

Wine/Beer Segmentation Study with Social Media analysis experiment



Beer and wine consumption are battling for drinker preference



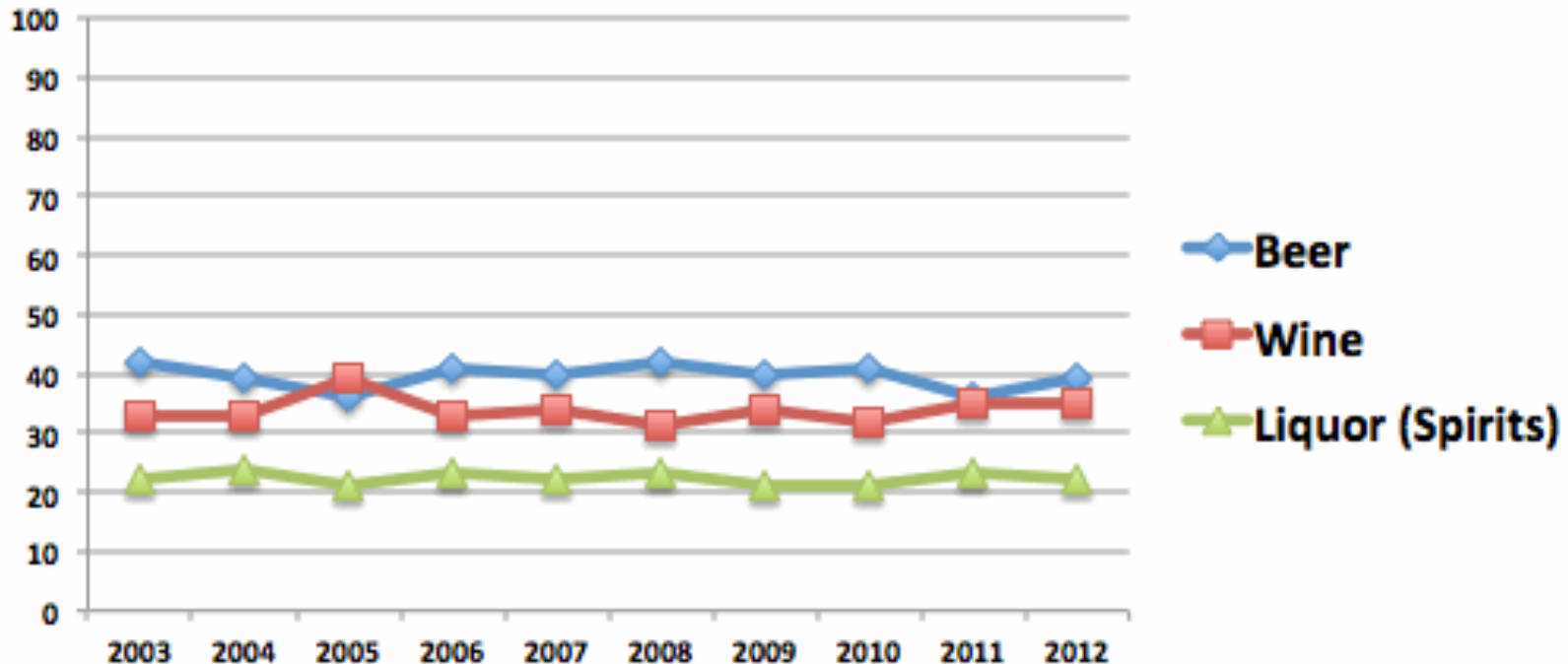
- Since 2009, beer consumption has decreased every subsequent year – U.S. beer volumes declined 1.2% in 2010 and 1.3% in 2011
 - Decline in consumption comes mostly from decreased sales of light beer – light beer is 52.8% of beer market

- Wine sales and volumes sold in the U.S., on the other hand, has increased every year for past 18 years
 - More wine is consumed in the U.S. than in France, Italy, or Spain (although per capita consumption is higher in those countries)
 - U.S. targeted to increase wine consumption to 13 liters per adult by 2015, up from 8.96 liters in 2009

- In U.S., 2010 (Kantar Media) wine ad spend increased 0.2% gain from 2009 to \$80 million. Beer's ad spend dipped for the third consecutive year, falling 0.6% to \$1.25 billion.

