ArMADA - Arvind Made Analytical Digital Assistant

Anirban Das Harsha Asetti Runcy Oommen Vaibhav Singhal

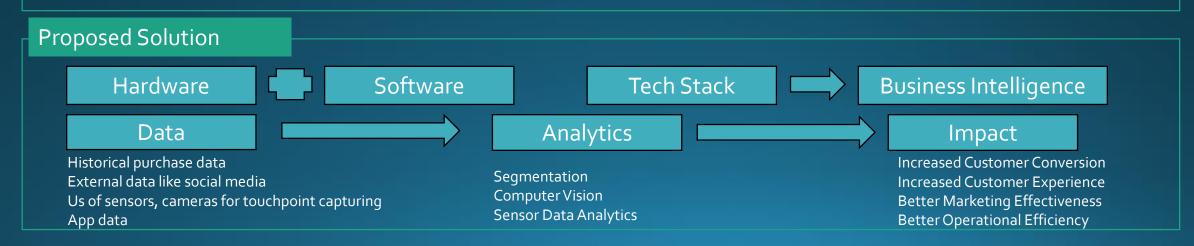
Arvind Brands: Digital Assistant

Context

- Customer Identification, prioritization and Engagement are the key factors to increase Customer Experience and increasing the Customer Life-Time Value
- In the age of e-commerce where e-retailers record every touch point of their customers and leverage that for personalized customer experience, stores lack behind in that area
- With the advent of new technologies in hardware and software both, stores stand a chance to get a competitive advantage

Objectives

- Analyze past purchasing behavior (in the store) and other activities outside the store (Digital Presence) for identification and prioritization of the customers
- Map the customer journey in the store for better customer service, marketing activities and operational efficiency
- Analyze customer behavior within store by sentiment analysis, feedback etc. for improvement in conversion rates through better customer service.



Identify & prioritize key customers entering a store

Advanced personalization using competitive information - Beacons

Data Layer

Customer Profile

- Demographic Data
- Lifestyle Preference

Campaign Effectiveness

- Total Impression provide
- Impression
 Viewed/Clicked
- Click through Conversion Rate
- Types of campaigns Viewed/Clicked

App Usage

- Time spent in App
- Browsing History
- Pages Viewed Details
- Time spent/page

Analytics Layer

Fransaction Data

- Total Transactions Made
- Average Order Amount
- Mode of Payment
- Order Returned/ Cancelled
- Products Purchased

In-Store Presence

- Stores Visits Frequency
- Time Spent within Store
- Affinity towards product SKUs
- Proximity from different Beacons
- Path Followed
- Zones Covered
- Day Parting Details

Persona Segmentation

Recommendation System

Promotion Content Design



Campaign 1



Campaign 2



Campaign 3

Reporting Layer

Measuring campaign effectiveness in terms of:

- Store visits Frequency
- Campaign contribution towards revenue
- Sales Lift Analysis
- Post campaign clickstream analysis

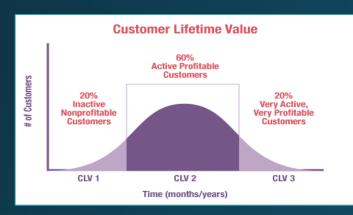
Analysis to be done based on data collected across multiple brands/ stores

Note: In absence of mobile app the lifestyle prediction of consumers will be through hypothesis based on similarity in-store behavioural pattern of existing consumers

Acquiring customers with future potential through DMP (Data management platform)

Identifying Potential Customers from 1st Party Base

Estimating future potential customer using first party DMP data and adding monetary value to business through better engagement with them



Location	Total Spend	Customers	CAC	CLV	Revenue	Profit *
Adwords Ocean	\$100	100	\$1	\$10	\$1000	\$900
Facebook River	\$150	50	\$3	\$30	\$1500	\$1350
Lake Microsoft	\$250	25	\$10	\$100	\$2500	\$2250

Understanding the right segment of customers bringing value to business with minimum acquisition cost.

Understanding External Personas for multiple segments

Segmenting target customers and profiling them in homogeneous groups using 2nd and 3rd party data like product usage, demographics, behaviour etc..



Browsing Behaviour Segments



Demographic Segments



- -> Deal Hunters
- -> Public Transport Users
- -> Price sensitive
- -> Holds Loyalty cards
- -> Prefer offline Store



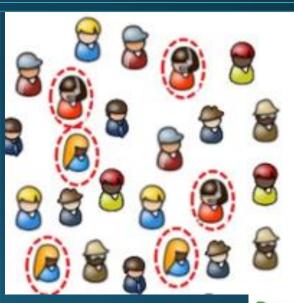
- -> Food Lovers
- -> Movie Goers
- -> Youth Base
- -> Rural Consumers
- -> M Wallet users
- -> Tech Enthusiast
- -> White Collar **Employ**



- -> Smart Phone Users
- -> Urban Consumers
- -> Credit Card Users
- -> Brand Centric
- -> International Traveller
- -> Fleet Taxi Users
- -> Jewellery Buyers

