews (parent) company-wise (obtained by dividing the sum of positive review percentage of all their products with the number of products), Coca-Cola would have the highest percentage at 85.86% followed by Pepsi and Zevia at 83.57% and 66.74% respectively.

**Figure 3.1.1b:** Scatterplot of each product's positive review percentage

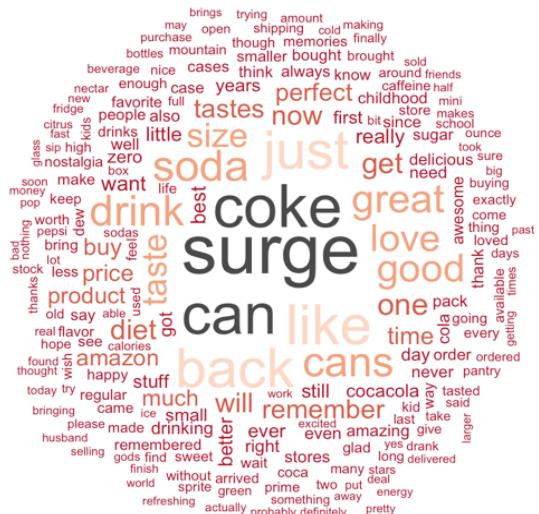


It is also particularly interesting to note that the distribution of the points in Figure 3.1.1b also indicate that there does not seem to be any correlation between a product's rank and its positive review percentage in this bestsellers list i.e. a higher rank does not mean it has a higher positive review percentage, or vice versa.

However, we also have to take into account that ratings (which are used to classify the review type) are made based on each person's subjective judgment and hence, not on a common set of “criteria”. Furthermore, we should also consider that ratings are possibly made with consideration to factors that are not directly related to the product such as the quality and timeliness of delivery.

COCA-COLA

**Figure 3.1.2a:** Word cloud of “positive” reviews  
(min freq: 100)



**Figure 3.1.2b:** Word cloud of “negative” reviews  
(min freq: 10)

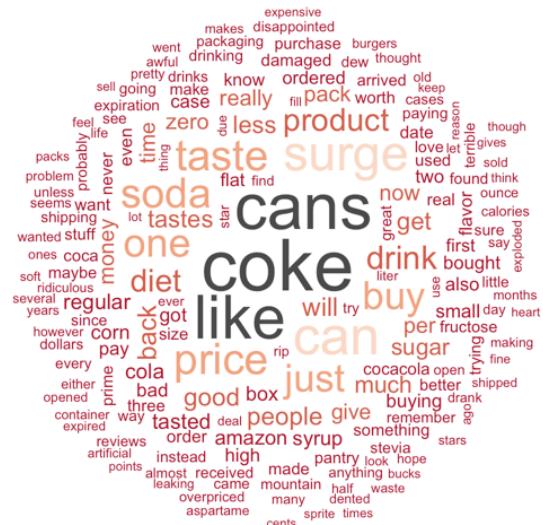
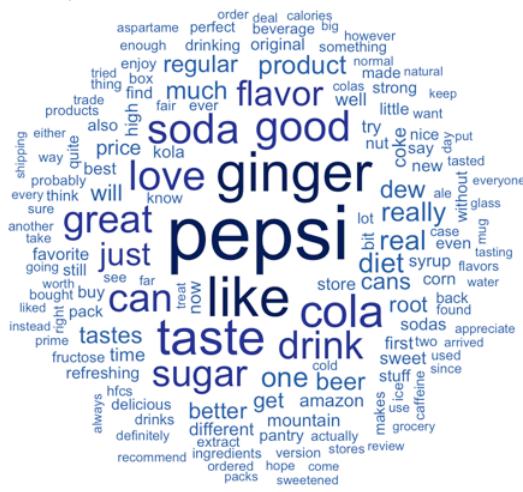


Figure 3.1.2a is a word cloud made from the text found in positive reviews of all products belonging to the Coca-Cola parent company. We can see that Surge products are mentioned more times than Coke but this is probably mainly because there are multiple ways to refer to Coke (e.g. “cocacola”) and the one Surge product has a disproportionately larger number of reviews (5215). As to what the reviewers enjoy (“great”, “love”, “perfect”) about Coca-Cola’s products, it seems that “taste” and “size” are 2 keywords which stand out. It is also interesting to note that for size, “small” and “smaller” are commonly used (in positive reviews), which imply that these reviewers appreciate a smaller packaging size. From Figure 3.1.2b, we can see that “taste” is also commonly mentioned in negative reviews. More importantly however, are the keywords related to price (“price”, “overpriced”) and delivery (“damaged”, “packaging”, “shipping”) that were relatively less prominent or absent in the positive reviews.

PEPSI

**Figure 3.1.3a:** Word cloud of “positive” reviews  
(min freq: 20)



**Figure 3.1.3b:** Word cloud of “negative” reviews (min freq: 5)

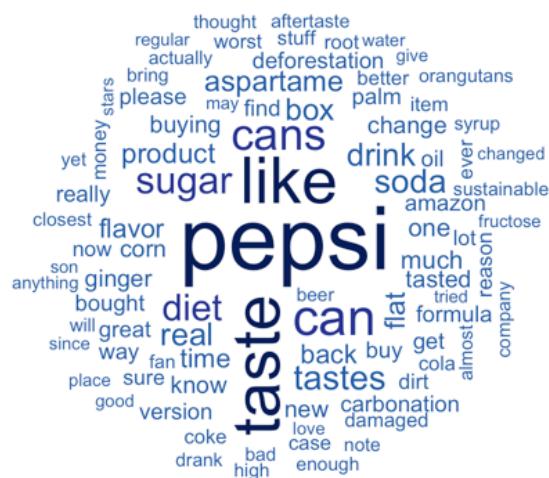
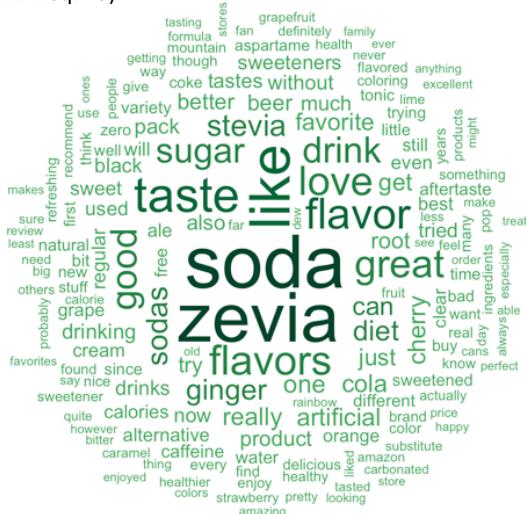


Figure 3.1.3a shows that “taste” is a key reason why reviewers enjoy (“love”, “great”, “good”) Pepsi’s products. Curiously, “sugar” is also mentioned quite frequently in positive reviews, probably because it contributes to the taste that reviewers are looking out for. From Figure 3.1.3b, it is also interesting to note that keywords such as “deforestation”, “orangutans” and “sustainable” are mentioned quite commonly (relatively). This could imply that consumers are increasingly concerned about whether the product (the soft drink and its packaging) they consume are produced sustainably, and is a factor that influences their consumption choice. Moreover, it is also noteworthy that “coke” is mentioned significantly in both positive and negative reviews of Pepsi’s products’.

ZEVIA

**Figure 3.1.4a:** Word cloud of “positive” reviews  
(min freq: 20)



**Figure 3.1.4b:** Word cloud of “negative” reviews (min freq: 10)



Stevia is a plant based natural sweetener with “leaves 200x sweeter than sugar and no caloric value”. Zevia differentiates itself from most other soda soft drink through its use of stevia to produce zero calorie, naturally sweetened soft drinks. It is interesting to see that in both positive (see Figure 3.1.4a) and negative (see Figure 3.1.4b) reviews, “taste” and “stevia” are 2 of the most common words found. As such, while the content of positive reviews are likely to be mostly about how reviewers enjoy (“good”, “great”, “love”) the taste of Zevia’s product (compared to other soda soft drinks) despite/ because of the use of stevia, the same product also garners negative opinions from other reviewers that do not like (“horrible”, “awful”, “disappointed”) the taste of the product.

## KEY FINDINGS

We felt the following are the key insights that we gathered from the analysis of the collected Amazon reviews:

1. Coca-Cola has a significant, dominating presence in the (online retail) soda soft drinks market. This can be observed from the number of products Coca-Cola has in the best-sellers list and the fact that its product is mentioned in Pepsi's product reviews.
  2. Taste is hugely important in determining a consumer's opinion of the product. This is the case for not just Coca-Cola's product, but also other rival companies' soda soft drink products. At times, this might contradict with the health properties of the product.
  3. Other than taste, packaging, price and delivery are also significant factors that affect a consumer's opinion.
  4. In terms of packaging, consumers can and do appreciate smaller sizes.
  5. Consumers are also conscious and concerned with a product's impact on the environment.

## COLLECTED TWEETS – FROM “COCACOLA”, “PEPSI”, “DR PEPPER”

We collected the most recent 3,250 tweets each (before and including 05 Oct 2016) from the US Twitter accounts of “Coca-Cola”, “Pepsi” and “Dr Pepper”. All of these Twitter accounts have a large number of followers – “Coca-Cola” has 3.29 million followers, “Pepsi” has 3.03 million followers, and “Dr Pepper” has 413 thousand followers.

## **OVERALL**

Regarding the usage of the twitter accounts, all 3 companies seem to be quite active recently as their most recent tweet was at 23:05 on 05 Oct 2016, 16:30 on 05 Oct 2016, and 23:40 on 05 Oct 2016 for Coca-Cola, Pepsi and Dr Pepper respectively. However, if we were to compare their earliest tweet (i.e. 3250<sup>th</sup> least recent tweet before 05 Oct 2016), Dr Pepper and Coca-Cola are considerably more active as their earliest tweets were made at 15:05 on 16 June 2016 and at 21:29 on 10 May 2016 respectively. On the other hand, Pepsi's earliest tweet was made at 15:22 on 09 Oct 2015.

**Figure 3.2.1a:** Word cloud of Coca-Cola tweets  
(min freq: 25)



**Figure 3.2.1b:** Word cloud of Pepsi tweets  
(min freq: 25)



**Figure 3.2.1c:** Word cloud of Dr Pepper tweets  
(min freq: 25)



3 common words among the 3 word clouds formed from the tweets made by Coca-Cola (Figure 3.2.1a), Pepsi (Figure 3.2.1b) and Dr Pepper (Figure 3.2.1c) were “thanks”, “love” and “sorry”. This shows that all 3 companies use their Twitter account to connect and develop a stronger relationship with the public through showing their appreciation. Another notable keyword which is common to both Coca-Cola and Pepsi is “sharing”.

Interestingly, for each company, tagline(s)/ campaign(s) are one of the most common term in their tweets. For Coca-Cola, these terms include “shareacoke” and “thatsgold” (Coca Cola’s campaign for the recently concluded Rio 2016 Olympics). Interestingly, Coca-Cola’s “Taste The Feeling” campaign is not found among the most common terms. For Pepsi, the terms are “pepsihalftime” and “sayitwithpepsi”. Lastly, the terms for Dr Pepper are “pickyourpepper” and “larrynation”. The usage of these terms by the companies is to serve a dual purpose to give a common theme to the company’s tweets and connect like-minded fans together.

