

CUSTOMER 360 WITH ADOBE ANALYTICS



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CUSTOMER 360 REPORTING WITH ADOBE ANALYTICS

A MEDIA & ENTERTAINMENT USE CASE

- **Customer 360 Analytics: What Inspires and What Challenges**
- **Organizing the Customer Metrics**
- **Adobe Analytics Implementation Strategies for Online and Offline Reporting**
- **The Customer 360 view and Use cases**
- **Q&A**

CUSTOMER 360: WHAT INSPIRES

Brands want to deliver a **Consistent and Relevant Experience to customers across touch points like Content, Commerce, Service & Marketing**. In order to deliver these experiences, touch points needs to have a **unified picture of their customer** from each other.

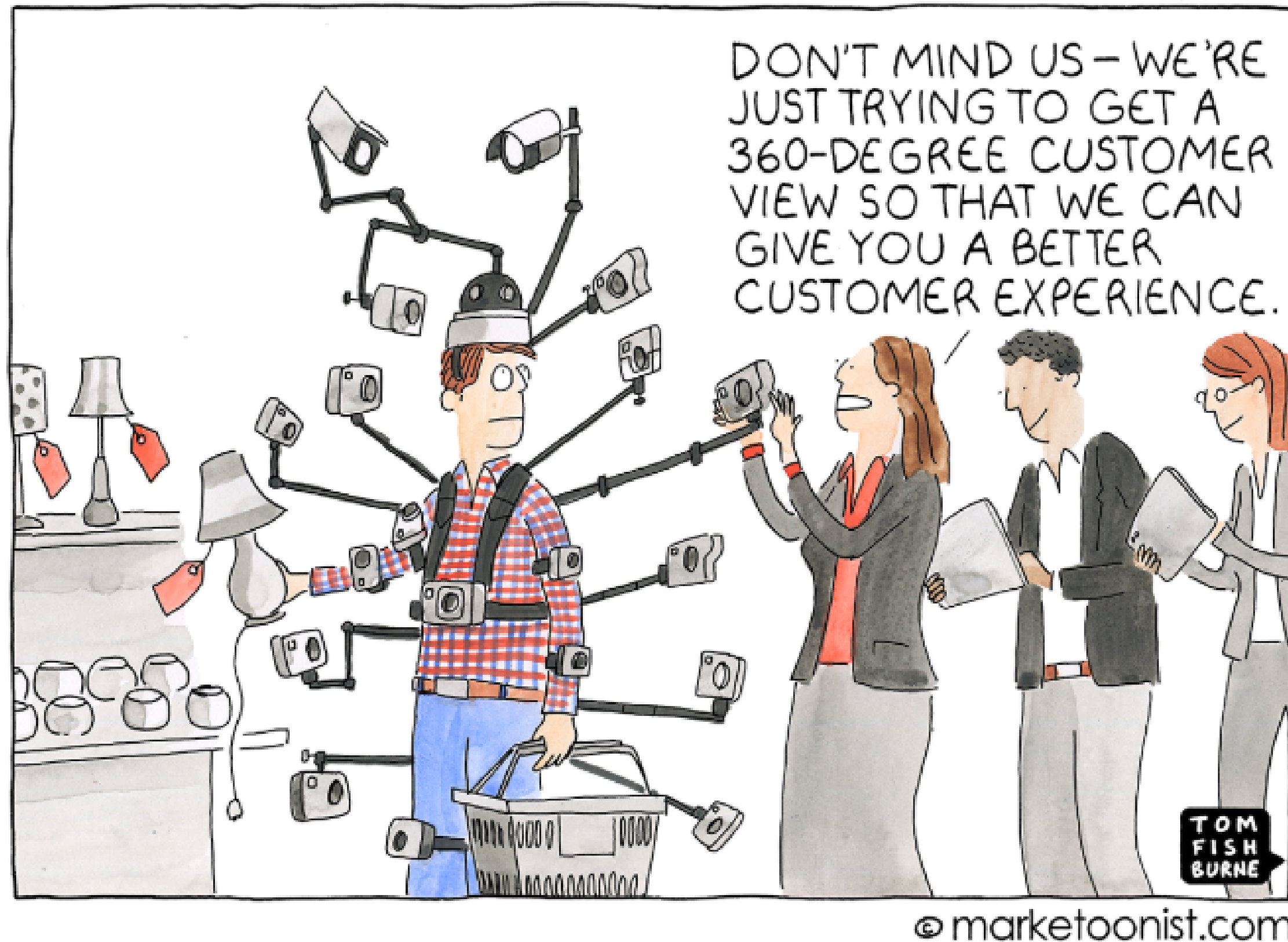
Often Digital Analysts, tangle themselves in combining data sources from Content, Commerce, Service & Marketing, to **find the Fanboys and Advocates of the Brand**.

Putting systems in place to do the mashup will **reduce the cycle of Import-Lookup-Analyze to just Setup-Analyze**



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CUSTOMER 360: AND WHAT CHALLENGES



Customer 360 is easier said than done.

Fewer than 10% of companies have a 360-degree customer view & only 5% use this view to systemically grow their businesses – Gartner

Data Managed in Silos and challenging to implement ETLs for reporting integrations

Challenging to **visualize the unified customer view** across the various touch points

It is never going to be a Full 360. **Touch points will evolve. Some touch points will become obsolete.**

CUSTOMER 360 WITH ADOBE ANALYTICS




A MEDIA & ENTERTAINMENT USE CASE

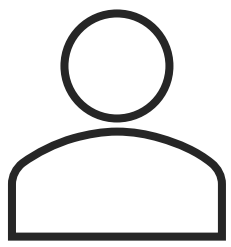
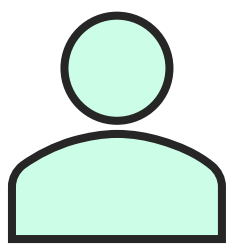
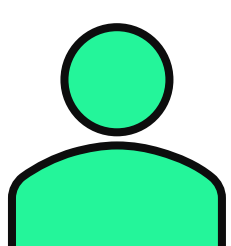


ORGANIZING THE KEY PERFORMANCE INDICATORS: FIND WHAT METRIC MATTERS AND WHERE IT MATTERS






ORGANIZING THE KEY PERFORMANCE INDICATORS AS PER CUSTOMER JOURNEY AND BRAND TOUCH POINTS

-  Unknown visitor Engagement
-  Known User Behavior, but no value exchange
-  Fully Known Customer with Value Exchange

		Marketing	Social	Content	Commerce	Service
Top of Funnel		Mass Marketing Impressions, Mails/SMS/Push Sent	Posts, Reach, Mentions, Impressions by Content type	Visits, Page Views, Bounce Rate	Product Views, Category Views, Brick & Mortar Store Visits	Customer Service Calls Initiated, Chats Initiated
Middle of Funnel		Retargeting Impressions, Mails/SMS/Push Opened	Likes, Comments, Follows	Page Depth, Internal Searches, Time Spent	Cart Adds, Checkouts Initiated, Rewards Earned	Service Call Duration, Chat Engagement Length
Bottom of Funnel		Marketing Campaign Visits to Content, Commerce & Service	Shares, Retweets, Virality, Organic Social Visits to Content, Commerce & Service	Content Subscribers, Lead Gens, Media Consumption	Ticket Purchases, Media Subscriptions, B&M Merch Purchase, Rewards Redeemed	Service Call CSAT, Live Event Survey Feedback, Chat Engagement CSAT

IDENTIFY KPIS WHICH ARE ONLINE/OFFLINE AND WHICH ARE IMPLEMENTED/NOT IMPLEMENTED

-  Unknown visitor Engagement
-  Known User Behavior, but no value exchange
-  Fully Known Customer with Value Exchange

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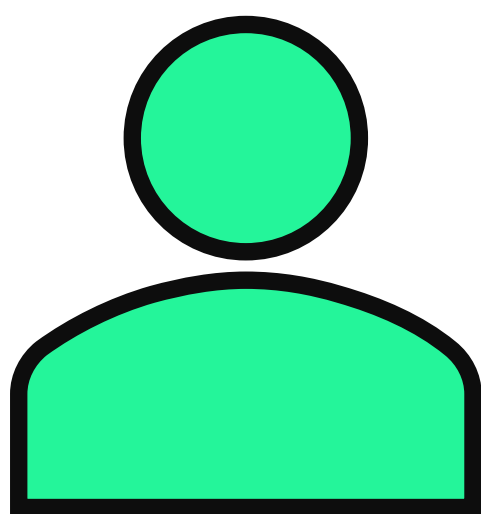


● Live Engagement Metrics Implemented ● Offline Metrics Not Implemented ● Other Digital Metrics Not Implemented



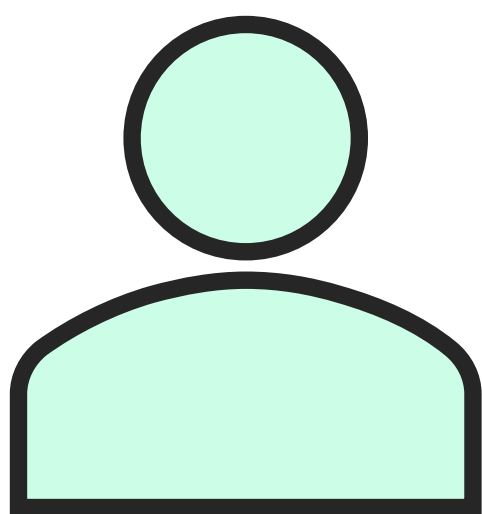
PRIORITIZE THE CUSTOMER 360 REPORTING NEEDS STARTING FROM THE MOST VALUABLE BRAND & CUSTOMER ENGAGEMENTS

High Priority



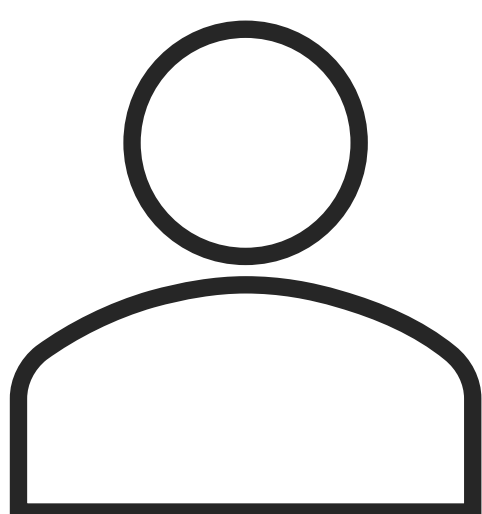
Implement metrics which represent value exchange between your Audience and the Brand. They matter the most. These Customer 360 metrics should help identifying the most valuable customers, for brand advocacy

Moderate Priority






Then Implement metrics which represent behavior or relationships with the end value exchange between the Audience and the Brand. These metrics help identify the NBOs (Next Best Offers), that push the Audience towards value exchange

Low Priority



These metrics may not be associated to an Identified Customer always. The Audience are just in their Awareness stage of the Brand Engagement Journey. But these are useful in optimizing the Top Of Funnel Strategies

-  Unknown visitor Engagement
-  Known User Behavior, but no value exchange
-  Fully Known Customer with Value Exchange

CUSTOMER 360 REPORTING

ADOBE ANALYTICS IMPLEMENTATION STRATEGIES

Live Engagement Tracking Mechanism

Offline and Other Digital Tracking Mechanism

Owned Web / Mobile tracking

Using Traditional:

1. App Measurement for Web
2. Adobe Mobile Services SDK for Mobile
3. Adobe Heart Beat Implementation for Stream Media Consumption

To record digital behavior of customers

Data Connector / Exchange Partners

Direct Integration with Reports of Other Digital Marketing Technologies

Plug and Play Analytics Integration with limited customization abilities

Not all Integrations will connect with Customer IDs

Data Sources – Summary Upload

Any custom data dimensions and metric summary can be uploaded using data sources.

Most commonly used:
Generic – Summary. 3 Dimensions and 3 Metrics

Data Insertion API – Event Tracking

Use Platforms like Mail Man or Post Man to orchestrate an API based data insertion in to Adobe Analytics

This is quiet complex, but can get granular details on offline behavior

CUSTOMER 360 IMPLEMENTATION ARCHITECTURE



Implement Analytics Cloud SDKs in Content Touch Point

Ensure Customer ID and Content Metric Mapping

Customer ID	Time Spent on Site or Page Depth	Media Views/Engagements



Implement Analytics Cloud SDKs in Commerce Touch Point

Ensure Customer ID and Commerce Metric Mapping

Customer ID	Product Views	Merch/Ticket Purchase



Implement Analytics QSPs in Content & Commerce Referring URLs

Ensure Customer ID and Marketing Metric Mapping

Customer ID	Paid Media/Social Visits	Organic Media/Social Visits



Implement ETLs from Service Touch Points to Upload in to AA Data Sources

Ensure Customer ID and Service Metric Mapping

Customer ID	Service Calls/Chats	Service Call/Chats CSAT



Implement ETLs from Marketing Touch Points to Upload in to AA Data Sources

Ensure Customer ID and Marketing Metric Mapping

Customer ID	Mails/SMS/Push Sent	Mails/SMS/Push Click-Thrus



Implement ETLs from Brick & Mortar Touch Points to Upload in to AA Data Sources

Ensure Customer ID and Offline Purchase Metric Mapping

Customer ID	Store Visits	Offline Merch /Ticketing Revenue

Customer ID	Content Metrics	Commerce Metrics	Service Metrics	Marketing Metrics

Assigning Adobe Analytics Success Events, for each of these metrics, will keep the architecture simple and straight forward

CUSTOMER 360 IN ANALYSIS WORKSPACE:






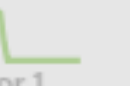
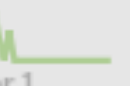
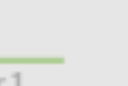
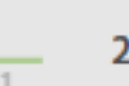
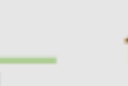
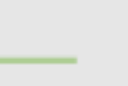
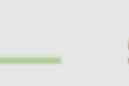
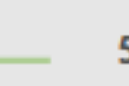

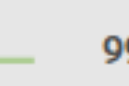
A TABLE OF CUSTOMERS AND TOUCH POINT KPIS

Customer 360 - Across Customer Journey (TOFU, MOFU & BOFU)

Drop a Segment Here (or any other component)

This month
Apr 1 2019 - Apr 30 2019

Freeform Table

	Content Metrics			Commerce Metrics			Service Metrics					Marketing Metrics			
	Page Views / Visits	Site Searches	Video Views	Live Event Ticketing Revenue	Mechandizing Site Revenue	Mechandizing Shop Revenue	Chat Support Initiate	Customer Service Call Initiates	Chat Support CSAT - Average	Customer Service CSAT - Average	Live Experience CSAT - Average	Paid media Retargetting Visits	Paid Social Retargetting Visits	Mails Sent	Mails Click Through
Customer ID Page: 1 / 1 Rows: 50	 10.13	 165	 1,136	 \$1,439	 \$1,121	 \$989	 117	 7,401	 29.63	 14.6	 14	 56	 58	 431	 99
1. customer_16	0.45 4.5%	14 8.5%	135 11.9%	\$52 3.6%	\$125 11.2%	\$86 8.7%	8 6.8%	256 3.5%	0.94 3.2%	0.9 6.2%	1 7.0%	0 0.0%	0 0.0%	35 8.1%	12 12.1%
2. customer_11	0.47 4.7%	6 3.6%	105 9.2%	\$102 7.1%	\$80 7.1%	\$154 15.6%	14 12.0%	640 8.6%	2.04 6.9%	2.0 13.6%	0 2.8%	0 0.0%	0 0.0%	6 1.4%	1 1.0%
3. customer_10	0.49 4.8%	5 3.0%	104 9.2%	\$134 9.3%	\$118 10.5%	\$108 10.9%	5 4.3%	366 4.9%	1.46 4.9%	1.4 9.9%	1 6.0%	3 5.4%	3 5.2%	38 8.8%	8 8.1%
4. customer_12	0.67 6.6%	24 14.5%	102 9.0%	\$119 8.3%	\$108 9.6%	\$38 3.8%	7 6.0%	690 9.3%	2.40 8.1%	2.4 16.2%	2 12.0%	7 12.5%	7 12.1%	31 7.2%	7 7.1%
5. customer_13	0.49 4.8%	23 13.9%	100 8.8%	\$134 9.3%	\$73 6.5%	\$98 9.9%	13 11.1%	618 8.4%	1.47 5.0%	1.4 9.8%	1 8.8%	2 3.6%	1 1.7%	43 10.0%	8 8.1%
6. customer_3	0.84 8.3%	13 7.9%	98 8.6%	\$111 7.7%	\$189 16.9%	\$135 13.7%	16 13.7%	980 13.2%	2.84 9.6%	2.8 19.1%	4 28.5%	1 1.8%	3 5.2%	115 26.7%	23 23.2%
7. customer_15	0.55 5.4%	18 10.9%	96 8.5%	\$189 13.1%	\$75 6.7%	\$0 0.0%	6 5.1%	0 0.0%	0.03 0.1%	0.0 0.0%	0 0.0%	3 5.4%	2 3.4%	0 0.0%	0 0.0%

CUSTOMER 360: ACTIVATING THE ONE PERCENT

“For most companies, their top 1% or 2% of customers contribute 20% to 30% of sales through direct purchases.”