Beer and wine preference in the U.S.

Do you most often drink liquor, wine, or beer?



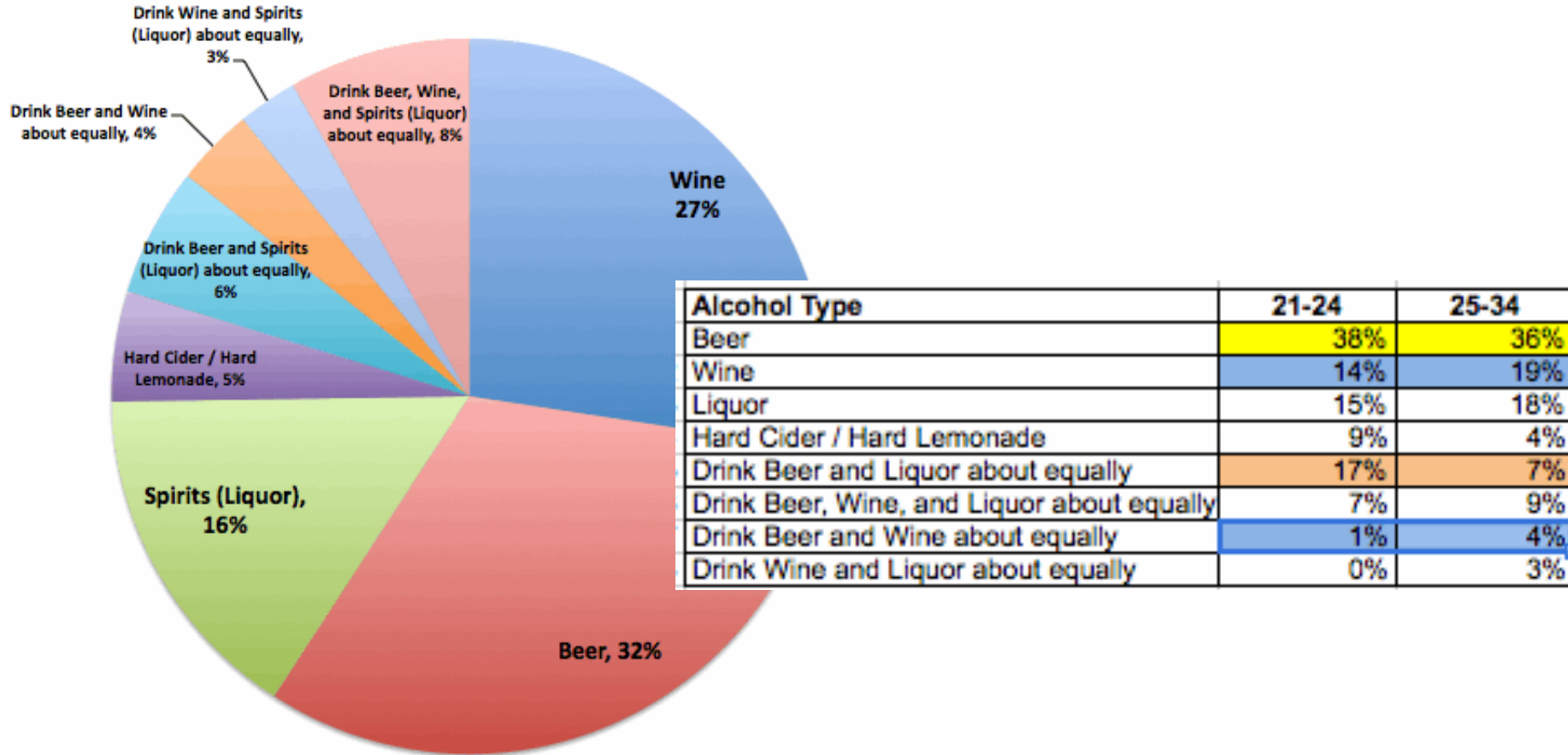
➔ Gallup Poll 2003-2012

Current American drinking habits (2012)



