TEALIUM®

Joy of Data

RECIPES FOR SUCCESS

Powerful Use Cases for Customer Data – Getting the Most Out of Your CDP

Table of Contents

Let's Get Started

Hey, all you Marketing, Analytics and Data Chefs! Welcome to The Joy of Data, a new kind of cookbook!

This ebook is full of delightful data recipes that showcase what ingredients go into baking solid customer loyalty and retention programs, whipping up powerful and personalized messaging, cooking up sophisticated advertising strategies and rolling them all up with predictive insights to create joyful experiences for your customers *(what a joyful mouthful)*!

Let's roll up our sleeves, tie on our digital aprons and get our tech stack utensils organized to start cooking up some experience goodness together.

Why are we building this recipe guide for you now? Today we hear a lot about the importance of customer data and customer data platforms (CDPs), but it is sometimes less clear on how to use the data to improve business outcomes — or even where to get started with a customer data project. There are also trends that make understanding and managing customer data more important than ever before, like:

1 Marketing and Analytics Teams Being Asked to Do More with Less

Raise your hand if you are a marketer and analytics professional being asked to squeeze more out of the same budget this year. All hands raised? OK, we thought so (and Gartner did too). 2020 was a year unlike any other, so many brands are wisely being cautious with their budget — that doesn't mean you don't have to hit the same goals though.

2 The Fragmented Customer Journey

Every marketing organization wants to be data-driven — to make the right decisions about where they're investing their time and money to deliver the best customer experience. Especially in a world where 4 out of 5 customers say that the experience a company provides is as important as its products and services. Understanding your customers' signals across offline and online data sources and responding and reacting in real-time is expected — but incredibly difficult. It requires blending the art of experience with the mathematical precision of data science. But not to worry — we're here to show you how you can get there with the right data foundation in place.

3 The 3 Ps of CX: Personalization, Prediction and Privacy

Consumers expect brands to know them and provide personalized services and recommendations, while simultaneously continuing to respect their privacy. With the phase-out of third-party cookies and an increasing focus on consent and privacy globally, businesses will need to shift to a first-party-first data strategy to strike that balance. Without the right data, key digital marketing use cases like behavioral targeting, cross-channel measurement, and personalization will no longer be possible in the way marketers expect. This cookbook will show you how to tap into your first-party data to keep connected with your customers and achieve the balance of personalization, prediction, and privacy.

4 Accelerating Digital Transformation

All of us want to forget 2020, but it happened and the world has shifted to a mandate of digital-first customer experiences. McKinsey and Company found that during the early stages of the pandemic, there was 10 years' worth of e-commerce growth in just 3 months (no that's not a typo). As more consumers have made digital their go-to means of purchase and engagement, digital transformation has accelerated. If you can't deliver great experiences for your buyers (which they now expect), it's easy for them to go elsewhere. Delighting customers on digital channels is no longer visionary, it's essential.

It's no easy task for digital marketing chefs, but just like any adventure, with planning, identification of key channels, tools, and objectives through the customer journey, you can drive growth, build loyalty and increase revenue.

This ebook will show you how to put your data to work to maximize your advertising spend and increase efficiency with your tech stack using a customer data platform (CDP).
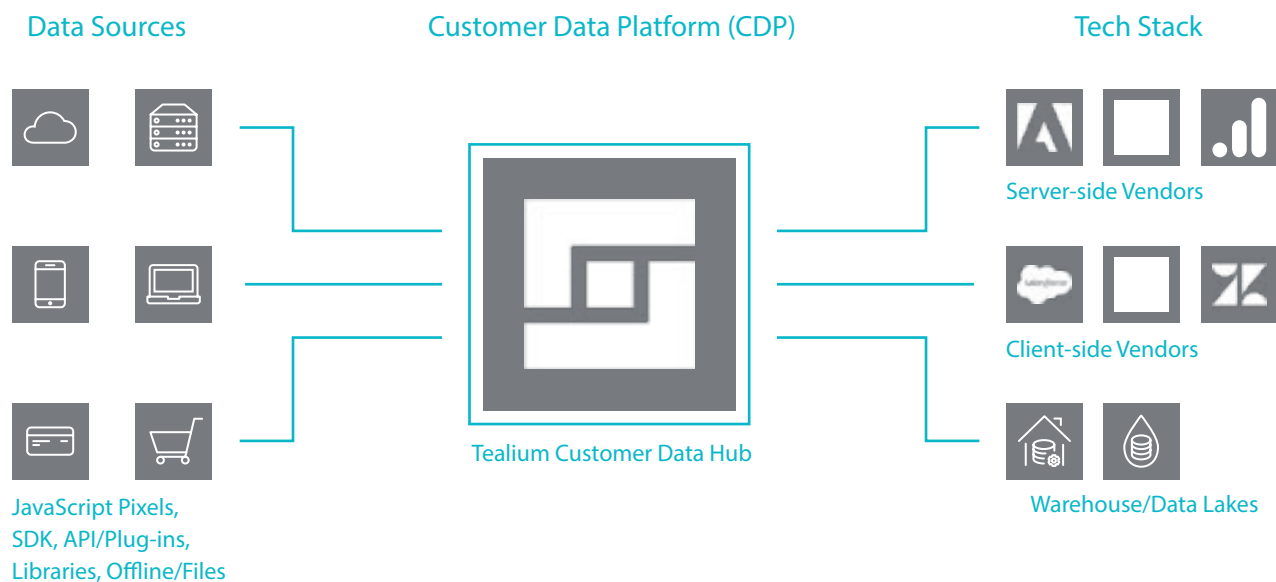
Your Kitchen Tools

Before we get into our customer data recipes, let's first ensure you have the right tools to complete these use cases.

