Yes to AMEX!
-Mission Gen Y

Our product **#AMEXANALYTICS**

GroupID: 5

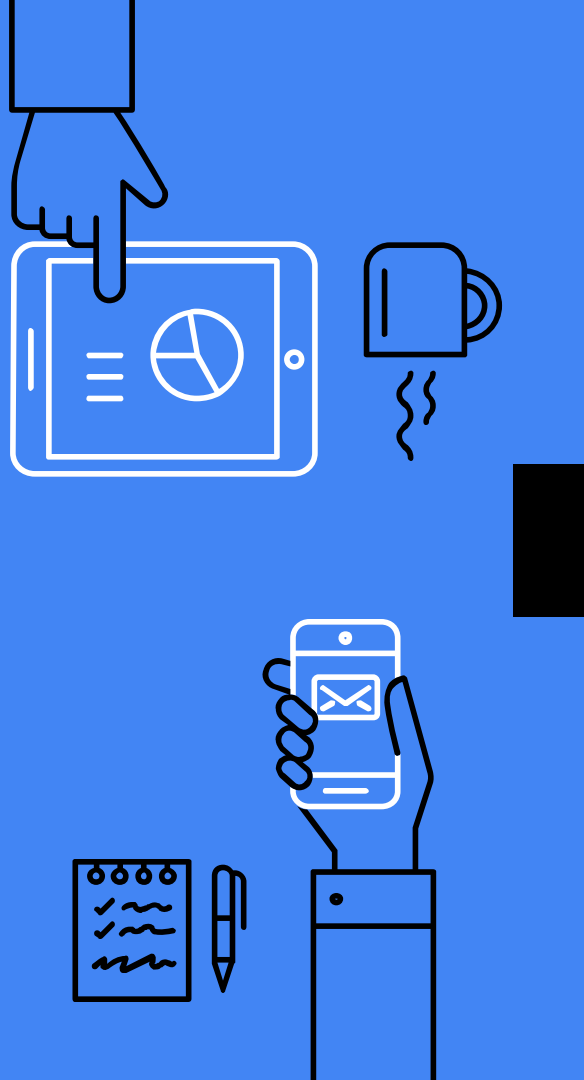
Shiv Nadar University, Greater Noida

Aakriti Shukla

Mehar Bhatia

Ishita Jain

Manasi Mittal

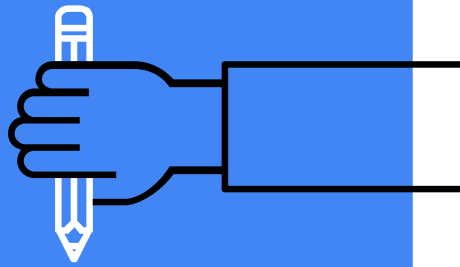


HELLO!

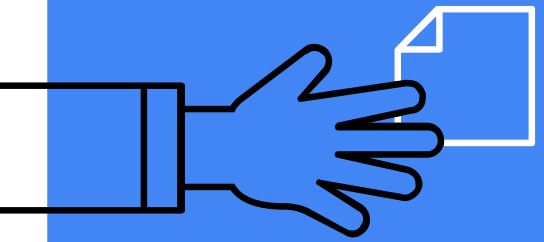
We are AMEX Analytics

American Express

Amex, is an American multinational financial services corporation which is best known for its charge card, credit card and traveler's cheque businesses. It is recognised for being "elite" and card has gathered prestige.



Understanding the Consumer



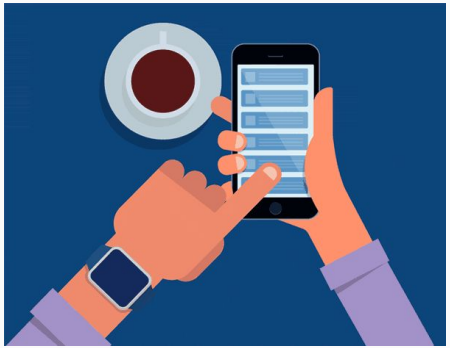
Who are the millennials and what do they want?

Who Are Millennials?

What Millennials Value
HAPPINESS
SHARING
PASSION
EXPERIENCES

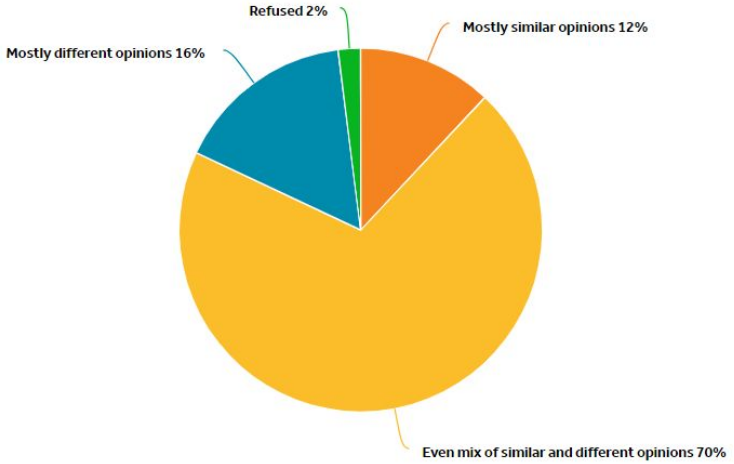
Millennials Look to their **Network** for answers

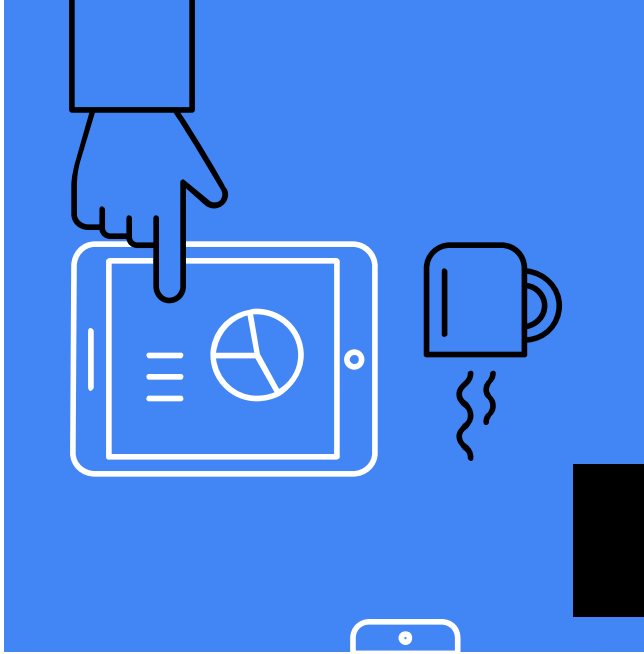
- Gen Y is well-acquainted with the **power of word of mouth**.
- They believe and often rely upon what their friends and family have to say.
- If they are extremely happy or disappointed in some service or product, they want the company as well as their consumers to know.
- “**Eight out of 10 millennials never buy anything without first reading a review, a study has found**.” - https://www.independent.co.uk



Millennials encounter a wide mix of opinions in social media

Question: Choose the statement that best describes you, even if it is not exactly right. Would you say that the opinions you see in your social media feeds are mostly similar to my own, an even mix of similar and different to my own, or mostly different than my own?





Response	Percent of Millennials
Mostly similar opinions	12%
Even mix of similar and different opinions	70%
Mostly different opinions	16%
Refused	2%

What do we have in Store?

Review Analysis

We wish to perform a rigorous segregation of reviews into being positive or negative by using selenium in order to scrape relevant tweets and consequently apply sentiment analysis to derive the **overall opinion of the respective consumer.**

How does it help?

We are able to extract the tweets in accordance to the input query, be it ‘visa’, ‘mastercard’, or ‘amex’.