- 79% drink alcohol on occasion, or are “open to alcohol”; 21% are total abstainers, or “closed to alcohol”
- More men (82%) are open to alcohol than women (76%)
- 60% had at least one alcoholic drink in the week prior to interview
- Within 24 hours prior to interview respondents reported having had an alcoholic drink:
 - 35-54 year olds – 34%
 - 55+ year olds – 32%
 - 21-34 year olds – 25%
 - Males – 40%
 - Females – 22%
- 73% of respondents with at least some graduate school experience have had a drink in the past week, compared to those who have at most a high school degree (46%)

Current American drinking habits (2012)



Drinker Segmentation



- ➔ Segmentation focused on 21-34 year old U.S. drinkers (Millennials) of beer, wine, and spirits
 - ➔ Millennials are participating in drinking behavior yet experimenting with settling on the preference of the type of alcohol to drink: wine, beer, and spirits
- ➔ Surveyed Millennials based on drinking-specific behaviors and attitudes, as well as general lifestyle behaviors, attitudes, and values in order to identify the key motivators that define and drive propensity toward favoring one type of alcohol over another
- ➔ Experiment was to combine two data streams – traditional online research and Facebook scraping of Millennials – to see if segmentation is enhanced with the additional information that social media analysis can provide

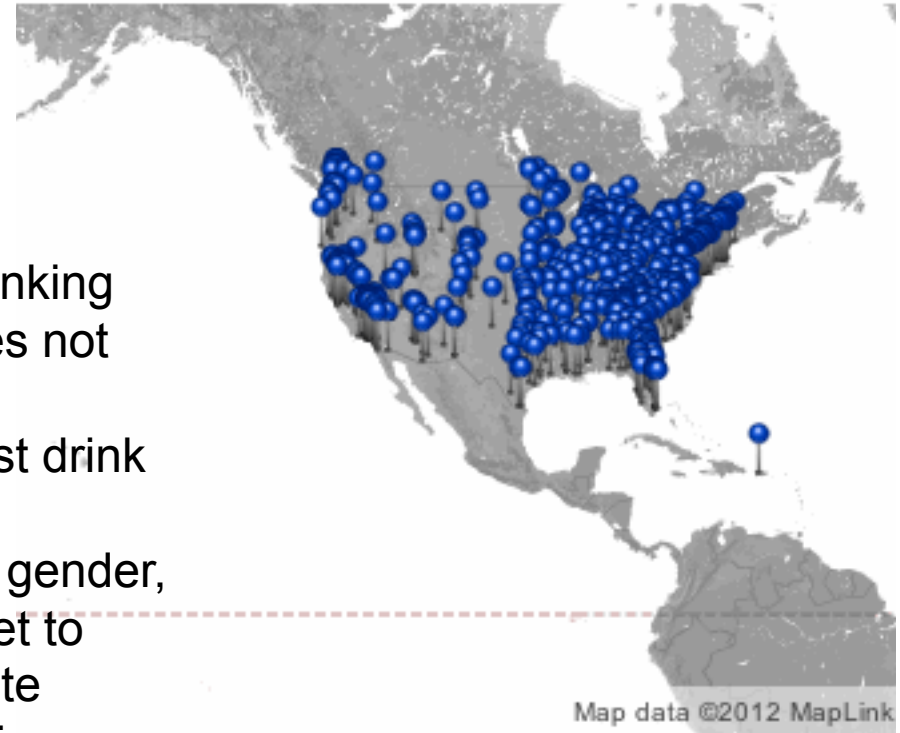
Definition of Millennials in the U.S.

- “Millennials” = “Gen Y” = Echo “Boomers”
- Birth years are between 1982 - 2000
- *Current focus*: those who are born during or before 1990, since legal drinking age is 21 year old (those between 30-34 years old are Gen Xers)
- Millennials were the first to grow up with computers in their homes
 - 75% have created profile on a social networking site such as Facebook, LinkedIn, or others
 - 79% send one or more text messages on a daily basis



Millennials surveyed online about drinking attitudes and behaviors

- Total of 827 21-34 year olds completed the 10 minute online survey:
 - 163 are **closed to drinking**
 - 665 who are **open to drinking**
 - 76% report regular weekly drinking
 - 21% occasional drinkers (does not drink every week)
 - 3% cannot remember their last drink
 - Weighted to census rep based on gender, age, region, income and targets set to balance sample to ensure adequate representation across demographics
 - Survey fielded October, 2012 using Toluna QuickSurveys



