HOW TO PROMOTE THE MUTUAL FUND TO THE TARGET INVESTOR

Social media analytics

Professor Langdon

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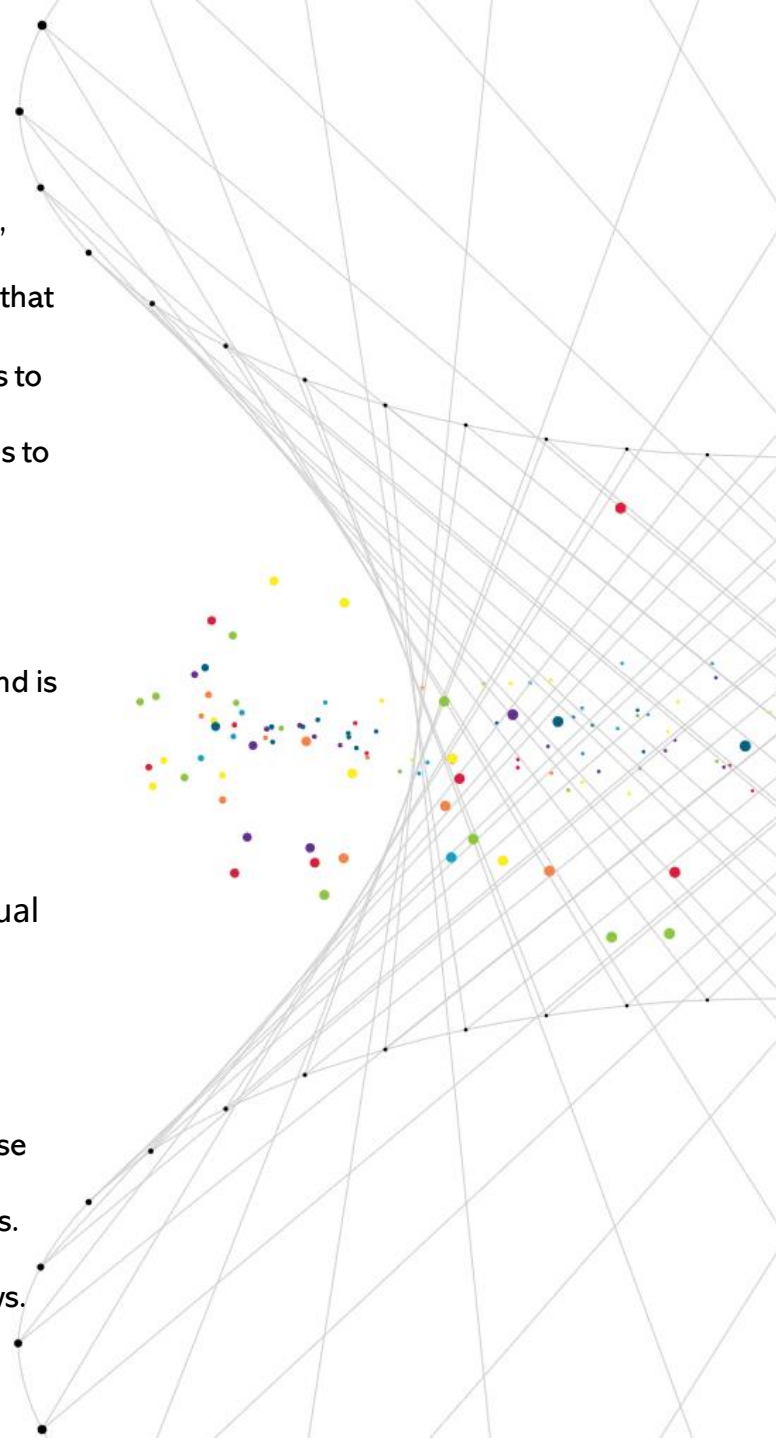
CONTENT

Our Project Schedule

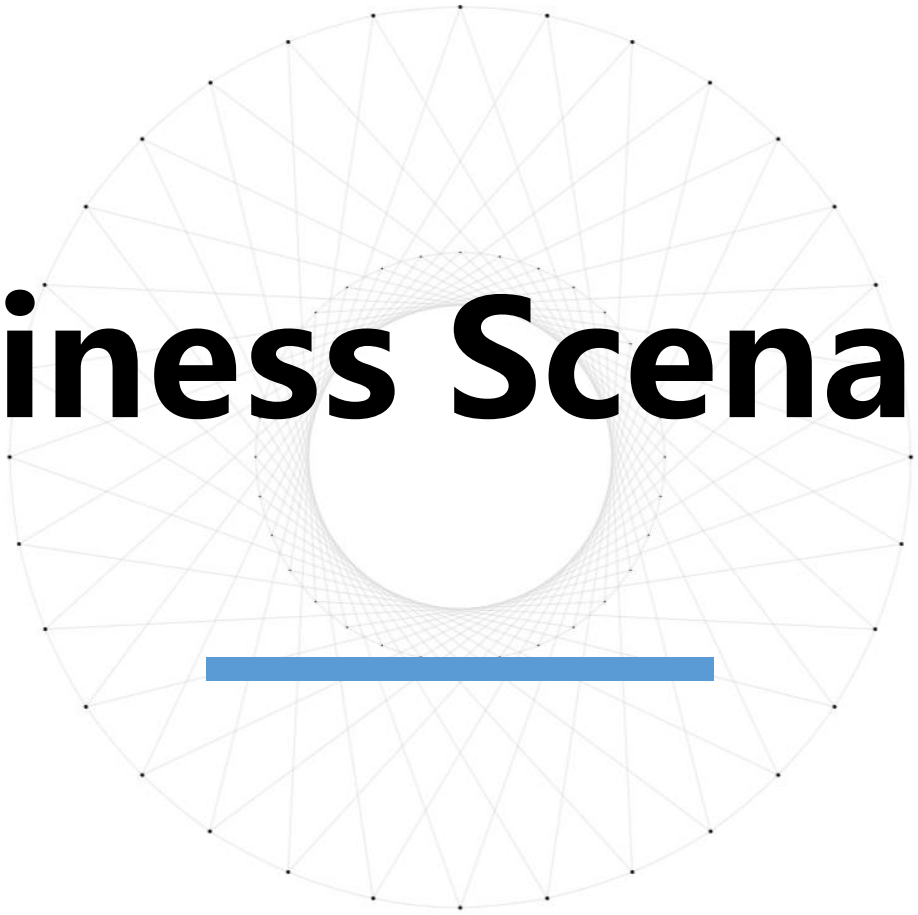
Task Description	Plan Start	Plan End	6 Weeks					
			Week1	Week2	Week3	Week4	Week5	week6
Idea								
Concept, Schedule	4/6/2019	4/7/2019						
Business Scenario Analysis	4/7/2019	4/14/2019						
Model Construction	4/14/2019	4/20/2019						
data analysis								
Data Collection	4/21/2019	4/27/2019						
Survey	4/21/2019	4/27/2019						
Measurement	4/28/2019	5/4/2019						
Results								
Estimation&Testing	5/5/2019	5/11/2019						
Preparation of Results	5/5/2019	5/11/2019						
Documentation	5/5/2019	5/11/2019						