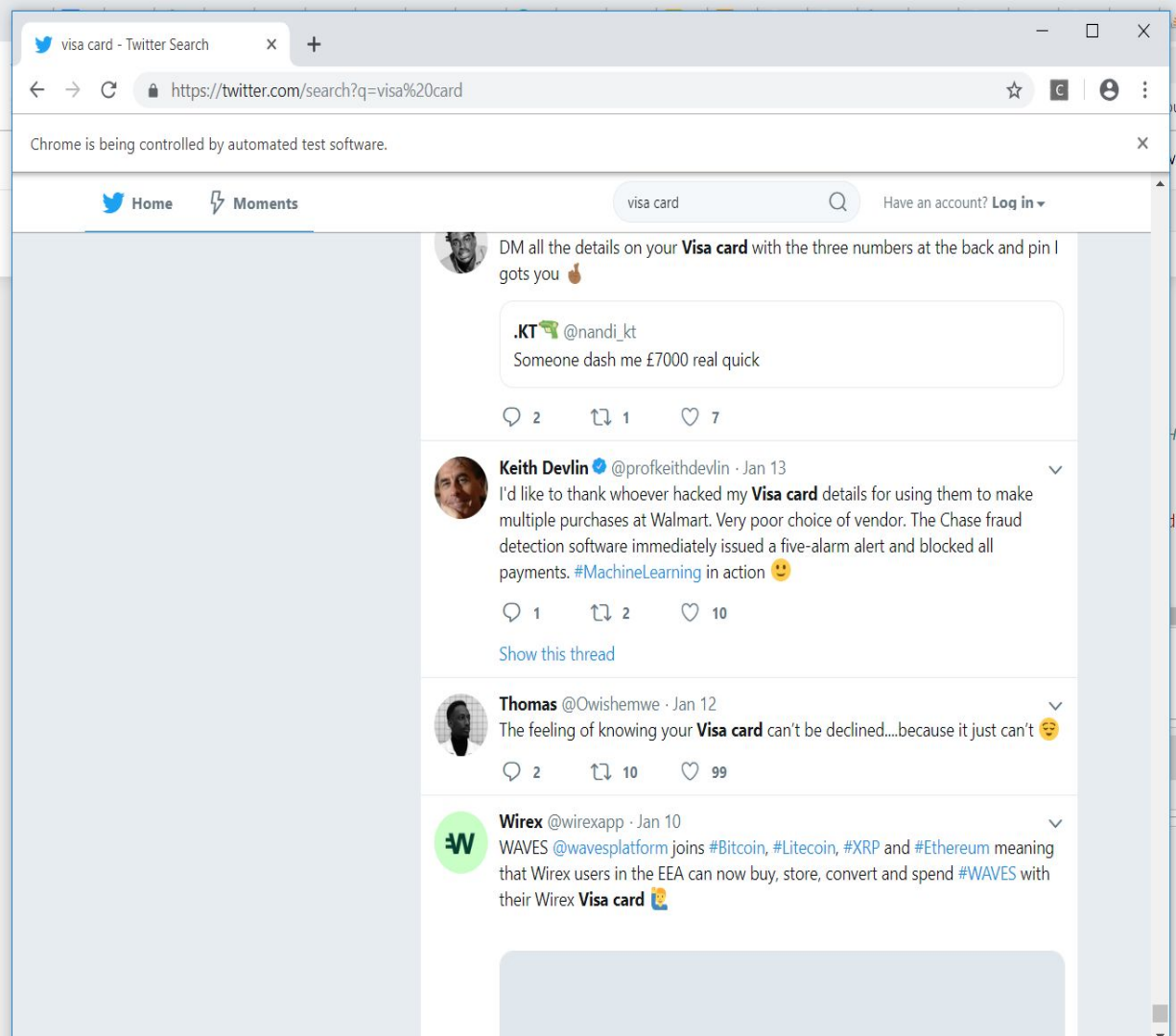
By monitoring competitive company reviews, we can obtain the lot of **satisfied/dissatisfied consumers** and strategise.

The sentiment analysis model classifies the tweets as being positive/negative with an **accuracy of 93%**

Vulnerable Consumers: The consumers that have recently faced issues with competitor companies form a target consumer-base for us and the ones giving negative reviews about AMEX.

SCRAPE

We obtain the relevant tweets for the search query ‘visa card’, scrape the data and store it in a dataframe.



Relieve the dissatisfied

After performing sentiment analysis, we obtain a list of **unhappy competitor company customers**.

This technique can be extended to other platforms where we can find customer reviews!

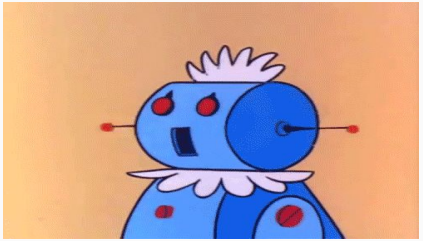
```
n [72]: #Extracting those id's where sentiment is negative (dissatisfied)
        tweets_df.loc[tweets_df['sentiment'] == 'negative']
```

ut[72]:

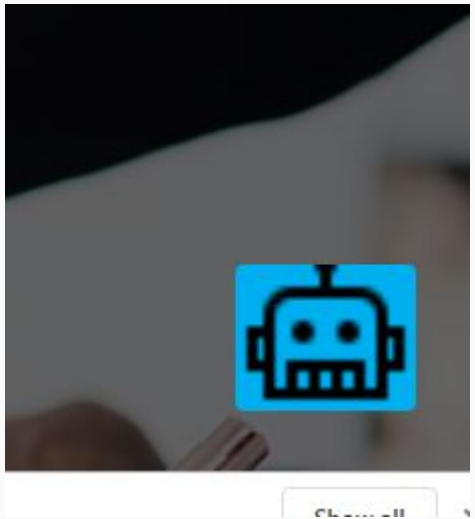
	tweets	tweet_id	sentiment	tidy_tweets
4	@Office365 Hey guys, I have a small problem, I...	0.6925770837198724-7	negative	@Office365 Hey guys, I have a small problem, I...
25	It's almost 5 pm, time to catch up with the fr...	0.6925770837198724-28	negative	It's almost 5 pm, time to catch up with the fr...
62	Platinum and Gold Visa Card Pizza and Ice Crea...	0.6925770837198724-65	negative	Platinum and Gold Visa Card Pizza and Ice Crea...
89	@ICICIBank_Care Hi I am unable to use your poc...	0.6925770837198724-92	negative	@ICICIBank_Care Hi I am unable to use your poc...
111	@KimIversenShow Hi Kim, you may hate twitter b...	0.6925770837198724-114	negative	@KimIversenShow Hi Kim, you may hate twitter b...
121	Don't be a victim of Visa card frauds. In case...	0.6925770837198724-124	negative	Don't be a victim of Visa card frauds. In case...
129	LIKE = VISA CARD WITH 2.3$ IN YOUR DM\n\nFOLLO...	0.6925770837198724-132	negative	LIKE = VISA CAD WITH 2.3$ IN YOU DM FOLLOW @Po...
133	Do you have the Uber-branded Visa card? Are yo...	0.6925770837198724-136	negative	Do you have the Uber-branded Visa card? Are yo...
143	On Feb 18, I was trying to buy plane tickets f...	0.6925770837198724-146	negative	On Feb 18, I was trying to buy plane tickets f...
156	Having Real Time Gross Settlement Dollars (RTG...	0.6925770837198724-159	negative	Havingeal Time Gross Settlement Dollars (GS $)...
166	This morning at diner, I saw someone with what...	0.6925770837198724-169	negative	This morning at diner, I saw someone with what...
171	Nano is now on @wirexapp! \n\n$NANO can now b...	0.6925770837198724-174	negative	Nano is now on @wirexapp! $NANO can now be sea...
181	The difference between unpleasant venereal dis...	0.6925770837198724-184	negative	The difference between unpleasant venereal dis...
184	Wototenga forex on black market, then load on ...	0.6925770837198724-187	negative	Wototenga forex on black market, then load on ...
189	I'm tired of this cold weather	0.6925770837198724-192	negative	I'm tired of this cold weather
201	Come and get an exclusive $50 Visa Card when y...	0.6925770837198724-204	negative	Come and get an exclusive $50 Visa Card when y...
207	Would y'all believe me if i told you that this...	0.6925770837198724-210	negative	Would y'all believe me if i told you that this...
212	And guess what, we enter a fake visa card and ...	0.6925770837198724-215	negative	And guess what, we enter a fake visa card and ...
218	New for the Holidays, Entenmann's® Little Bite...	0.6925770837198724-221	negative	New for the Holidays, Entenmann's® Little Bite...
222	Advice from a lady holding a chihuahua at a pa...	0.6925770837198724-225	negative	Advice from a lady holding a chihuahua at a pa...
244	Here's my unboxing video for the MCQ Jade Gree...	0.6925770837198724-247	negative	Here's my unboxing video for the MCQ Jade Gree...

Millenials love to interact with Chatbots

- Millenials value connection.
- They’d rather be talking to a bot that responds to them than typing in queries and finding answers.
- According to CARAVAN statistics, **60% of the millennials use chatbots 70% of those report positive experiences, and of the millennials who have not used them, more than half say they are interested in using them.**
- Millennials value speed and efficiency. Chatbot provides it all.



Our Supercool AMEX Bot



How does it help?

