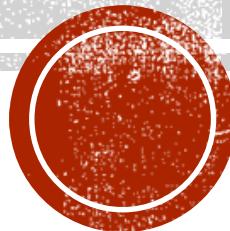


# CUSTOMER INTELLIGENCE

By Hardi Saputra



## Current Activities :

**Co-Founder**  
[\(datahaka.com\)](http://datahaka.com)

**Co-Founder**  
[\(takapic.com\)](http://takapic.com)

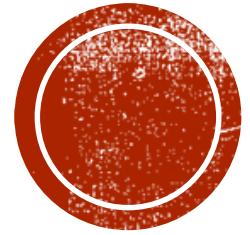
**Head of Data & Product**  
[\(rumah123.com\)](http://rumah123.com)

**Economic & Business Division**  
[\(idea.or.id\)](http://idea.or.id)



**HARDI SAPUTRA**

Statistician  
Data Scientist  
Marketing Researcher  
Product Innovator



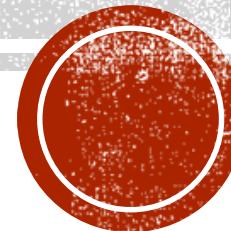
# WHAT IS CUSTOMER?



# A customer ?

sometimes known as a client, buyer, or purchaser; is the recipient of a good, service, product or an idea - obtained from a seller, vendor, or supplier via a financial transaction or exchange for money or some other valuable consideration.

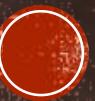
Source: Wikipedia





CUSTOMERS ARE THE HEART OF A  
BUSINESS AND THEIR NEEDS ARE OUR  
KEY DRIVERS

***It is not customers' job to know what they want***

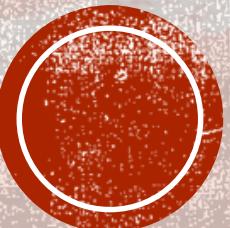




Quotes:

*“ Everything starts with the customer ”*

“Louis XIV”