Survey questions

→ Demographics

- Gender, age, race/ethnicity, region, education level, income, work position, primary grocery shopper, children in household, people in household, married status

→ Type of alcohol preferences

- Triggers that define beer/wine/liquor choice

→ Self-reported behaviors around alcohol:

- Frequency
- Location
- Future intent

→ Attitudes towards drinking:

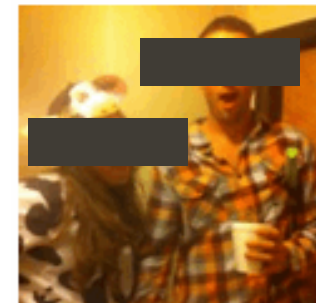
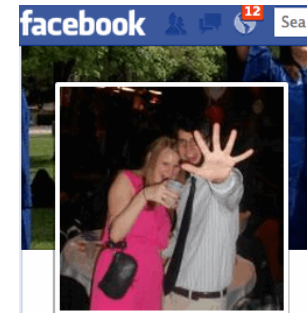
- Social effects
- Drinking triggers
- Need for acceptance
- Stress-relieving

→ Lifestyle / media habits

- | |
|---|
| ▶ Q1 Do you most often drink liquor, wine, or beer? (select only one answer) |
| ▶ Q2 At what locations do you drink liquor, wine, or beer? (Select one or more answers) |
| ▶ Q3 When did you last drink any kind of alcoholic beverage? |
| ▶ Q4 If you drink at the following venues, what is the typical price range of an alcohol drink at the place you attend, when compared to other similar, venues? |
| ▶ Q5 Would you describe yourself as ... |
| ▶ Q6 Would you describe yourself as ... |
| ▶ Q7 Compared to other people you know, how would you describe yourself? |
| ▶ Q8 Over the past year, did you drink less beer and more wine than in years past? |
| ▶ Q9 When you drink alcohol, how important is taste of drink to you? |
| ▶ Q10 When you connect with a game, app, or website using your Facebook account, you may give the game, app, or website, your basic info and the ability to read your posts and comments. For a monetary incentive allow the app to do this for market research purposes? |
| ▶ Q11 Do you do one of the following behaviors at least once a day, at least 4 days a week? (check all that apply) |
| ▶ Q12 What is your opinion of wine? |
| ▶ Q13 What is your opinion of beer? |

Social media research component

- ➔ During the survey, respondents were asked to allow a single-read of their Facebook walls, posts and comments; data gathered parsed into four potential categories: demographics, sociality statistics, discussions of alcohol usage, and discussions with brand mentions
- ➔ Other fixed attributes collected were number of friends, frequency of posting, fixed attributes
- ➔ 351 respondents (53% of those open to alcohol) agreed to the Facebook data-gathering
 - ➔ Full Facebook data pull
 - ➔ Only one “scrape” happened, associated with survey at point-in-time
 - ➔ Approximately 87K posts were read



Facebook Login – How it is done

First, the explanation request - “When you connect with a game, app, or website using your Facebook account, you give the game, app, or website, your basic info and the ability to read your posts and comments. For a monetary incentive, will you allow the survey to do this same activity for market research purposes?” *If yes...*

Next, the Facebook login-





Payments

Realtime Updates API

Advanced

App Details

Localize

Open Graph

Roles

Insights

Related links

[Use Debug Tool](#)[Use Graph API Explorer](#)[See App Timeline View](#)[Delete App](#)

MillennialsSegmentation

App ID: 273288346947

App Secret: [REDACTED] (reset)

Basic Info

Display Name: [?] MillennialsSegmentation

Namespace: [?] carolhaney

Contact Email: [?] carolsuehaney@gmail.com

App Domains: [?] Enter your site domains and press enter

Hosting URL: [?] https://secure-bastion-2161.herokuapp.com/

Sandbox Mode: [?] Enabled Disabled

Select how your app integrates with Facebook

- Website with Facebook Login ✕
Site URL: [?] http://toluna.com/fbconnect/
- App on Facebook Use my app inside Facebook.com.
- Mobile Web Bookmark my web app on Facebook mobile.
- Native iOS App Publish from my iOS app to Facebook.
- Native Android App Publish from my Android app to Facebook.
- Page Tab Build a custom tab for Facebook Pages.