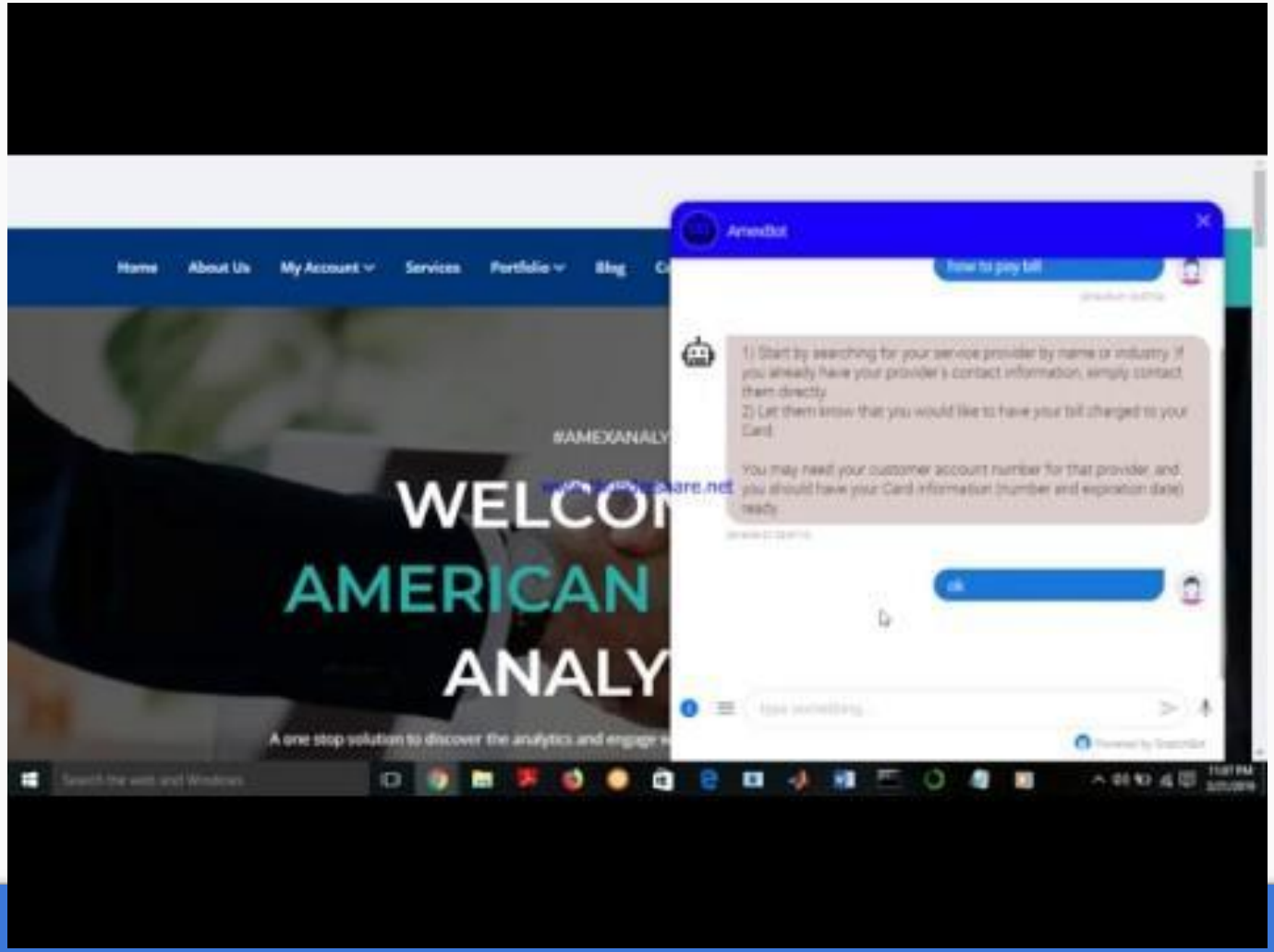
A master solution to all customer queries within seconds.

How can we use it to our benefit?

The chat history will help in monitoring potential customer behaviour.

What is the customer asking for? Is there anything that they need that we are not currently providing?

Also it will assist in identifying those sectors which customers value more.


Home
About Us
My Account
Services
Portfolio
Blog
AmexBot
how to pay bill
1) Start by searching for your service provider by name or industry. If you already have your provider's contact information, simply contact them directly
2) Let them know that you would like to have your bill charged to your Card.
You may need your customer account number for that provider, and you should have your Card information (number and expiration date) ready.
ok
#AMEXANALY
WELCOM
AMERICAN
ANALY
A one stop solution to discover the analytics and engage

Millenials are all about **Social Media**

- They value experiences.
- GenY loves social media!
- **“88% of Millennials have a Facebook account, and over half of them use the platform regularly.” -** www.laveh.com

Social Media Strategy?

A Campaign!

- We propose to have a campaign called **#ExpresswithAMEX** where people share video testimonials of their credit card experience and avail benefits.
- **The carriers of the campaign** would be **“influencers”**, customers identified through our database that have a high following (say, more than 1K) on social media platforms.

How does it help?

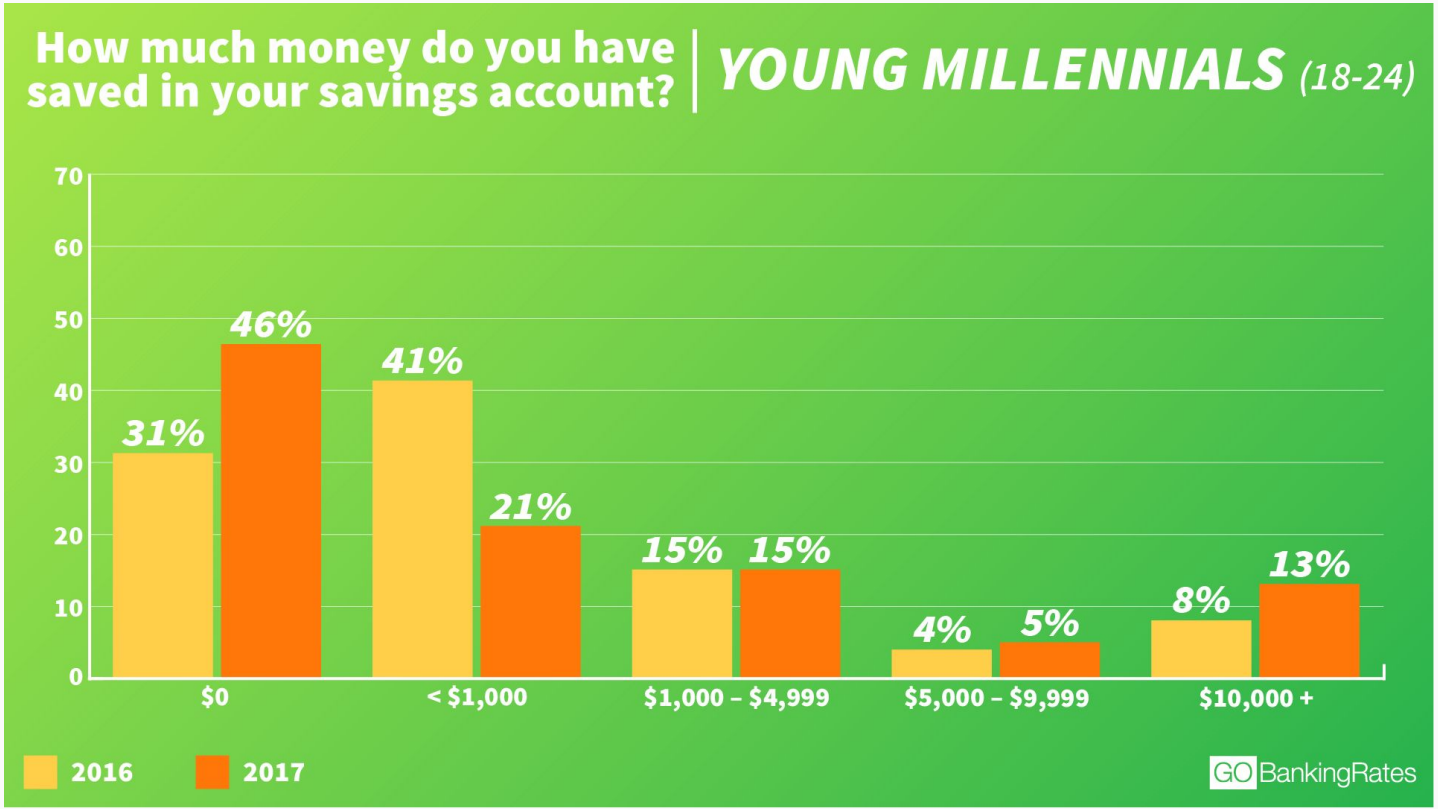
Automatically contact the “influencers” via email/instagram DMs/message to participate in the campaign and spread the word in return for points and rewards

After the campaign commences, it would be a possible to assign an **influencer score** to each participant in the campaign by looking at their outreach (a person reaching out to 100 people has a score of 0.1 and another that reaches out to 1000 would get a score of 1 or 100% outreach) and reward them benefits accordingly.