Summary

- Problem: In the world of financial investing, it can be difficult to decide which stock, bond, or mutual fund to invest in, especially if you have no experience with investing. Financial services firms offer advice from their advisors, but even that can be a lot of information to take in; today, many fin tech companies are recommending financial investment options to their customers. The current company we chose for our final project does not offer recommendations for mutual funds to customers. How can they recommend the appropriate mutual funds to investors?
- Objective: Use the popularity of mutual funds to appropriately match them with target investors. Here, we rely on the frequency of purchase of mutual funds to determine if a fund would be profitable or not. The more times a mutual fund is purchased, the more profitable it is; people don't buy into mutual funds that do not generate return.
- Approach: Use the Azure machine learning studio and create a content-based filtering recommender system to appropriately assign the top 3 mutual funds for the target investor. By comparing the content of the mutual fund and a user profile, we can recommend mutual funds to the user who has similar attributes or descriptive characteristics.
- Benefits: The qualitative benefits are that the recommender system is quick and easy to recommend, reduces purchase decision time, gives the investor variety among mutual funds, and it is highly accessible through API's Microsoft offers. The quantitative benefits are increased sales, increased average annual returns, and increased applications/page views.

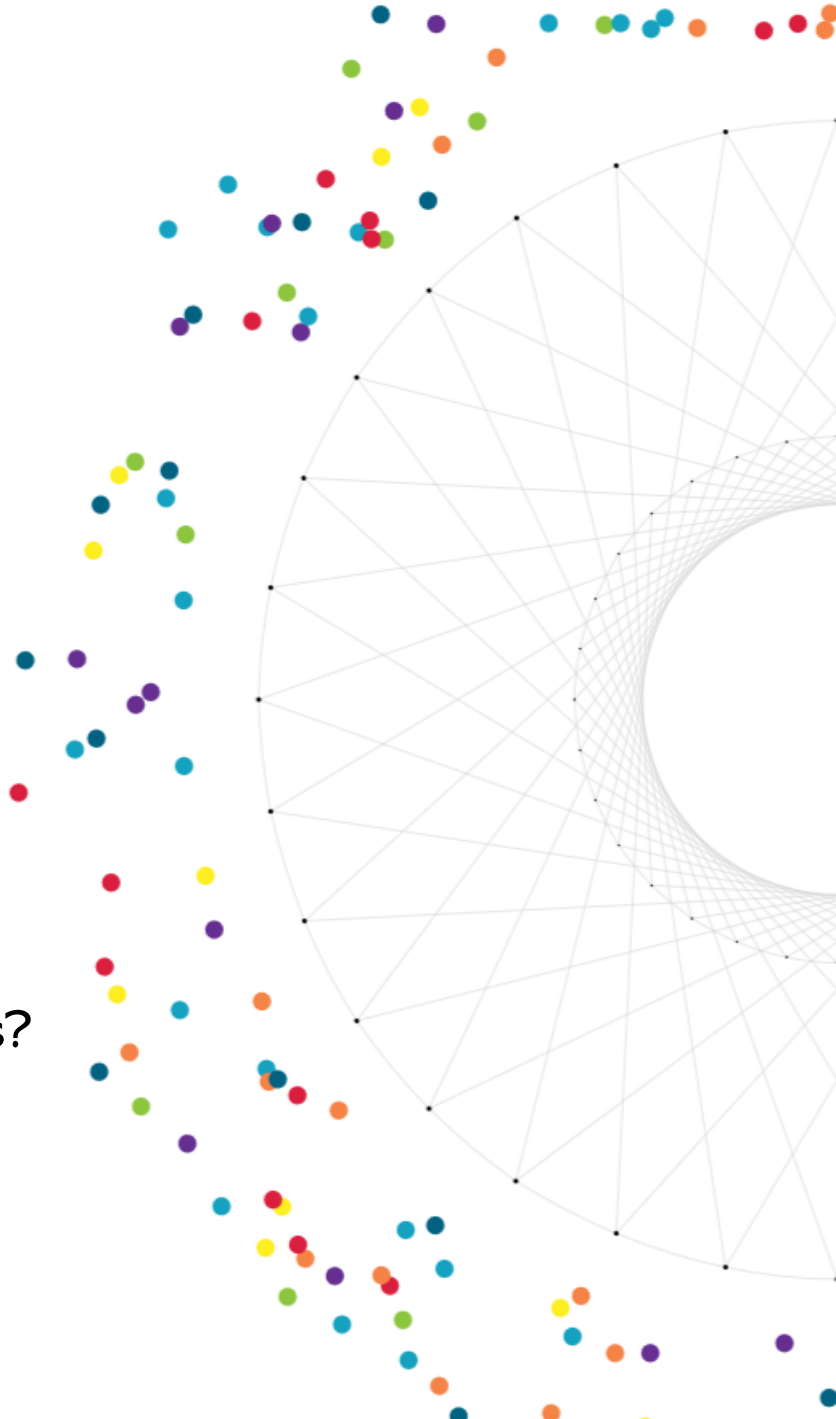


Business Scenarios



SCENARIO1 : WHAT IS THE PROBLEM

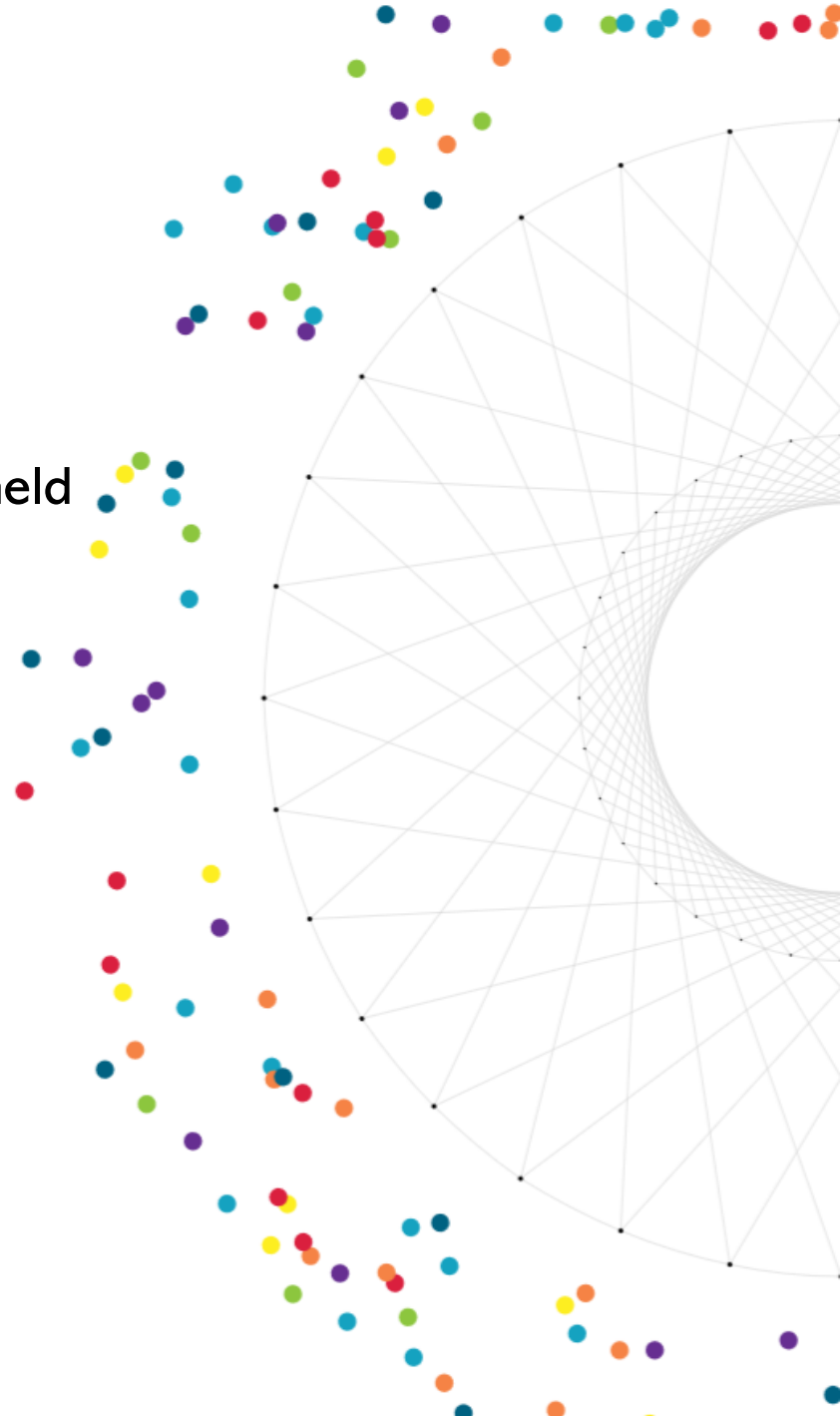
- In general, the new investor don't know which mutual fund they should invest.
- Currently, the company does not offer recommendations for mutual funds on their applications or website.
- How can they recommend the appropriate mutual fund to investors?



SCENARIO1 : HOW TO SOLVE IT

Objective: Appropriately match the company's mutual funds to the target investor by using the popularity of mutual funds bought and held by current customers.

Approach: Create a content-based filtering recommender system in Microsoft Azure ML Studio to appropriately assign the top 3 mutual funds for the target investor. We will use the purchase frequency of mutual funds to recommend the appropriate mutual funds to the investor.