~ From the Book “Rocket – Eight Lessons to Secure Infinite Growth”

Your Top 1% customer, are not measured by just one isolated metric for each touch point.
They are engaged across the touch points.

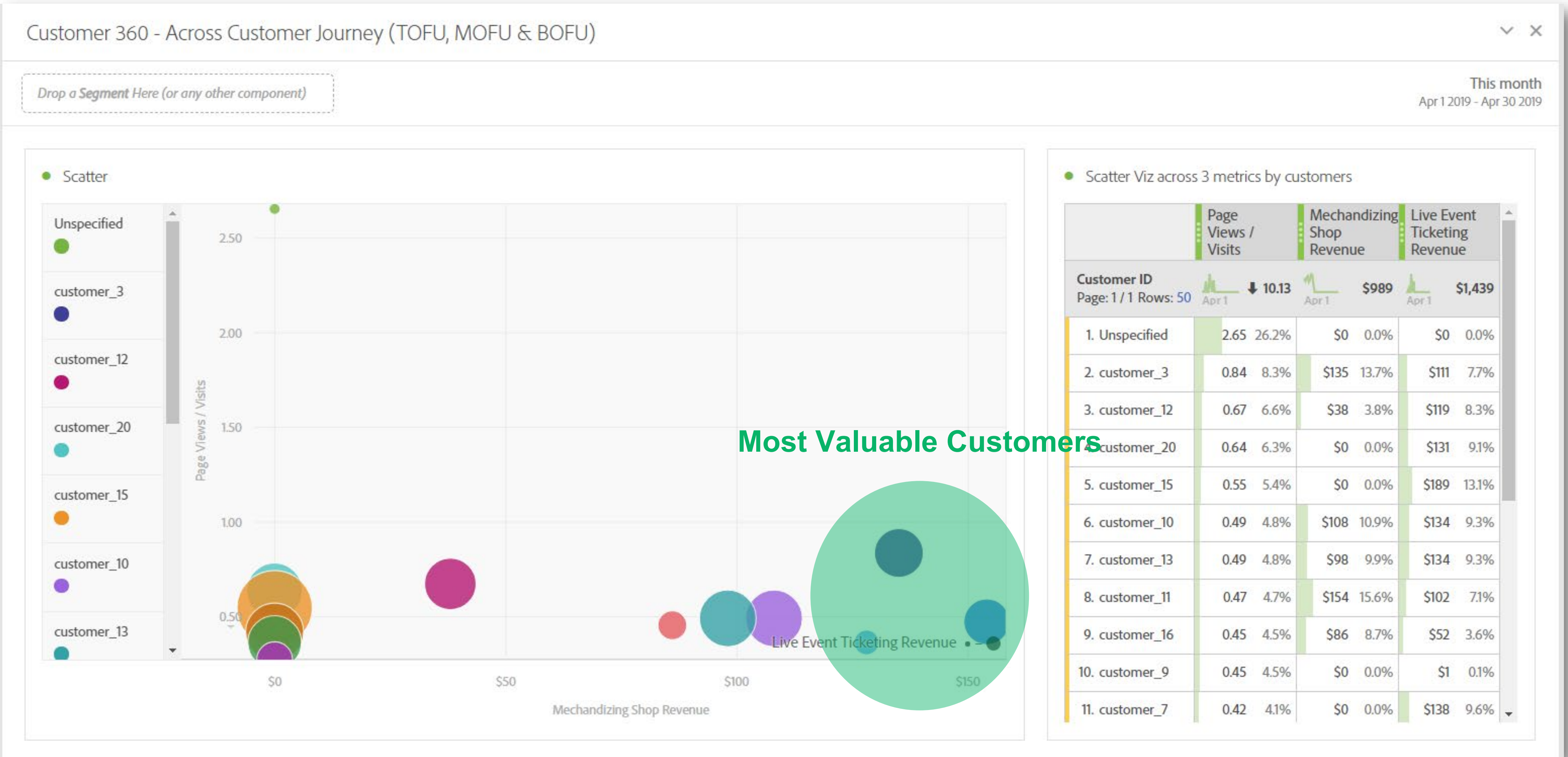
Experience Use Case:

I want to share a token of gratitude to **our fans of the brand, who literally live about us in both the digital and physical world**. They are the people who daily consume us digitally, who collect our merchandize at the stores and who advocate us in the social communities.

It is not resource efficient to delight every customer or prospect, but **if we can delight these fans, they are going to become our Brand Ambassadors and amplify our Brand**.

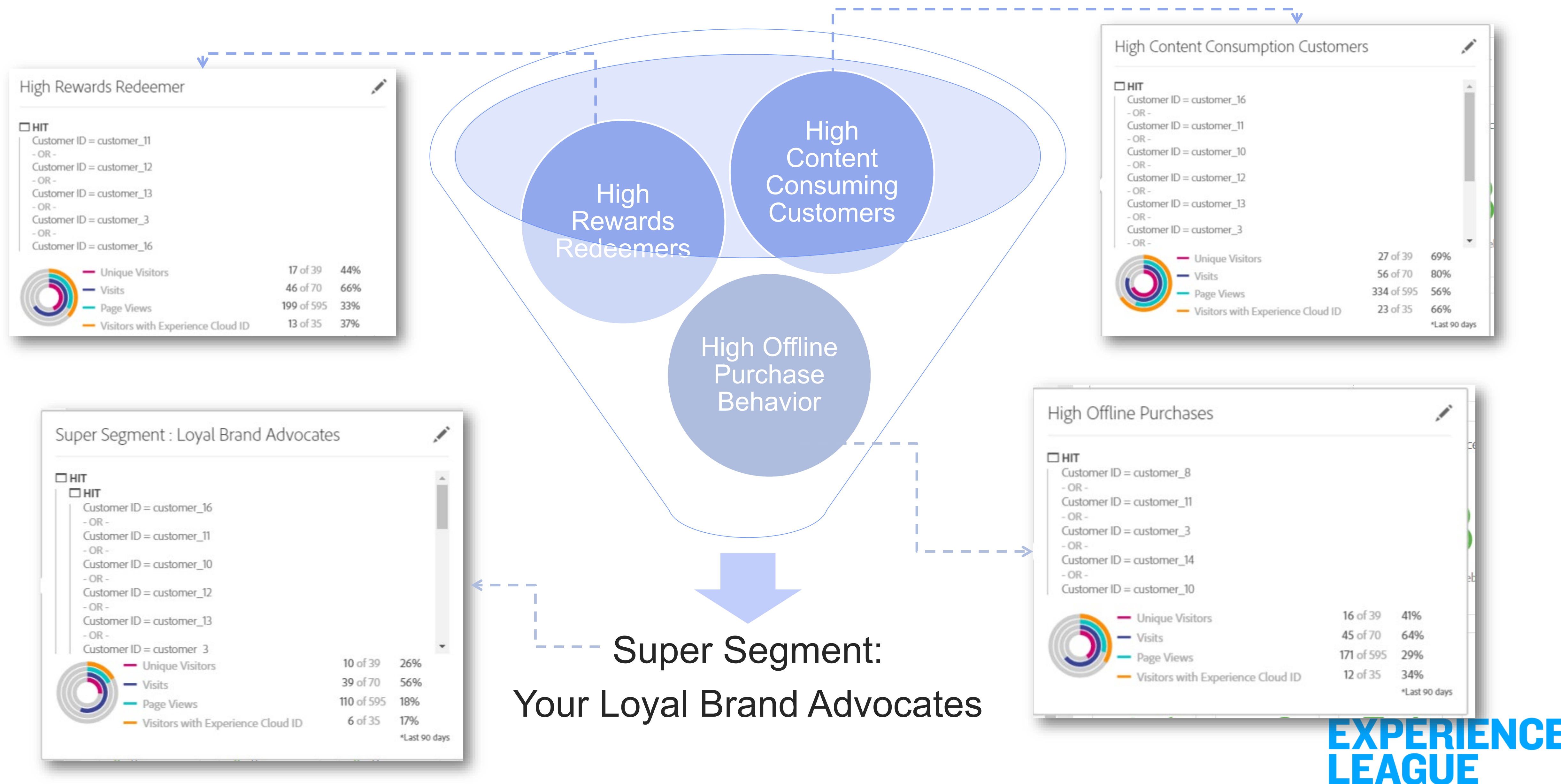
How do we find these fans ???

CUSTOMER 360 IN ANALYSIS WORKSPACE: SCATTER VISUALIZE YOUR CUSTOMERS ACROSS 3 METRICS



CUSTOMER 360:

SUPER SEGMENTS COMBINE ONLINE AND OFFLINE BEHAVIOR ACROSS TOUCH POINTS



CUSTOMER 360:

SUPER SEGMENT ACTIVATION LOCATIONS FOR RETARGETING

Super Segment
Applied on to the
customer 360 table

Segment

Super Segment : Lo... *Drop a Segment Here (or any other component)*

Freeform Table

	Page Views / Visits	Site Searches	Video Views	Live Event Ticketing Revenue	Mechandizi Site Revenue	Mechandizi Shop Revenue	Chat Support Initiate
Customer ID Page: 1 / 1 Rows: 50 1-2 of 2	3.00 Apr 1	19 Apr 1	203 Apr 1	\$213 Apr 1	\$269 Apr 1	\$289 Apr 1	30 Apr 1
1. customer_11	1.08 36.1%	6 31.6%	105 51.7%	\$102 47.9%	\$80 29.7%	\$154 53.3%	14 46.7%
Browser Type Page: 1 / 1 Rows: 5 1-1 of 5	8.67 Apr 1	6 Apr 1	105 Apr 1	\$102 Apr 1	\$80 Apr 1	\$0 Apr 1	14 Apr 1
1. Google	8.67 100.0%	6 100.0%	105 100.0%	\$102 100.0%	\$80 100.0%	\$0 0.0%	14 100.0%
MID Page: 1 / 1 Rows: 3	8.67 Apr 1	6 Apr 1	105 Apr 1	\$102 Apr 1	\$80 Apr 1	\$0 Apr 1	14 Apr 1
1. 83447213...	3.67 42.3%	5 83.3%	45 42.9%	\$51 50.0%	\$18 22.5%	\$0 0.0%	4 28.6%
2. 43013871...	3.67 42.3%	1 16.7%	60 57.1%	\$51 50.0%	\$62 77.5%	\$0 0.0%	10 71.4%
3. 19566260...	1.33 15.4%	0 0.0%	0 0.0%	\$0 0.0%	\$0 0.0%	\$0 0.0%	0 0.0%
2. customer_3	1.92 63.9%	13 68.4%	98 48.3%	\$111 52.1%	\$189 70.3%	\$135 46.7%	16 53.3%

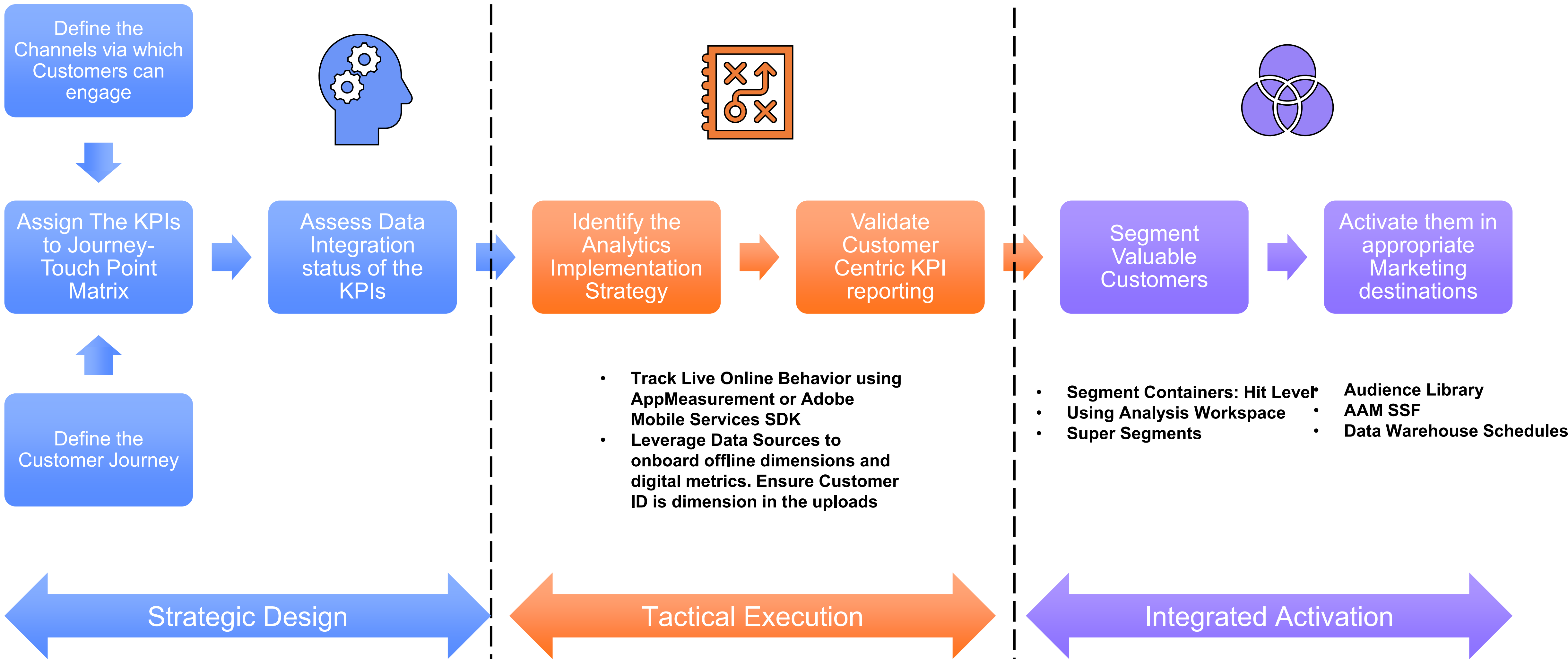
For Retargeting,
MIDs (online device
ID/Cookie) of the
Customer, based on
offline + online
segmentation

Activation Strategies

1. With Audience Library Sharing integration, Your Fan Audiences can be democratized across Experience Cloud Products (AAM for Marketing Tech Destination Mapping, AT for Internal Experience Targeting, ACS for Email Targeting)
2. Alternatively, can be sent to the Digital Marketing Technology FTP destinations with MID and Customer ID using Data Warehouse Schedules.

Offline metrics are not associated
with online device identifier. But
the Hit level segments can
retrieve the MID columns

CUSTOMER 360: SUMMARIZING DESIGN AND ACTIVATION WORKFLOW





Knowledge is
having the right
answer.

Intelligence is
asking the right
question.