[Save Changes](#)

Social media data attributes available



→ Demographics

- Gender
- Age
- Region
- Relationship Status

→ Sociality statistics

- number of friends
- number of posts per day
- comment-post ratio
- number of happy birthdays

→ Discussions of alcohol usage and brand mentions

- Beer
- Wine
- Hard Cider
- Spirits
- Alcohol/other brand mentions
- Bars / Going "out"
- Drinking/Partying

Available yet not used:

- First/last name, link, username

Structured data available:

- Read friendlists
- Read pages, apps, and domains of the user
- Read friend requests
- Check if the user is considered "online"
- Check how many friends of the respondent are "online"
- rsvp event

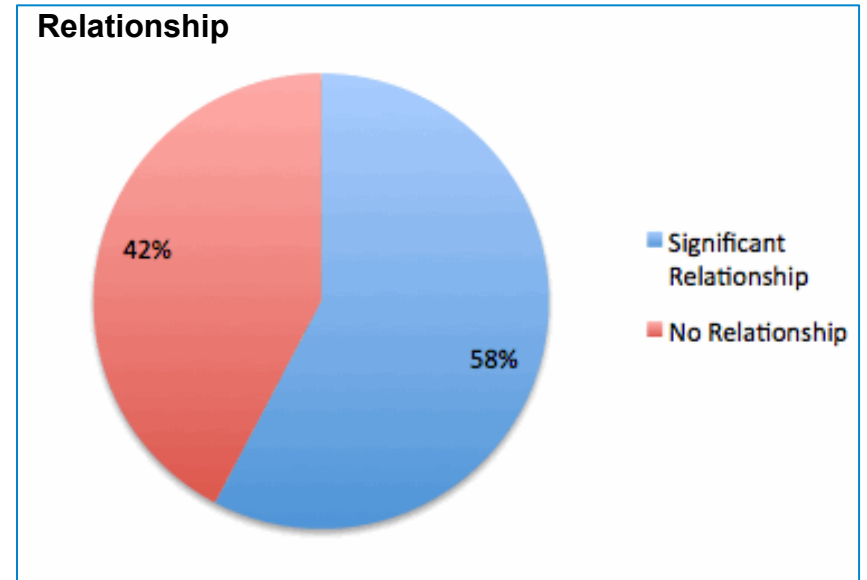
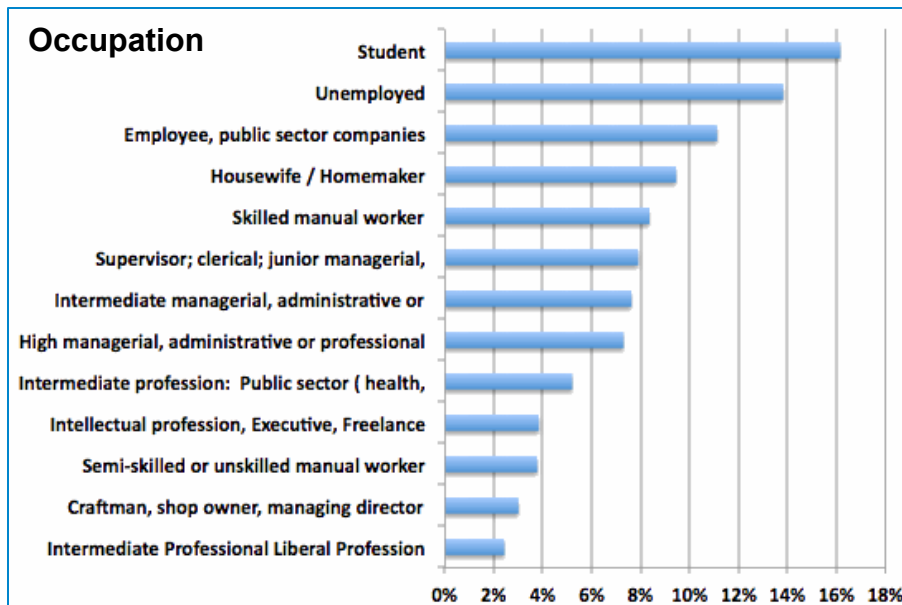
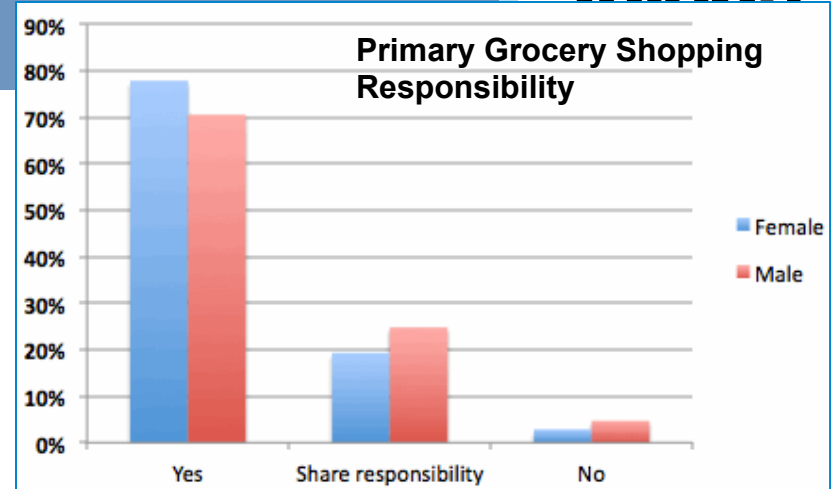
Textual data available:

- Read inbox
- Read all posts in news feed + perform searches against the news feed

Results and Implications



Demographics that assisted in segmentation



Results and Implications

- Millennials say drinking is way to unwind with friends or at end of day
- The strongest drivers for drinking wine is gender, specific location, grocery store shopping, relationship, and relaxing
- The strongest driver against beer drinking is its taste
- Alcohol content is not essential consideration for most drinkers

Over the past year, did you drink less beer and more wine than in years past?	Total
I have been drinking about the same amount as in years past	56%
I have been drinking less beer and more wine	24%
I have been drinking more beer and less wine	16%
This is the first year that I have tried beer or wine	4%

Parsing and associating of social media data

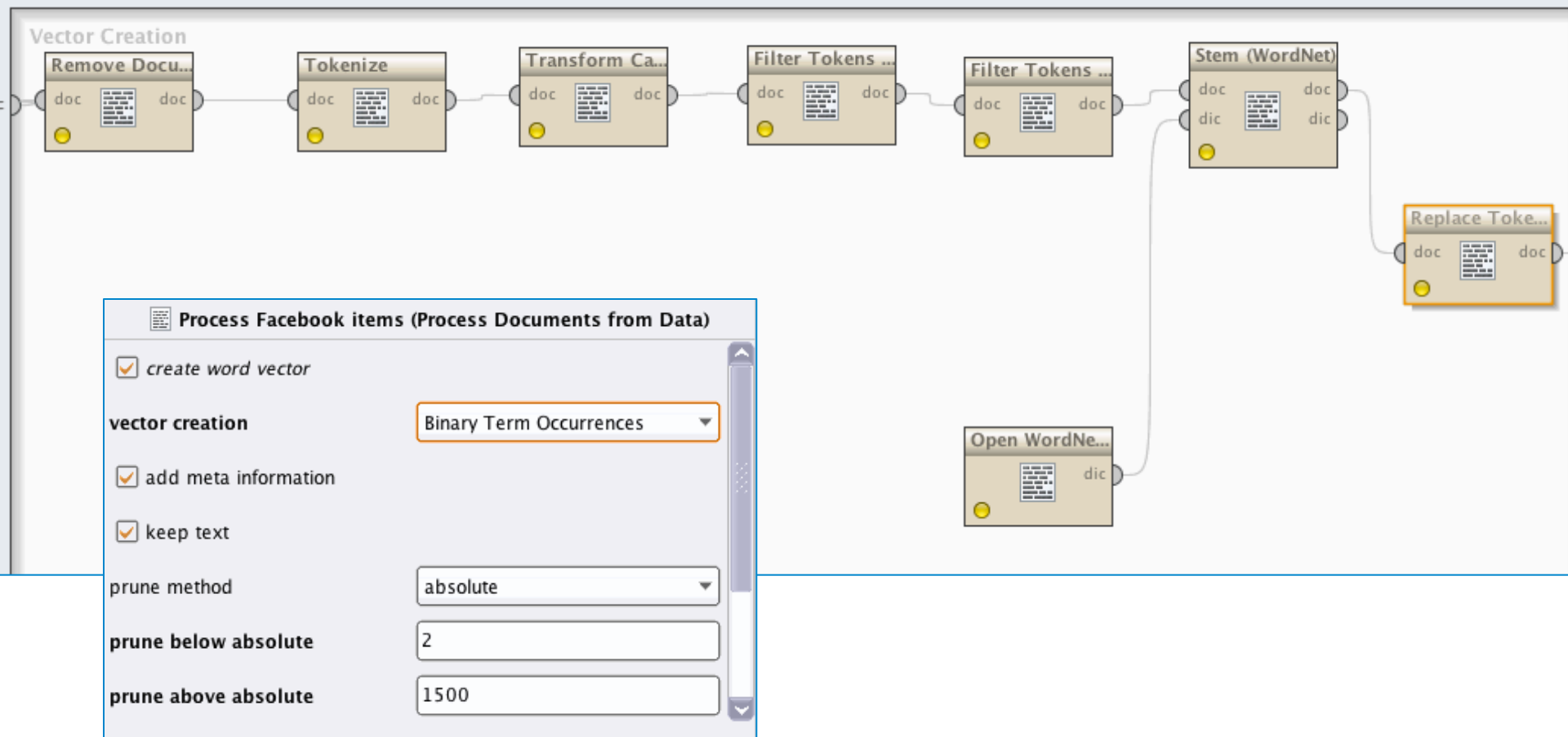
- Parsing was keyword-driven
 - Beer, wine, drinking*, bar, partying, “house party”, etc.
 - Brand list was generated from current brand list of 250 alcohol brands (used as a dictionary to help identify and annotate)

- Facebook conversations were then pre-processed into a corpus, with each textual unit being a root post and all comments to that root post

- The corpus was then processed and turned into structured attributes
 - Text discovered about drinking/bar behavior were assigned either 1 or 0
 - Number of discrete mentions were aggregated
 - Text were also documented as narratives

- These attributes were then joined with respondent dataset for analysis purposes

Text processing, vector creation



Segmentation Approach