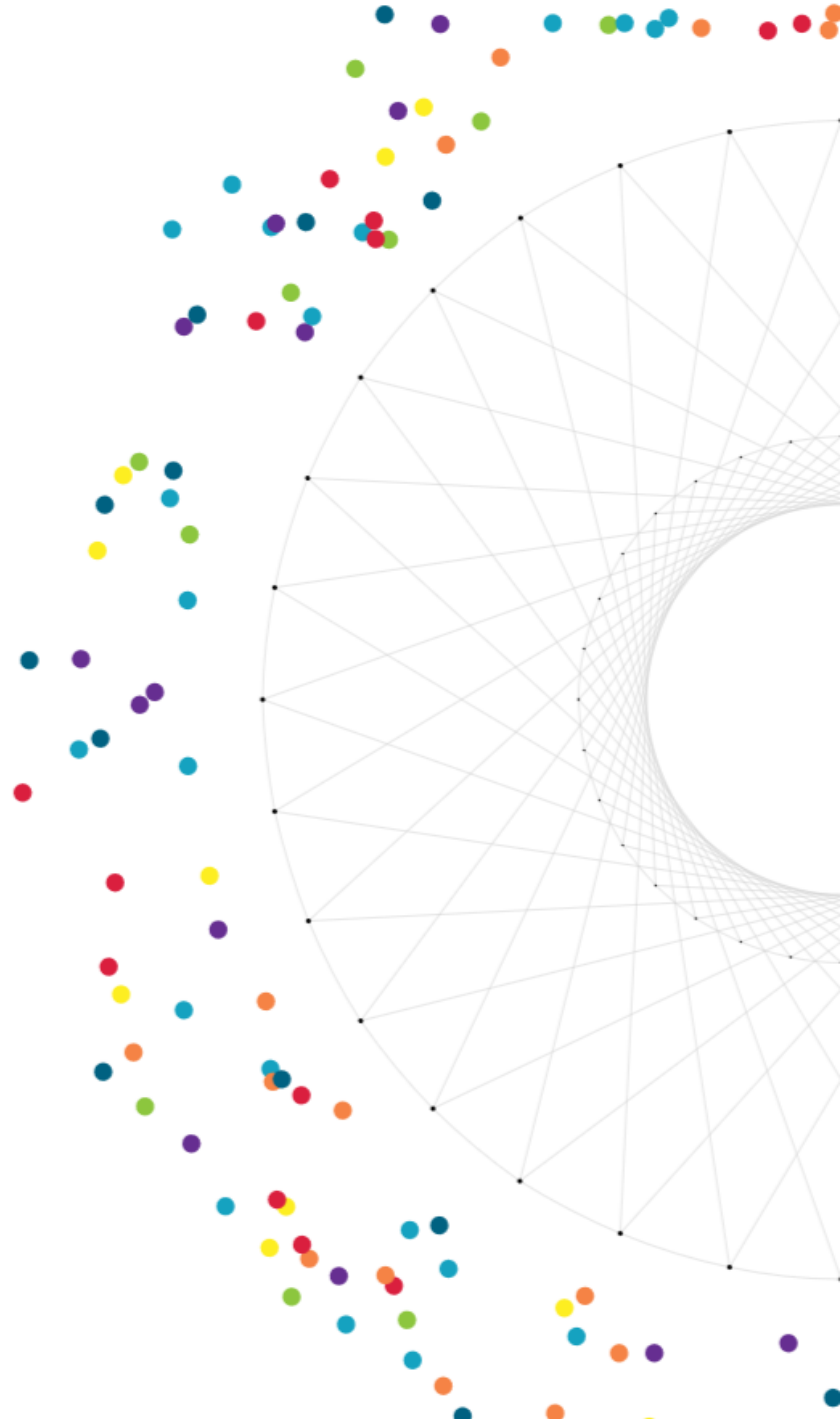


SCENARIO1 : Reference

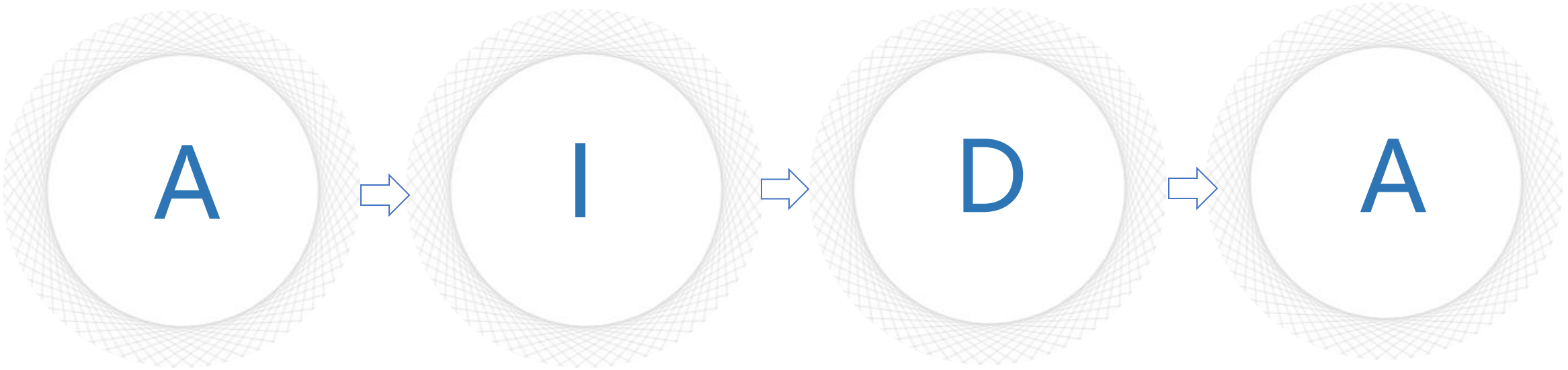
WHO ELSE AGREES WITH THE SOLUTION?