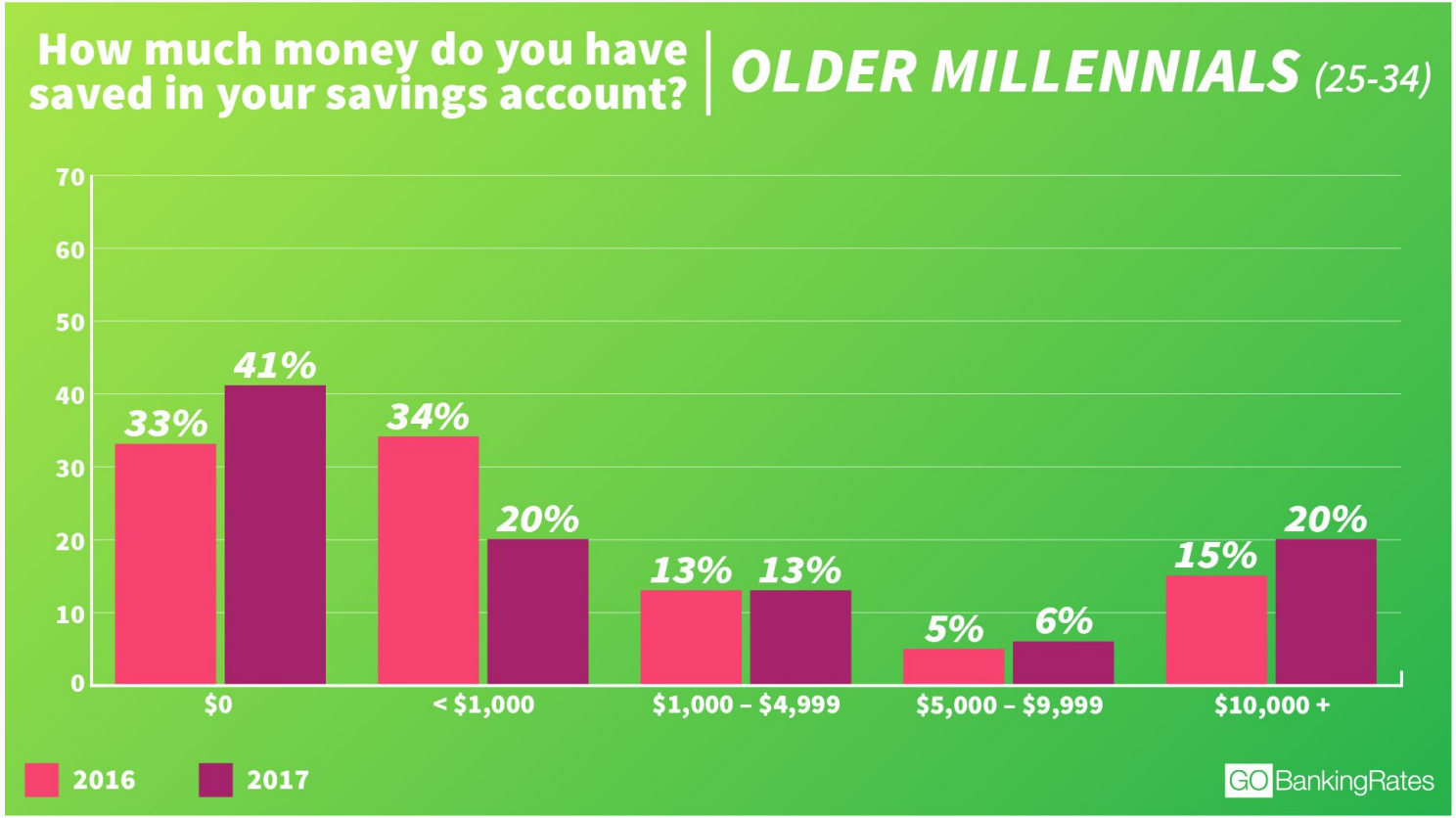
Millenials are focused on **saving**!

- A 2018 **Bank of America survey found that 1 in 6 millennials — which BoA defined as those between age 23 and 37 — now have $100,000 or more in savings**.
- That's impressive!
- But that stat doesn't tell the whole story!
- While some millennials are increasingly proving to be savvy savers, many other young people are not making progress at holding onto their cash.

Here are a few charts



Source: https://www.cnbc.com/2018/02/09/a-growing-percentage-of-millennials-have-absolutely-nothing-saved.html



Source: https://www.cnbc.com/2018/02/09/a-growing-percentage-of-millennials-have-absolutely-nothing-saved.html

IDEA!

Personalized Wallet Management System

- We felt the need to design a **Personalized Wallet Management System** for AMEX ANALYTICS website.
- The AMEX card holder will be able to keep track of his/her payments.
- The AMEX card holder can form a wallet where he/she can make sections for various purchases and assign budgets to them. This can also be edited too.
- The customer can then assign budgets for each section.
- After a payment has been using AMEX card, the amount/money will be subtracted automatically from the balance amount.

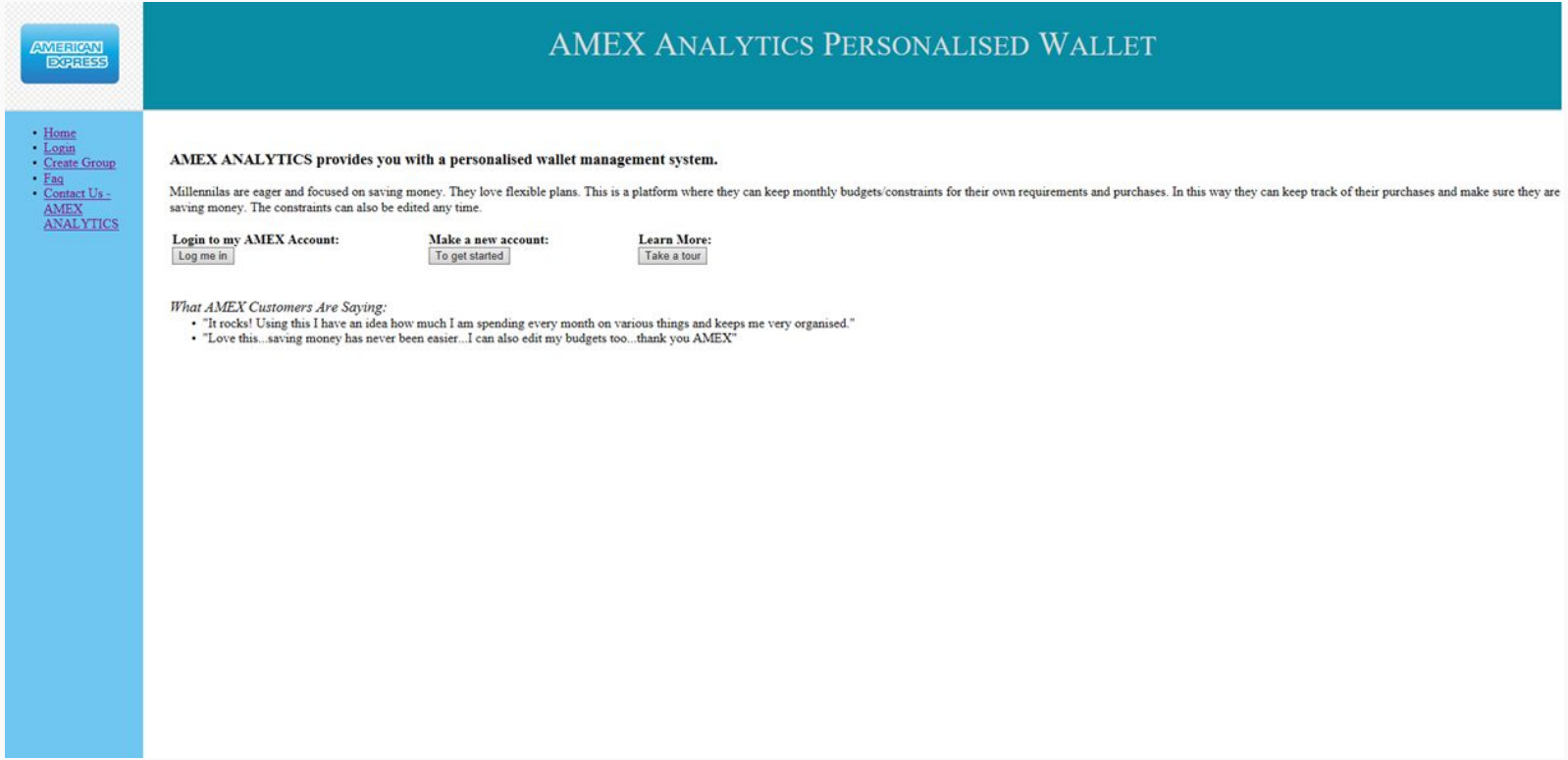
IDEA!