APPENDIX

- For Online implementation in Web and Mobile:
https://marketing.adobe.com/resources/help/en_US/sc/implement/
- For Offline Data Upload using Data Sources:
https://marketing.adobe.com/resources/help/en_US/sc/datasources/
- White Paper on Customer Intelligence 360: <https://www.adobe.com/in/experience-cloud/use-cases/customer-intelligence.html>
- For Segmentation using Adobe Analytics:
https://marketing.adobe.com/resources/help/en_US/analytics/segment/
- For Audience Library:
https://marketing.adobe.com/resources/help/en_US/mcloud/audience_library.html
- For Experience Cloud ID Service Implementation:
https://marketing.adobe.com/resources/help/en_US/mcvid/

APPENDIX

<div> <div> Restart Processing Complete Processing </div> <div> Deactivate </div> </div> <div> Type: Generic Data Source (Summary Data Only) Activated: 2019-04-11 </div>		<div> <input type="checkbox"/> Stop processing on errors Configure FTP Info </div>
Files In Processing Queue		
1.	rewards_1.txt	
2.	rewards_2.txt	
<div> <div> Restart Processing Complete Processing </div> <div> Deactivate </div> </div> <div> Type: Generic Data Source (Summary Data Only) Activated: 2019-04-11 </div>		<div> <input type="checkbox"/> Stop processing on errors Configure FTP Info </div>
Files In Processing Queue		
1.	store_1.txt	
<div> <div> Restart Processing Complete Processing </div> <div> Deactivate </div> </div> <div> Type: Generic Data Source (Summary Data Only) Activated: 2019-04-11 </div>		<div> <input type="checkbox"/> Stop processing on errors Configure FTP Info </div>
Files In Processing Queue		
1.	customer_service_1.txt	
2.	customer_service_2.txt	
3.	customer_service_3.txt	

```
1 # Generic Data Source (Summary Data Only) template file (user: 300087614 ds_id: 6)
2 # Customer ID MID Page Name Customer Service Call Initiates Customer Service Call CSAT
3 Date Evar 51 Evar 52 Evar 1 Event 113 Event 114
4
5
```

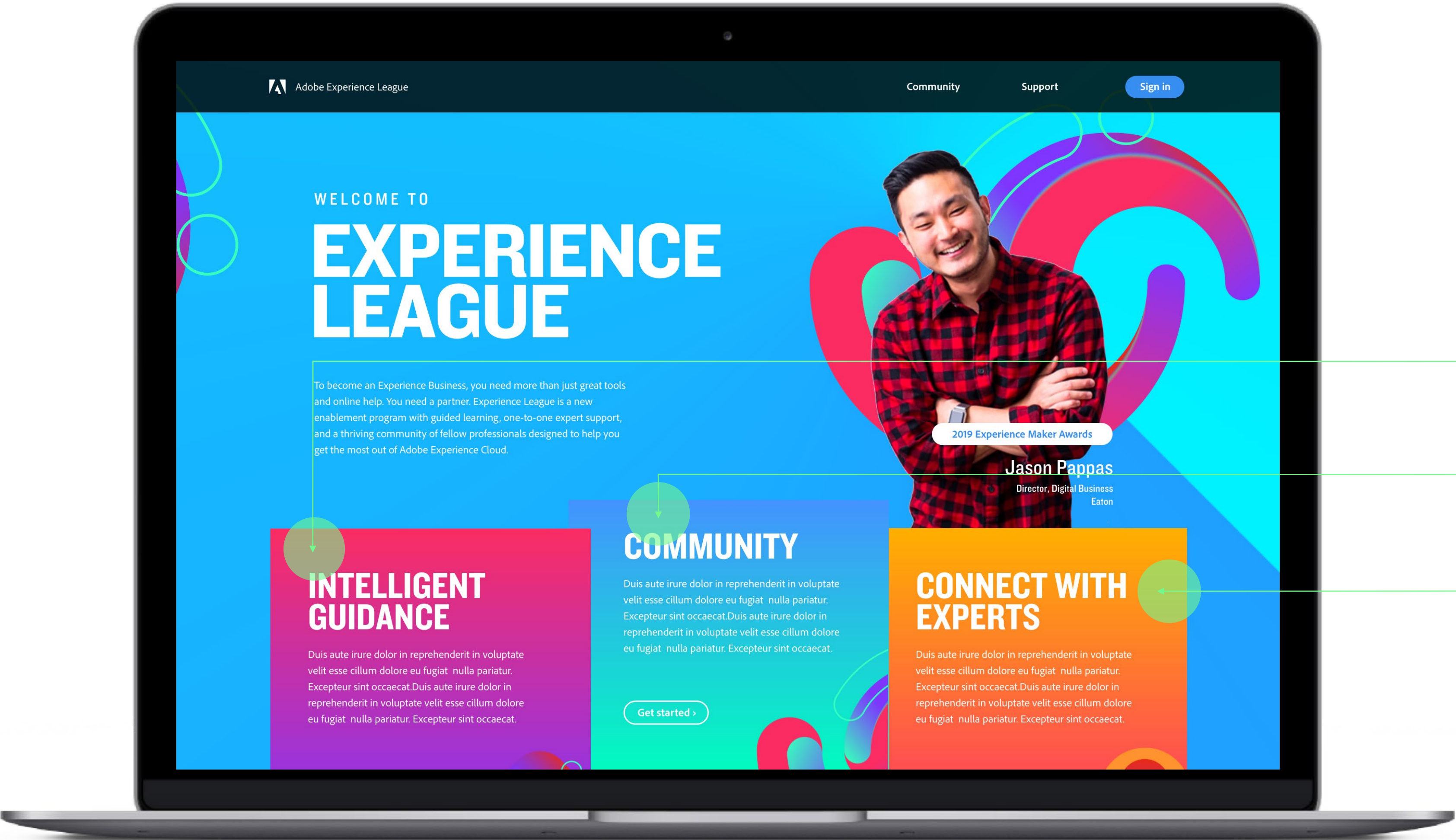
Data Sources Sample File

Data Sources Setup

Experience League is our new success program, **deeply personalized** for you to get to **instant value** with Adobe Experience Cloud.

EXPERIENCE LEAGUE

 experienceleague.adobe.com



Recommended step-by-step learning and events based on your preferences

Connection to a community of 150,000+ peers to get you answers in minutes

One location to connect with Experts ready to work with your company

EXPERIENCE LEAGUE COMMUNITY MEETUP

ADOBE ANALYTICS

Raghavan R P | Senior Business Consultant



DATA EXTRACTION STRATEGIES - RIGHT FIT

-
-
-

1

What options do I
have to export data?

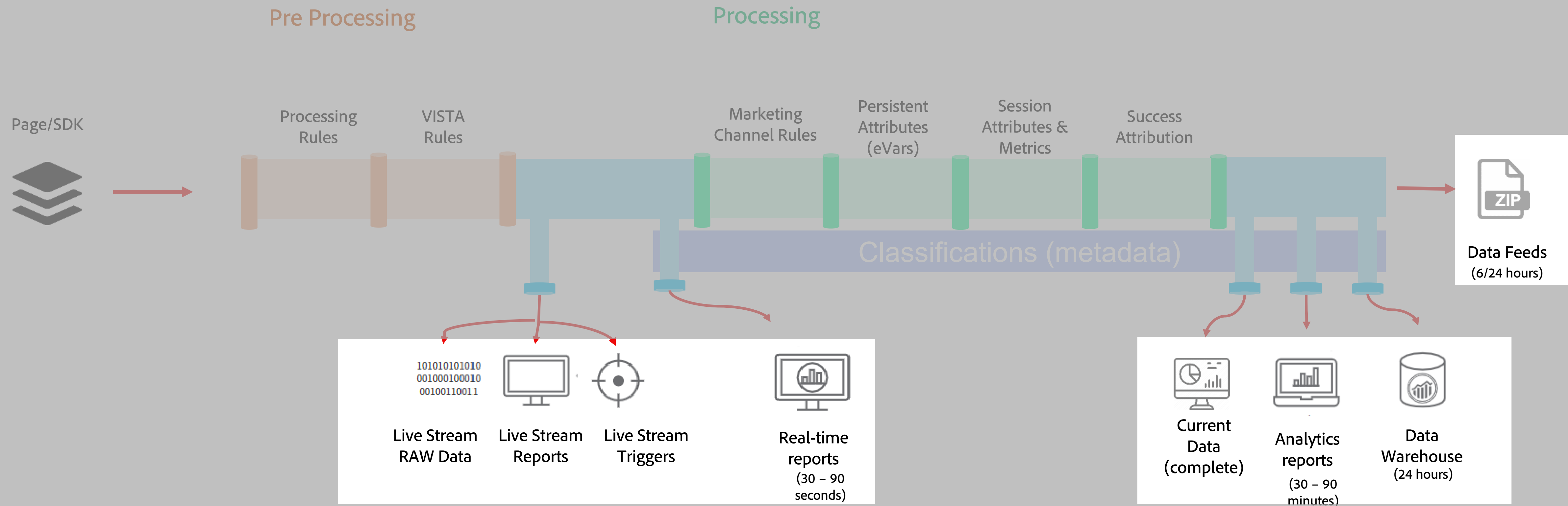
2

Which options
should I use?

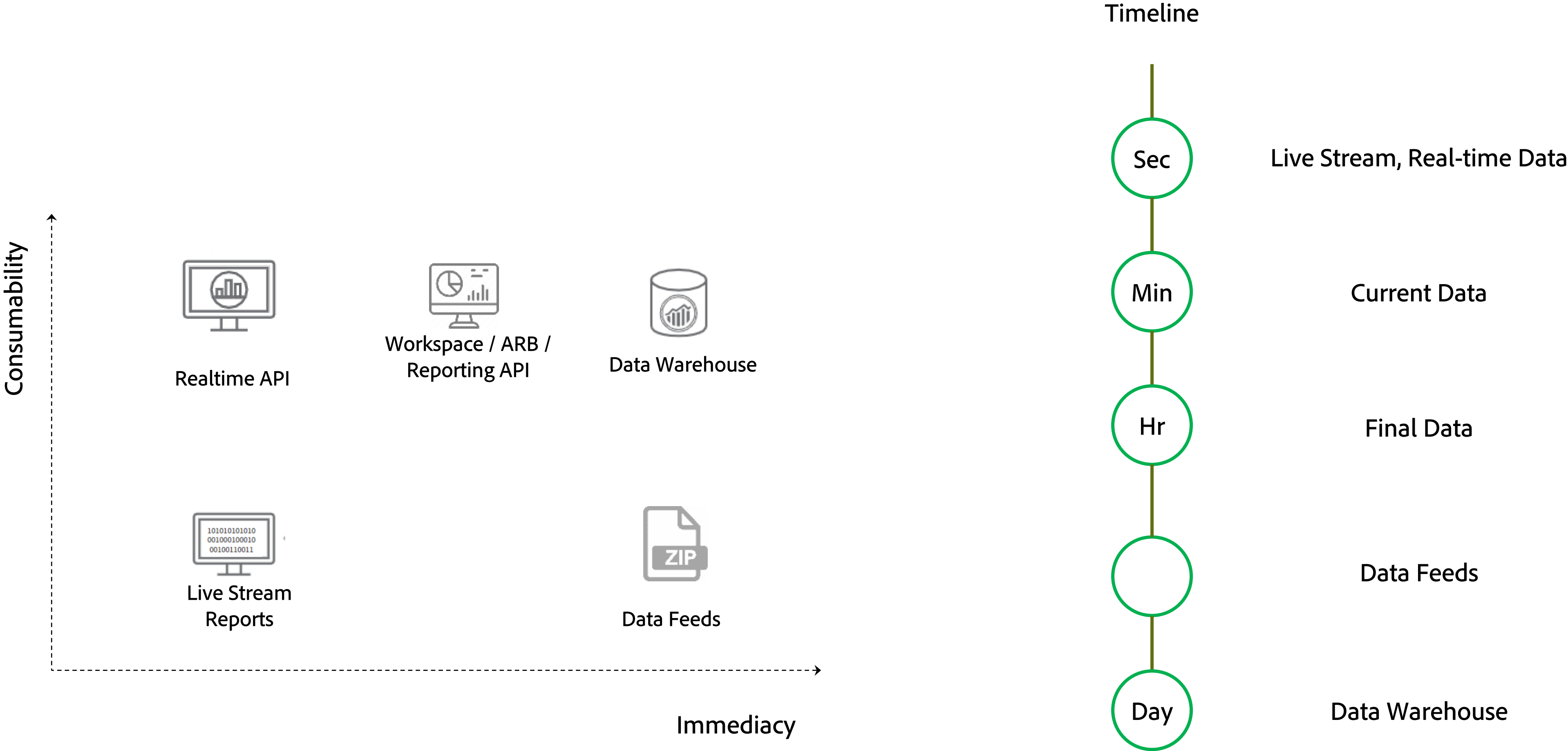
3

What are the best
practices?

ARCHITECTURE - GETTING THE DATA OUT



LONGER YOU WAIT FOR PROCESSING, CONTEXT RICH THEY ARE





LIVE STREAMS

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LIVE STREAMS

Adobe Analytics Live Streams gives you access to hit-level, semi-processed data in near-real time.

REAL-TIME MONITORING

Visualize the impact of your campaigns or web and mobile activity

PERSONALIZATION

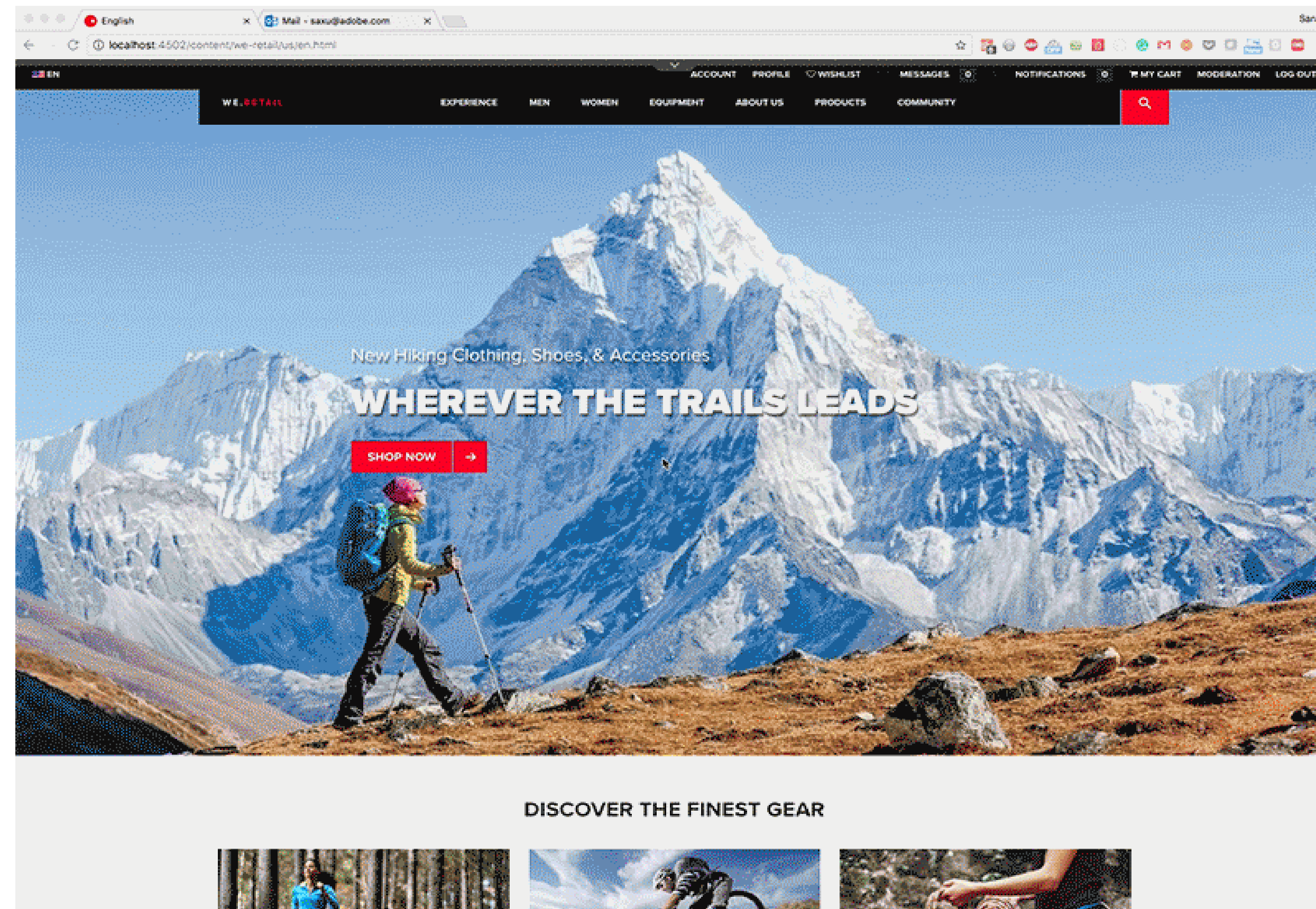
Deliver the most effective content and offers to every customer at the right time

CROSS-SOLUTION

Access hit-level events from other Adobe Experience Cloud Solutions

LIVE STREAM – USE CASES

“Shopping cart abandonment — when shoppers put items in their online shopping carts, but then leave before completing the purchase — is the bane of the online retail industry.” — Cooper Smith



MORE USE CASES

- Remarketing & Retargeting
 - Customers with personalized content and ads based on their preceding session interactions.
- Call Center Enrichment
 - Enrich your call center customer interactions with nearreal-time data streamed from your digital properties



ANALYTICS API

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ANALYTICS API

- Creation of data rich user interfaces that you can use to manipulate and integrate data. You can also create reports to explore, get insights, or answer important questions about your data.