"...a lot of times, people don't know what they want until you tell them."

- Steve Jobs, Business Week interview



SCENARIO1 : AIDA



- **Attention** – The consumer becomes aware of the mutual fund which we recommend to him/her.
- **Interest** – The consumer becomes interested by learning the information.
- **Desire** – The consumer develops a favorable disposition towards the mutual fund.
- **Action** – The consumer forms a purchase intention, or makes a purchase.

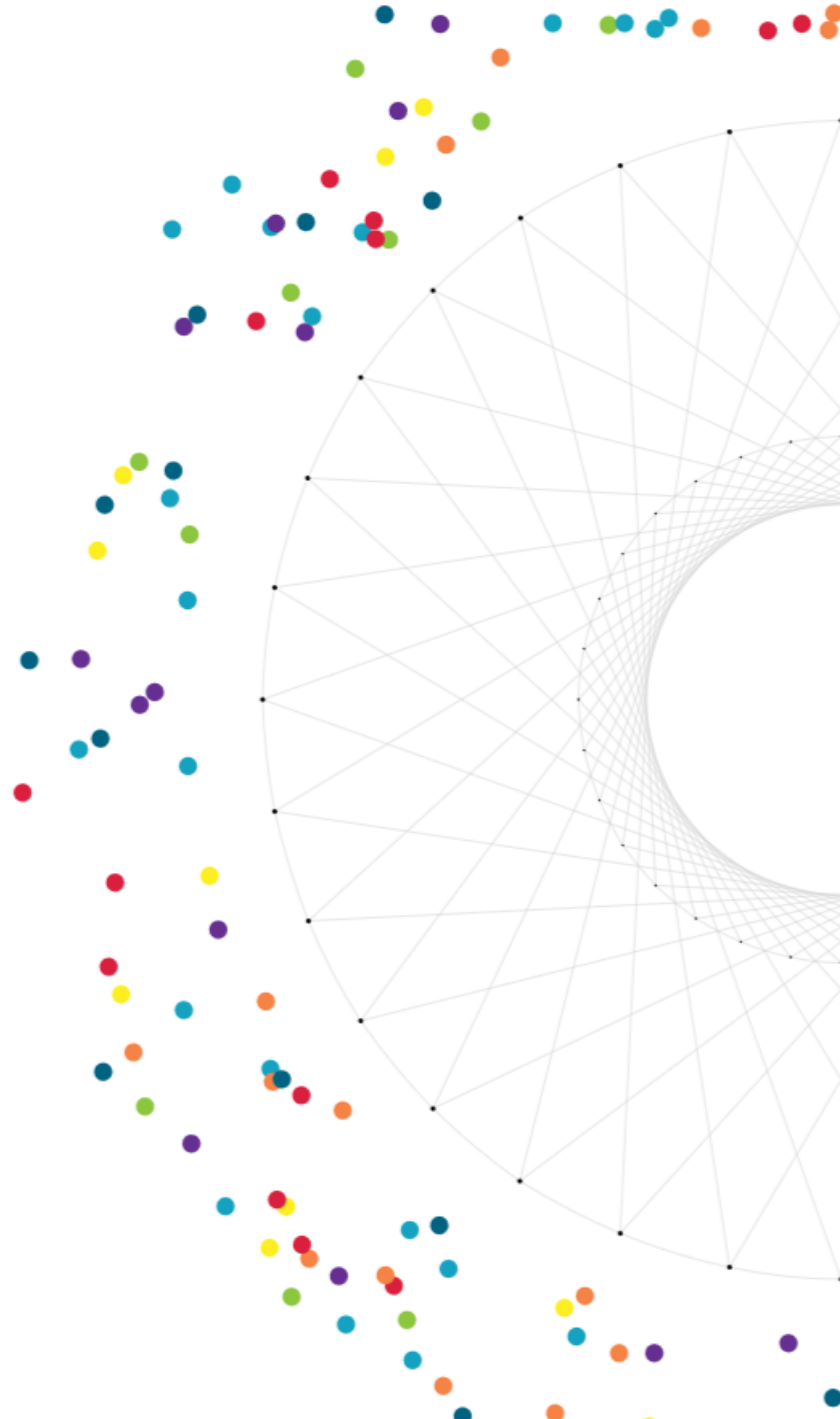
SCENARIO1 : BENEFITS

QUALITATIVE Benefits:

- Quick & Easy
- Reduce purchase decision time
- Variety
- Highly Accessible

QUANTITATIVE Benefits:

- Increased sales by **15%**
- Increased average annual returns of **13%**
- Increased application/page views by **100** per day



SCENARIO 2 :

WHAT IS THE PROBLEM?

The company does not have enough money to acquire new customers. Which promotion or deal should the company offer to get current customers to spend more?

HOW TO SOLVE IT?

Objective: Promote a recurring revenue model to current customers and increase revenues.
Approach: Conduct A/B testing on two possible promotions or deals the company wants to deploy to current customers.

WHO ELSE AGREES WITH THE SOLUTION?

"Acquiring new customers costs 5 to 10 times more than selling to a current customer -- and current customers spend 67% more on average than those who are new to your business."