# AREA OF INTEREST

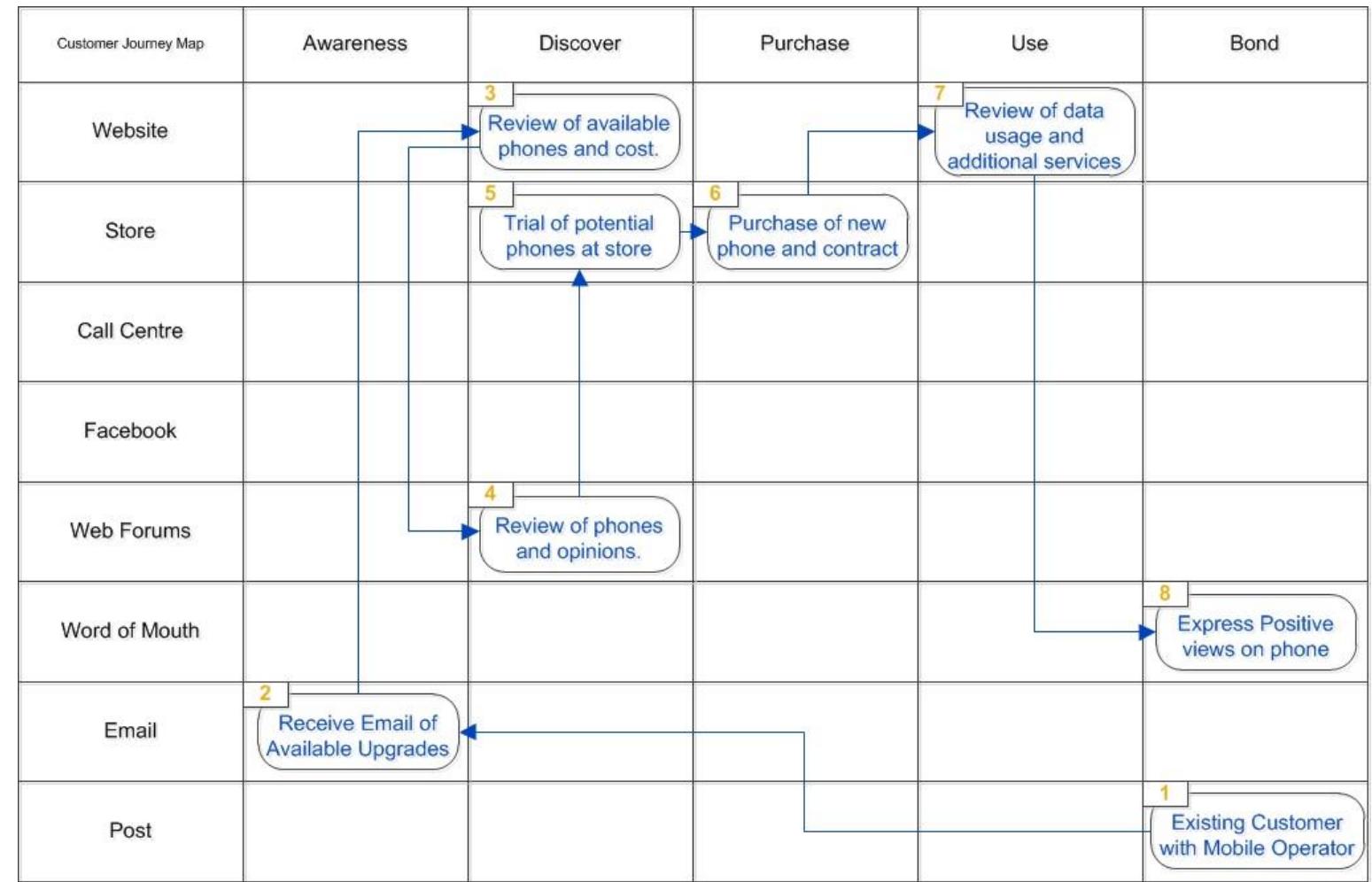


Fig 4



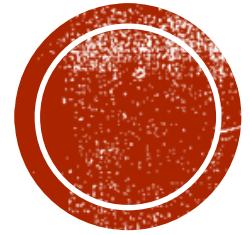
# AREA OF INTEREST



Customer  
Intelligence

An orange S-shaped curve with circular endpoints connects the two main sections of the diagram, linking the concepts of Customer Experience/Journey on the left with Customer Intelligence on the right.





# **WHAT IS CUSTOMER INTELLIGENCE (CI)?**

# CUSTOMER INTELLIGENCE (CI)?

CI aims at gaining a comprehensive understanding of customers by means of intelligent tools, which enable a more pointed customer contact and a higher degree of customer loyalty.

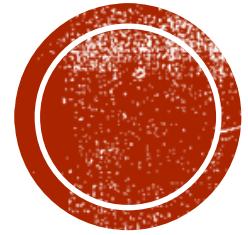
“IBM”



Forrester Research: “... 98 % of the marketers rate customer intelligence as the most important database element in producing successful results.”

**The problem:**

- No unanimous understanding of CI in science
- No clearly defined set of CI methods



# TRADITIONAL METHODS OF CUSTOMER INTELLIGENCE



## An Example:

As an example, some customers walk into a store and walk out without buying anything. Information about these customers/prospects (or their visits) may not exist in a traditional CRM system, as no sales are entered on the store cash register. Although no commercial transaction took place, knowing why customers leave the store (perhaps by asking them, or a store employee, to complete a survey) and using this data to make inferences about customer behaviour, is an example of CI.

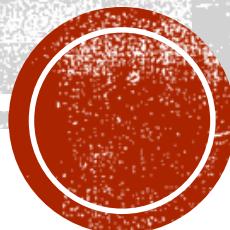
### Problem:

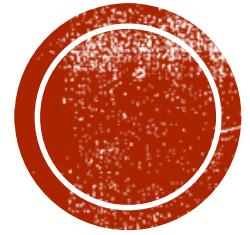
- Not be able to capture the natural voice of your customer
- Bias and Inaccuracy issue



*“Get closer than ever to your customer. So close that you tell them what they need well before they realize it by themselves”*