Reporting API

Primarily used for reporting requests, providing maximum flexibility and configuration options. Programmatic access to UI reports, including Real-time, standard reporting, and Data Warehouse

- Executive dashboards
- Custom reporting platforms
- Experience Cloud integrations

Revenue



AOV



Summary

REVENUE:
660

ORDERS:
1.8k

AOV:
3.3M

UNITS:
490

UPO:
2.6M

ASP:
440k

Top Products

Nullam ante	2.0k
Sed nulla	2.0k
Sed sapien	1.7k
Aenean nec	1.6k
Fusce blandit	1.6k
Integer interdum	1.3k
Vivamus varius	770

Orders



UPO



Units



ASP



Unique Visitors

64,855 2% YoY

Application Starts

25,154 1% YoY

Complete Rate

9.13% LAST WEEK

8.72% LAST MONTH

8.74% LAST 13-WEEKS

Application Completes

2,211 0% YoY

Conversion Rate

0.02% LAST WEEK

0.02% LAST MONTH

0.04% LAST 13-WEEKS

Visits

795,957 10% YoY

Self-Service Transactions

Mobile App Launches 5,067 6% YoY

Logins 1,878 4% YoY





DATA FEEDS & DATA WAREHOUSE

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DATA FEEDS

Batched delivery of raw, clickstream data. Each data feed comprises the raw data for a single report suite.

- Bulk Exports
- Integrating Analytics data into other data sets
- Custom processing (attribution)
- Validation/Troubleshooting

DATA WAREHOUSE

- Adobe Data Warehouse is a processed flexible data set (multi-level breakdown)
- Reports can be pulled by filtering the data and available through email / FTP
- Processing time may vary depending on the complexity of the data pull, max. up to 72 hours
- You can apply available segments and granularity by hourly, daily, weekly, monthly and yearly

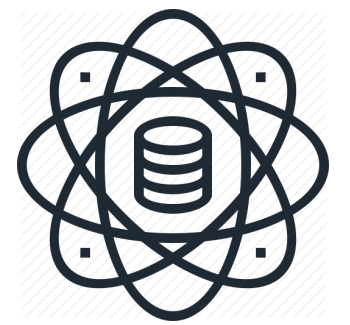
USE CASE

Solution



ENTERPRISE BI

- Integrate digital data with enterprise reporting
- *Build end-to-end dashboards*



DATA SCIENCE

- Input data for your models
- Enables faster model delivery



TROUBLESHOOTING










- Access to some special variables

Overview

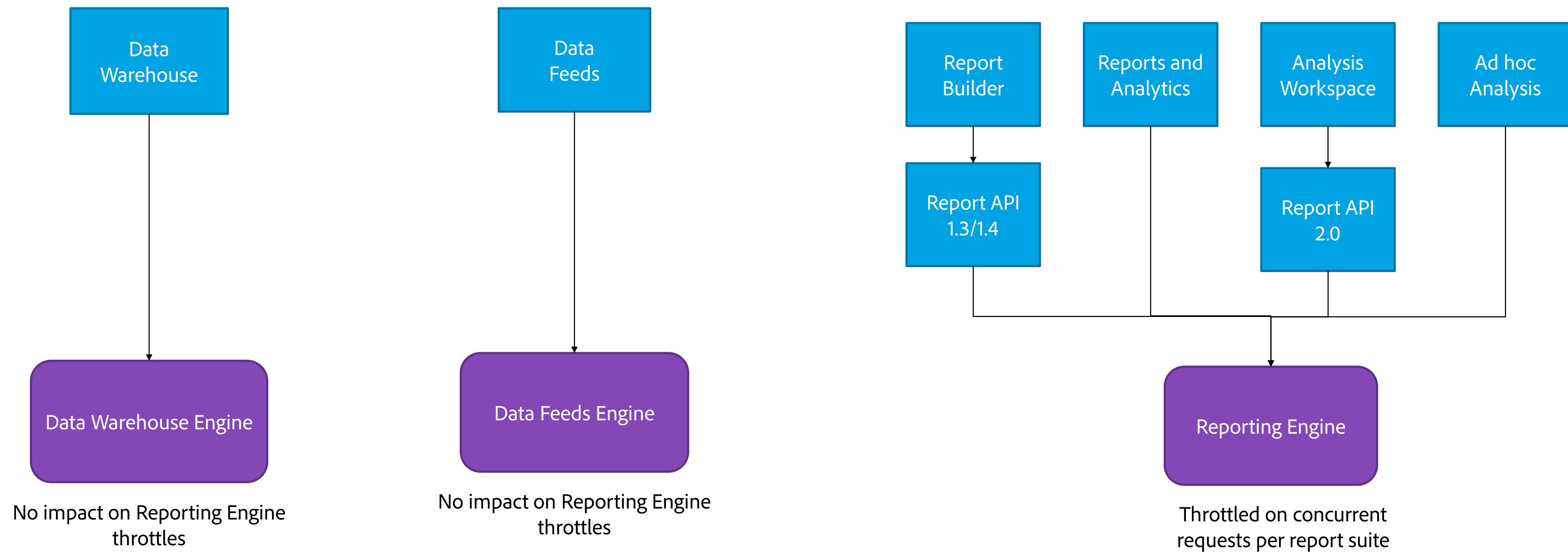
Technology

- Export processed data quickly
- Multiple formats available for exports
- Unlimited breakdowns (DWH)
- Scheduler option available to push to FTP
- Ability to deliver large files to FTP
- Manage request queue

DATA EXPORTING OPTIONS

		Live Stream	Data Feeds	API	Data Warehouse
	Data	<i>Individual Hits</i>	<i>Large Data Files</i>	<i>Aggregated Data</i>	<i>Large Data Files</i>
	Time	<i>Seconds</i>	<i>Hours</i>	<i>Minutes to Hours</i>	<i>Minutes to Hours</i>
	Format	<i>JSON</i>	<i>TAB</i>	<i>JSON</i>	<i>Multiple formats</i>
	Delivery	<i>Constantly Pushed</i>	<i>Scheduled Push</i>	<i>API Pull</i>	<i>Email or FTP</i>
	Columns	<i>300+</i>	<i>900+</i>	<i>Unlimited</i>	<i>Unlimited</i>
	Filter	<i>Row & Column Filter</i>	<i>Column Filter</i>	<i>Row & Column Filter</i>	<i>Segment</i>
	Processed	<i>Partially Processed</i>	<i>Hit-level</i>	<i>Partially or Fully Processed</i>	<i>Fully Processed</i>
	Frequency	<i>Real-Time or Hit Smoothing</i>	<i>Hourly or Daily</i>	<i>Real-Time or Post-Processed</i>	<i>Monthly, Yearly, or On Demand</i>
	Failover	<i>Re-Connect: 5 Minute Buffer</i>	<i>Re-Request Data File</i>	<i>Re-Request Data Via Code</i>	<i>Re-Request Data File</i>

REPORTING ENGINE





BEST PRACTICES

Bē
Jon Noorlander

DATA FEEDS & DATA WAREHOUSE BEST PRACTICES



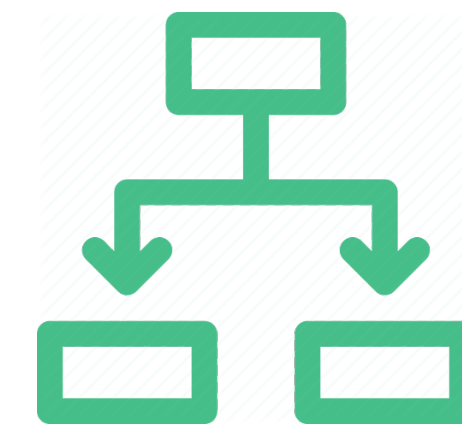
Delivery
Time



Traffic Spikes



Clean &
Current



Breakdown

WORKSPACE – BEST PRACTICES

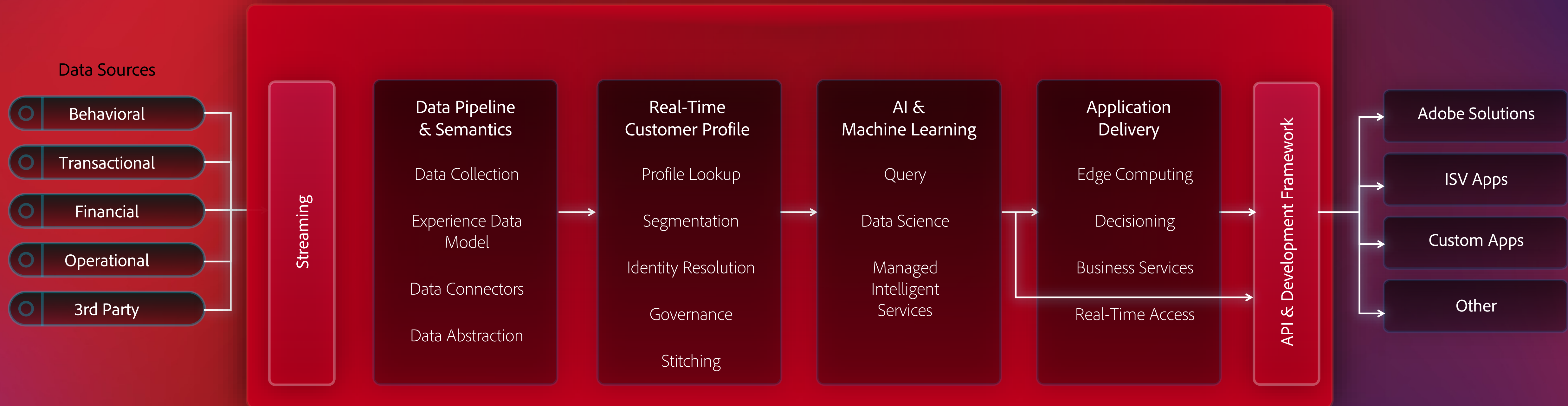
- Disable Anomaly Detection when not needed
- Minimize panels if not needed
- Prefer “equals” to other forms of string searches. Equals is faster than:
 - “contains” , “contains-any-of” , “ends-with” ,
 - Slowest of all: “contains-one-of” , “contains-all-of” ,

REPORT BUILDER – BEST PRACTICES

- Avoid reporting monthly data on a daily basis
- Avoid reporting repeatedly requesting unchanging data
- Use Data Warehouse for data export when possible
- Use Data Feeds for hourly data when possible



Adobe Experience Platform

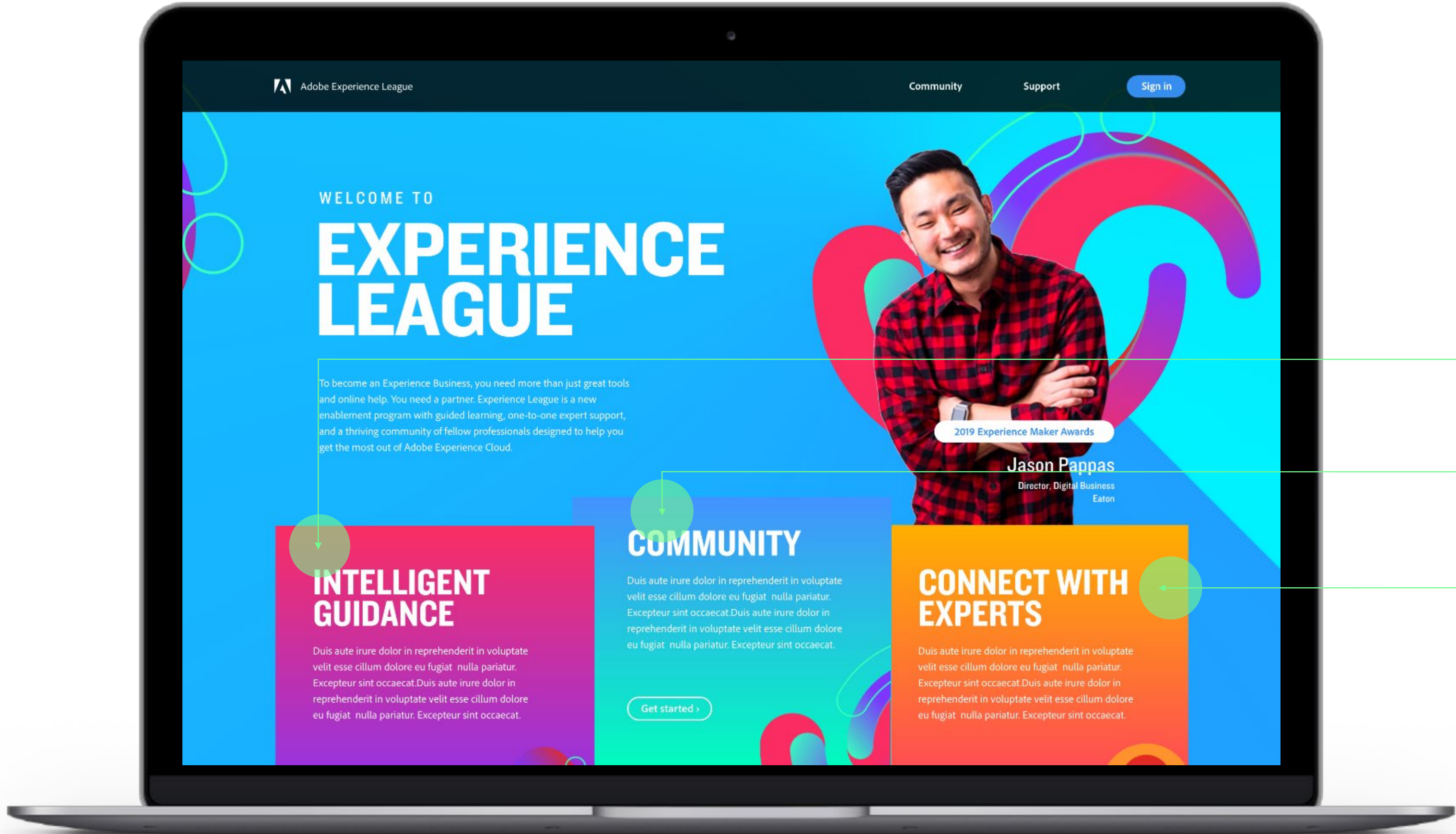


An open, intelligent, and real-time platform for customer experience

Experience League is our new success program, **deeply personalized** for you to get to **instant value** with Adobe Experience Cloud.