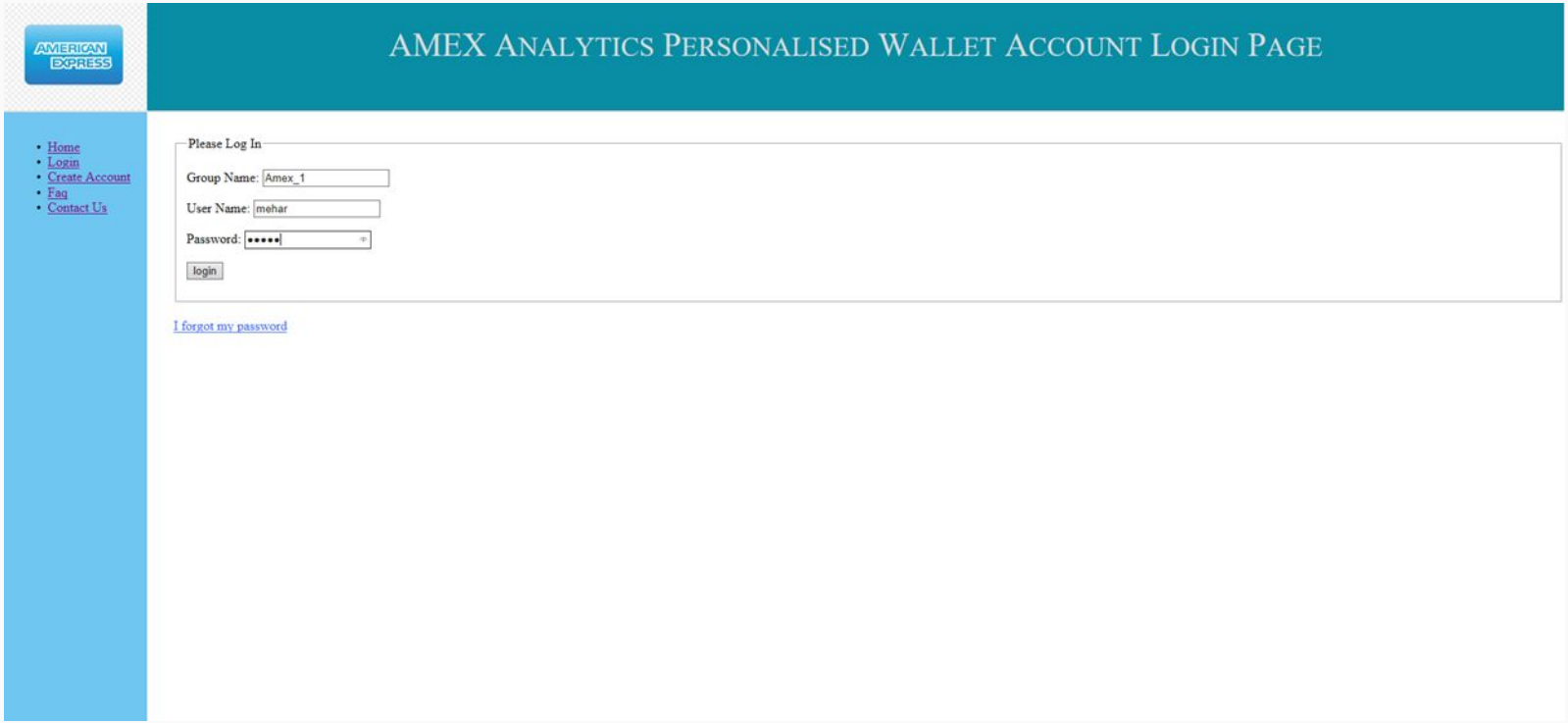
Personalized Wallet Management System

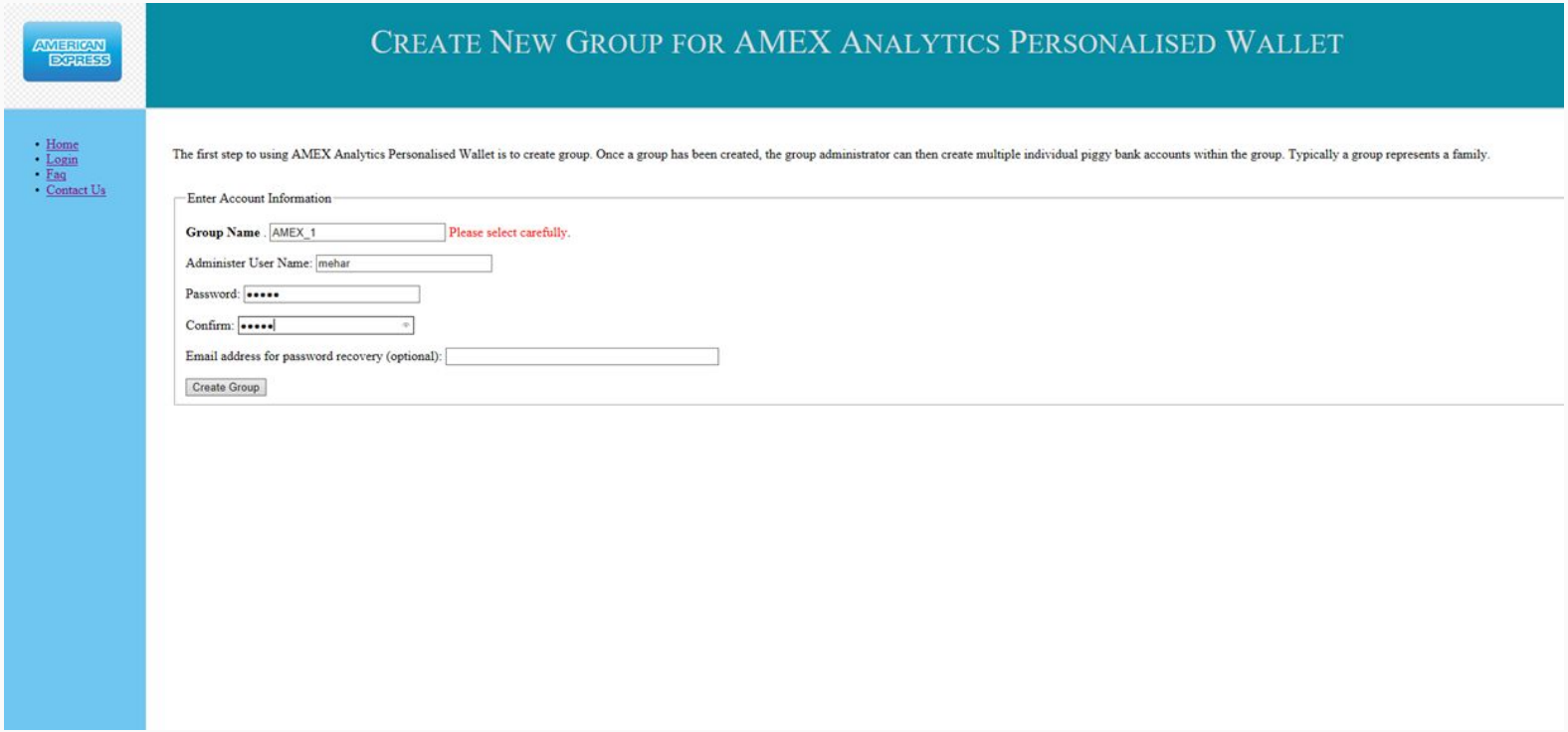
- For example, the customer can form sections in the wallet like ‘House Rent’, ‘Restaurants’, ‘Electricity’, ‘Clothing’ etc.
- After a payment has been done using AMEX card, the amount/money will be subtracted automatically from the balance amount.
- For example, say a customer has assigned Rs: 5000 to clothing for a month. After a transaction of Rs 1500 at H&M, the amount will be deducted automatically from the balance amount.

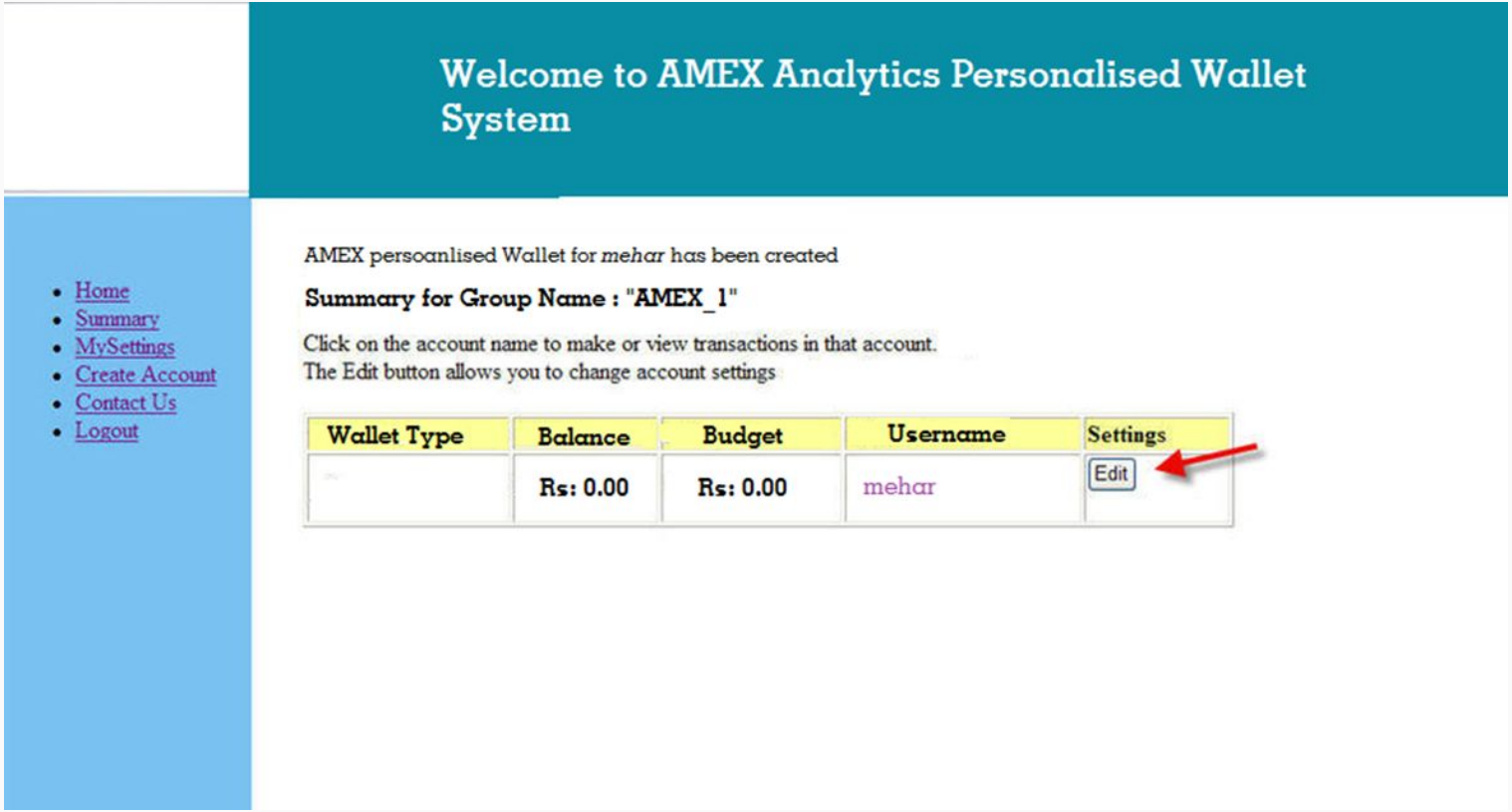
In the next slides, we present the screenshots from the prototype of the personalised wallet management system.