Steve Jobs

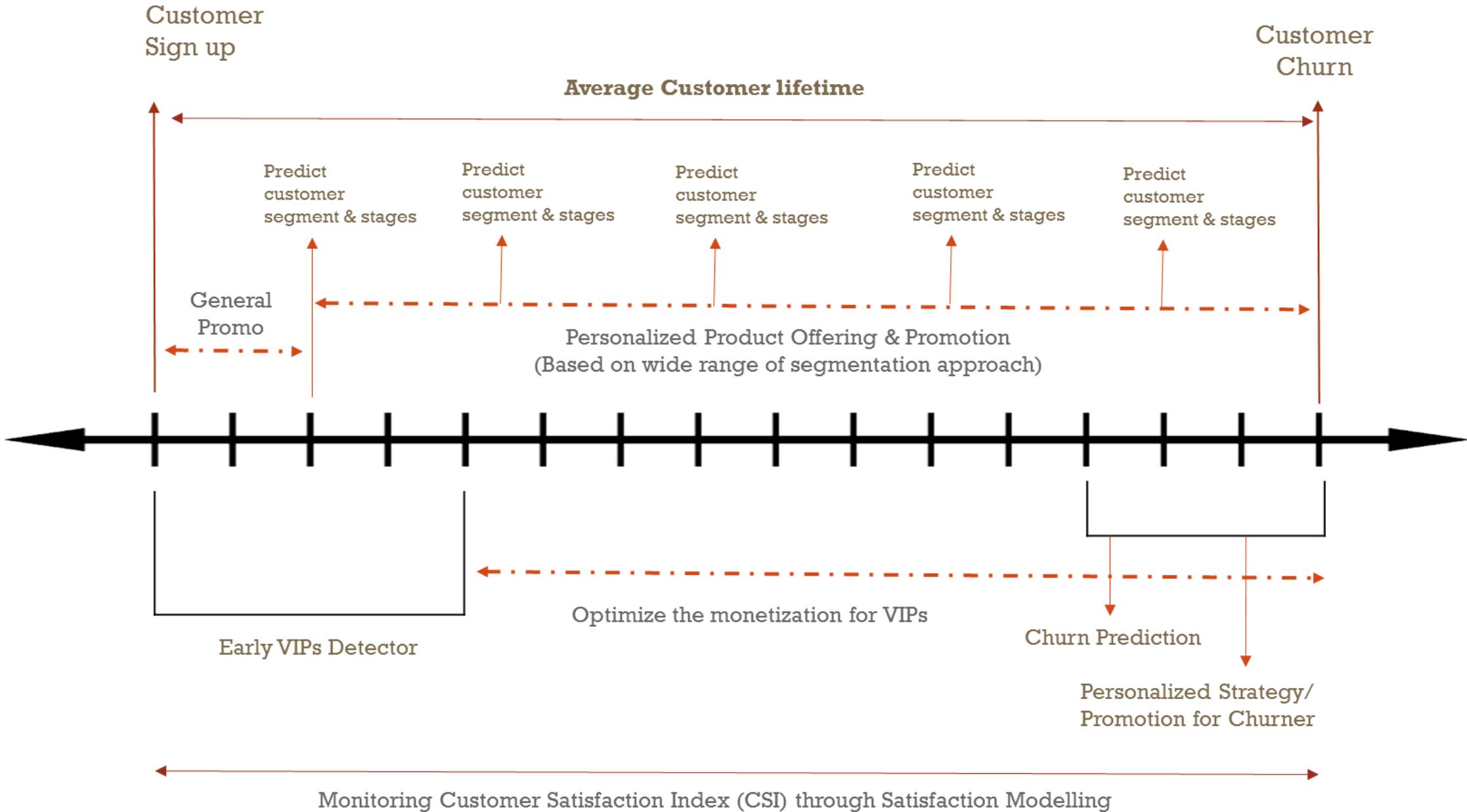


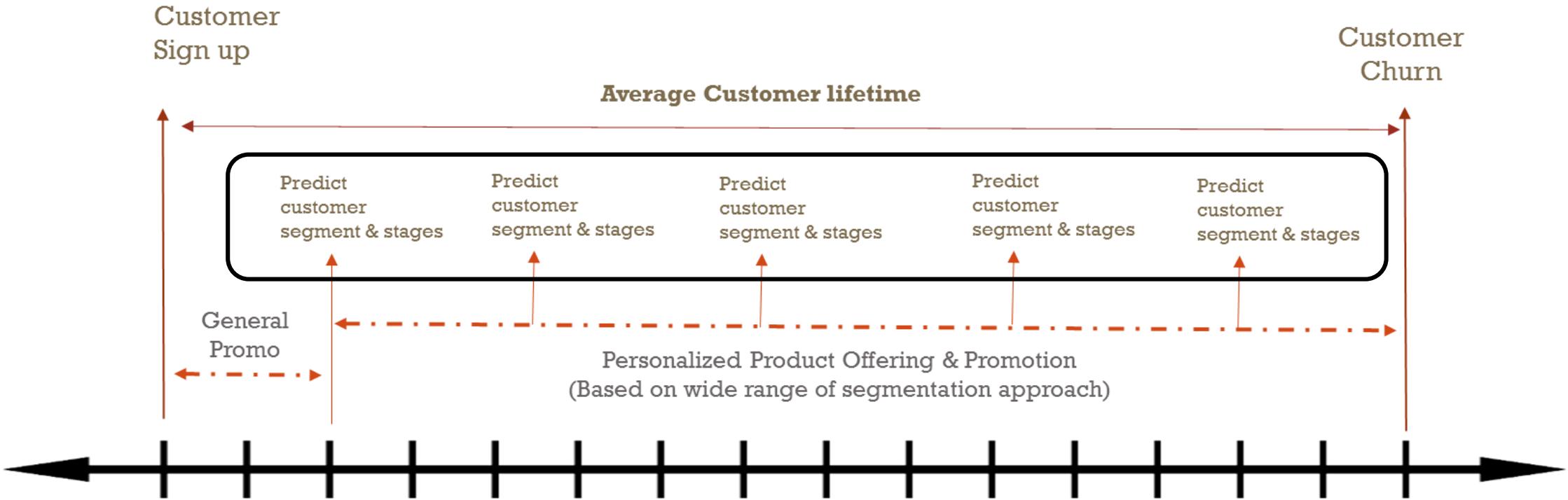


# **NEW CI APPROACH IN THIS ERA**



# CUSTOMER