EXPERIENCE LEAGUE

 experienceleague.adobe.com



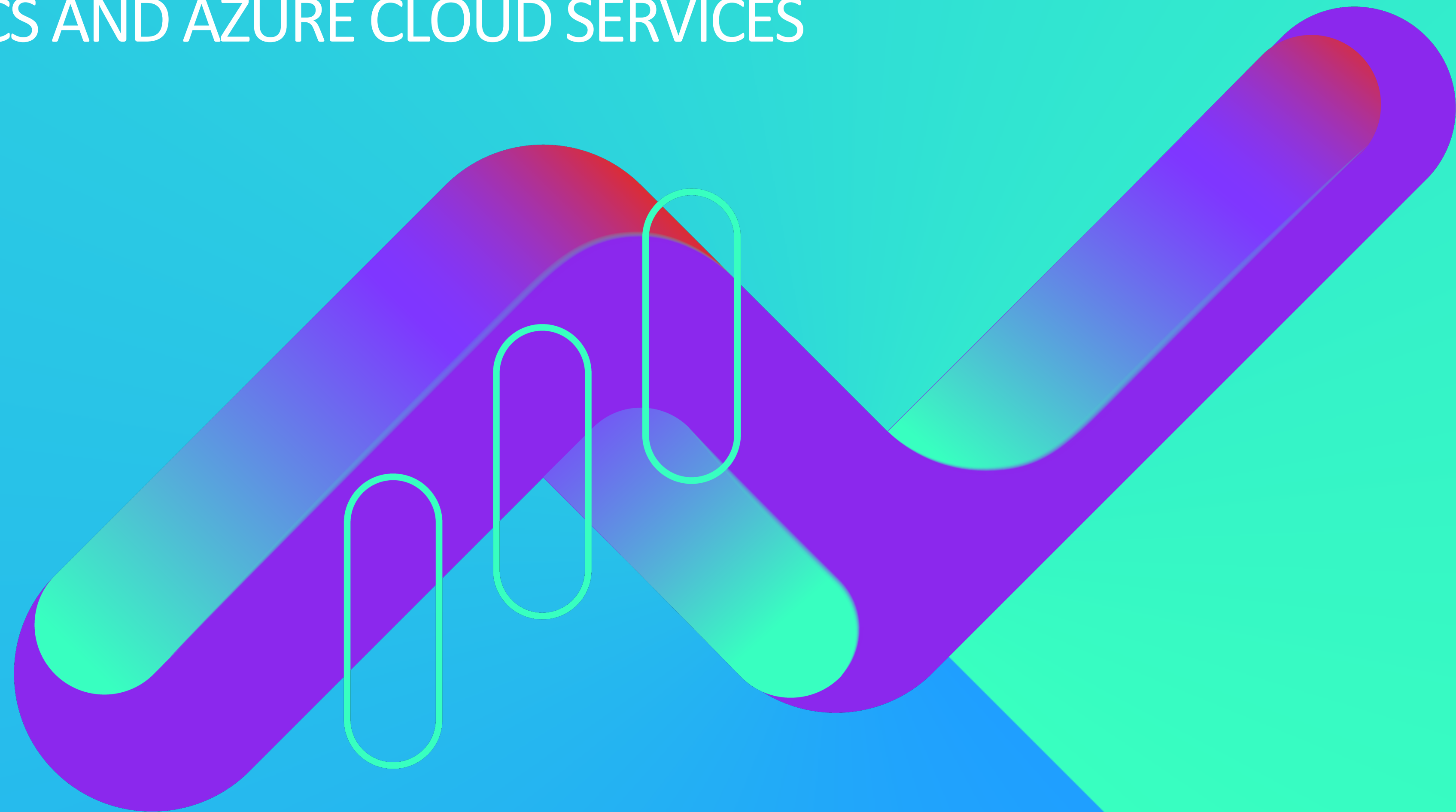
Recommended step-by-step learning and events based on your preferences

Connection to a community of 150,000+ peers to get you answers in minutes

One location to connect with Experts ready to work with your company

REAL TIME TEXT ANALYTICS

WITH ADOBE ANALYTICS AND AZURE CLOUD SERVICES



ASWIN KUMAR CS
ANALYTICS CONSULTANT
ADOBE CONSULTING SERVICES

REAL TIME TEXT ANALYTICS

WITH ADOBE ANALYTICS AND AZURE CLOUD SERVICES

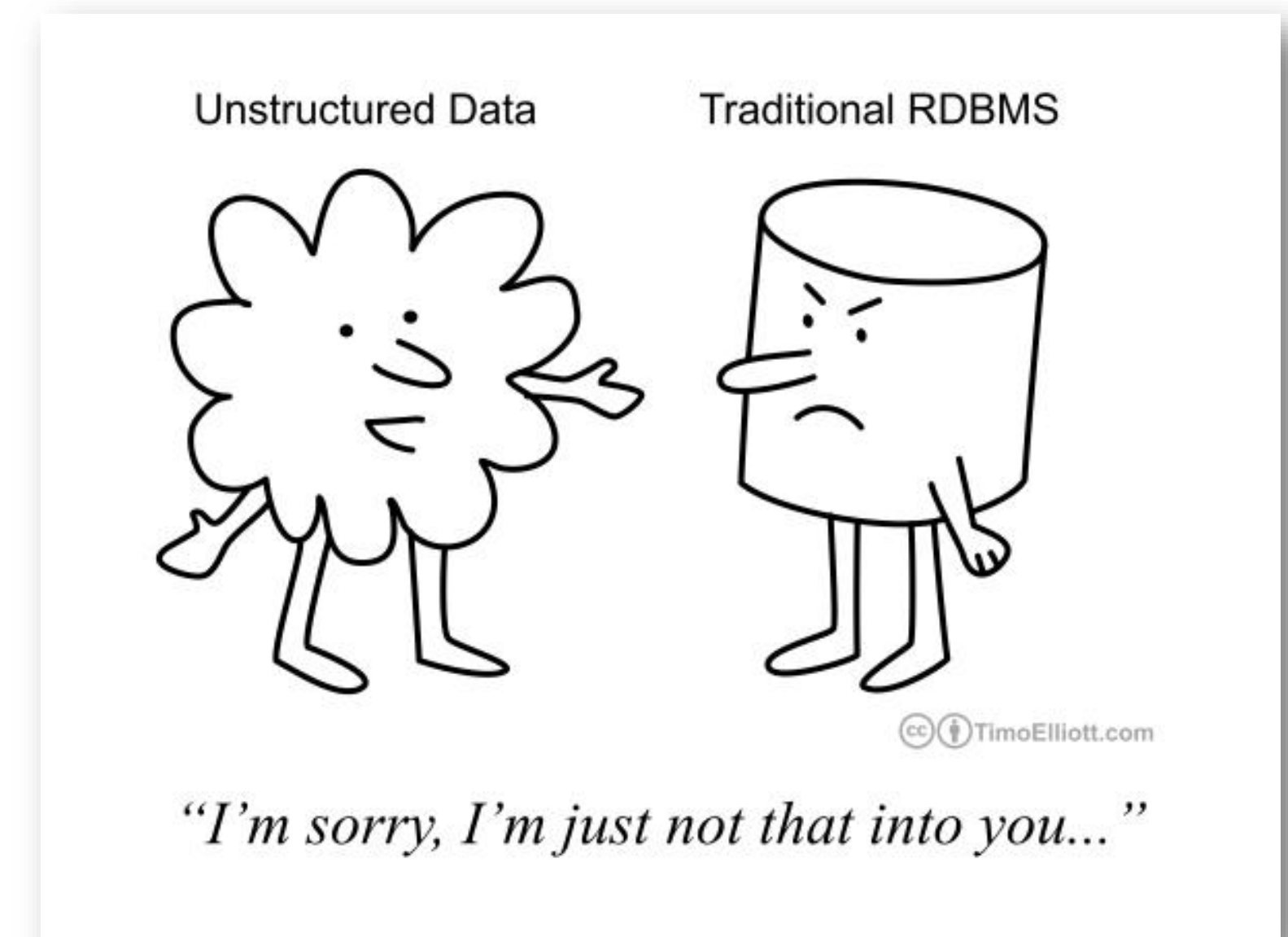
- **Evolution of the Text Analytics process**
- **Use Case: Text Analytics for Customer Experience**
- **Implementation Overview**
- **Tech Requirements**
- **Implementation Demo**
- **Value Realization**
- **Q&A**

EVOLUTION OF TEXT ANALYTICS PROCESS

More than 70% of world's digital data are unstructured, comprising of text, images, video, voice & audio.

Several processes have evolved to fit the unstructured data in to a structured format to gain actionable insights out of it

Text Analytics is a process of **extracting high-quality information like key phrases, process topics, sentiments, languages etc. from unstructured text data.**

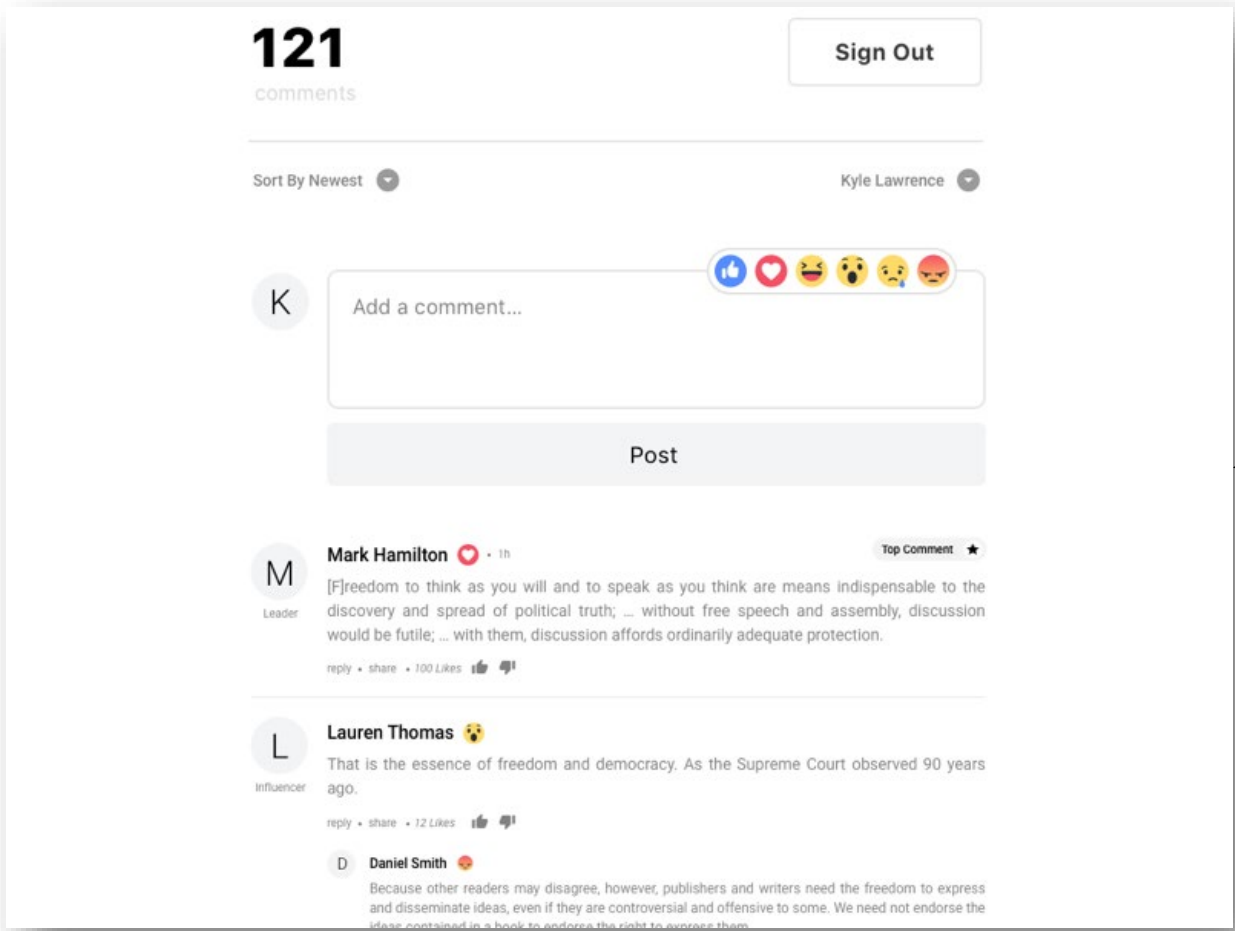


EVOLUTION OF TEXT ANALYTICS PROCESS

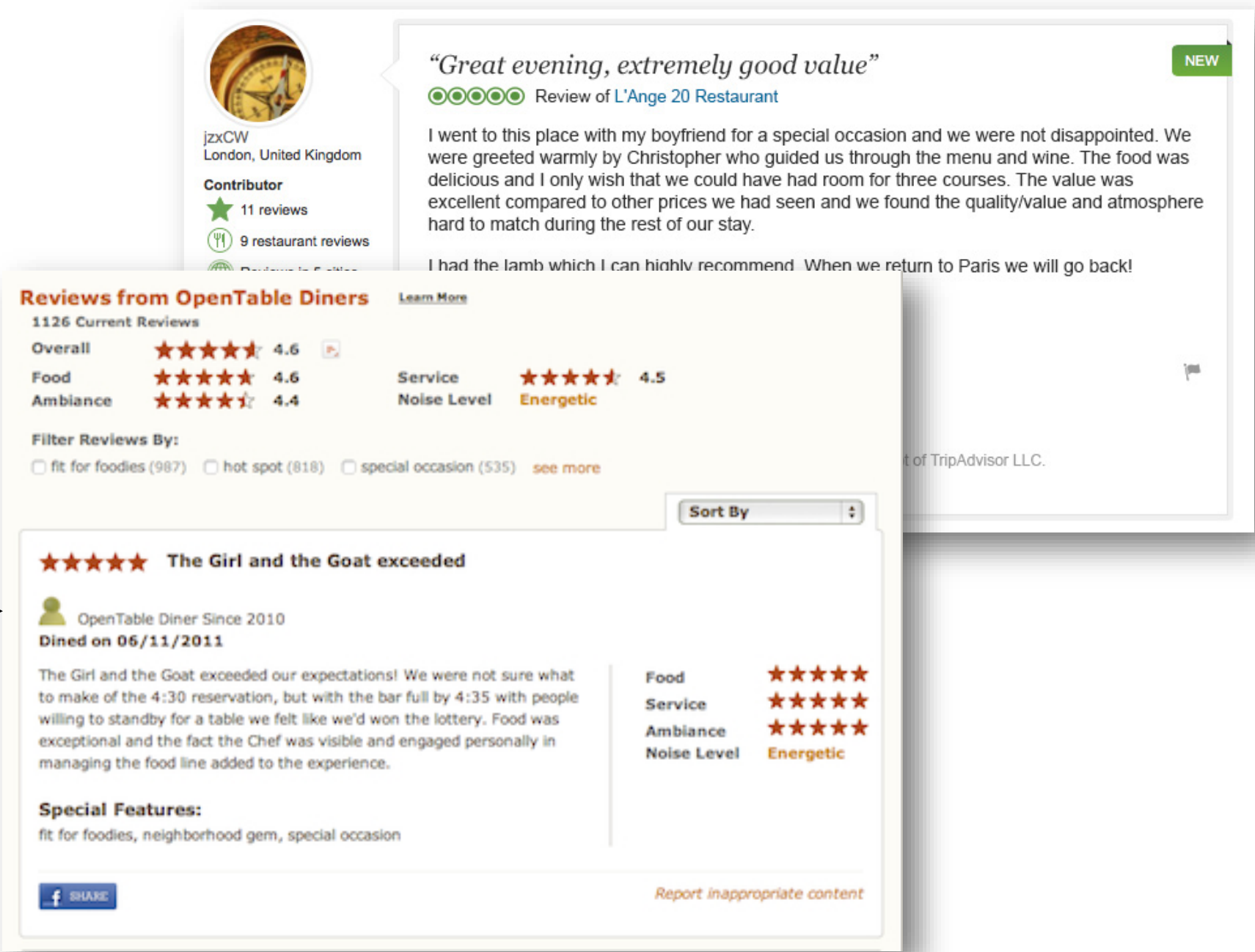
Sources of First Party Unstructured Customer Data