**Figure 3.2.2a:** Number of Coca-Cola tweets with the 5 most and least favorite counts

	Favorited Count	Number of Tweets
1	0	1041
2	1	1165
3	2	575
4	3	196
5	4	64

**Figure 3.2.2b:** Number of Pepsi tweets with the 5 most and least favorite counts

	Favorited Count	Number of Tweets
1	0	534
2	1	629
3	2	521
4	3	305
5	4	188

**Figure 3.2.2c:** Number of Dr Pepper tweets with the 5 most and least favorite counts

	Favorited Count	Number of Tweets
1	0	1099
2	1	1266
3	2	380
4	3	159
5	4	85

	Favorited Count	Number of Tweets
130	3166	1
131	3471	1
132	3594	1
133	3693	1
134	14724	1

	Favorited Count	Number of Tweets
0	8375	1
.1	9110	1
.2	12618	1
.3	15375	1
.4	15504	1
.		
1st Qu.	Median	Mean
0	1.00	2.00
	97.23	17.75
	15504	0.00

	Favorited Count	Number of Tweets
78	708	1
79	1044	1
80	1067	1
81	1525	1
82	1667	1

	in.	1st Qu.	Median	Mean	3rd Qu.	Max.
	0.000	0.000	1.000	6.578	2.000	1667.000

In general, the distribution of the favorited count of each tweet for all 3 Twitter accounts is that a majority of tweets have low favorite count and that only a handful of tweets have large numbers of favorited count. Coca-Cola's (Figure 3.2.2a) and Dr Pepper's (Figure 3.2.2c) favorited count distribution is similar to each other with a median favorite count of 1, and a mean favorited count of 24.52 and 6.58 respectively. The higher mean favorited count of Coca-Cola is because the Coca-Cola tweets with the largest favorited count have a favorite count that is much larger than Dr Pepper's.

In comparison, the median and mean favorited count for Pepsi is higher at 2 and 97.23 respectively. As can be seen in Figure 3.2.2b, this is both due to the lower numbers of tweets that were “favorited” 0 or 1 times (approximately half) and the large favorite count of its most favorited tweets. It is also probably worthy to note that the range of favorited count values of the collected Pepsi’s tweets is much larger than both Coca-Cola’s and Dr Pepper’s.

This is likely to be explained by the difference in the content of the tweets (between the companies) and the “activeness” of Pepsi’s Twitter account. Coca-Cola’s and Dr Pepper’s “earliest” tweet was on May 2016 and June 2016 respectively, but Pepsi’s earliest tweet dates back to Oct 2015.

## COCACOLA

As can be seen in Figure 3.2.3, a variety of tweets can be found among the 10 most favorited tweets – tweets about “celebration”, “food and drink pairing”, and “celebrity mentions”. Interestingly, several of these most favorited tweets does not mention Coca-Cola and allude to certain values. It is also noteworthy that all of these tweets contain a visual (picture or video). There is also a distinctive bright and red color theme in the visuals used.

**Figure 3.2.3:** Top 10 most favorited Coca-Cola tweets

<b>1. Coca-Cola</b> [Favorited 14724 times] <a href="https://t.co/WmOClOMiX0">https://t.co/WmOClOMiX0</a>		
<b>2. Coca-Cola</b> [Favorited 3693 times] Cheers to those who gave us our freedom\353_and to those who still do. #MemorialDay <a href="https://t.co/6WERwSCEkn">https://t.co/6WERwSCEkn</a>		
<b>3. Coca-Cola</b> [Favorited 3594 times] Welcome to Atlanta, @selenagomez! Best of luck tonight. #ShareaCoke <a href="https://t.co/BT2VoG2bzV">https://t.co/BT2VoG2bzV</a>		
<b>4. Coca-Cola</b> [Favorited 3471 times] On July 4th, we celebrate with family and friends! What lyric bottles are you sharing this weekend? #ShareaCoke\n <a href="https://t.co/nDiPvh3IVX">https://t.co/nDiPvh3IVX</a>		
<b>5. Coca-Cola</b> [Favorited 3166 times] Plate your crispy white cheddar grilled cheese and open a chilled Coca-Cola to create the perfect pairing. <a href="https://t.co/pNc08Qf6og">https://t.co/pNc08Qf6og</a>		
<b>6. Coca-Cola</b> [Favorited 3063 times] Steak and Coke? That_\321\351s a meal well done. <a href="https://t.co/epXHD7SDM4">https://t.co/epXHD7SDM4</a>		
<b>7. Coca-Cola</b> [Favorited 2203 times] Big moments come from many small ones. Ready for more gold for @AshtonJEaton & @TatyanaMcFadden? #Rio2016 #THATSGOLD <a href="https://t.co/0mhvf4VGj0">https://t.co/0mhvf4VGj0</a>		
<b>8. Coca-Cola</b> [Favorited 2178 times] It rained on the set of our latest commercial, and it was the perfect time for @JordanSpieth to work on trick shots.\n <a href="https://t.co/vZNfRcDTK9">https://t.co/vZNfRcDTK9</a>		
<b>9. Coca-Cola</b> [Favorited 2113 times] When it comes to gold, winning is just the beginning. What makes you feel gold? #Rio2016 #THATSGOLD <a href="https://t.co/VZt52rCaDS">https://t.co/VZt52rCaDS</a>		
<b>10. Coca-Cola</b> [Favorited 1541 times] @selenagomez, you are our spark! Happy Birthday!!!! <a href="https://t.co/ELOOCYzL4r">https://t.co/ELOOCYzL4r</a>		

## PEPSI

The 10 most favorited tweets of Pepsi (See Figure 3.2.4) can be classified into 2 categories: “celebrity mentions” (mainly music related) or to introduce a new product. Furthermore, there is also a greater prevalence of video usage in these tweets as compared to Coca-Cola.

Figure 3.2.4: Top 10 most favorited Pepsi tweets

### 1. Pepsi

#### [Favorited 15504 times]

Our latest commercial, ft @JussieSmollett & directed by @leedanielsent, brought Pepsi into the world of #Empire! [nhttps://t.co/d1HRfzT79N](https://t.co/d1HRfzT79N)

Our latest commercial, ft @JussieSmollett & directed by @leedanielsent, brought Pepsi into the world of #Empire! 🎉!



Here's to 23 years of racing and 18 years of partnership. Thank you, @jeffgordonweb #Team24

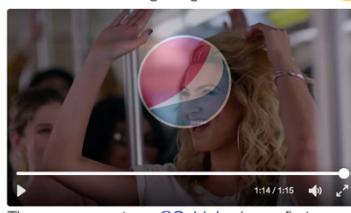


### 2. Pepsi

#### [Favorited 15375 times]

BIG shout out to our girl @ToriKelly for her nomination. Amazing things in store for 2016 \_231\205\_ [nhttps://t.co/Ek9zz6LHxC](https://t.co/Ek9zz6LHxC)

BIG shout out to our girl @ToriKelly for her nomination. Amazing things in store for 2016 😊



The #1893PepsiCola Ginger and Mint Julep is a wonder of modern mixology. So easy, yet so delicious. Enjoy.

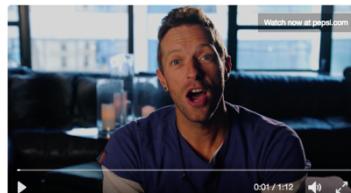


### 3. Pepsi

#### [Favorited 12618 times]

The rumors are true: @Coldplay is our first #PepsiHalftime artist! Here's a first look at their Halftime prep! [nhttps://t.co/Oh6V5F4b5t](https://t.co/Oh6V5F4b5t)

The rumors are true: @Coldplay is our first #PepsiHalftime artist! Here's a first look at their Halftime prep:



Uncle Drew is back, and he brought company. Tune in to see what happens next! #UncleDrew



### 4. Pepsi

#### [Favorited 9110 times]

#BreakOutThePepsi like @AntonioBrown84 for those winning moments. (You didn't think you'd get her number, did you?) [nhttps://t.co/i14fq7xSlb](https://t.co/i14fq7xSlb)

#BreakOutThePepsi like @AntonioBrown84 for those winning moments. (You didn't think you'd get her number, did you?)



It's back - like you've never seen before. Get your hands on a #CrystalPepsi right now.



### 5. Pepsi

#### [Favorited 8375 times]

This is the greatest moment of our band's life. -Chris Martin. Go BTS as @Coldplay rehearses for #PepsiHalftime. [nhttps://t.co/pyuAczQKjk](https://t.co/pyuAczQKjk)

"This is the greatest moment of our band's life." -Chris Martin. Go BTS as @Coldplay rehearses for #PepsiHalftime.



He's #ReadyToGo as the #NextPepsiArtist! BTS with @JussieSmollet on the set of #Empire! 🎉



### 6. Pepsi

#### [Favorited 8331 times]

Here's to 23 years of racing and 18 years of partnership. Thank you, @jeffgordonweb #Team24 [nhttps://t.co/acYaiJPflU](https://t.co/acYaiJPflU)

#BreakOutThePepsi like @AntonioBrown84 for those winning moments. (You didn't think you'd get her number, did you?)



### 7. Pepsi

#### [Favorited 4373 times]

The #1893PepsiCola Ginger and Mint Julep is a wonder of modern mixology. So easy, yet so delicious. Enjoy. [nhttps://t.co/6dz1Zpph9y](https://t.co/6dz1Zpph9y)

"It's back - like you've never seen before. Get your hands on a #CrystalPepsi right now.



### 9. Pepsi

#### [Favorited 3971 times]

It's back - like you've never seen before. Get your hands on a #CrystalPepsi right now. [nhttps://t.co/Ym3V6MaU1J](https://t.co/Ym3V6MaU1J)

"It's back - like you've never seen before. Get your hands on a #CrystalPepsi right now.



### 10. Pepsi

#### [Favorited 3685 times]

He's #ReadyToGo as the #NextPepsiArtist! BTS with @JussieSmollet on the set of #Empire on FOX [nhttps://t.co/Tu9usHK80c](https://t.co/Tu9usHK80c)

"He's #ReadyToGo as the #NextPepsiArtist! BTS with @JussieSmollet on the set of #Empire! 🎉



## DR PEPPER

As for Dr Pepper (see Figure 3.2.5), there is a distinctive humorous tone in the 10 most favorited tweets. It is also interesting that the visuals that are used are for humorous effect (largely due to the content of the tweet) as compared to for informational or inspirational purposes. Furthermore, the visuals that are used do not encompass videos but only pictures and short GIFs.