INTELLIGENCE FRAMEWORK





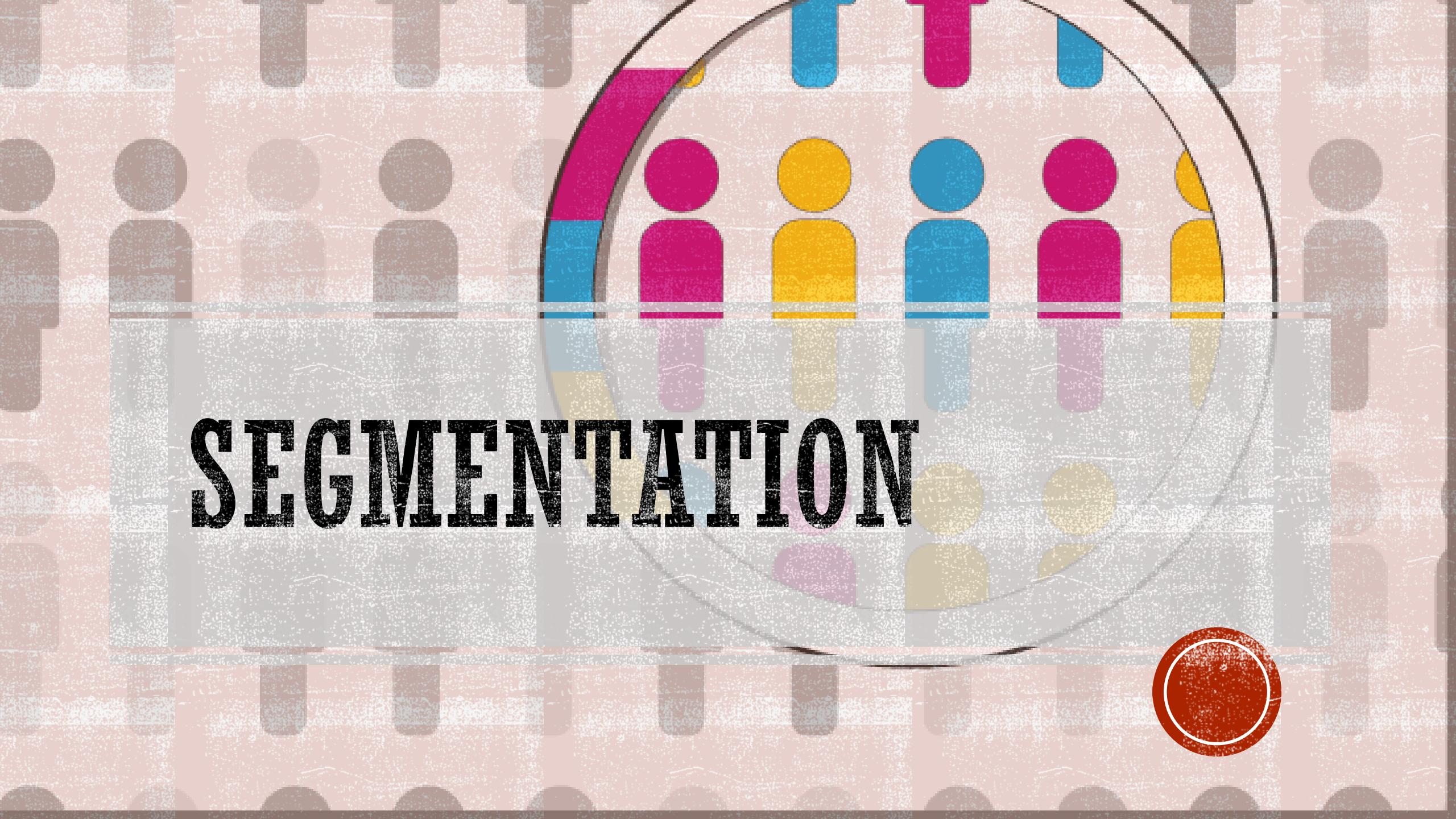
## Segmentation:

Simple Segmentation

RFM (Recency, Frequency, Monetary)