Product Reviews



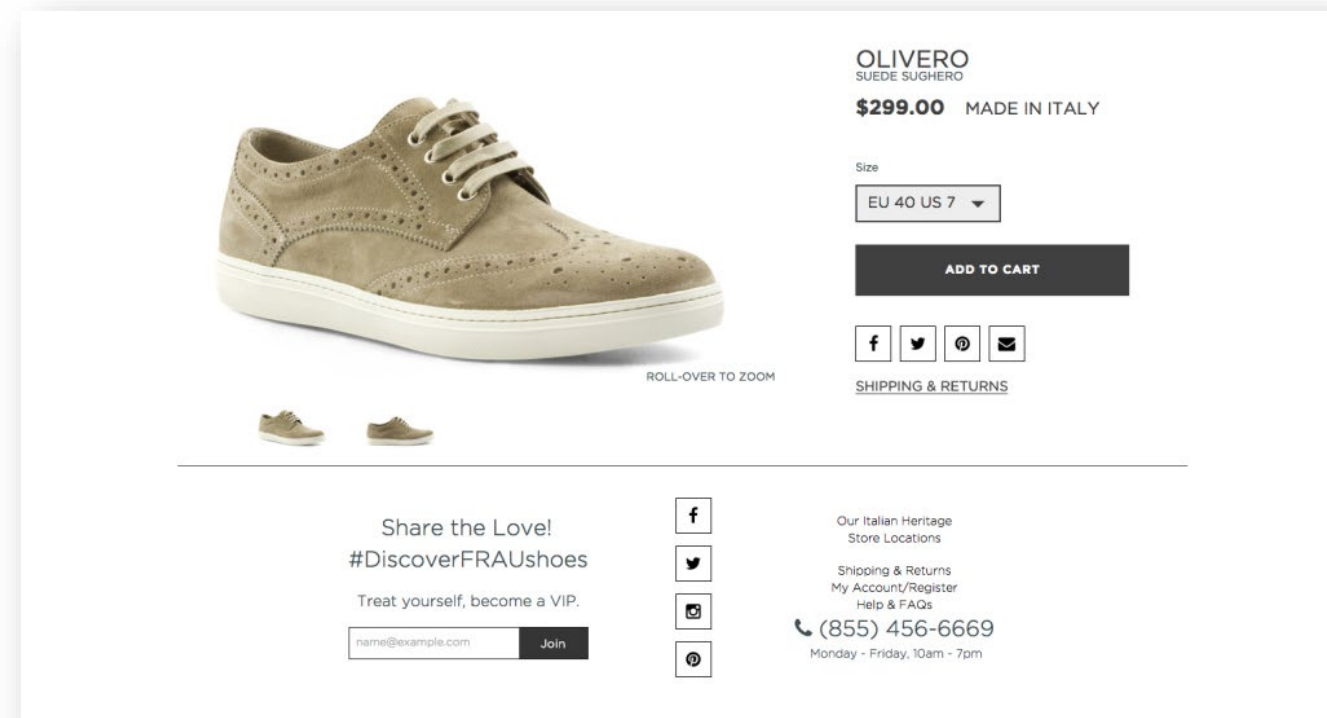
Media Content Reviews



Hotel, Location & Restaurant Reviews

TEXT ANALYTICS FOR CUSTOMER EXPERIENCE

Product Page



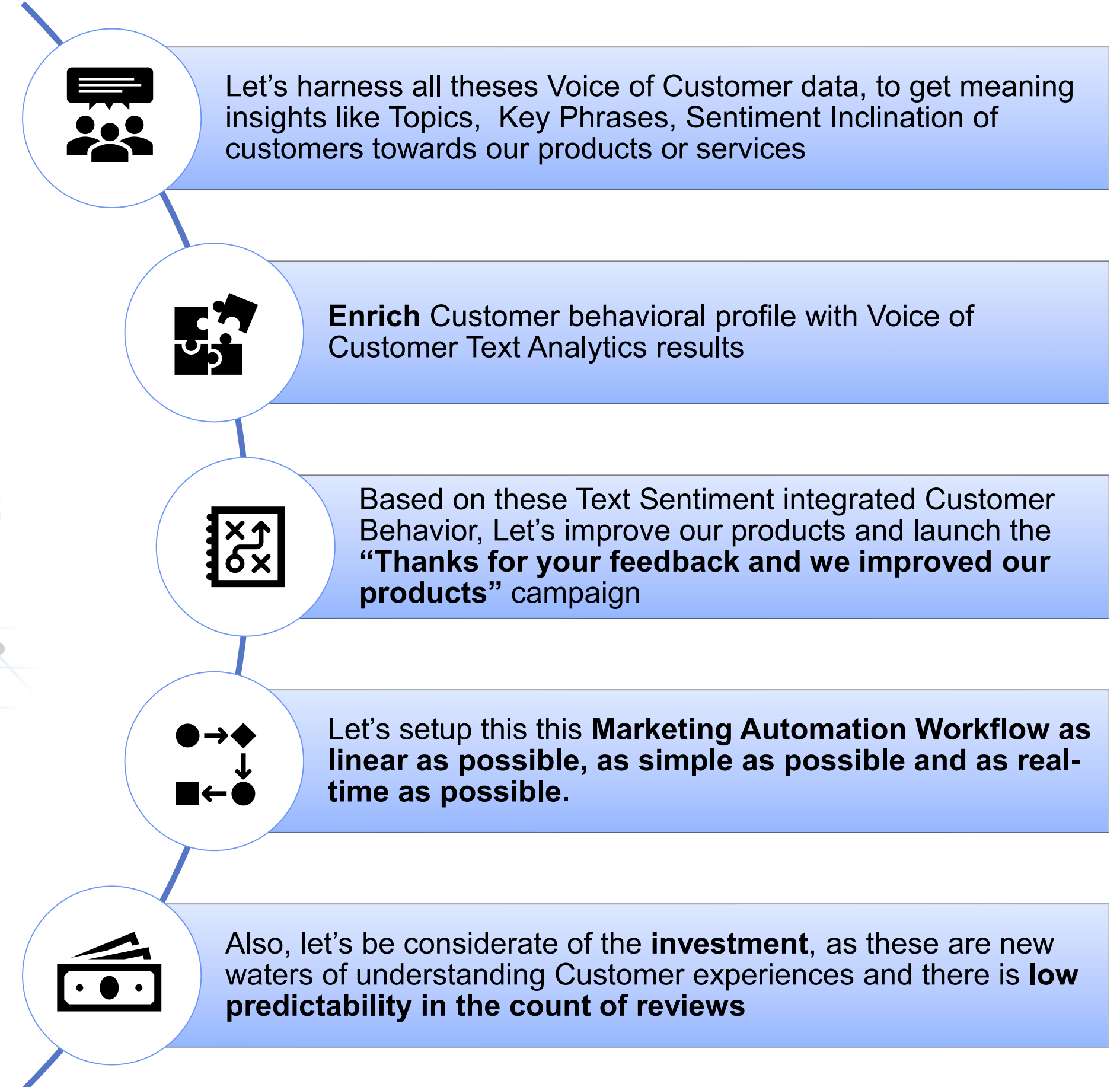
Voice of the Customer



Voice of the Customer (VoC) is a term that describes your **customer's** feedback about their experiences with and expectations for your products or services. It focuses on **customer** needs, expectations, understandings, and product improvement.



Digital Marketing & Customer Experience



TEXT ANALYTICS SOLUTIONS & CHALLENGES

Several Products and Platforms have evolved in order to address Text Analytics Needs like

1. **On Premises Software** – R, SAS, SPSS, PolyAnalyst
2. **Cloud Services** – Radian 6, Megaputer
3. **Cloud API Services** – Azure, AWS, GCP

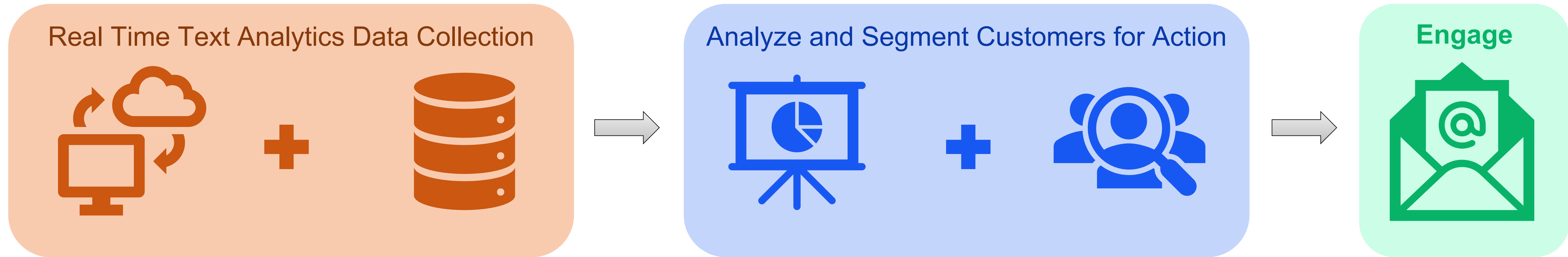


However there are still challenges in creating the right setup:

1. **Time** – Time taken to accumulate, process and Analyze unstructured data
2. **Service Expenses** – Idleness of on premise software / cloud services / resources during days of lesser demand
3. **Isolated Insights** – Friction in integrating the text analytics insights with Customer Behavior
4. **Insight Actionability** – Friction in taking actions like a proactive campaign to a set of customers with negative sentiment



REAL TIME TEXT ANALYTICS IMPLEMENTATION



Solution Overview: Integrating Text Analytics as part of Digital Analytics Implementation

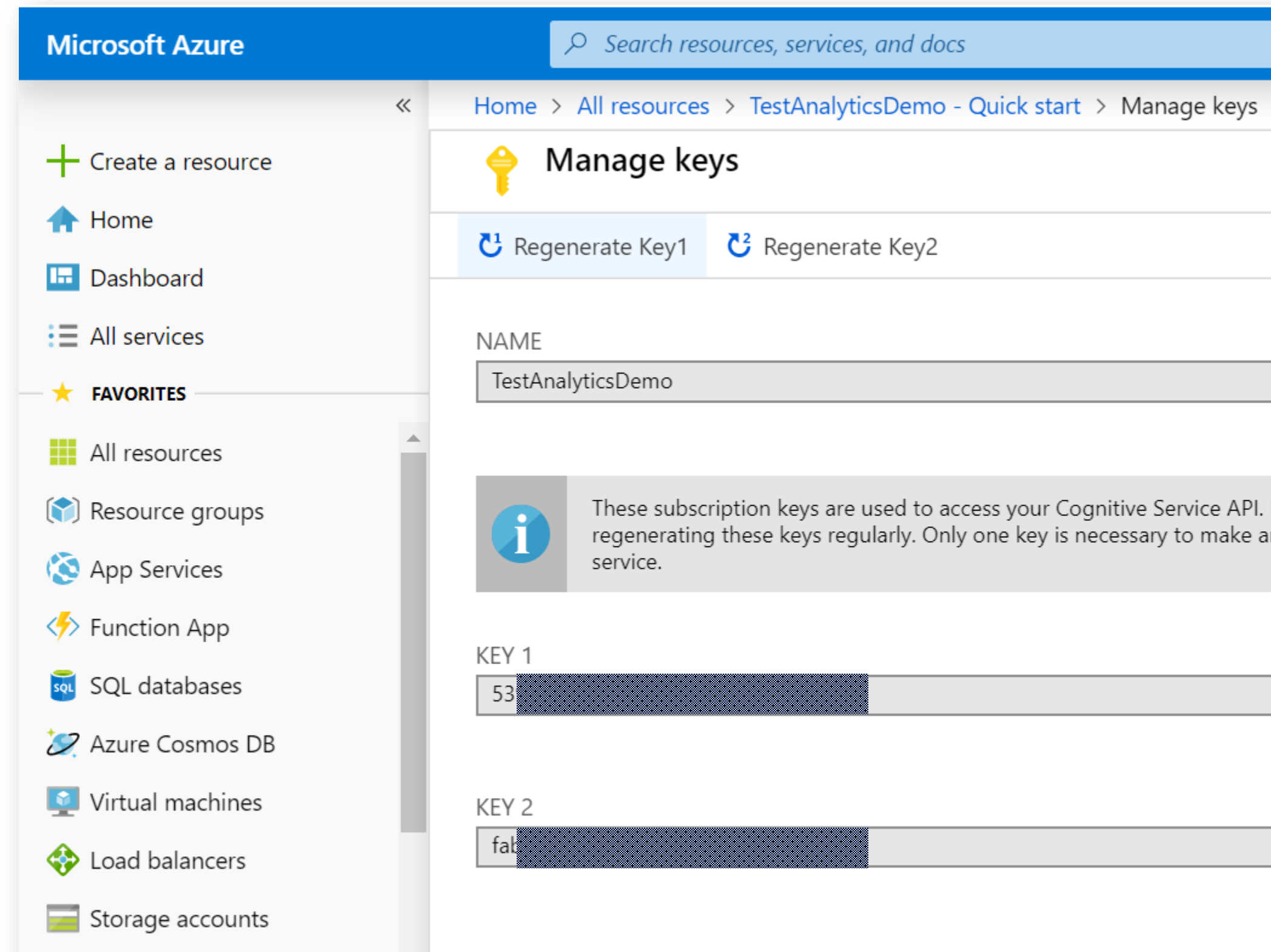
In order to implement the solution, we would need the following:

1. API Text Analytics Service
2. Adobe Analytics Variables
3. Tag Management

TECH REQUIREMENTS

Azure

1. Azure Account
2. Text Analytics API services



<https://docs.microsoft.com/en-us/azure/cognitive-services/text-analytics/how-to/text-analytics-how-to-signup>