Identifying right target audience based on personas identified

Extrapolating identified persona information for targeted segment and mapping them with universal cookie base through look-alike models



PrecisionMatch 3rd Party Data Set

People who look like Converting **Audiences**

Map customer Journey in store & customer behavior

Technologies for capturing customer touchpoints

Customer Effort	Technology	Advantages	Utility	Drawbacks
No	Wi-Fi Tracking	Use of in-house Wi-FiAlmost equivalent utility as Video Analytics	People counting, Dwell Times, Repeat Visitors, People tracking	 Limits to a sample of audience Inaccurate-short wavelength RF
No	3D Stereo Video	Additional advantages: Surveillance, Queue management, Predictive Solution	People counting, Dwell Times, Repeat Visitors, People tracking	 High Infrastructure cost High Processing Cost Complex algorithm execution Treatment of depth
No	Infrared Beams	Low costEasy set-up	People counting	 Cannot recognize direction Double counts for entering and exit Miscount in groups
No	Thermal Imaging	Low costEasy set-up	People counting	Disturbances with other objects in place
Yes	BLE Beacons	Directly contact the customer, in real-timePush Notifications	People counting, Dwell Times, Repeat Visitors, People tracking	 Audience size is significantly less Beacon compatibility with Android is very less

Based on store size and cost, any of these or combination can be used to capture the customer touchpoints

Impact of Capturing Customer Touchpoints

Touchpoints for video analytics

Store Entry

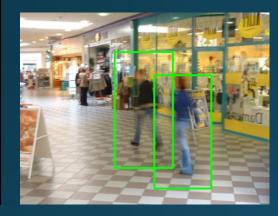
Moving in the store

At a counter/isle/dispenser

Point of sale

Video analytics
Outcome

Passer by to entry conversion



Path of customers, most busy zones



Age, Gender Tagging, Behavior Analysis



Identification of loyalty customers



Impact

Measures for increasing entry to store through ads, offers etc.

Use in store marketing for channelling people at desired zones (New Products, Offer Launches)

Customer behaviour at different counters/zones

Automatic identification of loyal customers

* Can be used at entry too

Loyalty Customer Identification, Behaviour Analysis, Dwell Time at different counters

Solution Architecture

WiFi, RFIF, NFC Data Analytics (Architecture)

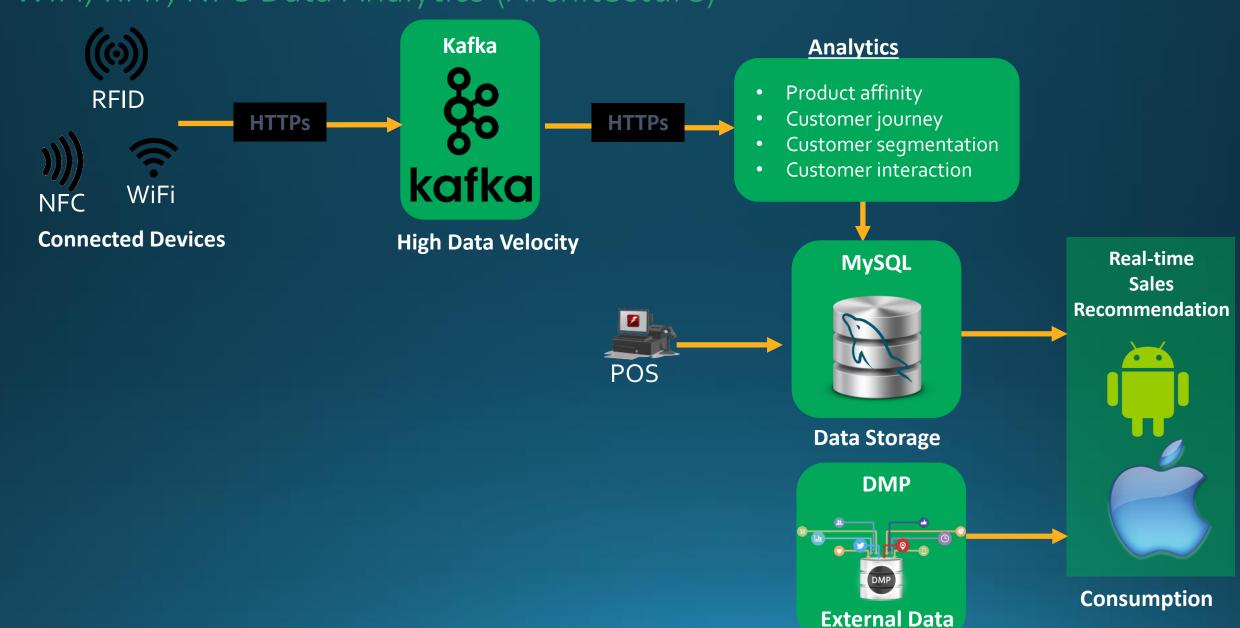


Image & Video Data Analytics (Architecture)