- Matt Clark

Clark M. (2017, February22) *Returning Customers Spend 67% More Than New Customers - Keep Your Customers Coming Back with a Recurring Revenue Sales Model. Retrieved May 1, 2018. From* https://www.business.com/articles/returning-customers-spend-67-more-than-new-customers-keep-your-customers-coming-back-with-a-recurring-revenue-sales-model/

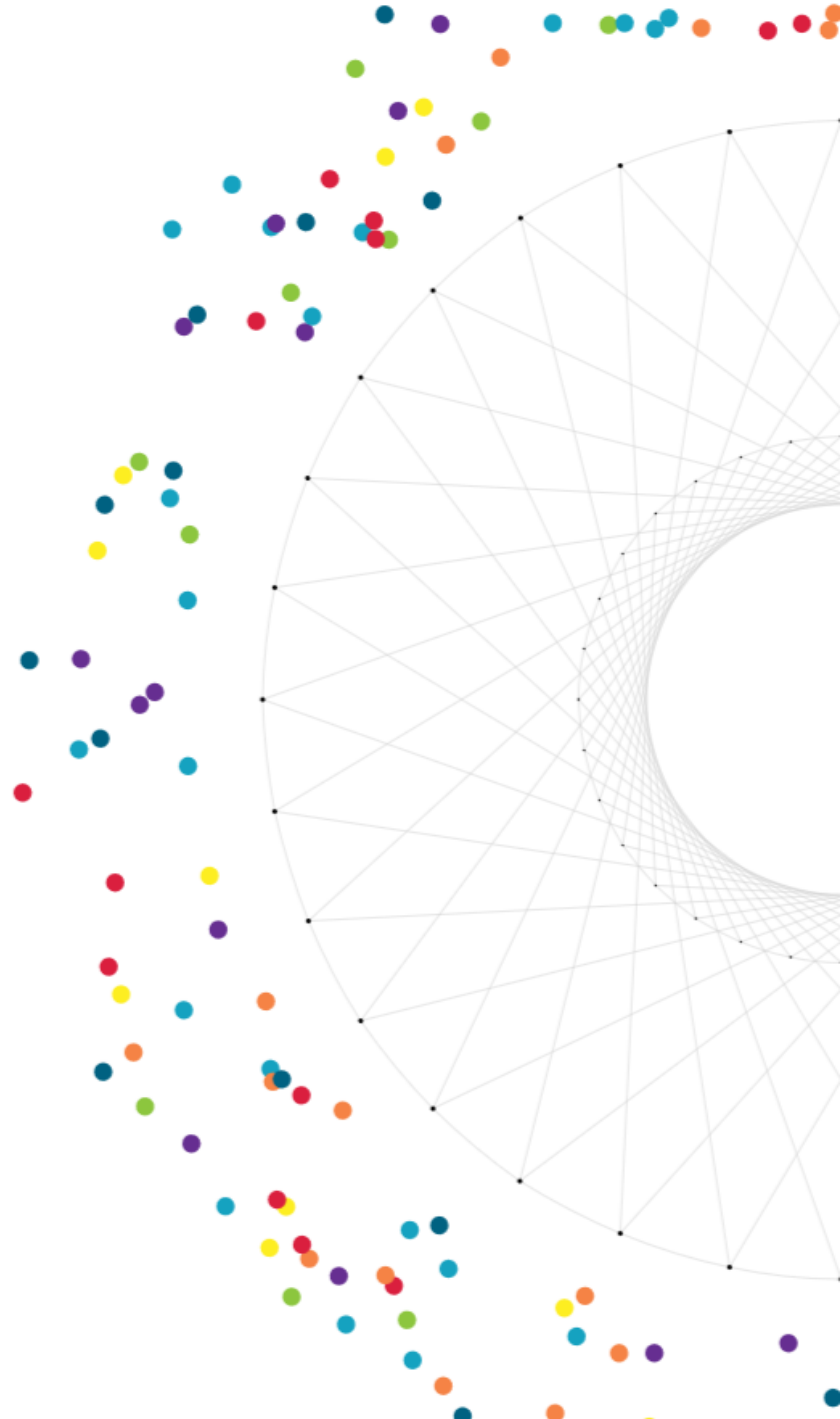
SCENARIO2 : BENEFITS

QUALITATIVE Benefits:

- Increase customer loyalty
- Better define the target market

QUANTITATIVE Benefits:

- Increased sales of **21%**
- Increased market share of **2%**



Qualitive assessment

Qualitative Assesment

How?