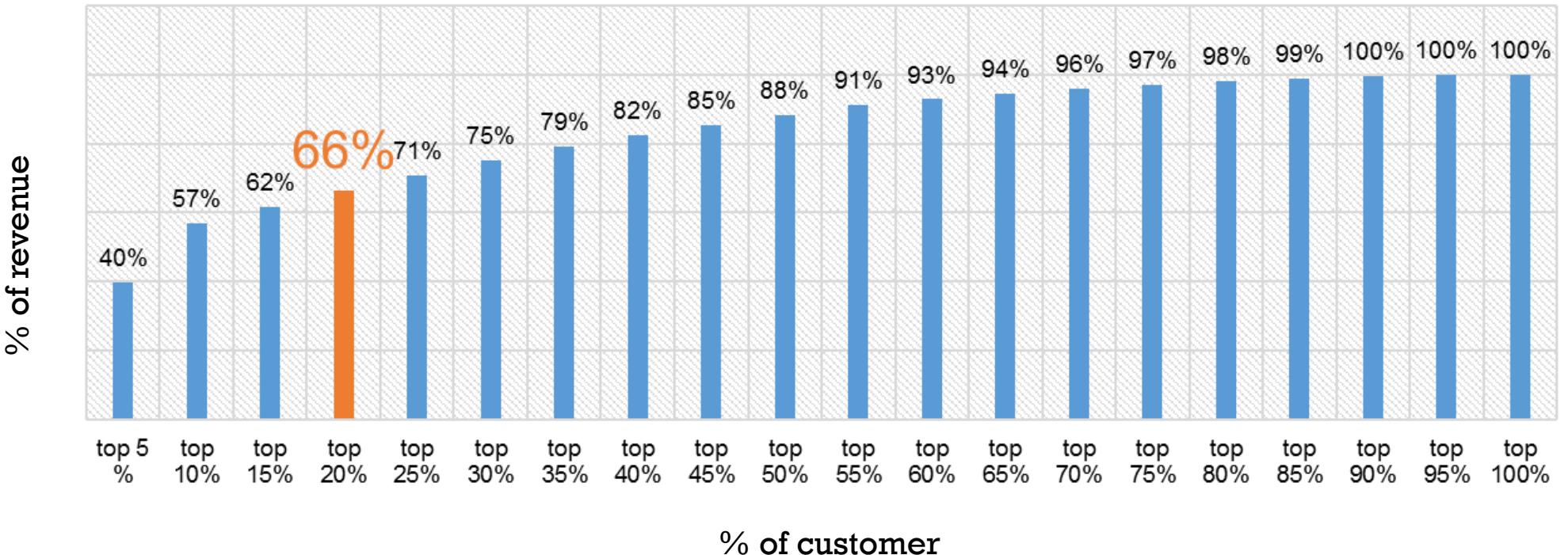
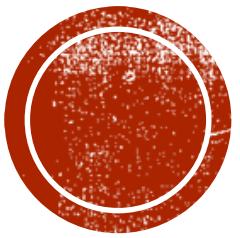
More Advanced Clustering (Supervised, Unsupervised, Hybrid)