TECH REQUIREMENTS

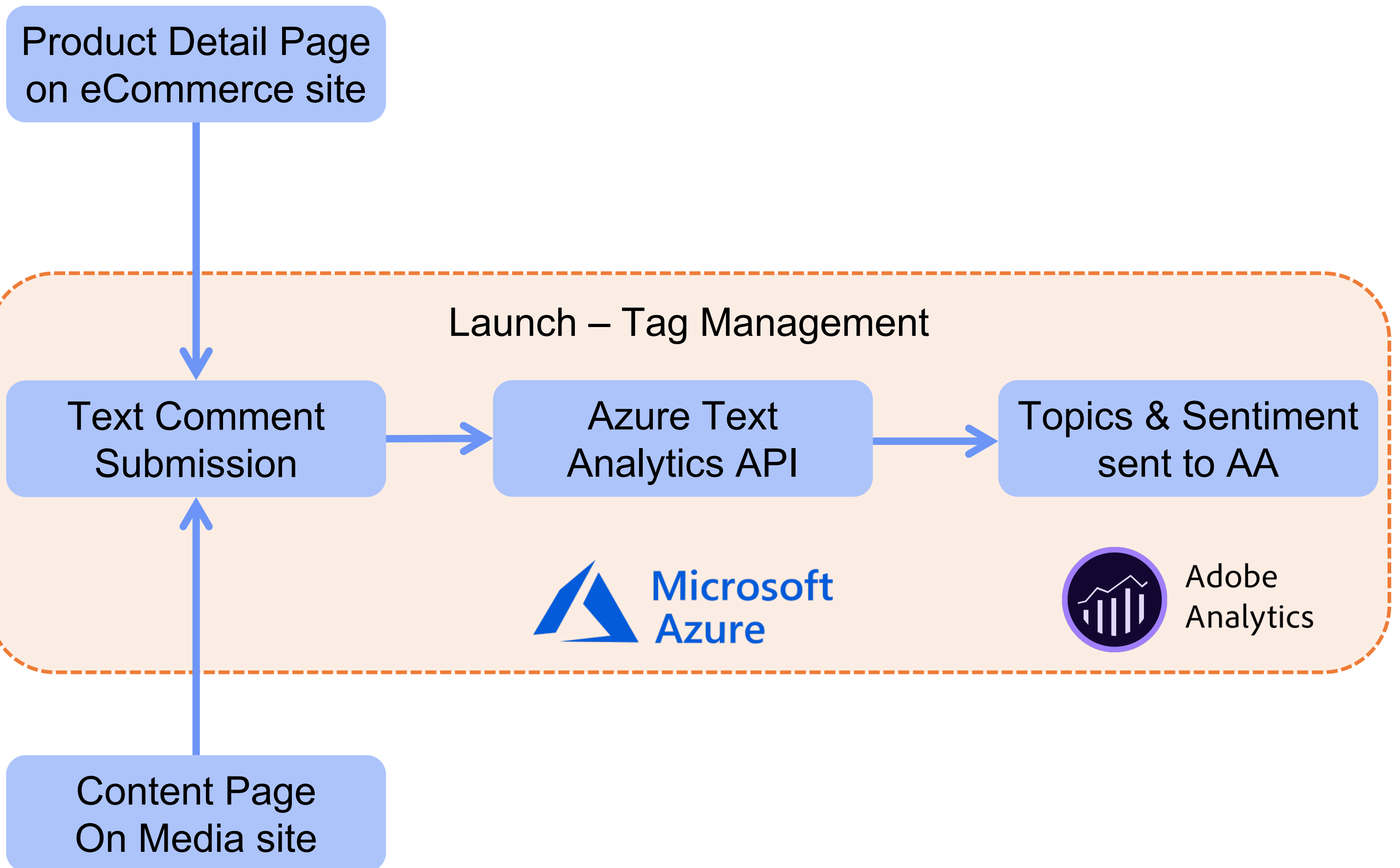
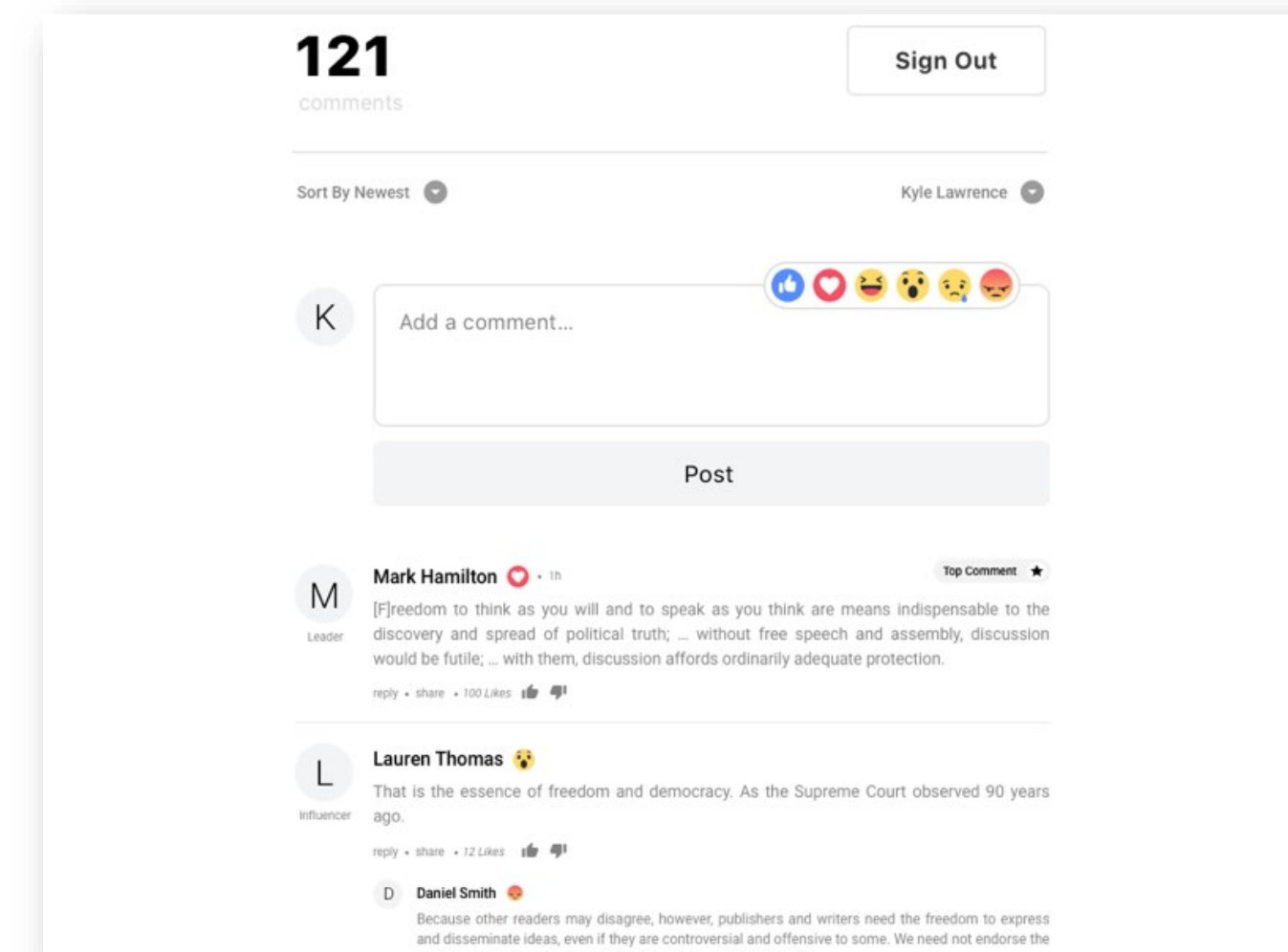
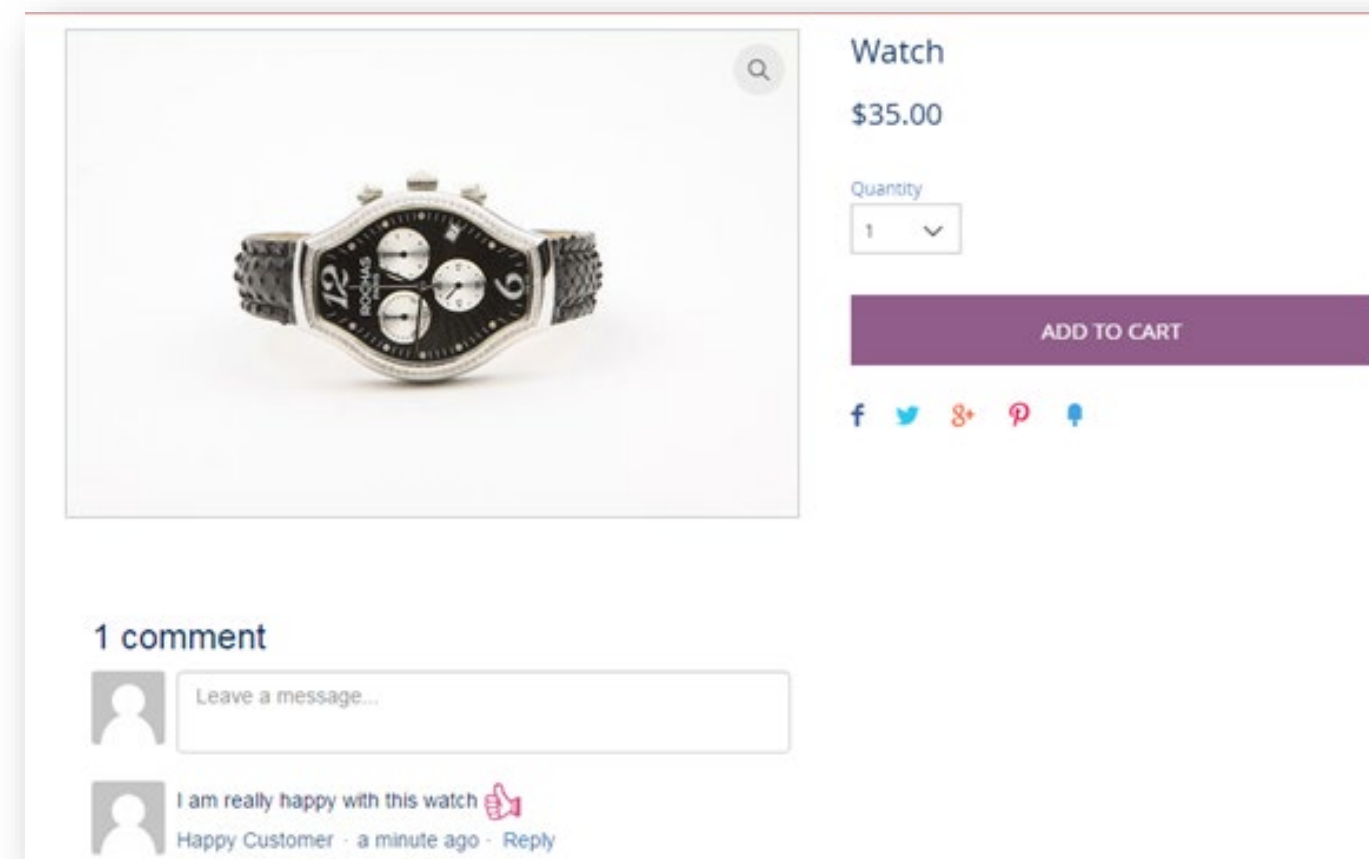
Adobe Analytics

- 1. Dimensions and metrics
- 2. Launch Tag Management – to capture the comment submission

	Dimensions	Metrics
Content ID	eVar	
Customer ID	eVar	
Content	eVar	
Text Analytics: Key Phrases/Topics	list Var	
Text Analytics: Sentiment Class	eVar	
Sentiment Score		Numeric Event

<https://docs.adobe.com/content/help/en/analytics/implementation/implement-analytics-with-dtm/analytics-tool/global-variables.html>

DATA FLOW ILLUSTRATION



IMPLEMENTATION DEMO

Tech Implementation Steps

1. Capture the content submission event

The screenshot shows the 'Edit Rule' configuration window. At the top, the title 'Edit Rule' is displayed. Below it, the 'Name' field contains 'Comment Submit'. The 'If - Determines when you want the rule to fire' section is divided into 'EVENTS' and 'CONDITIONS'. The 'EVENTS' section shows two conditions: 'Core - Click' and 'Core - Direct Call', connected by an 'OR' operator. The 'CONDITIONS' section has an 'Add' button. The 'THEN - Determines what you want the rule to do' section is divided into 'ACTIONS'. The 'ACTIONS' section shows two actions: 'Adobe Analytics - Set Variables' and 'Adobe Analytics - Send Beacon', connected by a 'THEN' operator. There are plus signs to add more events, conditions, or actions.

Edit Rule

Name

Comment Submit

If - Determines when you want the rule to fire

EVENTS ⓘ

Core - Click OR Core - Direct Call +

CONDITIONS ⓘ

+ Add

THEN - Determines what you want the rule to do

ACTIONS ⓘ

Adobe Analytics - Set Variables THEN Adobe Analytics - Send Beacon +

IMPLEMENTATION DEMO

Tech Implementation Steps

2. Get Topics and Sentiment from Azure Text Analytics API Service – owned by web developer

Edit Code (JavaScript)

```
1 // Setting up the API request key for keyPhrases
2 var key = "53 [REDACTED]";
3 var doc = document.getElementById("comment_box").value;
4 var url_kp = "https://centralindia.api.cognitive.microsoft.com/text/analytics/v2.1/keyPhrases"
5 var url_senti = "https://centralindia.api.cognitive.microsoft.com/text/analytics/v2.1/sentiment"
6
7 var payload = {
8     "documents": [
9         {
10             "language": "en",
11             "id": "1",
12             "text": doc
13         }
14     ]
15 }
16
17 data = JSON.stringify(payload)
18
19 // HTTP Request instance for Key Phrases
20 var xmlhttp_kp = new XMLHttpRequest();
21 xmlhttp_kp.open("POST", url_kp, false);
22 xmlhttp_kp.setRequestHeader("Content-Type", "application/json");
23 //xmlhttp.setRequestHeader("Accept", "application/json");
24 xmlhttp_kp.setRequestHeader("Ocp-Apim-Subscription-Key", key);
25 xmlhttp_kp.send(data);
26
27 response = JSON.parse(xmlhttp_kp.response)
28 _satellite.setVar("kp_response", xmlhttp_kp.response);
29 console.log(response)
30
```

Edit Code (JavaScript)

```
15 }
16
17 data = JSON.stringify(payload)
18
19 // HTTP Request instance for Key Phrases
20 var xmlhttp_kp = new XMLHttpRequest();
21 xmlhttp_kp.open("POST", url_kp, false);
22 xmlhttp_kp.setRequestHeader("Content-Type", "application/json");
23 //xmlhttp.setRequestHeader("Accept", "application/json");
24 xmlhttp_kp.setRequestHeader("Ocp-Apim-Subscription-Key", key);
25 xmlhttp_kp.send(data);
26
27 response = JSON.parse(xmlhttp_kp.response)
28 _satellite.setVar("kp_response", xmlhttp_kp.response);
29 console.log(response)
30
31 // HTTP Request instance for Sentiment
32 var xmlhttp_senti = new XMLHttpRequest();
33 xmlhttp_senti.open("POST", url_senti, false);
34 xmlhttp_senti.setRequestHeader("Content-Type", "application/json");
35 //xmlhttp.setRequestHeader("Accept", "application/json");
36 xmlhttp_senti.setRequestHeader("Ocp-Apim-Subscription-Key", key);
37 xmlhttp_senti.send(data);
38
39 response = JSON.parse(xmlhttp_senti.response)
40 _satellite.setVar("senti_response", xmlhttp_senti.response);
41 console.log(response)
42
43 // Parsing Variables
44 kp = JSON.parse(_satellite.getVar("kp_response"));
45 senti = JSON.parse(_satellite.getVar("senti_response")); //senti.documents[0].score
46
47
```

IMPLEMENTATION DEMO

Tech Implementation Steps

3. Assign Topics to AA Variables – Owned by Adobe Analytics Expert

4. Send to AA Server

Edit Code (JavaScript)

```
44 // Parsing Variables
45 kp = JSON.parse(_satellite.getVar("kp_response"));
46 senti = JSON.parse(_satellite.getVar("senti_response")); //senti.documents[0].score
47
48 kp_arr = kp.documents[0].keyPhrases
49 kp_arr_2 = []
50 for (i = 0; i<10; i++){
51   if (kp_arr[i])
52     {kp_arr_2.push(kp_arr[i])}
53 }
54
55 // Assigning AA Variables
56 content_id = _satellite.getVar("content_id");
57 s.pageName = document.title + ":" + content_id;
58 s.prop2 = _satellite.getVar("page_url") + ":" + content_id;
59 s.prop21 = s.eVar21 = content_id;
60 s.prop22 = s.eVar22 = _satellite.getVar("customer_id")
61 s.prop23 = s.eVar23 = doc
62
63
64 s.prop24 = s.eVar24 = s.list1 = kp_arr_2.join("|")
65
66 sentiment = "neutral";
67 if(senti.documents[0].score > 0.65) {sentiment = "positive";}
68 if(senti.documents[0].score < 0.35) {sentiment = "negative";}
69
70 senti_score = Math.round(senti.documents[0].score*100)
71 s.prop25 = s.eVar25 = sentiment + "|" + senti_score
72 s.events = "event25=" + senti_score
73
74 s.linkTrackVars = "prop20,eVar20,prop23,eVar23,prop2,prop21,eVar21,prop22,eVar22,prop24,eVar24,prop25,eVar25,list1,events"
75 s.linkTrackEvents = "event25"
76
```

Edit Rule

Name

Comment Submit

If - Determines when you want the rule to fire

EVENTS ⓘ

Core - Click

OR

Core - Direct Call



CONDITIONS ⓘ

+ Add

THEN - Determines what you want the rule to do

ACTIONS ⓘ

Adobe Analytics - Set Variables

THEN

Adobe Analytics - Send Beacon



IMPLEMENTATION DEMO

Tech Implementation Steps

5. Validate Data Being Sent to Server

1. API Server calls to Azure Text Analytics
2. Launch JS Variable processing and assignment
3. Sending data to AA server

The screenshot displays the Chrome DevTools interface. The **Network** panel is active, showing a list of requests. A blue circle with the number '1' highlights the first two requests, which are XHR calls to 'launch-EN9745...'. The **Console** panel is also active, showing a series of logs. A blue circle with the number '2' highlights a deprecation warning about 'XMLHttpRequest' and subsequent logs from 'Adobe Analytics'. A blue circle with the number '3' highlights the 'Adobe Analytics Server Call #2' log, which contains a detailed list of data being sent to the server, including Report Suite ID, Page Name, Current URL, Events, and various eVars and props.

Name	Status	Type	Initiator	Size	Time	Waterfall
keyPhrases	200	xhr	launch-EN9745...	213 B	395 ms	
keyPhrases	200	xhr	launch-EN9745...	603 B	62 ms	
sentiment	200	xhr	launch-EN9745...	213 B	32 ms	
sentiment	200	xhr	launch-EN9745...	605 B	55 ms	
s98554219580...	200	gif	AppMeasurem...	591 B	70 ms	

5 requests | 2.2 KB transferred | 173 B resources

Console | What's New

top | Filter | Default levels | 1 hidden

- Rule "Comment Submit" fired. VM710:1
- [Adobe Analytics] Set variables on the tracker. VM710:1
- [Adobe Analytics] Applying the following properties on tracker: "{}". VM710:1
- ⚠ [Deprecation] Synchronous XMLHttpRequest on the main thread is deprecated because of its detrimental effects to the end user's experience. For more help, check <https://xhr.spec.whatwg.org/>.
- {documents: Array(1), errors: Array(0)} VM710:1
- {documents: Array(1), errors: Array(0)} VM710:1
- [Adobe Analytics] Firing link track beacon using the values: {"linkType":"o","linkName":"Text Analytics"}. VM710:1
- Comment Submit VM710:1
- ▼ Adobe Analytics Server Call #2 (1023 chars) cs.js:54
 - CUSTOM LINK : Text Analytics cs.js:59
 - Report Suite ID : geo1xxpnwlaunchacs cs.js:61
 - Page Name : Real Time Text Analytics for Content Publishers:48 cs.js:61
 - Current URL : http://localhost/real_time_text_analytics/index_local.html? cs.js:61
 - Events : event25=82 cs.js:61
 - List eVar1 : reproach cs.js:61
 - eVar21 : 48 cs.js:61
 - eVar22 : 86 cs.js:61
 - eVar23 : Those who fear reproach will not commence anything which has not been (thoroughly considered) and made clear to them. cs.js:61
 - eVar24 : reproach cs.js:61
 - eVar25 : positive|82 cs.js:61
 - prop2 : http://localhost/real_time_text_analytics/index_local.html?:48 cs.js:61
 - prop21 : 48 cs.js:61
 - prop22 : 86 cs.js:61
 - prop23 : Those who fear reproach will not commence anything which has not been (thoroughly considered) and made clear to them. cs.js:61