Figure 3.2.5: Top 10 most favorited Dr Pepper tweets

<b>1. Dr Pepper</b>	<b>[Favorited 1667 times]</b>	I raise a bubbly, delicious, 23-flavor-filled, ice-cold Dr Pepper to you, college football fans. <a href="https://t.co/QBy9c1XWmF">https://t.co/QBy9c1XWmF</a>		I raise a bubbly, delicious, 23-flavor-filled, ice-cold Dr Pepper to you, college football fans.	The only thing better than your team scoring? An ice-cold Dr Pepper landing in your hands while it happens.		You're not a master until you've caught all 23 flavors.
<b>2. Dr Pepper</b>	<b>[Favorited 1525 times]</b>	@trevor_knight9 Trevor Knight.					
<b>3. Dr Pepper</b>	<b>[Favorited 1067 times]</b>	The season's hottest style can be yours. I call it "Larry Couture." RETWEET for a chance to score #LarryNation <a href="https://t.co/fkJzPHsj7p">https://t.co/fkJzPHsj7p</a>					
<b>4. Dr Pepper</b>	<b>[Favorited 1044 times]</b>	If someone doesn't get your Dr Pepper obsession, move on. You don't need that type of negativity in your life.					
<b>5. Dr Pepper</b>	<b>[Favorited 708 times]</b>	And we loves @DallonWeekes <a href="https://t.co/M4fCjZQc7L">https://t.co/M4fCjZQc7L</a>					
<b>6. Dr Pepper</b>	<b>[Favorited 679 times]</b>	The only thing better than your team scoring? An ice-cold Dr Pepper landing in your hands while it happens. <a href="https://t.co/qekJRO5DTS">https://t.co/qekJRO5DTS</a>		If someone doesn't get your Dr Pepper obsession, move on. You don't need that type of negativity in your life.	People ask why Dr Pepper is so good and we're like \_(`\')/_		Go Culpepper yourself. No really, I have a lens on Snapchat today. Tweet your best Larry #LarryNation
<b>7. Dr Pepper</b>	<b>[Favorited 622 times]</b>	You're not a master until you've caught all 23 flavors. <a href="https://t.co/akOCadtvMs">https://t.co/akOCadtvMs</a>					Dr Pepper is the 🐐
<b>8. Dr Pepper</b>	<b>[Favorited 554 times]</b>	People ask why Dr Pepper is so good and we're like \_(`\')/_					
<b>9. Dr Pepper</b>	<b>[Favorited 492 times]</b>	Go Culpepper yourself. No really, I have a lens on Snapchat today. Tweet your best Larry #LarryNation <a href="https://t.co/LWHZLjen4V">https://t.co/LWHZLjen4V</a>		And we loves @DallonWeekes			
<b>10. Dr Pepper</b>	<b>[Favorited 448 times]</b>	Dr Pepper is the _					

## KEY FINDINGS

Our analysis of the 3,250 most recent tweets from Coca-Cola, Pepsi and Dr Pepper revealed that:

1. Different companies use their Twitter account for different purposes and engage in different levels of public engagement.
2. The usage of videos in tweets, specifically for informational and inspirational purposes, seem to be particularly effective in generating public interest.
3. In general, celebrity mentions are also very effective in generating “likes” (favorites). As compared to movies and sports celebrities where promoting soft drinks may conflict with the celebrity’s image, music celebrities in particular seem to be very effective.

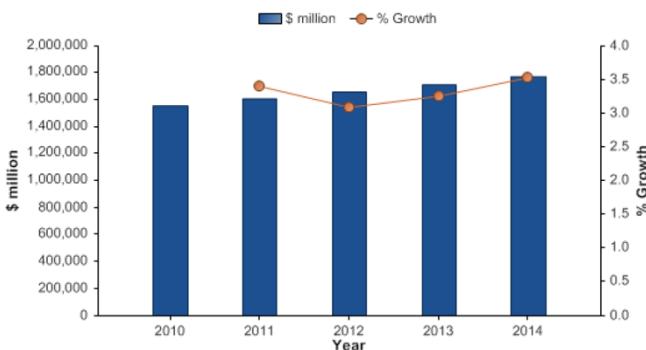
# INDUSTRY ANALYSIS

In this section, we first examine relevant trends in the global beverage industry that can pose as threats or opportunities for Coca-Cola. As we are targeting the Singapore market, we will also highlight key details of the industry (in Singapore's context) and the country's customer demographics.

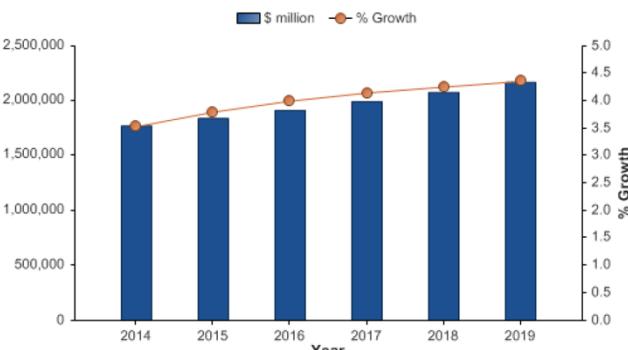
## GLOBAL BEVERAGE INDUSTRY

### OVERVIEW

The global beverages industry generates sales from two major categories – alcoholic and non-alcoholic beverages. Drinks in the alcoholic beverage categories include distilled spirits, wine and beer, while the non-alcoholic beverages category comprises of drinks such carbonated soft-drinks, fruit juices, bottled water, functional drinks and sports drinks.



Source: Marketline 2015



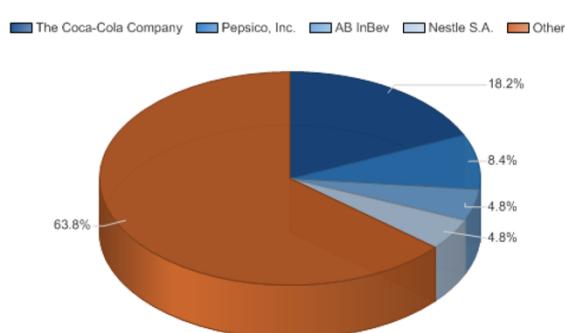
Source: Marketline 2015

The global beverages market had total revenues of \$1,774 billion in 2014, representing a compound annual growth rate (CAGR) of 3.3% between 2010 and 2014 (Figure 4.1.1a). Comparatively, the European and Asia-Pacific markets grew with CAGRs of 1.6% and 6.3% respectively in this period. Interestingly, the soft drinks segment was the “most lucrative in 2014, with total revenues of \$607,312.6m, equivalent to 34.2% of the market’s overall value” (Marketline, 2015).

This trend is expected to continue (Figure 4.1.1b) with an anticipated CAGR of 4.1% from 2014 to 2019, driving the market to a value of \$2,170 billion by the end of 2019. In this period, European and Asia-Pacific markets are expected to grow with CAGRs of 2.1% and 7.5% respectively.

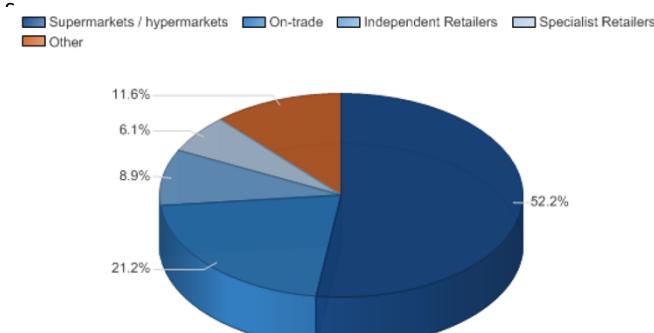
### MARKET SHARE AND DISTRIBUTION

**Figure 4.1.2a:** Global beverages industry share: % share, by volume, 2014



Source: Marketline 2015

**Figure 4.1.2b:** Global beverages industry distribution: % share, by volume, 2014



Source: Marketline 2015

As can be seen in Figure 4.1.2a and Figure 4.1.2b, Coca-Cola is the market leader accounting for 18.2% share of the global beverages industry's volume while supermarkets/ hypermarkets are the leading distribution channel in the global beverages industry and account for a 52.2% share of the total industry's volume.

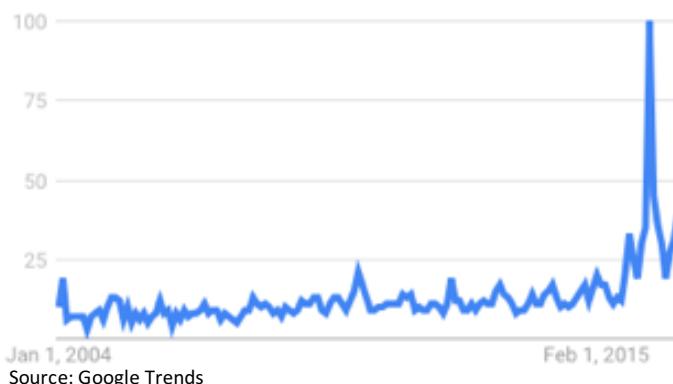
As an increasingly large number of products compete for space in super/hypermarkets, retailers have gained an increasing power to determine what goes on the shelves. It is important for Coca-Cola to maintain its market share to negate the increasing power from the distributors.

## RELEVANT CONCERNs

### INCREASED GOVERNMENT ATTENTION TO UNHEALTHY PRODUCTS

There is a foreseeable future where governments globally will increasingly target unhealthy food and beverage products. Over the past few years, World Health Organization (WHO) has been criticizing sugar as a major cause of obesity and cardio-vascular diseases. Google Trends (see Figure 4.1.3a) also supports the recent rising in sugar tax mentions, particularly in United Kingdom, Australia, United States, India and Canada.

**Figure 4.1.3a:** Relative popularity of search term "sugar tax"



Source: Google Trends

Business Monitor Online has also identified several markets in Latin America, Western Europe and North America that are most likely to implement sugar taxes based on different sets of indicators such as the prevalence of obesity and diabetes, consumption levels of sugar and soft drinks, and fiscal indicators (BMI Research, 2016). Recently, to address the country's high level of diabetes, India's chief economic advisor proposed the introduction of a tax on sugary drinks as part of the country's Goods and Services Tax (GST).

**Figure 4.1.3b:** BMI's assessment of likelihood of soda tax based on selected macroeconomic & industry indicators

		Obesity Rate (% 18+)	Diabetes Prevalence (% 20-79)	Sugar Consumption (kg per capita)	CSD Consumption (litres per Capita)	Fiscal revenue (% of GDP)	Budget Balance (% of GDP)
Latin America	Argentina	26.8	5.7%	44	129	27.8	-2.3
	Brazil	20.0	9.2%	55.7	82	22.1	-6.2
	Chile	27.8	9.5%	na	106	20.7	-1.6
	Colombia	21.0	7.3%	36.8	na	16.7	-2.6
	Mexico	28.1	12.6%	35.1	128	22.9	-3.1
	Peru	21.1	4.5%	41.8	42	19.1	-0.5
W. Europe	France	23.9	5.4%	33.5	47	52.6	-4
	Germany	20.1	8.3%	47.4	86	44.1	0.7
	Italy	21.0	5.1%	27.8	42	48.1	-3
	Spain	23.7	8.2%	23	84	37.8	-5.8
Other	United Kingdom	28.1	4.9%	37.7	107	34.8	-5.5
	Australia	28.6	7.8%	51.9	63	23.6	-2.8
	United States	33.7	9.2%	33.2	159	17.3	-3.2

Red - Strongly encourages the introduction of a tax

Orange - Encourages a tax

Green - Opposes a tax or neutral.

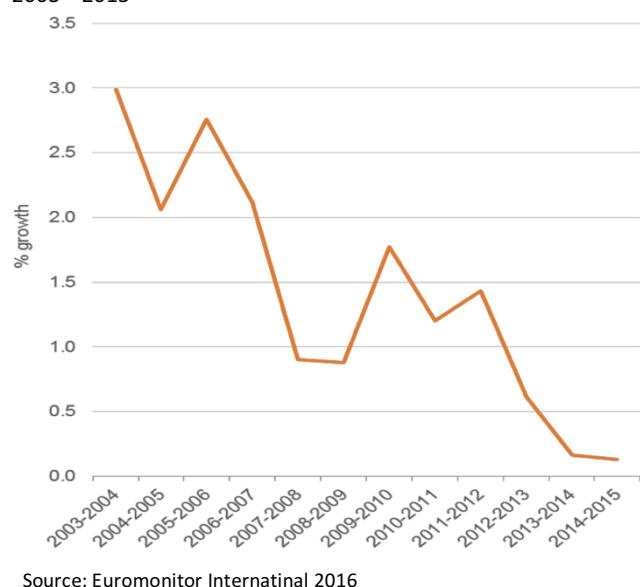
Source: National sources, WHO, International Diabetes Foundation, BMI

This debates over sugar taxes constitute key risks for manufacturers of soft drinks (especially carbonates). For example, after Mexico introduced a tax on sugary drinks and foods with high fat/sugar content in January 2014, consumption of carbonated soft drinks (CSD) in the country dropped severely following the implementation of the tax. Coca-Cola's bottlers in the country have also reported declining sales. Even if a tax is not implemented in these countries, public debates over sugar consumption are still likely to negatively implicate drink manufacturers as they marginalize their products through heightened health awareness.