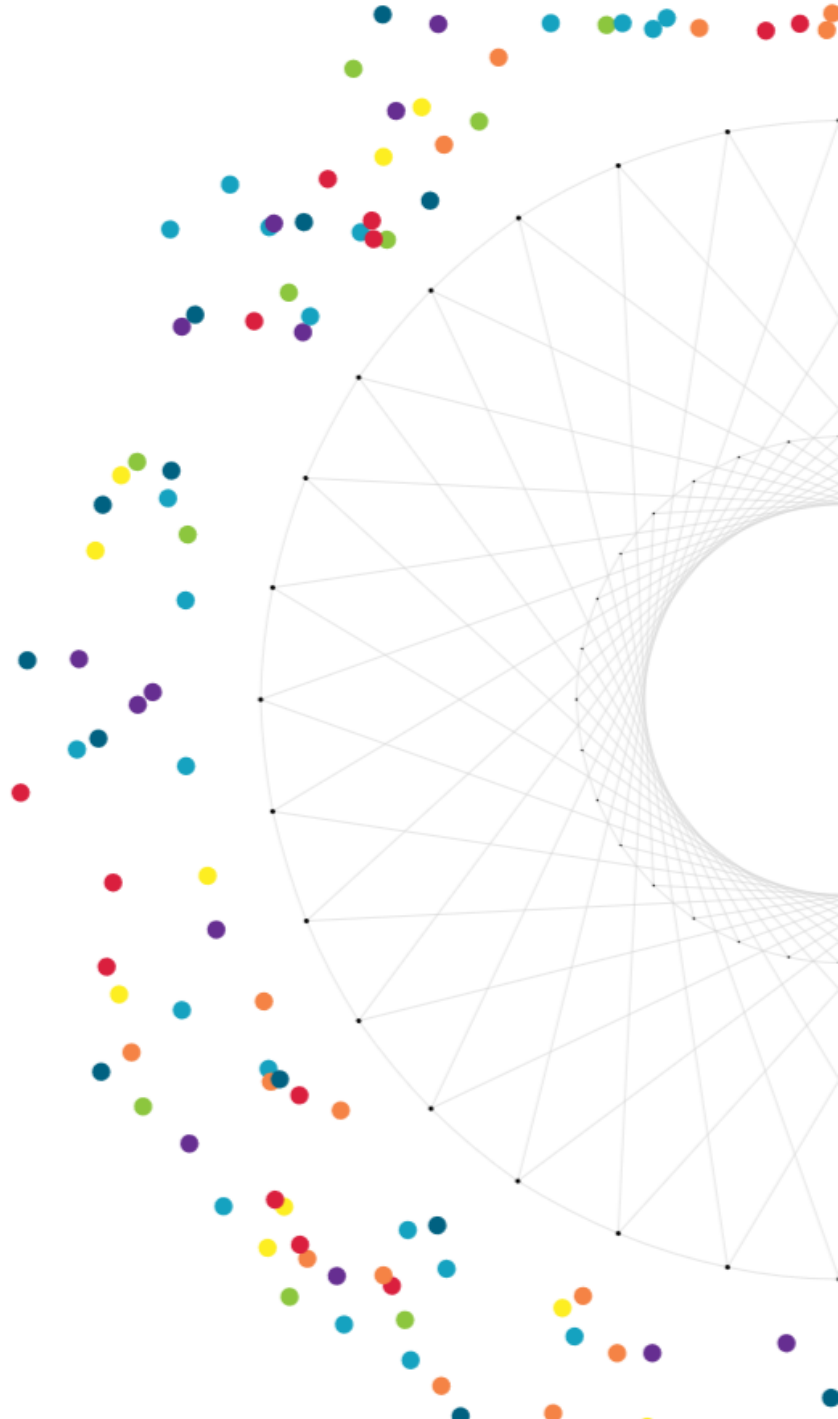
1 Azure machine learning studio

2 Create an experiment > Collect data

3 Split data > Train matchbox recommender > score matchbox recommender > evaluate recommender

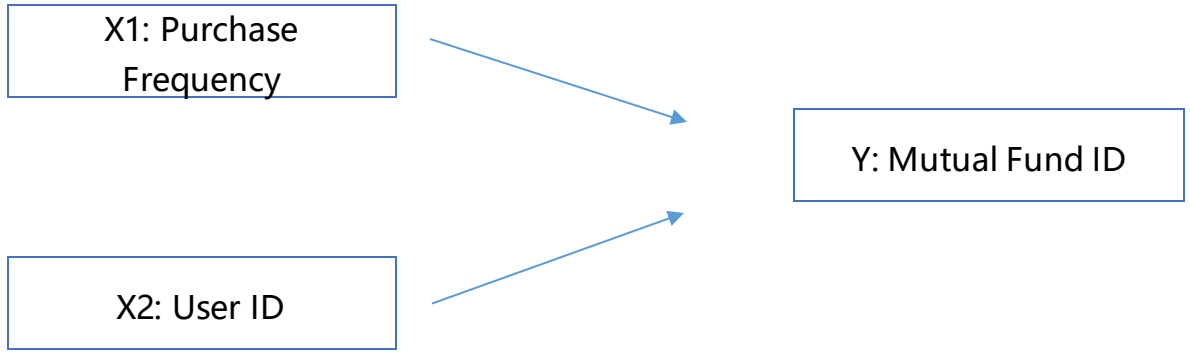
Variables:

	X Variables		Y Variable
	Purchase Frequency	**User ID**	**Mutual Fund ID**
Definition	How often the mutual fund is purchased.	Unique identification number associated to the customer	Unique identification number associated to the mutual fund
Unit of measurement	Numerical	Alpha-Numeric	Alpha-Numeric
Source	Data point collected from the firm	Firm-generated variable	Firm-generated variable



X & Y Variables (Scenario 1)

Independent Variables Dependent Variable



Reference: "The point is that individual consumer preferences are often shaped not entirely by the individual, but by the collective preferences of the masses, and by the status quo in the marketplace." - Dann McGinn, President of the McGinn Group, a research and strategy consultancy in Arlington.