# SEGMENTATION

# SIMPLE SEGMENTATION

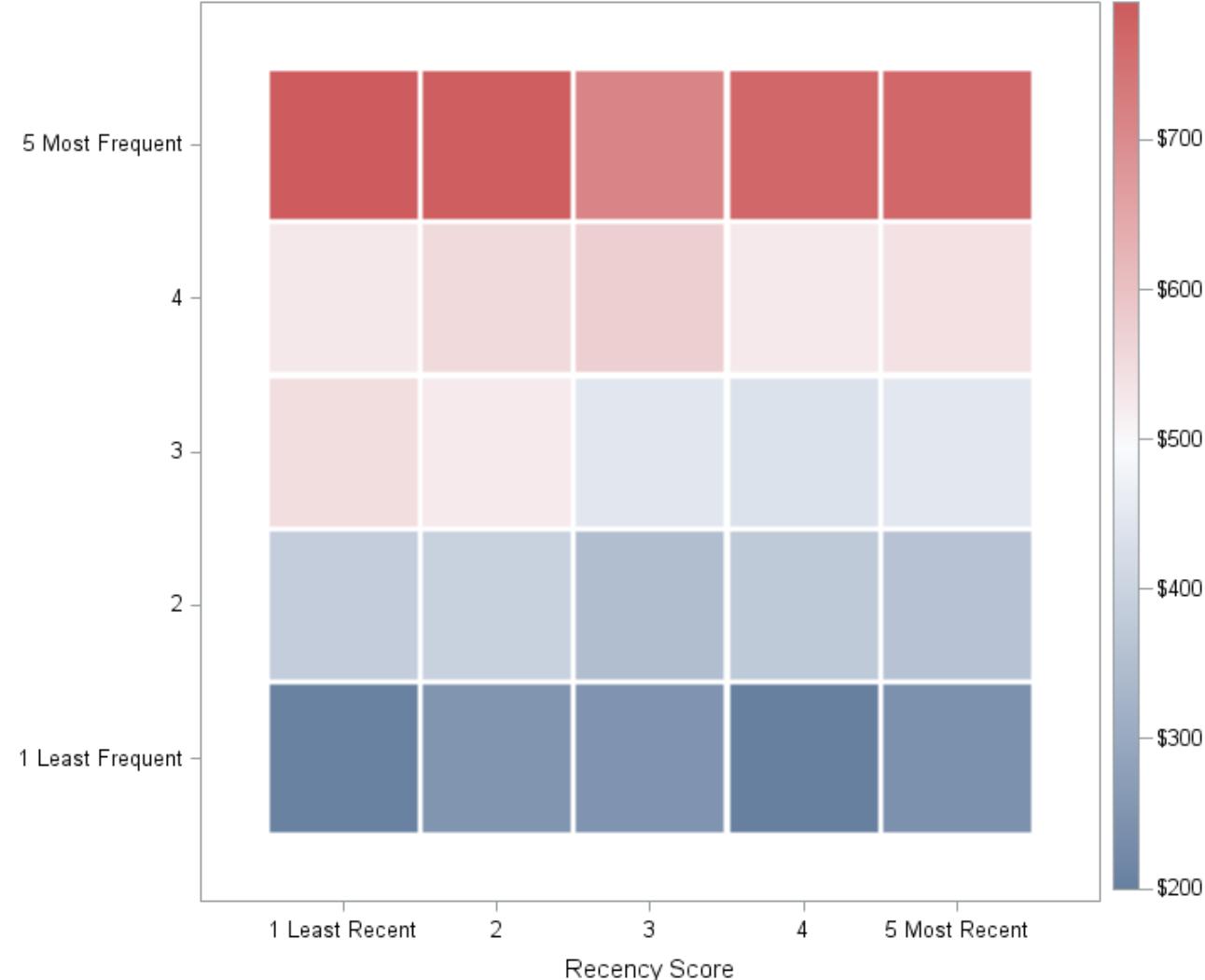


e.g. using 80/20 Pareto's Principle

“80% of revenue comes from 20% of customers”

# RFM

Monetization Map of Sums of Transaction Amounts



Color represents Medians of Sum of Transaction Amounts within Recency Score by Frequency Score Cell  
Maximum Number of Groups: 5 (Recency), 5 (Frequency), 5 (Monetary)  
Binning Method: Independent

## Recency

- How recent is the last purchase?

## Frequency

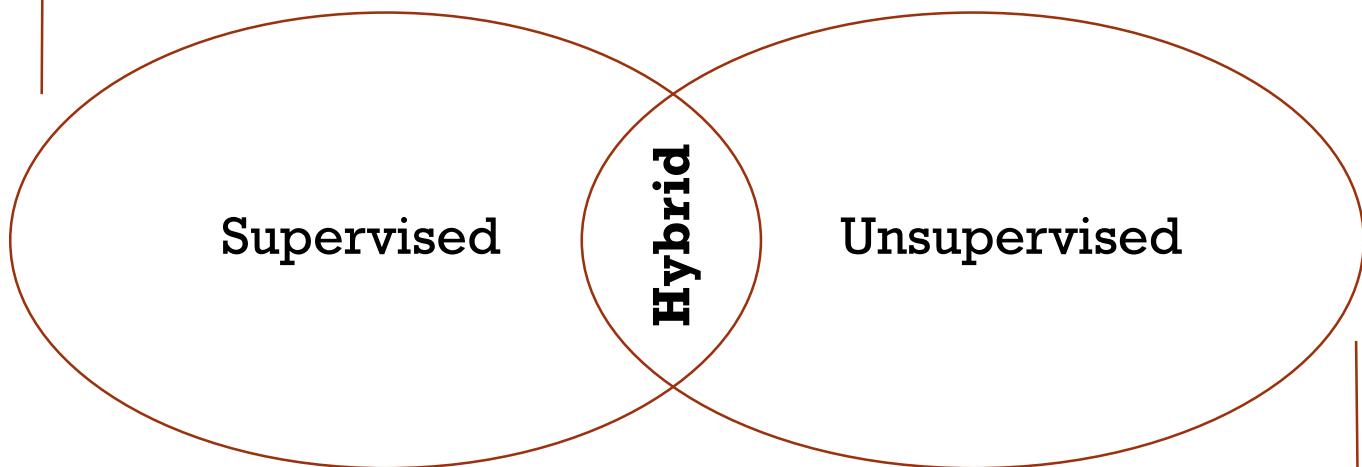
- How frequently does he/she buy?

## Monetary

- How much does he/she spend?