## INCREASING HEALTH CONSCIOUSNESS

In recent years, consumers are more educated on the nutritional value of consumables and this has affected their purchasing decision. The substantial impact of the health and wellness trend is most visual in the carbonated drinks segment (Figure 4.1.3c). There is an increasing trend where consumers are trading carbonates for products with perceived health benefits like energy drinks, fruit juices.

**Figure 4.1.3c: Global Carbonates: Total Volume Growth 2003–2015**



Source: Euromonitor International 2016

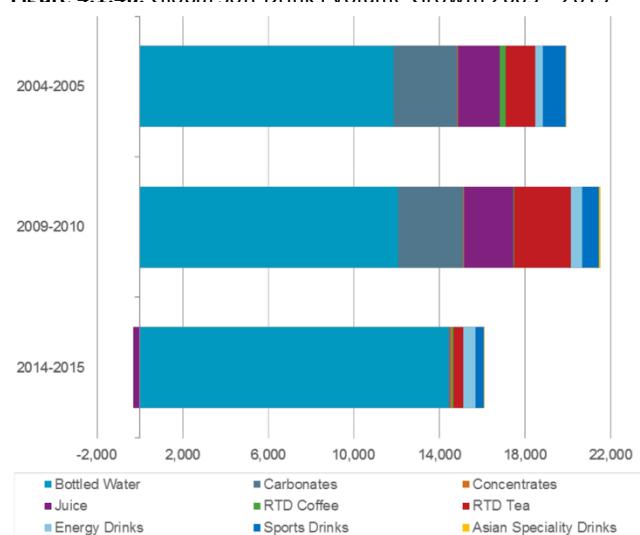
## POSSIBLE OPPORTUNITIES

### BOTTLED WATER, SPORTS AND ENERGY DRINKS

Packaged bottled water sales have been driving global volume growth in the soft drinks market from 2005 to 2015 (see Figure 4.1.4a). In every global region, bottled water is experiencing an increase in per capita consumption faster than any other packaged beverage category over 2010–2015. In North America, Australasia and Western Europe, bottled water is the main category sustaining continued volume growth in overall soft drinks (Passport, 2016).

The sports and energy drink segment is also estimated to experience a high level of growth in line with the general growth seen in sports nutrition. Consumers are taking the healthier approach to life, impacting the demand levels in the sports sector. This sector provides beverage companies a high market opportunity growth of \$6.9 Billion to \$9.3 Billion in 2012 and 2017 respectively (Berry, 2013).

**Figure 4.1.4a: Global Soft Drinks Volume Growth 2005–2015**



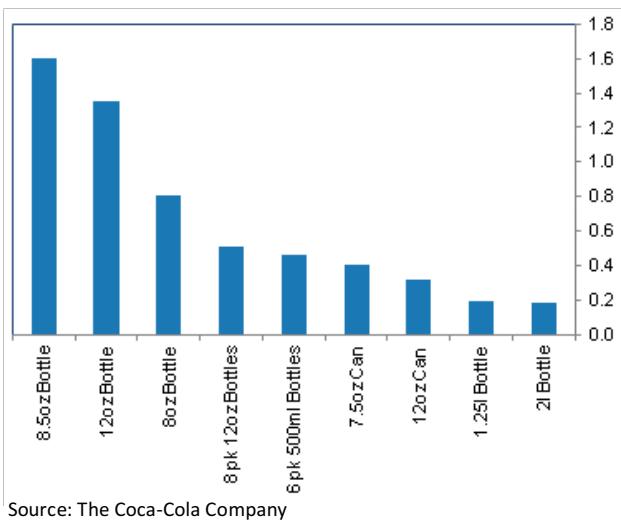
Source: Passport 2016

## PACKAGING

In many developing countries like India, Coca-Cola has been underperforming relative to other global markets on a per capita basis. Their challenge lies in reaching out to a massive youth population in these countries that have a large market size that Coca-Cola has not yet tapped into. To incentivize first time buyers, Coca-Cola and Pepsi have decided to sell smaller size cans that are specifically designed for lower prices for younger consumers (BMI Research 2016). For example, Coca-Cola India came up with 180ml single-serve cans priced at Rs20, while Pepsi launched 150ml cans for Pepsi and Diet Pepsi at Rs15.

The smaller sizes and lower prices are more attractive to consumers with lower incomes, and tend to be more cost efficient than the larger sizes in terms of USD per product (see Figure 4.1.4b). For instance, Coca-Cola reported in 2015 that it makes USD1.6 on its 8oz bottles compared to USD1.35 for 12oz bottles across its global markets. It has been predicted that this use of smaller sized cans of carbonated soft drinks to attract first-time buyers will see strong success in the market (BMI Research, 2016).

**Figure 4.1.4b:** Worldwide USD Per Product Offering, 2015



## CONVENIENCE STORES

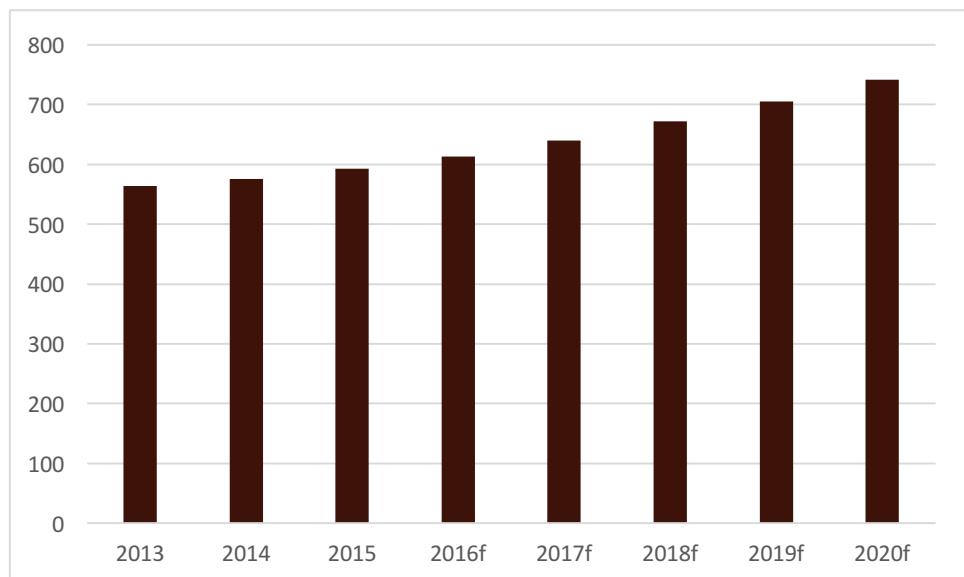
Chicago-based Mintel estimates that 2016 revenues for convenience stores in the United States will grow by 3.6 percent to reach \$451.3 billion and will continue on a forward path of growth. This is despite the competition that convenience stores face when it comes to consumer packaged goods (CPG) as consumers can often get them at a lower price from supermarkets or mass merchandisers.

Chicago-based Information Resources Inc. has also stated that “convenience stores sell an estimated 50 percent of all single-serve bottled water purchases in the United States” and “nearly half of all convenience store customers (49 percent) said that they primarily stopped to purchase a beverage on their most recent visit” (Hartmann, 2016). In particular, bottled water and energy drink sales in convenience stores have increased by 8.5% and 6.6% respectively. This highlights the rising potential of convenience stores in driving beverage sales.

## SINGAPORE MARKET

### OPPORTUNITIES IN NON-ALCOHOLIC BEVERAGE SEGMENT

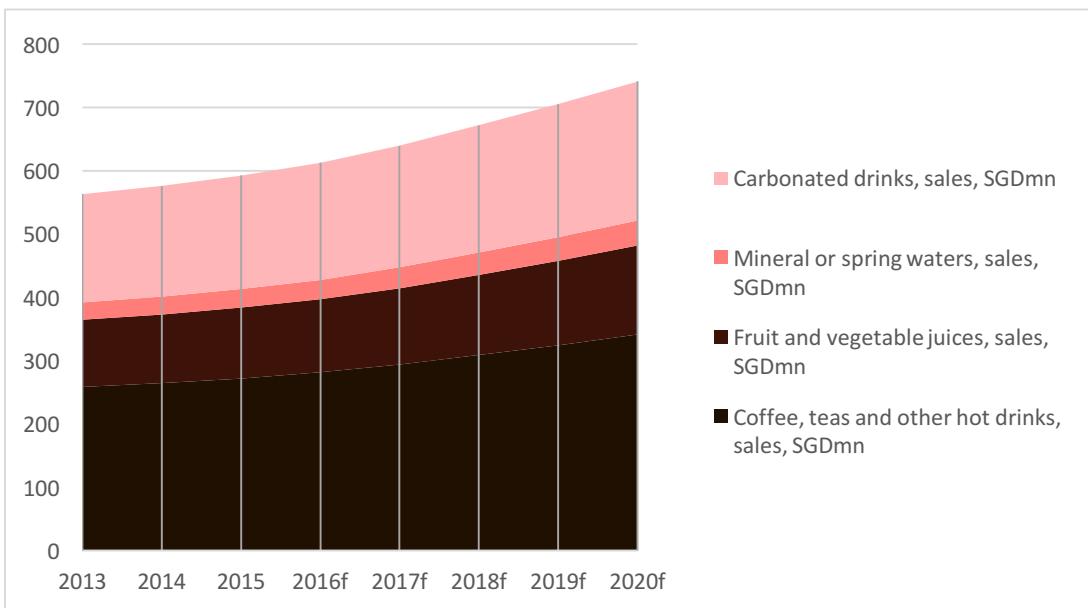
**Figure 4.2.1a:** Non-alcoholic drinks sales (SGDmn) 2013—2020



Source: BMI, national sources

We will be focusing on the non-alcoholic beverage segment since Coca-Cola's products are in this segment. As shown in Figure 4.2.1a, the non-alcoholic beverage segment is forecasted to grow positively every year. Non-alcoholic beverage sales growth year-on-year in 2016 is expected to be 3.4%, with a projected CAGR of 4.6% from 2015 to 2020 (BMI research, 2016).

**Figure 4.2.1b:** Projection of sales values according to different segments



Source: BMI, national sources

Comparatively, in terms of sales value, the largest segment is the coffee, teas and other hot drinks, followed by carbonated drinks, fruits and vegetable juices and mineral/ spring water. Projected sales values indicate that sales in all of these segments will experience positive growth in the near future (see Figure 4.2.1b).

Coffee is the main driver of growth in the hot drinks category, growing at a CAGR of 5.6% to 2020. Driven by prevailing health trends, bottled water will show the strongest growth at a CAGR of 7% to 2020, although coming from a small base. Similarly, food and vegetable juices are also expected to grow at a CAGR of 5% to 2020. Finally, carbonated drinks will grow at a CAGR of 4.4% to 2020.