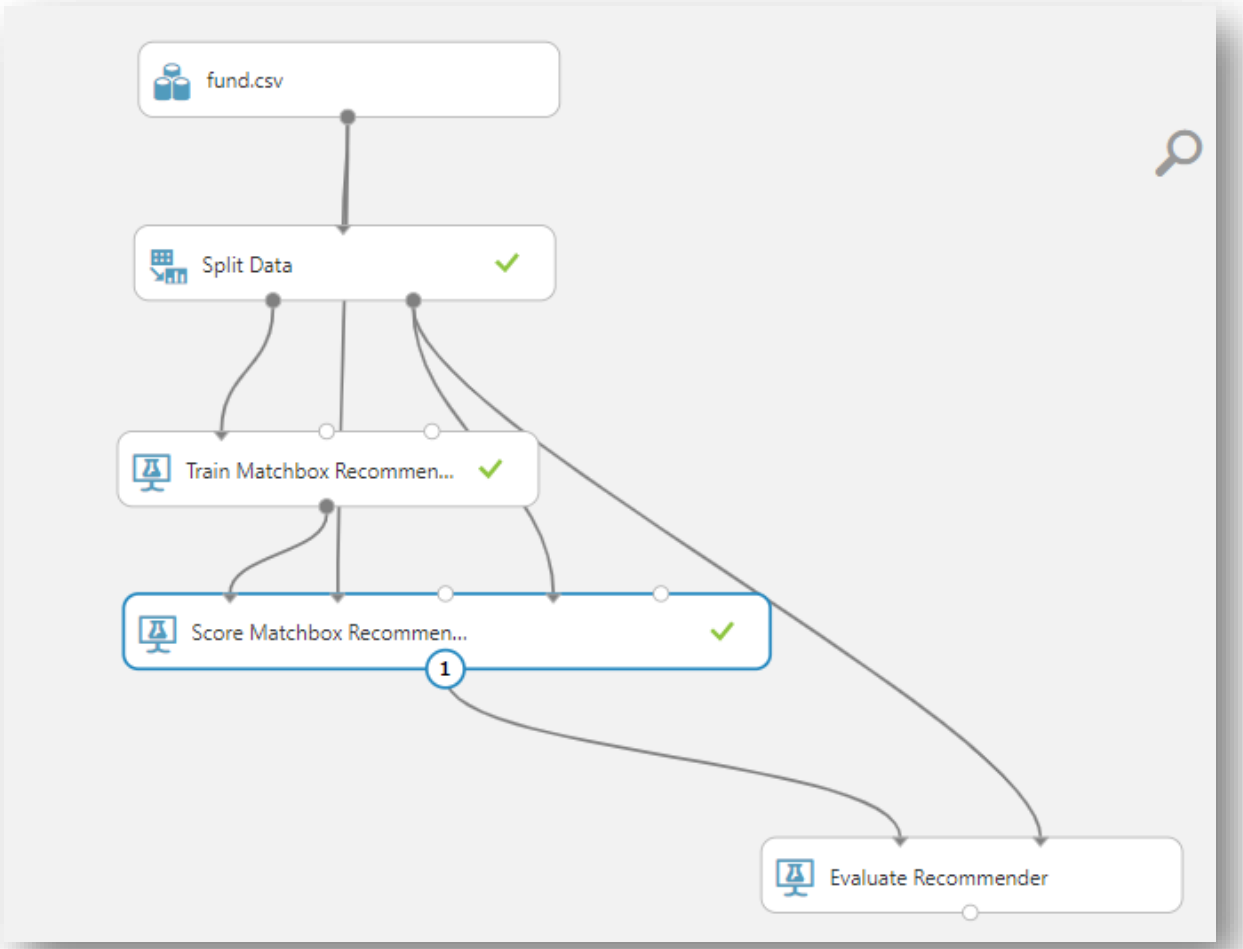
Tuttle, B. (2011, August 26) *How Consumers Fool Themselves Into Thinking They' ve Made Good Purchases. Retrieved May 3, 2019 from* http://business.time.com/2011/08/26/how-consumers-fool-themselves-into-thinking-theyve-made-good-purchases/

Pretesting

ANALYTICS METHOD

Use a Content-Based Filtering Recommendation System to recommend items based on a comparison between the content of the items and a user profile. The idea here is that if multiple users buy a mutual fund, it means the fund has a higher possibility of return. Thus, our approach is to recommend these types of funds to the user who has similar attributes or descriptive characteristics.

RUN METHOD(SCENARIO 1)



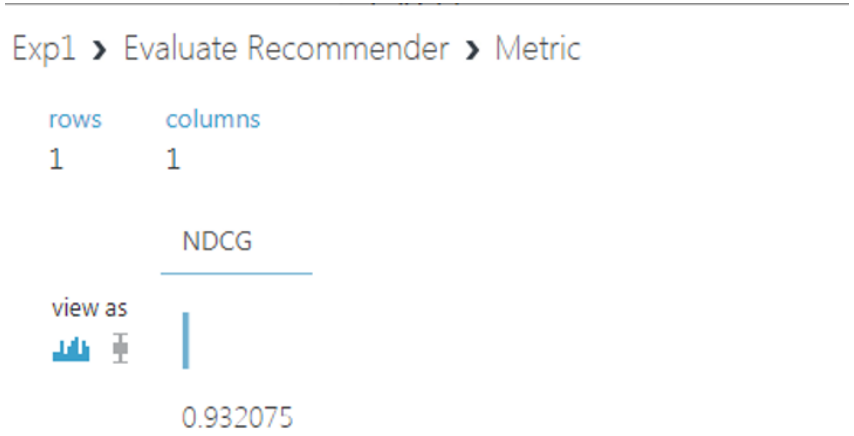
rows	columns
8	4

u1	i2	i5	i6
u2	i3	i1	i5
u3	i4	i5	i6
u4	i4	i5	i1
u5	i4	i2	i3
u6	i5	i2	i3
u7	i2	i4	i3
u8	i2	i1	i6

Discuss findings:

Based on the recommendation result,

We can offer different mutual fund options to the appropriate investor within the application and online self-service.



Short Video

How to promote

the mutual fund to the target investor?


THANK YOU FOR WATCHING