IMPLEMENTATION SUMMARY

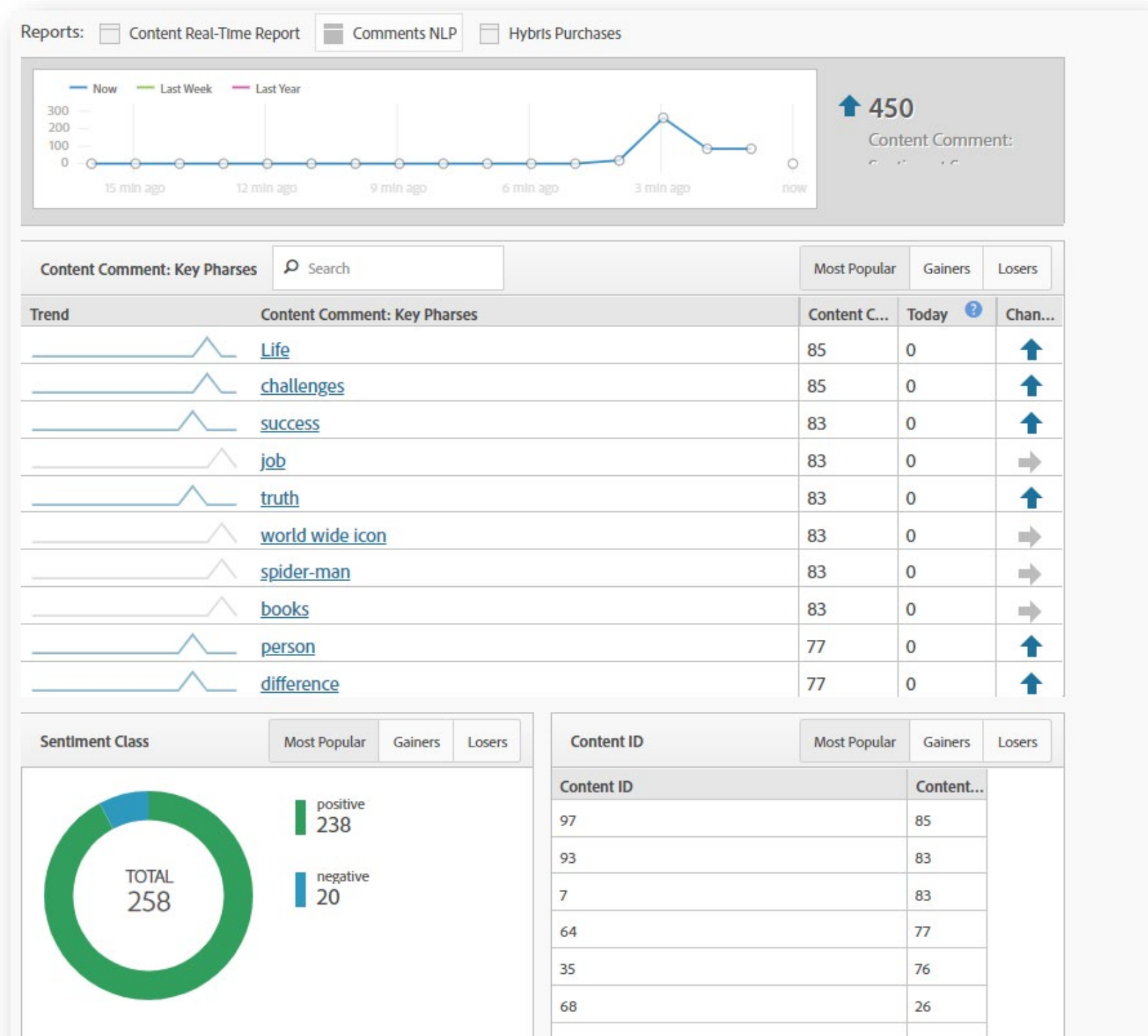
Tech Implementation Steps

1. Capture the content submission event
2. Get Topics and Sentiment from the Azure API
3. Assign Topics and sentiment to the Adobe Analytics Variables
4. Send Data to Analytics Server
5. Validate Data being Sent to AA Server

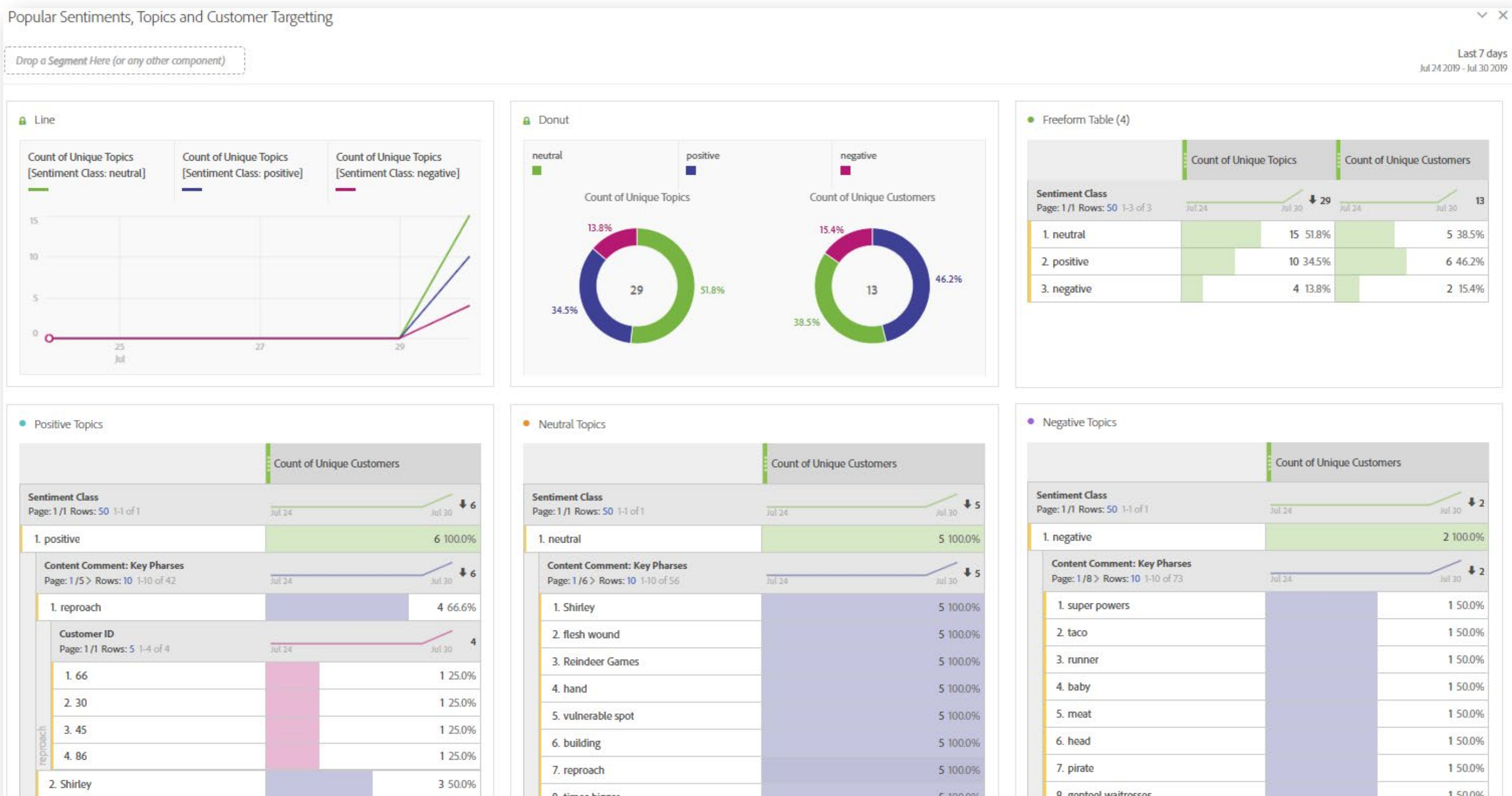
Adobe Analytics Configuration and Reporting

1. Assign List Props, List Vars, eVars & Events to Topics and sentiment
2. Create Real-time dashboard with props for validation
3. Create Dashboard
 1. Sentiment Trend
 2. Popular Topics
4. Use Customer ID, Content ID and Topics Dimension for Deep-Dive Analysis, Segmenting and Targeting
 1. Share with Experience Cloud Audiences
 2. Setup Triggers for Better Customer Experience

TEXT ANALYTICS DASHBOARDS



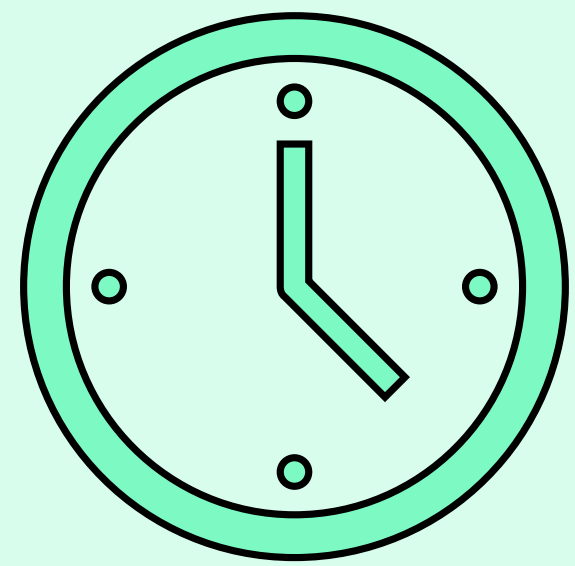
Real Time Sentiment Analytics



Deep Dive Analysis with Sentiments & Customer IDs

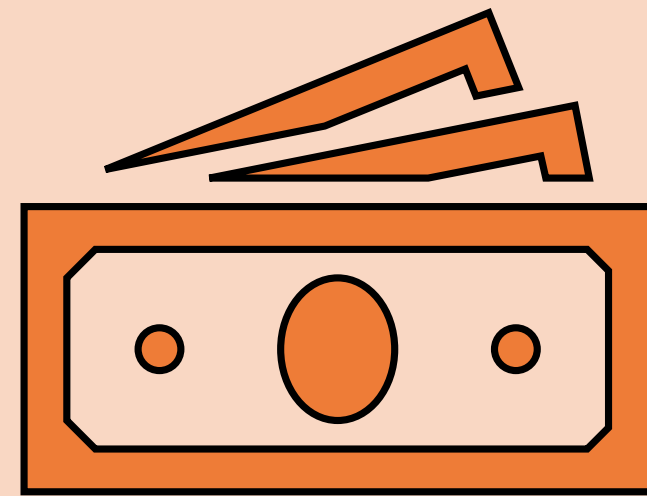
VALUE REALIZATION

Time



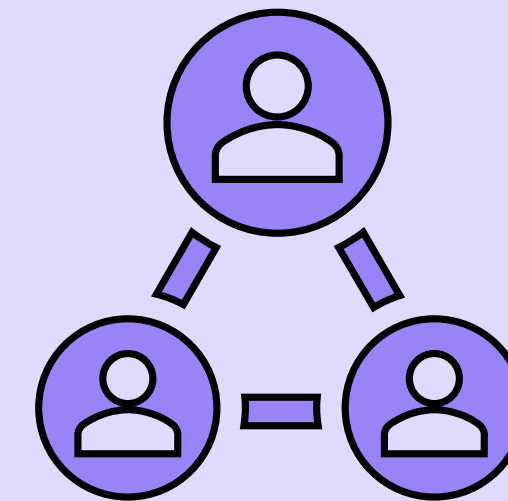
Save Time in analyzing high level Text Topics and Sentiment for Content Reviews

Monetary



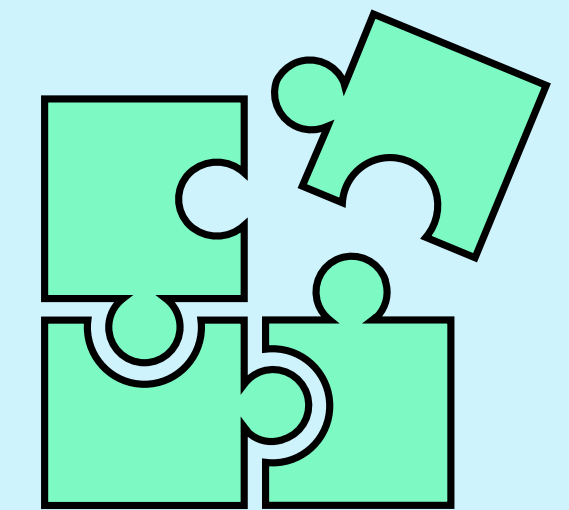
Optimize Cost by implementing Flexible Cloud Text Analytics Services

Customers



Ability to Analyze, Segment and Target Customers with Content Sentiments

Integration



Sentiments, Content and Customers are integrate and ready for actionability



Knowledge is
having the right
answer.

Intelligence is
asking the right
question.

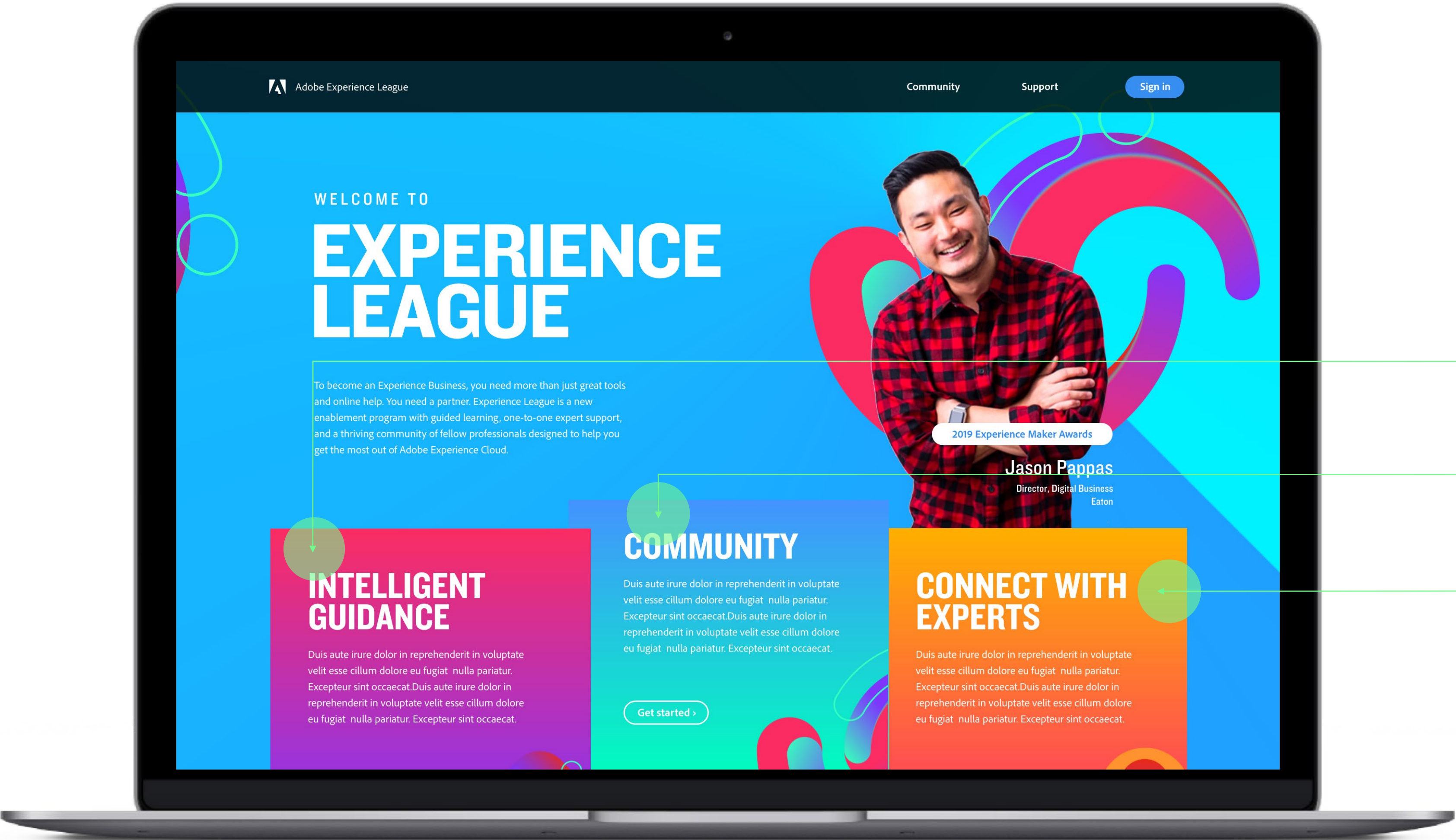
APPENDIX

- For Details on Azure Text Analytics Setup: <https://docs.microsoft.com/en-us/azure/cognitive-services/text-analytics/how-tos/text-analytics-how-to-signup>
- For Details on Azure Text Analytics Pricing: <https://azure.microsoft.com/en-in/pricing/details/cognitive-services/text-analytics/>
- For Online implementation in Web and Mobile: https://marketing.adobe.com/resources/help/en_US/sc/implement/
- For Documentation on Event Tracking with Launch Tag Management: <https://docs.adobelaunch.com/>
- Community Support: <https://experienceleague.adobe.com/>

Experience League is our new success program, **deeply personalized** for you to get to **instant value** with Adobe Experience Cloud.

EXPERIENCE LEAGUE

 experienceleague.adobe.com



Recommended step-by-step learning and events based on your preferences

Connection to a community of 150,000+ peers to get you answers in minutes

One location to connect with Experts ready to work with your company