## KEY PLAYERS

**Figure 4.2.2:** Key Players In Singapore's Drinks Sector

Company	Ownership	Sub-Sector	Sales, SGDmn
<b>Frazer &amp; Neave (Singapore) Pte Ltd</b>	Fraser and Neave Ltd.	Food and beverage - brewers, soft drinks and dairy	2103.8
<b>Asia Pacific Breweries (Heineken)</b>	Heineken NV	Beverage - alcoholic/brewers	3779.51
<b>YHS (Singapore) Pte Ltd</b>	Yeo Hiap Seng Ltd.	Food and beverage - snack foods and soft drinks	437.6
<b>Super Group Ltd</b>	Super Group Ltd	Food and beverage - convenience foods and instant drinks	539
<b>Viz Brand Limited</b>	Viz Branz Limited	Beverage - instant hot drinks	167.8

Source: Investor relations, BMI

Major non-alcoholic key players in Singapore's ready-to-drink (RTD) packaged drinks sector will include Fraser & Neave (F&N) and Yeo Hiap Seng (Yeo's). Beverages such as F&N's 100 Plus isotonic drink and Yeo's chrysanthemum tea are increasingly more popular among locals over traditional carbonates brands such as Coca-Cola and Pepsi.

Rising out-of-home consumption, which is partly driven by growing consumer affluence, is a major growth driver of overall soft drinks demand in Singapore. Furthermore, the prevalence of organized retail such as convenience stores and supermarkets has provided local soft drinks manufacturers with an extensive distribution network across Singapore.

### **FRASER & NEAVE (F&N)**

F&N is primarily a food and beverage manufacturer and distributor and is the leading company in Singapore in these sectors. Besides being a dominant player in the soft drinks sector, among the company's most prominent food and beverage brands are F&N Magnolia Milk, F&N Ice Mountain, F&N Nutrisoy and 100 Plus.

With a wide portfolio of mid-range products, the company is well-positioned in the currently highly dynamic soft drinks market in Singapore. For example, it has chosen to ride the wave of popularity for green tea in Singapore and has launched green tea variants under the F&N Seasons brand following the end of its licensing agreement with Coca-Cola.

The company is a leader in terms of innovation, this being evident from its own products, such as Ice Mountain, F&N Fruit Tree Fresh and 100 Plus, which are leaders in the bottled water, unfrozen nectars and sports drinks categories, respectively. Moreover, it was the first domestic manufacturer to produce juice-based carbonates such as F&N Outrageous Orange, which is popular among local consumers as an affordable orange juice-based carbonate. Product launches are supported by high levels of promotional spending, thus improving their chances of success. According to F&N's 2015 annual report, they hold the number 1 position in isotonic, soya & bottled water, the number 2 position in carbonated soft drinks and the number 3 position in ready-to-drink tea in Singapore.

The recent termination of a bottling agreement with Coca-Cola, has also allowed F&N to pursue growth freely across the region and led to the introduction two new soft drinks to its portfolio – non-carbonated beverage 100PlusEdge and carbonated soft drink Clearly Citrus. The introduction of these products is likely to have a positive impact on soft drinks demand in Singapore.

### **YEO HIAP SENG (YEO'S)**

Yeo's is another food and beverage manufacturer who has established market presence in not just South-East Asia, but also in countries from other regions such as the United States, United Kingdom, Australia, China and Hong Kong. Beverages that the company produce under the Yeo's house brand include Asian drinks such as chrysanthemum tea, winter melon tea, lemon barley drink, ready-to-drink tea such as Japanese green tea and Oolong tea and fruit juice drinks such as soursop drink and guava drink. Other notable brands in the company's portfolio include H-TWO-O, Pink Dolphin and Justea.

### **COCACOLA'S PRESENCE IN SINGAPORE**

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Coca-Cola positions its brands in the mid-priced segment, allowing it to reach out to the mass of consumers and to remain competitive against domestic players within soft drinks. Even though some of its products such as Coca-Cola Zero and Coca-Cola Light are positioned in the sluggish category of carbonates, other brands such as Heaven & Earth and Vitamin Water are well positioned in the fast-growing ready-to-drink tea and functional bottled water categories.

Furthermore, the company is also recognized as a leader in terms of innovation within health and wellness beverages. With the launch of Ayataka Japanese Green Tea in late 2013, Coca-Cola Singapore Beverages became the pioneer of unsweetened RTD green tea. In addition, the company was among the first to come up with RTD tea variants that blend fruit and herbs flavours through the release of Heaven & Earth Mango Tea with a hint of chamomile, and Apple Tea with a hint of lemongrass in mid-2015. Between 2015 and 2020, Coca-Cola has committed itself to invest US\$100 million in its Singapore operations to engage in research and innovation activities in the region.

## COLLECTED TWEETS – FROM “COCACOLASG”

We collected 2,668 tweets (made before and on 05 Oct 2016) from Coca-Cola Singapore’s Twitter account. Figure 4.2.3 shows the tweets with the 10 highest favorite count. In general, the highest favorite counts are quite low. Interestingly, the content of the most favorited tweet is an explicit promotion. The use of pictures is common and many of the tweets are related to festivals/ holidays.

**Figure 4.2.3: Top 10 most favorited Coca-Cola Singapore tweets**

**1. Coca-Cola Singapore [Favorited 309 times]**

Buy 4 500ml Coke products for only \$12 (U.P. \$14) at Universal Studios SG's Halloween Horror Nights\302\256 this October.  
<http://t.co/Zlz0aJcO2K>

Buy 4 500ml Coke products for only \$12 (U.P. \$14) at Universal Studios SG's Halloween Horror Nights® this October.



Wanna #lepak? TAG your homies onto this #ShareaCokeSG photo by @azurrahshaalsagoff to ask them out!



**2. Coca-Cola Singapore [Favorited 198 times]**

The gang\342\200\231s all here to spread the cheer! #MerryChristmas everyone! #HappyHolidays #ShareHappiness #CocaCola <https://t.co/EtojxdrgaU>

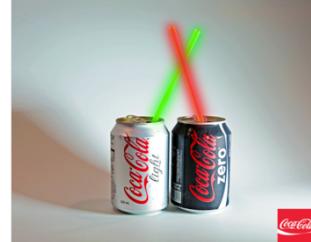
The gang's all here to spread the cheer! #MerryChristmas everyone! #HappyHolidays #ShareHappiness #CocaCola



**3. Coca-Cola Singapore [Favorited 181 times]**

Light or dark, which side will you choose? Let the light straw duel begin! #CocaCola <https://t.co/Rs8DhUjdwu>

Light or dark, which side will you choose? Let the light straw duel begin! #CocaCola



**4. Coca-Cola Singapore [Favorited 163 times]**

This #LeapDay celebrate by jumping into something you\342\200\231ve been putting off! #NoTimeLikeThePresent

#Coke <https://t.co/h9kTkRkXkw>

Dying to ask out your crush? Do it in style, just like @jemfoo!

#LikeaBoss #ShareaCokeSG #SG50



**5. Coca-Cola Singapore [Favorited 160 times]**

Print your name on a Coke can just like @typicalben's! Visit our #ShareaCokeSG roadshows now! <http://t.co/FUI7O011lc>

<http://t.co/KHG34YrIHv>

Love is in the air this #CNY. Have a wish you're longing to share? Say it with #Coke

#CokeCNYsg



**6. Coca-Cola Singapore [Favorited 148 times]**

Wanna #lepak? TAG your homies onto this #ShareaCokeSG photo by @azurrahshaalsagoff to ask them out!

<http://t.co/9k3JHCmvx1>

Light or dark, which side will you choose? Let the light straw duel begin! #CocaCola



**7. Coca-Cola Singapore [Favorited 135 times]**

Dying to ask out your crush? Do it in style, just like @jemfoo!

#LikeaBoss #ShareaCokeSG #SG50

<http://t.co/3EG7sKqUv3>

All the ingredients for a hot night: warm weather, cool friends and ice cold, frosty #Coke.



**8. Coca-Cola Singapore [Favorited 107 times]**

Love is in the air this #CNY. Have a wish you\342\200\231re longing to share? Say it with #Coke #CokeCNYsg <https://t.co/UbZDeGTLHP>

This #LeapDay celebrate by jumping into something you've been putting off!

#NoTimeLikeThePresent #Coke

<https://t.co/3EG7sKqUv3>



**9. Coca-Cola Singapore [Favorited 101 times]**

All the ingredients for a hot night: warm weather, cool friends and ice cold, frosty #Coke. <https://t.co/tYjRzR9moB>

Print your name on a Coke can just like @typicalben's! Visit our #ShareaCokeSG roadshows now! <http://coca-cola.com.sg/SHAREACOKESG/>



**10. Coca-Cola Singapore [Favorited 96 times]**

Majalah Singapura! #ItsOnUsNow #SG50 <http://t.co/WTpWX5aYJ>

Isn't this beautiful? Thanks @hugamoo for this! Visit our roadshows <http://coca-cola.com.sg/SHAREACOKESG/> #ShareaCokeSG

<http://t.co/WTpWX5aYJ>

**10. Coca-Cola Singapore [Favorited 96 times]**

Isn't this beautiful? Thanks @hugamoo for this! Visit our roadshows <http://t.co/FUI7O0iCcK> #ShareaCokeSG <http://t.co/dAyl7sxoki>

we've been given so much to be happy for

#itsonusnow



Isn't this beautiful? Thanks @hugamoo for this! Visit our roadshows <http://coca-cola.com.sg/SHAREACOKESG/> #ShareaCokeSG