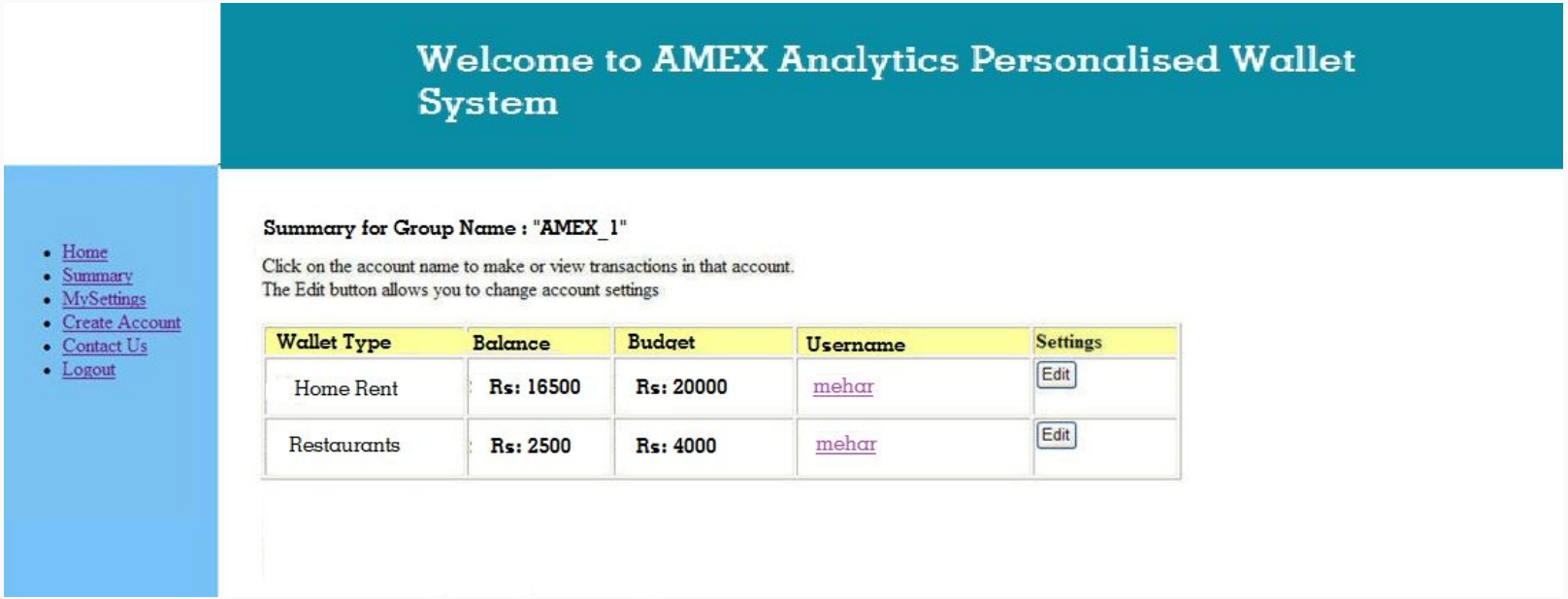
AMEX ANALYTICS WALLET
Saving
More Money
Personalised Wallet
Management System for
all AMEX customers
START NOW


AMERICAN EXPRESS
AMEX ANALYTICS PERSONALISED WALLET
Home
Login
Create Group
Faq
Contact Us - AMEX ANALYTICS
AMEX ANALYTICS provides you with a personalised wallet management system.
Millennials are eager and focused on saving money. They love flexible plans. This is a platform where they can keep monthly budgets/constraints for their own requirements and purchases. In this way they can keep track of their purchases and make sure they are saving money. The constraints can also be edited any time.
Login to my AMEX Account:
Log me in
Make a new account:
To get started
Learn More:
Take a tour
What AMEX Customers Are Saying:
"It rocks! Using this I have an idea how much I am spending every month on various things and keeps me very organised."
"Love this...saving money has never been easier...I can also edit my budgets too...thank you AMEX"


AMERICAN EXPRESS
AMEX ANALYTICS PERSONALISED WALLET ACCOUNT LOGIN PAGE
Home
Login
Create Account
Faq
Contact Us
Please Log In
Group Name: Amex_1
User Name: mehar
Password:
login
I forgot my password


AMERICAN EXPRESS
CREATE NEW GROUP FOR AMEX ANALYTICS PERSONALISED WALLET
Home
Login
Faq
Contact Us
The first step to using AMEX Analytics Personalised Wallet is to create group. Once a group has been created, the group administrator can then create multiple individual piggy bank accounts within the group. Typically a group represents a family.
Enter Account Information
Group Name . AMEX_1 Please select carefully.
Administer User Name: mehar
Password: •••••
Confirm: •••••
Email address for password recovery (optional):
Create Group


Welcome to AMEX Analytics Personalised Wallet System
Home
Summary
MySettings
Create Account
Contact Us
Logout
AMEX persoanlised Wallet for mehar has been created
Summary for Group Name : "AMEX_1"
Click on the account name to make or view transactions in that account.
The Edit button allows you to change account settings
Wallet Type
Balance
Budget
Username
Settings
Rs: 0.00
Rs: 0.00
mehar
Edit


Welcome to AMEX Analytics Personalised Wallet System
Home
Summary
MySettings
Create Account
Contact Us
Logout
Summary for Group Name : "AMEX_1"
Click on the account name to make or view transactions in that account.
The Edit button allows you to change account settings
Wallet Type
Balance
Budget
Username
Settings
Home Rent
Rs: 16500
Rs: 20000
mehar
Edit
Restaurants
Rs: 2500
Rs: 4000
mehar
Edit

Continuing the Good Work

RETENTION OF CUSTOMERS BY KNOWING THEIR LIKES:

Social networks are an extraordinarily important part of Millennials' digital lives, in part because social networks have become much more than a way to connect about personal matters.**Social media engages them with different opinion and views.**

We have tried to analyse what **#amexcard** users likings by extracting the positive keywords from their tweets including both positive and negative reviews.

APPROACH:

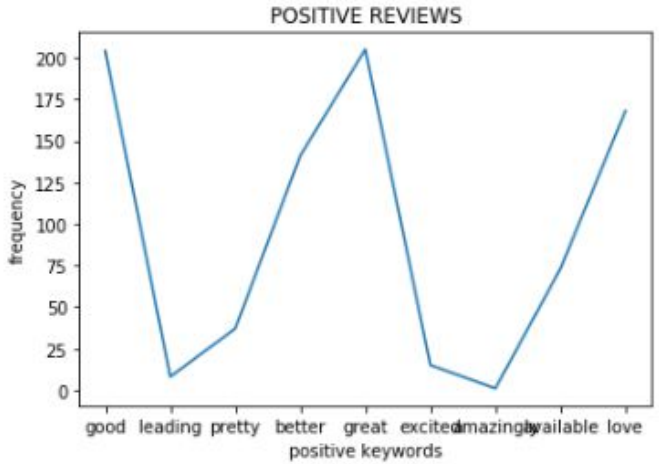
Scraping the data from social media like twitter and analysing them for positive keywords along with their frequency.