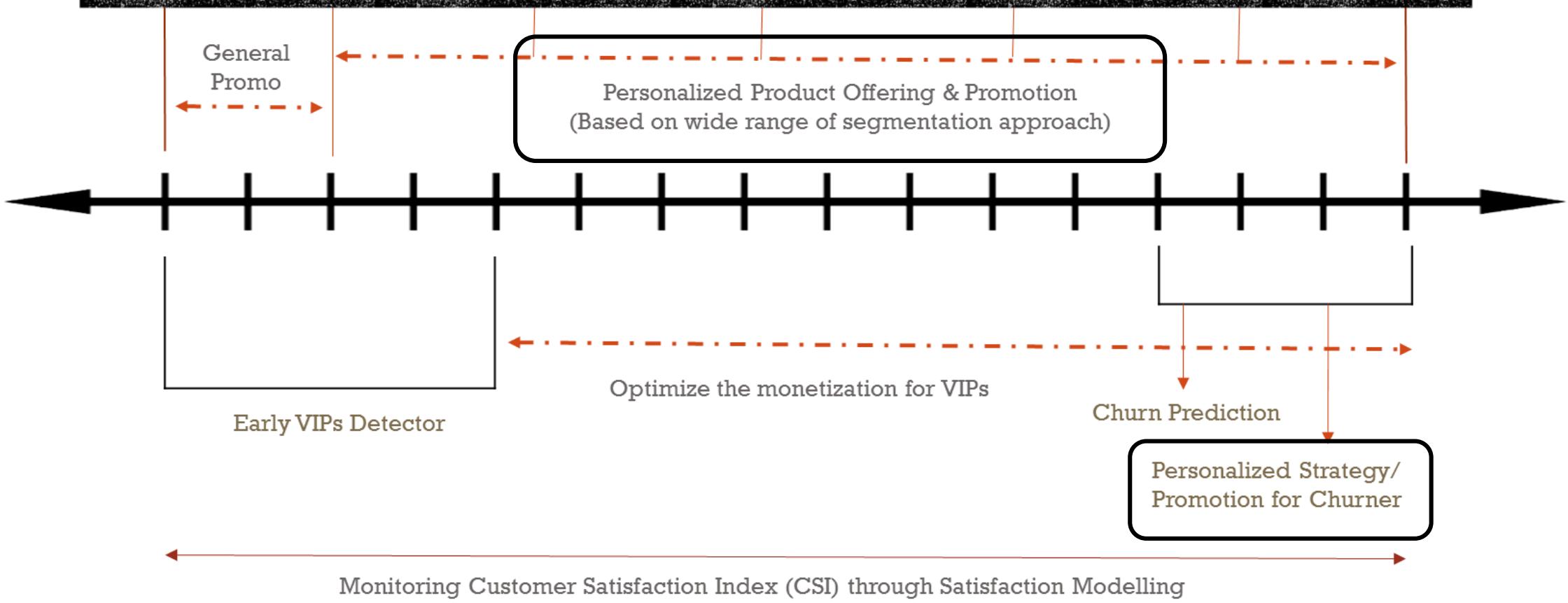
Benefit the historical and current domain knowledge related to the business



Explore more opportunities in the way of leveraging advanced segmentation techniques