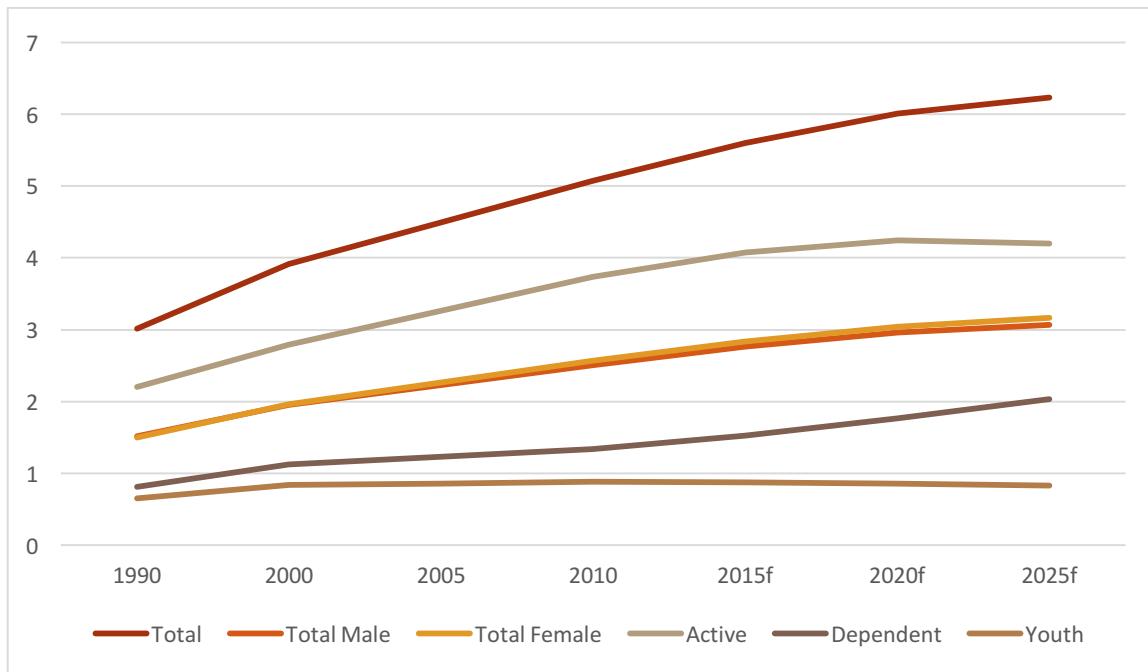
<http://t.co/dAyl7sxoki>



## CUSTOMER DEMOGRAPHICS

### AGEING POPULATION

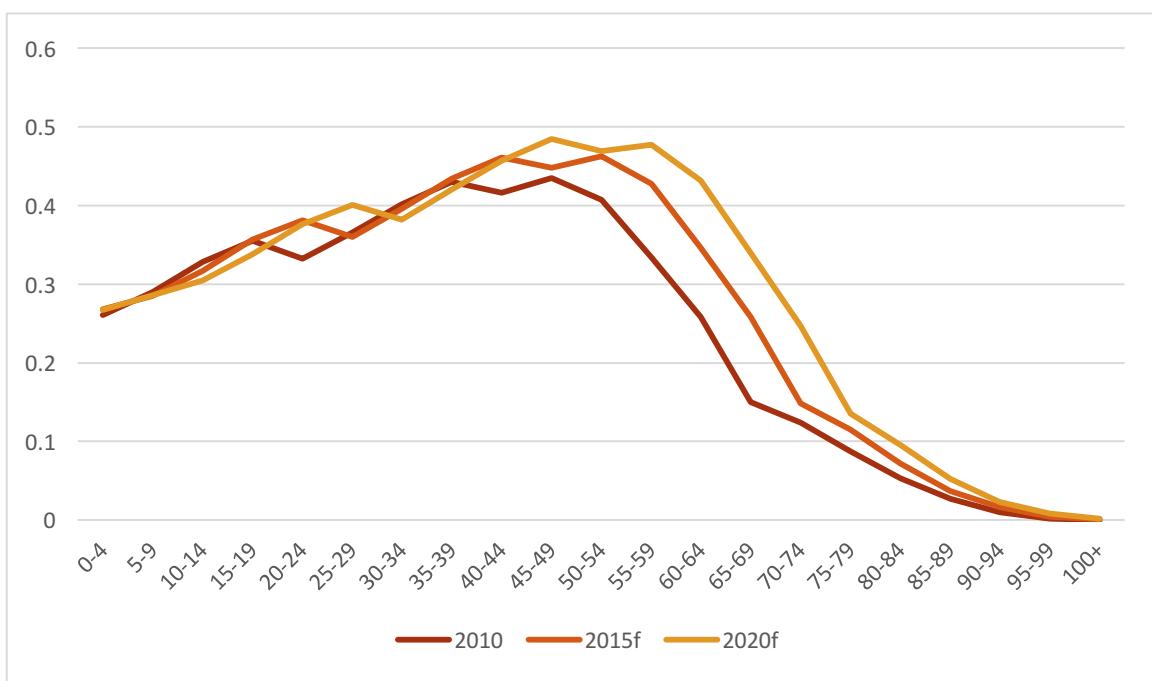
Figure 4.2.4a: Key Population Indicators (in millions)



Source: World Bank, United Nations, Business Monitor International

Singapore is expected to experience a total population growth of approximately 18 percent from 2010 to 2020 (Figure 4.2.4a). However, the growth in total population may not result in an increase in the number of potential customers. This is because along with the growth in total population, the population of dependents in Singapore is forecasted to increase approximately 32 percent whereas youth population is expected to fall 66 percent – possibly signifying a fall in future youth and young adult consumers.

Figure 4.2.4b: Total Population by Age Groups (in millions)

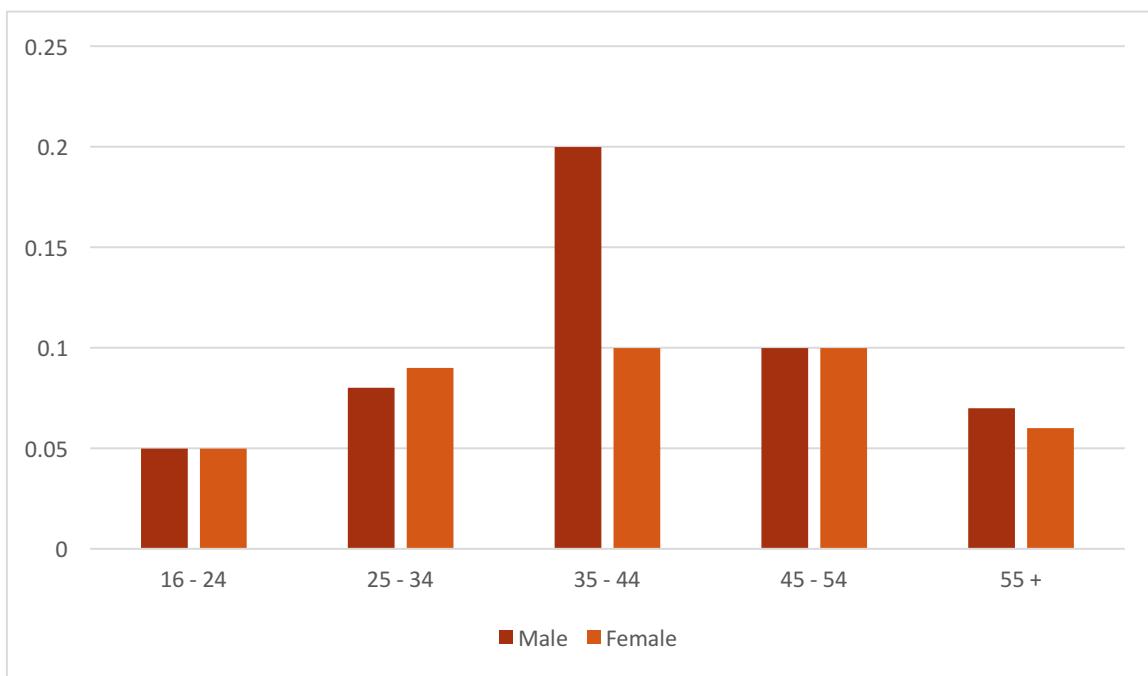


Source: World Bank, United Nations, Business Monitor International

Zooming into the individual age groups (Figure 4.2.4b), we would expect a fall in potential customers coming from the 10 to 14 (by 7 percent), 15 to 19 (by 5 percent) and 30 to 34 (by 5 percent) age groups. Coca-Cola should be ready to counter the implications on consumption of these age groups by shifting their target focus on the other age groups that would be expecting growth.

## HIGHER PROPORTION OF ADULT AND MALE CONSUMERS

**Figure 4.2.5:** Food and Beverages User by Age Groups and Gender in Singapore (in millions in 2016)



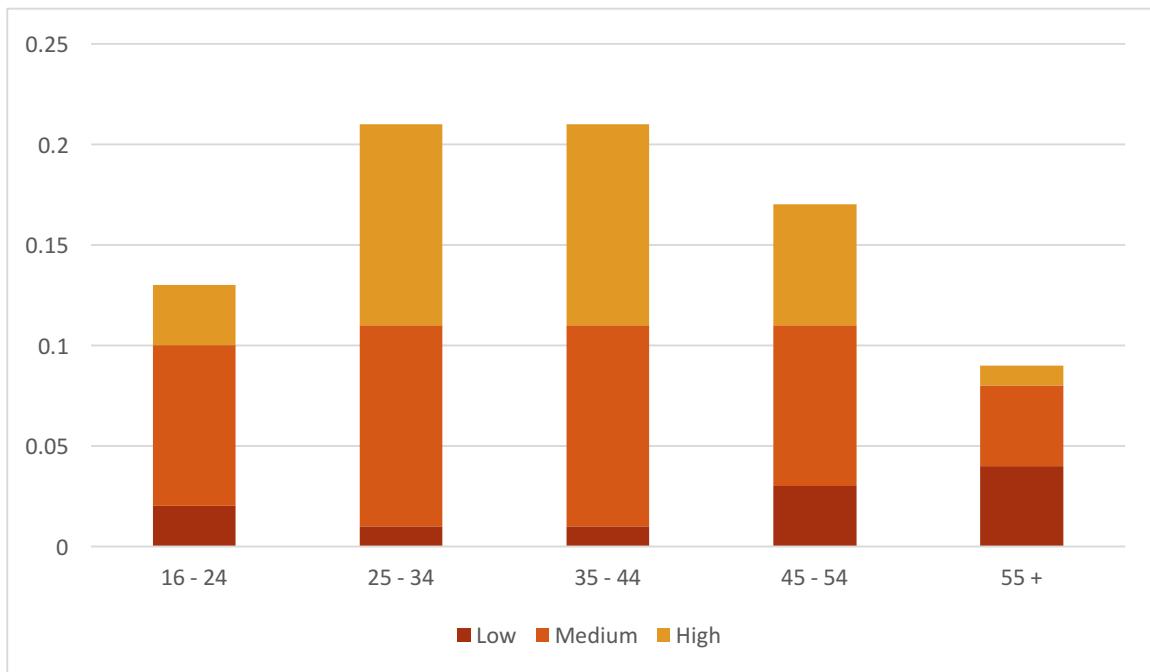
Source: Statista 2016

It can be seen that the largest group of food and beverage consumers come from the age group 35 to 44 years old, taking up approximately 33 percent (Figure 4.2.5). This could be due to a higher spending power as they are likely to be part of the working population for a considerable period of time and are non-dependents who have their own share of stable income.

If we look at gender, males also take up a larger proportion as compared to females, comprising approximately 56 percent. This is also consistent with a 2012 U.S. Annual Social and Economic Supplement Survey which indicates that males in general would spend more on food and beverages as compared to females.

## HIGHER PROPORTION OF MIDDLE INCOME CONSUMERS

**Figure 4.2.6:** Food and Beverages User by Age Groups and Income Split in Singapore (in millions in 2016)



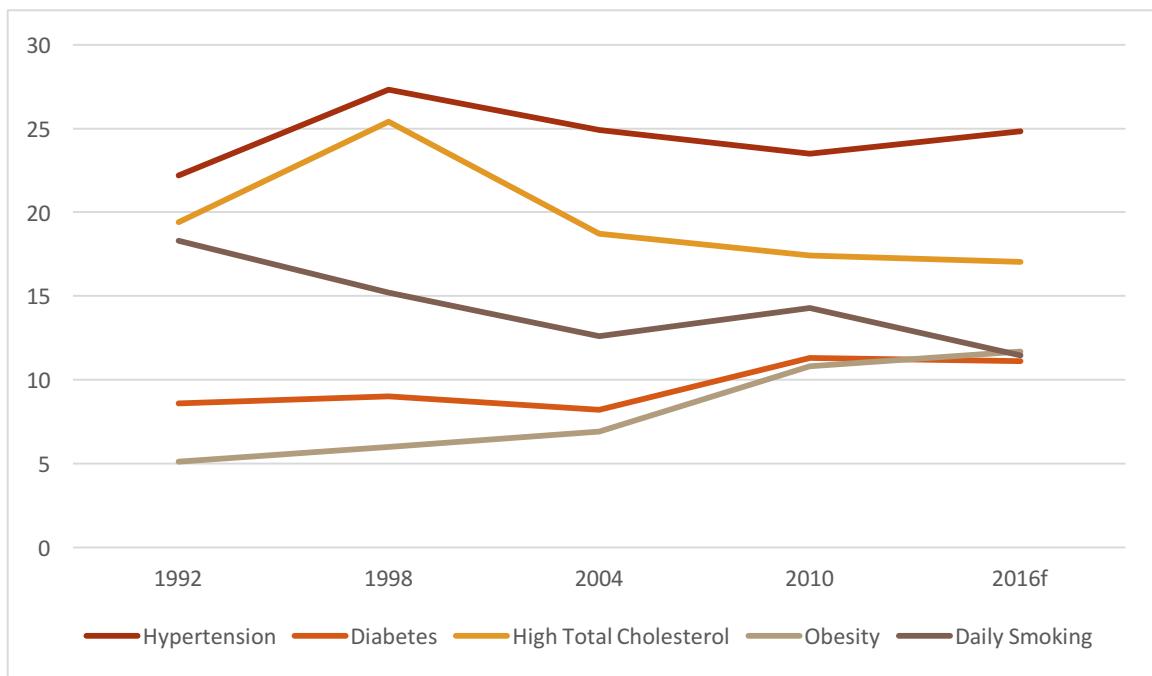
Source: Statista 2016

Figure 4.2.6 shows that a large segment of food and beverage consumers comes from the medium income group, taking up approximately 49%. On the other hand, the low income group only takes up a meagre 14%.