- Segmentation solution developed used exploratory factor analysis followed by two-step cluster analysis
- Only the Open to Drinking population was included in the segmentation analysis
- 21-34 year olds are identified as target population because correlation higher that older drinkers are “stuck in their ways” and it might be too late to convert those who have switched
- Goal of this exercise is to identify those factors that assist in at-risk for switching away from beer drinking, at least partially

Six segments emerge



factor	Segment 1 Love My (tasty) Beer	Segment 2 Bonding with Friends	Segment 3 Nice women don't drink beer	Segment 4 My Lifestyle	Segment 5 Living on the Wild Side	Segment 6 Moms at home relaxing
Gender	Male	Male	Female	Male	Female	Female
Age	25-34	21-24	25-34	25-34	21-24	25-34
Education/Income/Job	College	HS Ed	Hs Ed	College-Educated	Grad School +	Stay at Home
Relationship Status	Not Married	Married	Married	Married	Not Married	Married
Parenthood	No	Yes	No	Yes	No	Yes
Main Consumption Location/Cost	Bar/Home	Bar/home	Own home/Friends, Family	Bar, Home Complements food	Bar \$	Home, Restaurants
Reason Drinking	Taste	Social	It is good for me	Somewhat important	Relax	Relax
Importance of Taste	Very important	Not that important	Very important	Early	Somewhat important	Very important
Early/Late Adopter	Late	Early	Late	Medium	Early	Late
Media Consumption	Low	Medium	High	High	High	High
Facebook Friends/Happy Birthday	Low	Medium	High	Medium	Medium	High
Posting Behavior	Low	Medium	Low	High	Medium	High
Discuss Alcohol	Yes	Yes	No	No	Yes	No
Discuss Brands	No	No	Yes	No	Yes	Yes
Switching from Beer	No	No	Maybe	Maybe	Maybe	Yes