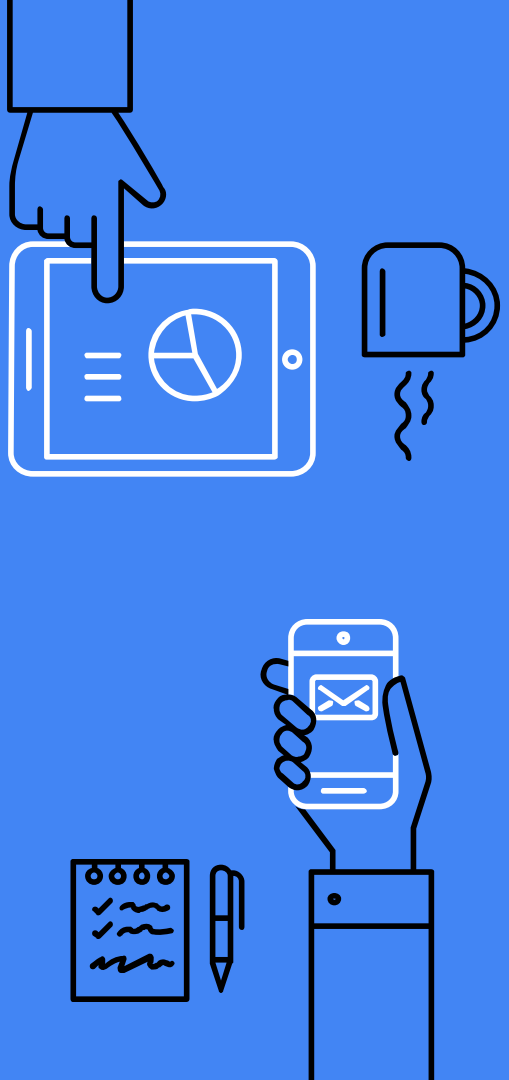
Analysing the satisfaction content of a particular feature among the users by measuring its frequency in our list of keywords.

THE PLAN? Keep them happy!

INCREASE CUSTOMER BASE WHILE RETAINING THE PREVIOUS CUSTOMERS:

Try not to change the features which makes the customers happy. The graph shows the satisfaction metric of most commonly used positive keywords.



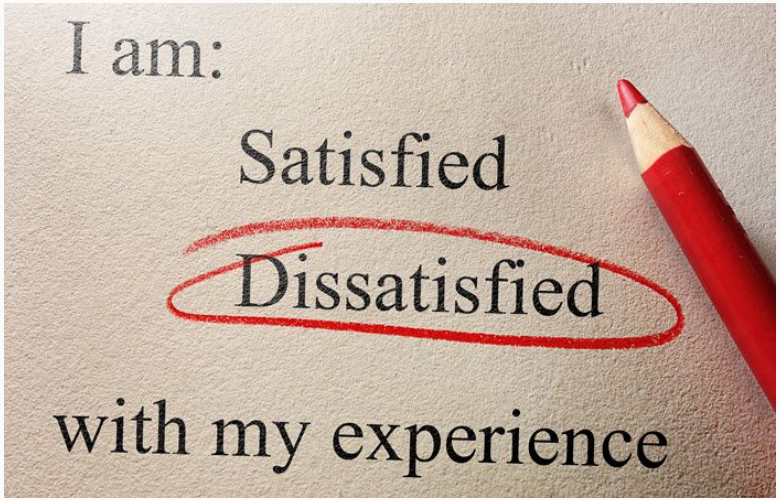


You don’t wanna lose them! Do you?

- The *New York Times* pointed out that in **2016 the number of Amex cards in use fell 18 percent, while Amex revenue in 2016 was down more than $2 billion from two years earlier.**
- It is important to catch a hold of those customers who are on the verge of switching or withdrawing from AmEX services. Also, why are they doing so?

Make them **Stay**

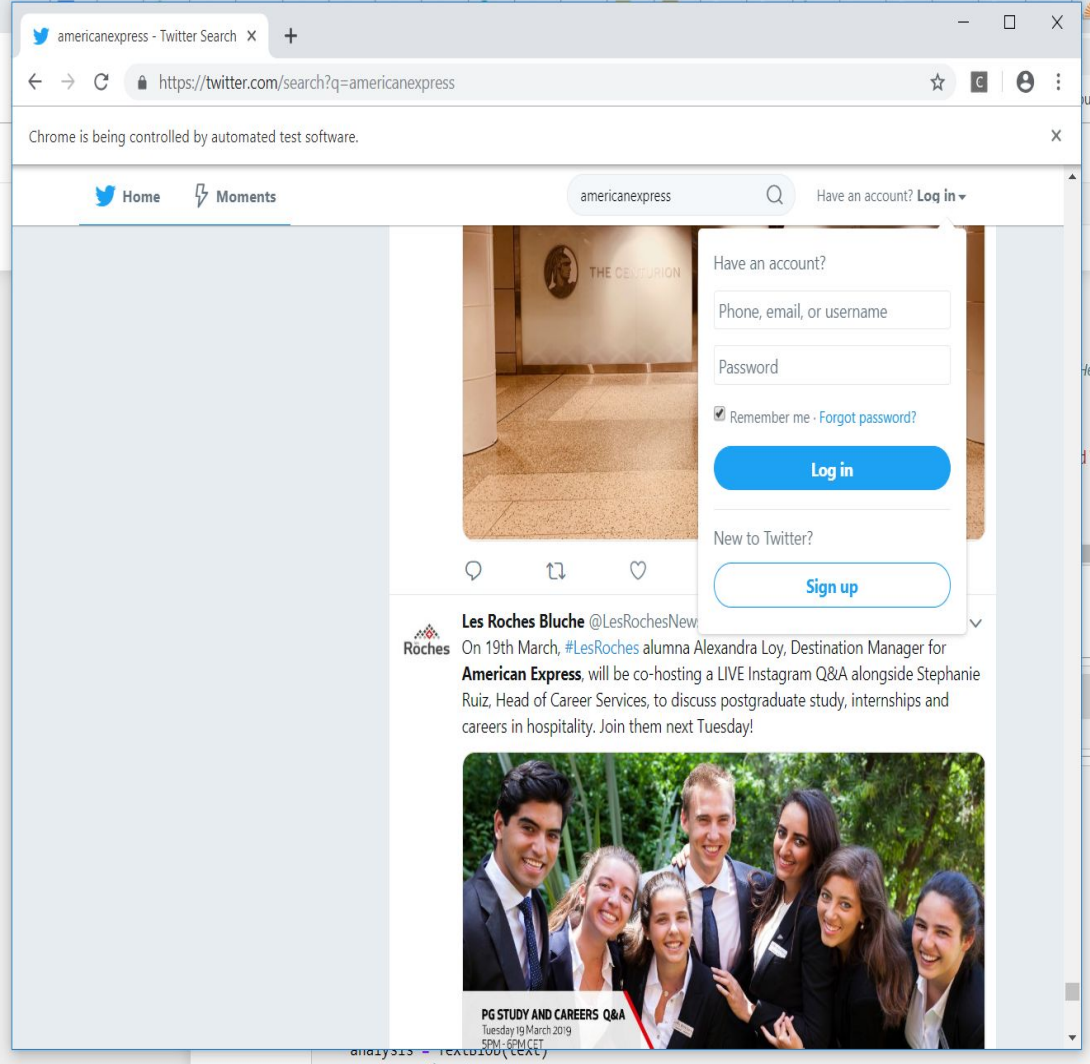
- We aim to acquire data regarding **customers** who have been **disappointed** in the services of the company.
- Like we did for competitor companies, it's important to recognise the points of dismay with AmEX's products and services.
- We did this by scraping tweets for the query 'amex' as displayed in the following slide and successively applying sentiment analysis to categorise them as positive/negative.



SCRAPE

Query: ‘americanexpress’

scrape the data and store it in a dataframe.



Don’t let them go

After performing sentiment analysis and segregation, we obtain a list of **unhappy customers** likely to leave. Address their grievances and concerns.

In [52]:
```
#Extracting those id's where sentiment is negative (dissatisfied)
tweets_df.loc[tweets_df['sentiment'] == 'negative']
```

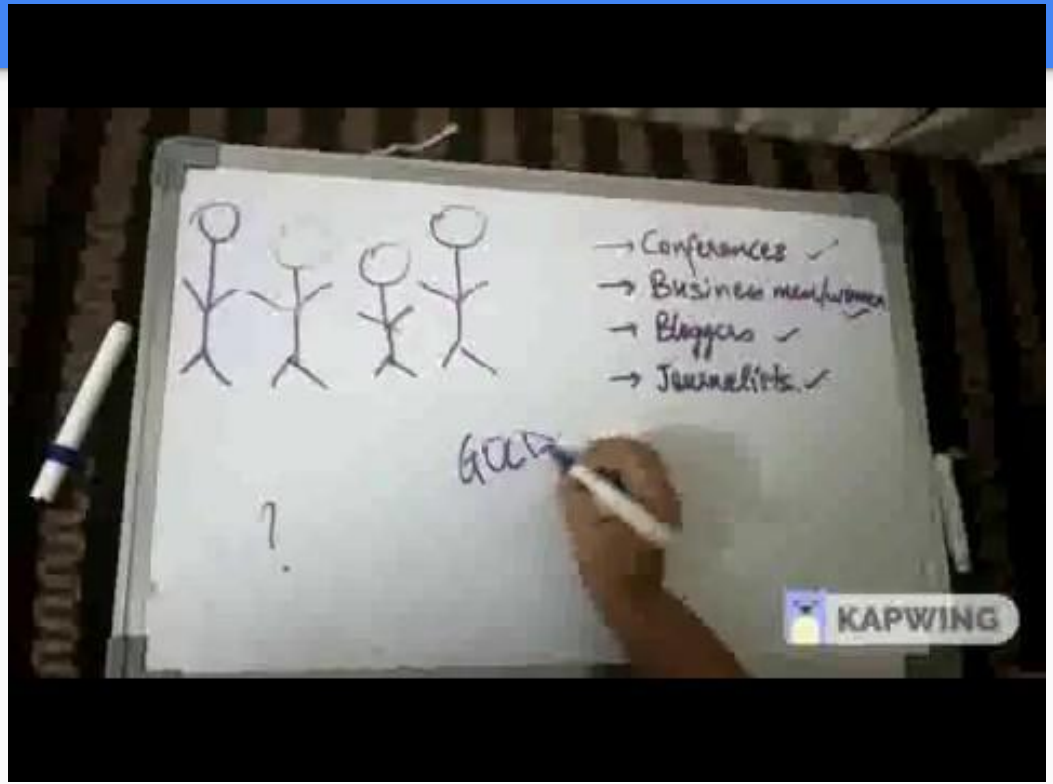
Out[52]:

	tweets	tweet_id	sentiment	tidy_tweets
11	Highlights from my speaking engagement at Amer...	0.9004008482888513-14	negative	Highlights from my speaking engagement at Amer...
17	Fuck the American Express Card\nI never leave ...	0.9004008482888513-20	negative	Fuck the American Express Card I never leave h...
18	#Stonegasmoviechallenge2019 (MARCH 18: MOVIE W...	0.9004008482888513-21	negative	#Stonegasmoviechallenge2019 (MACH 18: MOVIE WI...
21	.@AmericanExpress Card Members! Stop by sectio...	0.9004008482888513-24	negative	.@AmericanExpress Card Members! Stop by sectio...
23	I know twitter rants about shitty companies is...	0.9004008482888513-26	negative	I know twitter rants about shitty companies is...
24	Dow-member American Express $AXP just recently...	0.9004008482888513-27	negative	Dow-member American Express $AXP just recently...
27	Del Taco does not accept American Express. WTF?	0.9004008482888513-30	negative	Del Taco does not accept American Express. WTF?
47	American Express Sending Out Checks for Missin...	0.9004008482888513-50	negative	American Express Sending Out Checks for Missin...
48	#Isles legend Bryan Trottier is in the house t...	0.9004008482888513-51	negative	#Isles legend Bryan Trottier is in the house t...
54	Fuck you @AmericanExpress pic.twitter.com/xUQj...	0.9004008482888513-57	negative	Fuck you @AmericanExpress pic.twitter.com/xUQj...
59	American Express Sending Out Checks for Missin...	0.9004008482888513-62	negative	American Express Sending Out Checks for Missin...
66	Miami Spring Break Checklist:\n-A sick bro pic...	0.9004008482888513-69	negative	Miami Spring Break Checklist: -A sick bro pic ...
69	Card Wars: American Express Everyday vs Everyd...	0.9004008482888513-72	negative	Card Wars: American Express Everyday vs Everyd...
79	"Minor Refurbishment" In American Express Cent...	0.9004008482888513-82	negative	"Minorefurbishment" In American Express Centur...
89	A close friend daughter just turned 18 in Janu...	0.9004008482888513-92	negative	A close friend daughter just turned 18 in Janu...
91	Fake Institutes! Using big companies name to f...	0.9004008482888513-94	negative	Fake Institutes! Using big companies name to f...
95	I’m livid. I got a topbox for my niece; and it...	0.9004008482888513-98	negative	I’m livid. I got a topbox for my niece; and it...
108	How Long Does It Take To Transfer American Exp...	0.9004008482888513-111	negative	How Long Does It Take To Transfer American Exp...
127	@AmericanExpress are you guys aware of this is...	0.9004008482888513-130	negative	@AmericanExpress are you guys aware of this is...

Reality is an Illusion. We have the perfect illusionary reality for our premium customers!

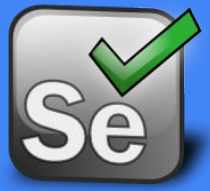
- Millenials love cool tech.
- Infact, they are one of the most **tech-savvy** generations.
- We have a **techie way to engage** this techie generation.
- Business Cards equipped with **augmented reality (AR)** that showcase the cardholder's direct links to website, linkedin profile, etc will be given to our *Gold members* at a minimal cost.
- The best customers will be able to acquire this card for **FREE**!
- Watch the **video on the following slide** to know more.

AR BUSINESS CARDS



Technology Stack

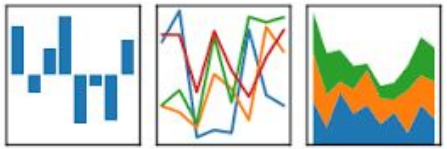
Natural Language
Analyses with NLTK

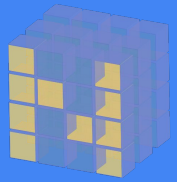


matplotlib

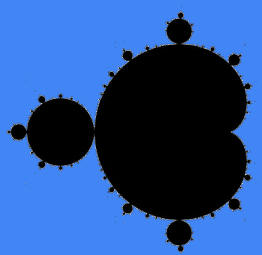
pandas

$$y_{it} = \beta' x_{it} + \mu_i + \epsilon_{it}$$





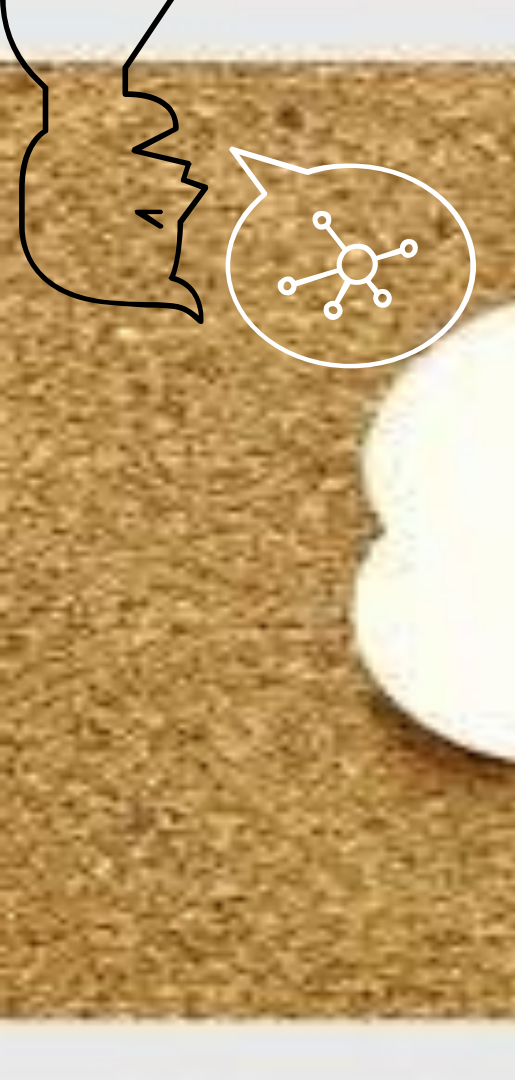
NumPy

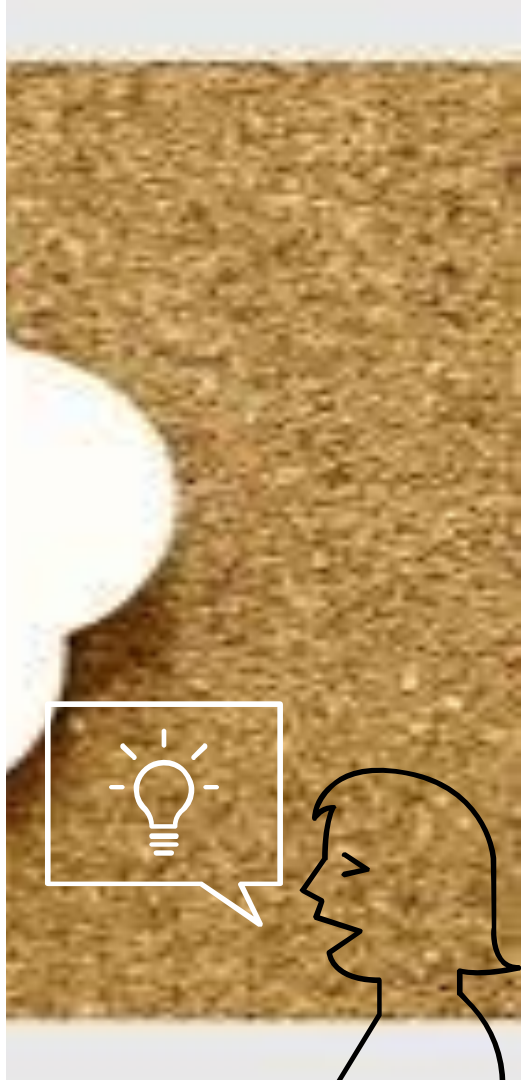


TextBlob

To Sum it Up

All in all, we have provided technical solutions to attract , engage and make sure that millennials stick by utilizing the distinguishing characteristics of the Gen Y.



Thank You for your time!

We hope you enjoyed our ideas as much as we enjoyed creating them! :)