## INCREASING HEALTH CONSCIOUSNESS

With the implementation of the Healthier Choice Symbol Programme in 2009, consumers in Singapore can be seen to be increasingly health conscious and would consider purchasing healthier options. Furthermore, the Health Promotion Board (HPB) is also actively promoting the consumption of healthier products, targeting to increase the market share of healthier products to 25 percent by 2020.

**Figure 4.2.7:** Prevalence among adults ages 18 to 69 years old (%)



Source: Ministry of Health Singapore

Furthermore, as can be seen in Figure 4.2.7, there is an increasing percentage of disease burdens such as diabetes and obesity in Singapore, which calls for increasing policies or programmes to promote health consciousness in Singapore to increase. With consumers in Singapore being increasingly health conscious, we would expect an increase in demand for drinks that contain fewer artificial ingredients.

## WELL CONNECTED NATION

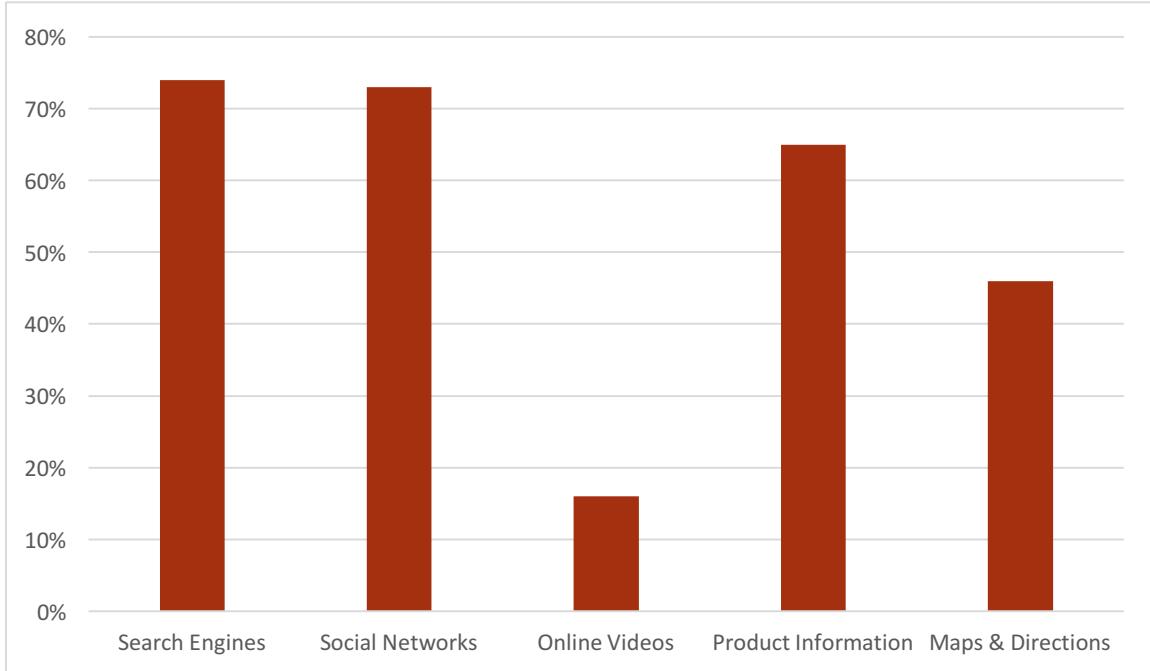
With the highest internet penetration rate in the Southeast Asia region (Internet Live Stats, 2016), the internet is a good avenue of marketing efforts to be directed towards.

**Figure 4.2.8a:** Summary of online statistics in Singapore in ????

Active Internet Users	Active Social Media Accounts	Mobile Connections	Active Mobile Social Accounts
4.45 Million	3.60 Million	8.30 Million	3.20 Million
Penetration: 81%	Penetration: 66%	Penetration: 152%	Penetration: 59%
+12% Growth since Jan 2014	+13% Growth since Jan 2014	+3% Growth since Jan 2014	+14% Growth since Jan 2014

Source: We Are Social 2015

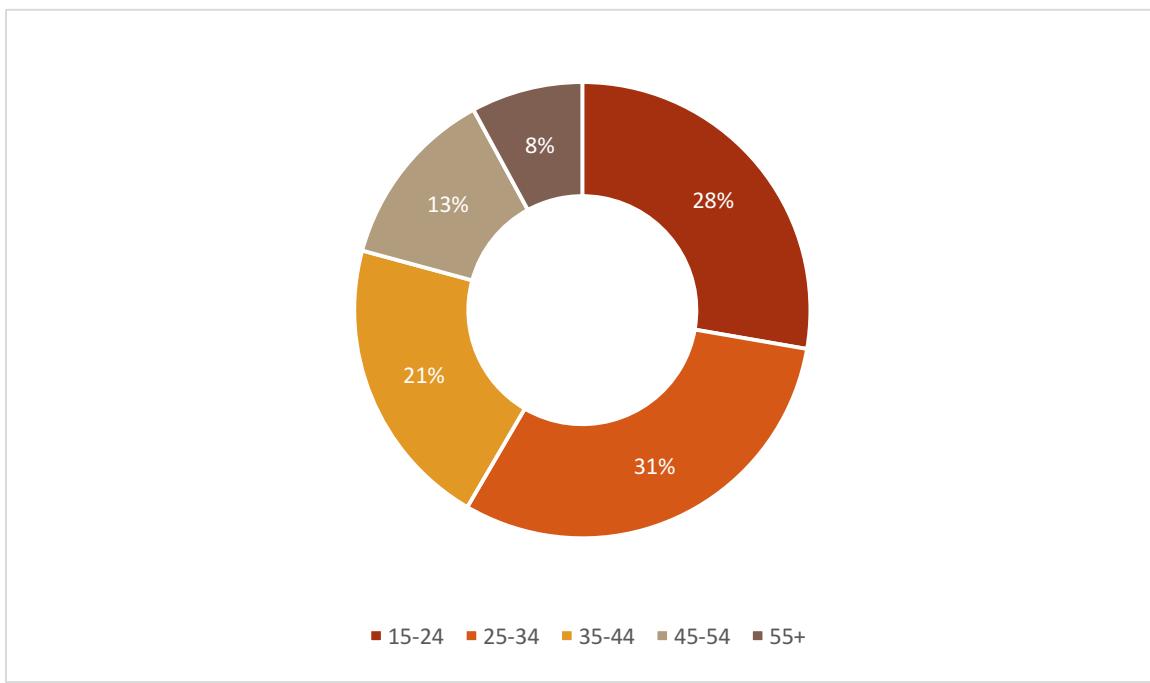
**Figure 4.2.8b: Range of Online Activities Carried Out on Smartphones and Computers**



Source: Consumer Barometer with Google

As can be seen in Figure 4.2.8a, whereby the data collected are based on surveys that are conducted to represent the users' own claimed activity, there is a high percentage and growth of population in Singapore being actively involved in social media and mobile social platforms. Furthermore, based on Google's "The Connected Consumer Survey" (see Figure 4.2.8b) 73% of online users in Singapore spend time online on social networks. Hence, Coca-Cola could expect a high outreach through social media platforms.

**Figure 4.2.8c: Distribution of Internet Users in Singapore as of September 2013 by Age Groups**



Source: Statista 2013

From Figure 4.2.8c, we can also see that a majority (59%) of Internet users in Singapore are between 15 to 34 years old.

# RECOMMENDATIONS

Taking into account findings and insights from previous sections in the report, we have come up with a number of recommendations that Coca-Cola could consider to improve their competitive position in Singapore's market. They are summarized in Figure 5.1.

Figure 5.1: Summary of proposed recommendations



## CARBONATED SOFT DRINKS SEGMENT

We found out in previous sections of the report that it is “quite common” knowledge/ there is increased attention to the unhealthiness of Coca-Cola’s carbonated soft drink (CSD) product(s). However, we have also established that Coca-Cola commands a large market share in the CSD market, and that a key concern of consumers in this market is taste (even at the expense of health concerns). Hence, we have chosen the primary focus for our recommendations in this sub-section to be on how to make Coca-Cola’s CSD product(s) stand out among other companies’ CSD products and not through making Coca-Cola CSDs seem healthier.

### MODIFICATIONS TO MARKETING

Firstly, Coca-Cola should not focus on marketing the product (drink) but engage in marketing that creates an ideal image (through highlighting certain values) that others would associate with Coca-Cola. In this regard, the “Taste The Feeling” campaign has been quite effective. In particular, we would suggest for Coca-Cola to concentrate on familial themes. In a previous section of the report, we saw that a video with this theme has proven to be quite popular generally. Furthermore, values related to family in the Asian setting (majority in Singapore) are also held in greater esteem.

Secondly, we have also seen that creative picture pairings of food with Coca-Cola are quite popular. There is a strong and diverse food culture in Singapore. Coca-Cola could consider doing localized version of such food and drink pairings, possibly incorporating them into festival celebration as well. For instance, a tweet celebrating Chinese New Year that shows a picture of Coca-Cola with pineapple tarts strategically stacked in the shape of a Coca-Cola bottle.

Thirdly, Coca-Cola is not just a product but an easily identifiable brand. Previously in the report, we observed that Coca-Cola related merchandise are quite popular with the public in the Twitter-sphere. Hence, Coca-Cola could partner with appropriate companies to manufacture such products and offer them in purchase-with-purchase promotions where people can buy Coca-Cola shirts or mugs after buying Coca-Cola drinks (or Sprite, Fanta etc.). Alternatively, as “freebies” are particularly effective in attracting attention in Singapore, they could be offered as free gifts. The increased publicity from the use of such related merchandise (e.g. wearing Coca-Cola shirts in public) could also make the company stand out more among rival companies.

## PACKAGING

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As mentioned in an earlier case study in India, Coca-Cola could consider offering smaller servings (cans/ bottles) of CSD. Not only is a smaller “serving” more profitable for Coca-Cola, it can also be taken as a way to address health concerns as now consumers have the option to drink a smaller “serving” of unhealthy CSD. In considering the size of the cans, the shape of the cans is also important. For example, a slimmer can (containing the same volume of beverage) might be able to create a positive psychological impact in the minds of consumers, and would also be easier to hold.

Furthermore, the potential of novel or creative packaging should also not be underestimated. The success of the “Share A Coke” campaign can be attributed to the fact that people are able to personalize their cans/ bottles of Coca-Cola. Every now and then, Coca-Cola can come up with unique and novel packaging that attracts attention or/ and result in greater consumer engagement. For example, Coca-Cola can print unique prints/ designs on the underside of Coca-Cola bottle caps/ cans that can form a larger picture when put together. To further incentivize consumers, Coca-Cola could also provide gifts that can be exchanged upon collection of a certain set of “prints”. There can also be gamification where consumers can earn cash for recycling cans (identified by printed serial numbers) at determined collections. This could both entice more purchases and improve Coca-Cola’s image as being environmentally conscious.