Factors that correlated

<u>factor</u>
Gender
Age
Education/Income/Job
Relationship Status
Parenthood
Main Consumption Location/Cost
Reason Drinking
Importance of Taste
Early/Late Adopter
Media Consumption
Facebook
Friends/Happy Birthday
Posting Behavior
Discuss Alcohol
Discuss Brands
Switching from Beer

Segment 1 – Love My Tasty Beer

<u>factor</u>	Segment 1 Love My (tasty) Beer
Gender	Male
Age	25-34
Education/Income/Job	College
Relationship Status	Not Married
Parenthood	No
Main Consumption Location/Cost	Bar/Home
Reason Drinking	Taste
Importance of Taste	Very important
Early/Late Adopter	Late
Media Consumption	Low
Facebook Friends/Happy Birthday	Low
Posting Behavior	Low
Discuss Alcohol	Yes
Discuss Brands	No
Switching from Beer	Not likely

Segment 2 – Bonding with Friends

<u>factor</u>	Segment 2 Bonding with Friends
Gender	Male
Age	21-24
Education/Income/Job	HS Ed
Relationship Status	Married
Parenthood	Yes
Main Consumption Location/Cost	Bar/home
Reason Drinking	Social
Importance of Taste	Not that important
Early/Late Adopter	Early
Media Consumption	Medium
Facebook Friends/Happy Birthday	Medium
Posting Behavior	Medium
Discuss Alcohol	Yes
Discuss Brands	No
Switching from Beer	Not likely

Segment 3 - Nice women don't drink beer

factor	Segment 3 Nice women don't drink beer
Gender	Female
Age	25-34
Education/Income/Job	Hs Ed
Relationship Status	Married
Parenthood	No
Main Consumption Location/Cost	Own home/Friends, Family
Reason Drinking	It is good for me
Importance of Taste	Very important
Early/Late Adopter	Late
Media Consumption	High
Facebook Friends/Happy Birthday	High
Posting Behavior	Low
Discuss Alcohol	No
Discuss Brands	Yes
Switching from Beer	Maybe

Segment 4 - Its My Lifestyle

	Segment 4
<u>factor</u>	My Lifestyle
Gender	Male
Age	25-34
Education/Income/Job	College-Educated
Relationship Status	Married
Parenthood	Yes
Main Consumption Location/Cost	Bar, Home
Reason Drinking	Complements food
Importance of Taste	Somewhat important
Early/Late Adopter	Early
Media Consumption	Medium
Facebook	
Friends/Happy Birthday	Medium
Posting Behavior	High
Discuss Alcohol	No
Discuss Brands	No
Switching from Beer	Maybe

Segment 5 - Living on the Wild Side

	Segment 5
factor	Living on the Wild Side
Gender	Female
Age	21-24
Education/Income/Job	Grad School +
Relationship Status	Not Married
Parenthood	No
Main Consumption Location/Cost	Bar \$
Reason Drinking	Relax
Importance of Taste	Somewhat important
Early/Late Adopter	Early
Media Consumption	High
Facebook	
Friends/Happy Birthday	Medium
Posting Behavior	Medium
Discuss Alcohol	Yes
Discuss Brands	Yes
Switching from Beer	Maybe

Segment 6 – Moms at home ... relaxing

<u>factor</u>	Segment 6 Moms at home relaxing
Gender	Female
Age	25-34
Education/Income/Job	Stay at Home
Relationship Status	Married
Parenthood	Yes
Main Consumption Location/Cost	Home, Restaurants
Reason Drinking	Relax
Importance of Taste	Very important
Early/Late Adopter	Late
Media Consumption	High
Facebook	
Friends/Happy Birthday	High
Posting Behavior	High
Discuss Alcohol	No
Discuss Brands	Yes
Switching from Beer	Yes

Questions?



Carol Sue Haney

Toluna

carol.haney@toluna.com

802-254-2117

Twitter: @carolsuehaney

Facebook: carolsuehaney

LinkedIn: carolsuehaney