## MORE ADVANCED CLUSTERING APPROACH

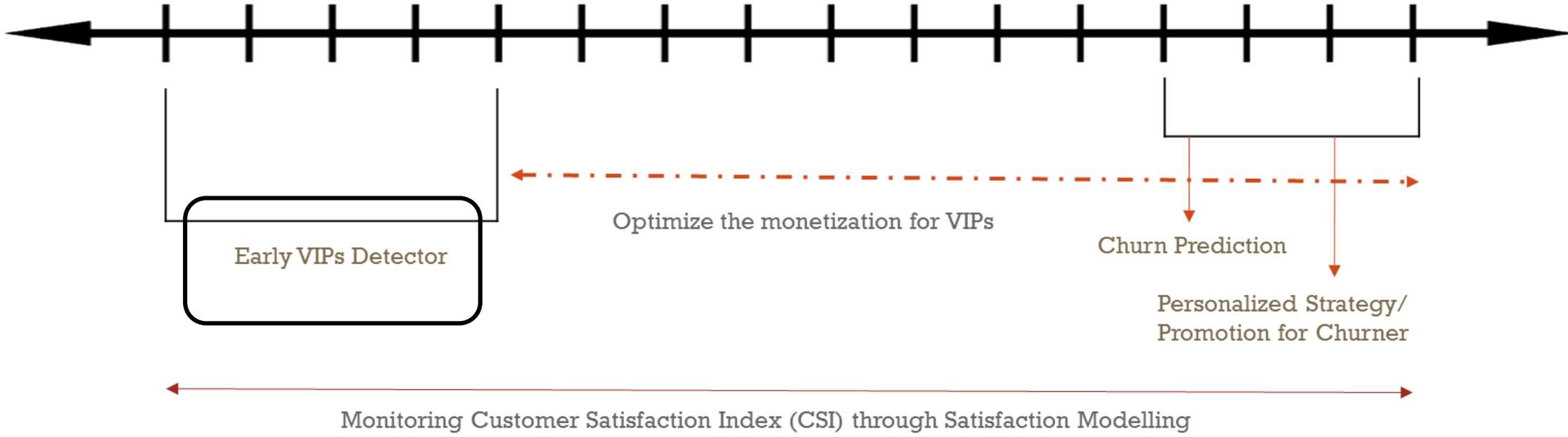
# Recommendation System



## Customer Sign up

# VIPs Detector

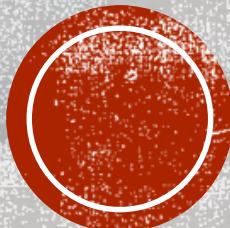
## Customer Churn





*“Your most unhappy customer are your greatest source of learning”*

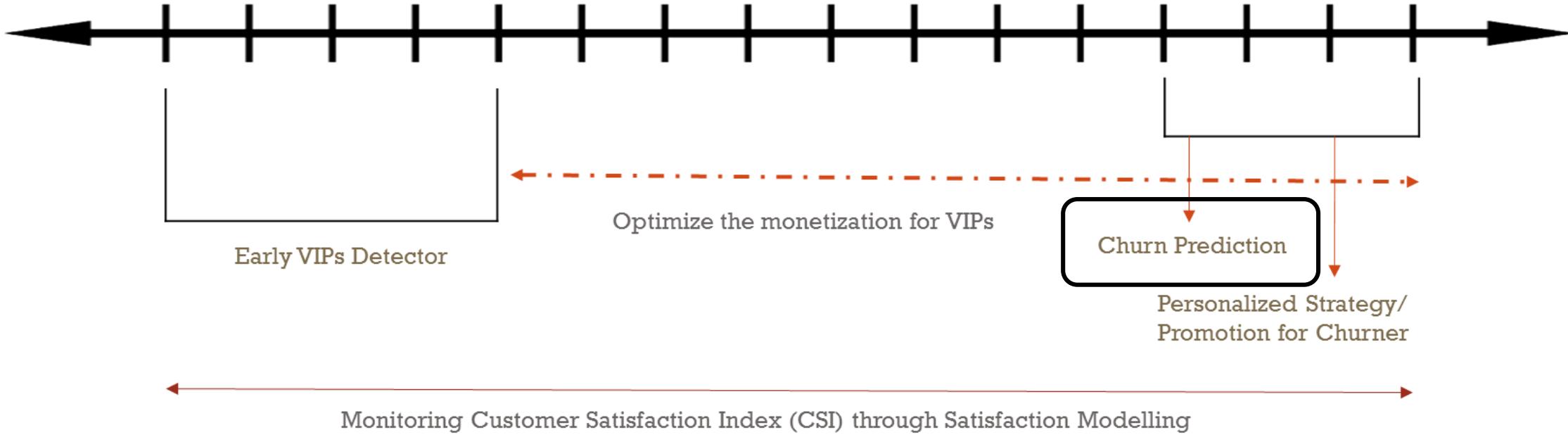
Bill Gates



## Customer Sign up

## Customer Churn

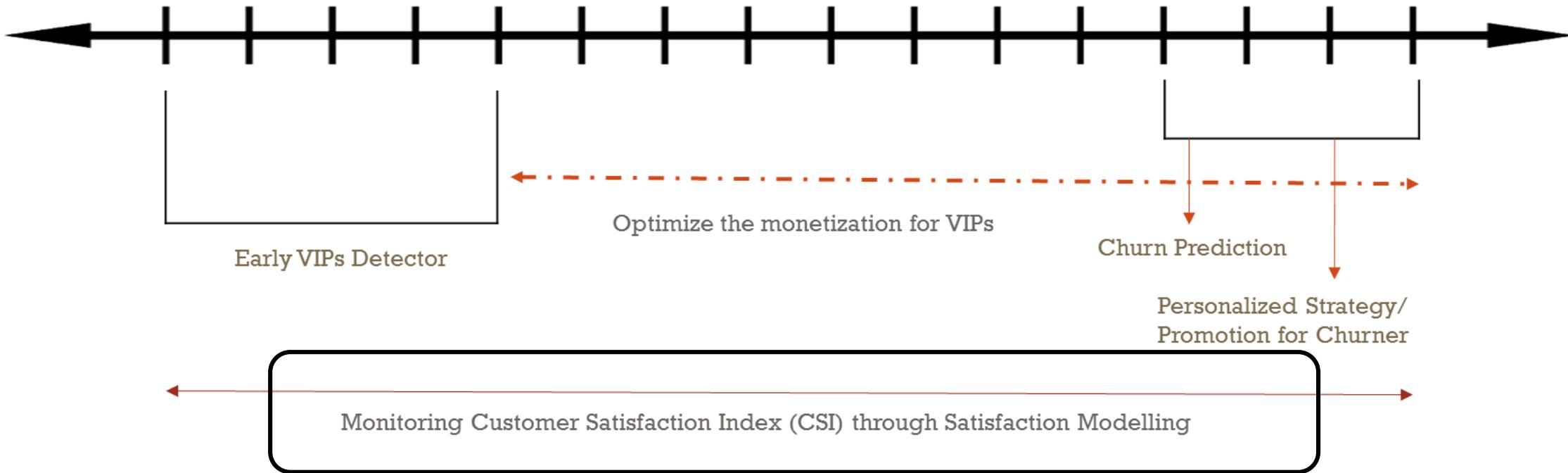
# Customer Churn Prediction



Customer  
Sign up

Customer  
Churn

# Experience Monitoring & Evaluation



# THANK YOU



*"There is only one boss. The customer. And he can fire everybody in the company, from the chairman on down, simply by spending his money somewhere else "*

Sam Walton