## DIVERSIFICATION IN OTHER SEGMENTS

### INTRODUCE READY-TO-DRINK COFFEE BRANDS

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As previously mentioned, coffee is the main driver of growth in the hot drinks beverage category in Singapore. The presence of big commercial coffee giant such as Starbucks and The Coffee Bean, smaller coffee retailers such as Ya Kun Kaya Toast and Old Town White Coffee that cater to the lower-end segment, and coffee shops that serve traditional coffee mainly to locals and the elderly, have helped to developed a coffee culture in Singapore.

However, there is also scope for growth in the longer term for the coffee market. The increasingly sophisticated, urbanised lifestyles of local consumers, accompanied by higher incomes, will translate into a growing appetite for premium-priced Westernised styles of coffee, such as espresso and mocha. Supported by higher purchasing power, consumers are also likely to develop increasingly sophisticated tastes for coffee and demand greater variety in coffee products, such as Vietnamese coffee and flavoured beverage options. Premiumisation, as well as increasing health-consciousness and product innovation is likely to spur on sales.

Specifically, Coca-Cola could consider entering the coffee industry in Singapore through the ready-to-drink (RTD) segment. In 2007, Coca-Cola teamed up with *illy*, an established Italian coffee specialist company to launch a premium RTD line of coffee called *illy issimo*. More recently in September 2016, Gold Peak, a premium tea and coffee brand under Coca-Cola, announced that it will offer premium RTD coffee in the United States in the first quarter of 2017. Coca-Cola could consider introducing these 2 premium brands in Singapore market as well.

## GENERAL

### PROMOTIONS

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As previously mentioned, beverage purchases from a majority of purchases in convenience stores in the Unites States. In Singapore, convenience stores include stores like “Cheers” in petrol stations or “7-Eleven”. While there are obvious differences between the two countries, not least of which is the size difference between the countries, it is likely that this trend also holds in Singapore (logically). In which case, Coca-Cola could consider specific promotions targeted at convenience stores to entice consumers to buy their products/ buy more. There is a need for specific promotions as unlike consumers in super/ hypermarkets, the primary goal of people who visit convenience stores is not necessarily to purchase drinks (e.g. paying for petrol) or to purchase in bulk (probably just for immediate consumption). The position of promotion information/ advertisements in convenience stores could also be particularly important considering the smaller enclosed areas of convenience stores.

In addition, Coca-Cola should also consider “cross-promotion” with other beverage brands in its portfolio. Specifically, these brands are not carbonated soft drinks brands but brands which are not known to be “unhealthy” such as Minute Maid, Qoo, Powerade, Dasani etc. For example, a promotion to purchase two 1.5L bottles of Coca-Cola and a 6-pack can of Qoo for a combined lower price. This might lead to increased demand for both brands of products (because of the bargain price) and new customers of the other product (because of this, Coca-Cola drinkers try and find that they like Qoo, and vice-versa).

## MORE DOMINATING SOCIAL MEDIA PRESENCE

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Coca-Cola’s main local competitors are brands such as F&N and Yeo’s. However, these companies barely have a social media (Twitter, YouTube, Facebook) presence, if at all. Having an online social media presence is important, especially so in the context of highly connected Singapore and that most youth and young adults are users of social media. Coca-Cola should take advantage and assert their online social media presence even more to engage with consumers and reach out to a wider audience.

That being said, Coca-Cola’s social media presence is not that large. For example, the Coca-Cola Singapore account has only 7,771 followers as compared to Coca-Cola which has 3.29 million followers or Coca-Cola PH (Philippines) with 73.1 thousand followers. If the reason is that people are not aware of the “localized” version of the social media account, then there should be more effort in letting people know. To do so, there Coca-Cola could hold publicity events and promotions that explicitly make people aware of this (celebrities to promote, free drinks for “follows”, “likes” etc.).

Coca-Cola also has to put in effort to make sure that the content is of interest to the user. A way which we found to be effective in a previous section of the report is to use (local) celebrities and involve them in publicity events. In addition, the use of interesting videos rather than just pictures or words is likely to generate greater interest. Finally, Coca-Cola should also strive to have two-way engagement and not just use social media as a one-way information platform. This could be achieved by posting content that explicitly invites (and rewards) public engagement or simply, responding to public queries/ comments.

## GREATER OFFLINE PRESENCE

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While Coca-Cola’s local competitors do not have much of an online social media presence, they can be considered to have more offline presence than Coca-Cola. A good example would be the 100 Plus brand under F&N. 100 Plus was the official isotonic drink of the 28<sup>th</sup> SEA Games in Singapore. Furthermore, 100 Plus sponsors or supports many official sporting events such as the Great Eastern Women’s Run, Sundown Marathon, OCBC Cycle and Safra Run and Ride. This is excluding many other smaller scale schools’ sport events or community events that 100 Plus supports. In traditional media, one can also see regular 100 Plus advertisements in the “Sports” section of “The Straits Times” newspaper. All these have led many to consider 100 Plus as the synonymous sports drink brand.

Coca-Cola should strive to emulate this example. It has a large portfolio of brands that could benefit from a greater offline presence. For example, Powerade could similarly sponsor sports events while Coca-Cola (drink) could sponsor other types of mass participation events such as outdoor music festivals and concerts/ countdown parties. Alternatively, Coca-Cola could also give Dasani bottled water to charities/ NGOs to build up its corporate social responsibility image. Furthermore, building of an offline presence need not necessarily be about sponsorship. It can also be through eye-catching “stunts” or simple publicity events. For example, as inspired by a popular favorited tweet in the previous section, the Coca-Cola bear could “visit” the Singapore Zoo or University World Studios to hand out drinks/ take pictures.

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# APPENDIX

## APPENDIX A: SENTIMENT SCORING FUNCTION

We used the following function in Figure 6.1 to obtain a “sentiment score” for several of our collected tweets and comments from YouTube videos.

Figure 6.1: Sentiment Scoring Function

```
score.sentiment = function(sentences, pos.words, neg.words, .progress='none') {
  require(plyr)
  require(stringr)

  scores = laply(sentences, function(sentence, pos.words, neg.words) {

    # clean up sentences with R's regex-driven global substitute, gsub():
    sentence = gsub('[:punct:]', '', sentence)
    sentence = gsub('[:cntrl:]', '', sentence)
    sentence = gsub('\\d+', '', sentence)
    # and convert to lower case:
    sentence = tolower(sentence)

    # split into words. str_split is in the stringr package
    word.list = str_split(sentence, '\\s+')
    # sometimes a list() is one level of hierarchy too much
    words = unlist(word.list)

    # compare our words to the dictionaries of positive & negative terms
    pos.matches = match(words, pos.words)
    neg.matches = match(words, neg.words)

    # match() returns the position of the matched term or NA
    # we just want a TRUE/FALSE:
    pos.matches = !is.na(pos.matches)
    neg.matches = !is.na(neg.matches)

    # and conveniently enough, TRUE/FALSE will be treated as 1/0 by sum():
    score = sum(pos.matches) - sum(neg.matches)

    return(score)
  }), pos.words, neg.words, .progress=.progress )

  scores.df = data.frame(score=scores, text=sentences)
  return(scores.df)
}
```

Source: <https://jeffreybreen.wordpress.com/page/2/>

As can be seen, the function assigns a (separate) score of 1 for each word in the text that appears in the list of positive and negative words. We used Hu & Liu’s (2004) opinion lexicon for the list of positive and negative words. The sentiment score is then determined by subtracting the negative word score from the positive word score.

The sentiment score determined does not take into account the context specific words are used, assumes each word is positive/negative to the same degree, is comparative (how much more positive/ negative the text is) and does not consider every word found in the text collected (only those found in the lists of positive and negative words).

### BASIC TEXT PRE-PROCESSING

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We did the following pre-processing for words collected from the different social networking sites.

#### TWITTER

In order, we removed possible emoticons, the “RT” portions of retweeted tweets, Twitter usernames which follow or otherwise, html links and unnecessary white spaces in the text.

#### YOUTUBE AND AMAZON

In order, we removed possible emoticons and html links in the text.

### ADDITIONAL TEXT PRE-PROCESSING

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Additionally, we did the following separate pre-processing to form the following analysis.

#### WORD CLOUDS

In order, we converted all text to lowercase, removed numbers, removed English stopwords according to R’s “tm” package’s stopwords dictionary, removed punctuation and removed any additional whitespace.

We avoided word stemming in the text processing for our word clouds as we wanted the words in our word cloud to be more readable.

#### N-GRAMS

In order, we converted all text to lowercase, removed numbers, removed English stopwords according to R’s “tm” package’s stopwords dictionary, stemmed words in English, removed punctuation and removed any additional whitespace.

### ADDITIONAL STOPWORDS

In addition, for the section where tweets were collected based on the keyword “cocacola”, we added the following terms to the list of stopwords to be removed: "cocacola", "coca-cola", "coca", "cola", "coke". For tweets which were collected based on the keyword “tastethefeeling, we added only one additional term “tastethefeeling” to the stopwords list. The reason for this is because such terms are given to be found in the collected tweets for the respective sections.

## APPENDIX C: DETAILS OF MINED YOUTUBE VIDEOS

### COCACOLA “FACT” VIDEOS

Video Title	Uploaded By	Upload Date	Number of Views	Number of Likes	Number of Dislikes	Number of comments extracted
Still drinking coca cola? Watch this!	healthfit7	Jan 16, 2011	32,919,995	53,380	42,071	57,497
10 Interesting Facts About Coca-Cola	Alltime10s	Aug 1, 2011	1,651,991	4,648	356	2,905
5 Crazy Facts about Coca-Cola	World 5 List	Jul 9, 2014	8,609,583	12,291	3,139	2,146
10 Shocking Facts About Coca-Cola	Alltime10s	Aug 23, 2015	2,715,769	24,069	1,408	4,441

### MOST POPULAR UPLOADED VIDEOS BY COCACOLA

Video Title	Uploaded By	Upload Date	Number of Views	Number of Likes	Number of Dislikes	Number of comments extracted
Coca-Cola Happiness Machine	CocaCola	Jan 12, 2010	7,679,578	27,522	1,453	2,627
Coca-Cola Friendly Twist	CocaCola	May 19, 2014	9,947,568	34,259	1,199	2,114
"The World Is Ours" - Aloe Blacc X David Correy (Official Music Video)	CocaCola	Jun 11, 2014	7,076,302	21,797	744	456
Just Dance Now with Coca-Cola and Les Twins!	CocaCola	Sep 25, 2014	11,573,527	3,560	290	137
Stop phubbing around   Coca-Cola	CocaCola	Dec 17, 2014	22,356,928	1,895	189	120
Coca-Cola: Coke Mini (Hulk vs. Ant-Man)	CocaCola	Feb 7, 2016	10,036,869	58,900	2,146	2,338
Avicii vs. Conrad Sewell - Taste The Feeling	CocaCola	Mar 10, 2016	18,120,303	192,308	3,147	6,444

### VIDEOS IN COCACOLA’S TASTETHEFEELING PLAYLIST

Video Title	Uploaded By	Upload Date	Number of Views	Number of Likes	Number of Dislikes	Number of comments extracted
Anthem	CocaCola	Jan 19, 2016	1,169,093	7,059	301	456
Break Up	CocaCola	Jan 19, 2016	564,584	3,641	110	152
Brotherly Love	CocaCola	Jan 19, 2016	2,584,131	32,934	645	3,159
Supermarket	CocaCola	Jan 19, 2016	503,561	1,730	142	137
Under Pressure	CocaCola	Jan 19, 2016	297,411	1,273	101	104
Antarctic Summer	CocaCola	Apr 18, 2016	11,465	75	16	18
Empty Bottles	CocaCola	Apr 18, 2016	29,907	113	23	6