You'll Need:

- **Data Sources:** These are your building-block ingredients and can come from almost anywhere you collect customer data (online or offline). As the recipes go on, you may leverage more or fewer data sources; make sure you season to taste for your business.

- **A Customer Data Platform (CDP):** We highly recommend Tealium for the best recipe outcomes. At Tealium, we've built what we refer to as a data-first, vendor-neutral customer data platform. We call it this because it focuses on the data first and foremost: how it is collected, unified, and then accessed through other tools. Ultimately, your CDP will help you put your data source ingredients into the context of a customer profile, and then build customer segments for your business to run better personalization campaigns. If you need to take a step back and understand what a CDP is, we recommend checking out The Definitive Guide to Customer Data Platforms.

- **Your Tech Stack:** The landscape of technologies powering customer engagement in a large enterprise is rarely based on a single ecosystem. Multiple lines of business use many different tools, clouds and platforms — meaning that some part of your customer insights and experiences are at risk of remaining siloed. We recommend taking inventory of your most important channels like email marketing, personalization tools, mobile marketing platforms, social media, CRM, analytics, data warehouses, customer service tools, chat tools, and more. This will give you an idea of how you want to activate the data in your customer data platform.

Data Sources	Customer Data Platform (CDP)	Tech Stack

JavaScript Pixels, SDK, API/Plug-ins, Libraries, Offline/Files

Tealium Customer Data Hub

Server-side Vendors

Client-side Vendors

Warehouse/Data Lakes

OK Chefs, are we ready? Let's dive into creating our first series of recipes: Building a Single Customer View.

Chapter 1

Building a Single Customer View Unique to You

A comprehensive view of your customer is the single most effective way to deliver a relevant and timely customer experience. This use case benefits all departments and roles by generating a single view of the customer across engagement channels. It's a goal that's a bit of a unicorn for marketing and analytics teams, but if you can build your view with the right customer data ingredients and tools, it can truly drive higher customer lifetime value (LTV) and revenue for your business.

This single view is created for many reasons, but the main outcome is generating an accurate view of your buyer as the foundation of customer analytics, as well as orchestrating engagement. When the data is accurate and current (real-time is ideal), teams can deliver the right experience to the customer at the right time. This results in higher customer lifetime value, more engaged customers, and more loyal buyers.

Let's dive into our first recipe so we can speak about an example.

Recipe 1: Grill Up a Single View of Your Customer to Generate Appetizing Insights

Problem

There is so much customer data in so many different places that generating high-quality insights can be slow and laborious due to data-wrangling and the need for technical resources. Every day it takes to generate a customer insight is one less day that insight can be used to generate revenue.

Solution

Automate data management practices in a customer profile from the time of data collection through activation and analysis.

(We're giving our example of ingredients and kitchen tools below, but feel free to fill out your own in the blank section below)

Example Lists

Ingredients

Web

Products searched   Content interests

Products viewed   Loyalty status

Purchases

Offline/POS

Preferred store location   Contact center sessions

In-store purchases

Mobile

App installed   Push notification engaged

App opened

Push notification received   Login history

Kitchen Tools

Web analytics
eCommerce site
Display advertising (DMP, DSP)
Website personalization
CRM
Mobile engagement platform
Email service provider

Your Lists

Ingredients

Web

Offline/POS

Mobile

Kitchen Tools

I want to… Improve the time it takes to turn data into customer insights

In order to… Increase agility and drive more revenue by getting insights live quicker

Step 1 — Get Your Ingredients

First off, it's important to understand the customer insight you're trying to generate in order to know what data you want to collect. In this common example, let's say we want to generate insight into a customer's purchase behavior across online and offline sources to understand and target two customer segments: (1) new purchasers and (2) inactive customers.

For both audiences we'll need insights into purchase activity across channels, and for new purchasers we'll also have to make sure they didn't return the item. This means we want data from web, POS, and mobile channels.

Step 2 — Add Context

Every venue and platform uses its own visitor ID that can be useful for building comprehensive profiles and targeting users across devices. When any known ID is matched, visitors, their behaviors, and devices are automatically stitched together into a customer profile.

With data organized in a customer profile, we can perform calculations to determine customer-level insights, called attributes, that aren't available in each channel by itself. Attributes are assigned as data is collected so that you can uniquely distinguish new purchasers from inactive customers (across channels) and take appropriate action.
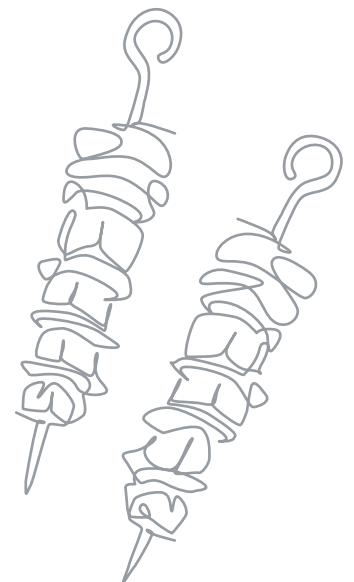
By defining the insight you want, this insight can be generated in the moment and then passed downstream to integrated systems without further data prep.

Step 3 — Generate Insights

Customer attributes are used to define audiences. Audiences allow you to manage data flowing to integrated systems.

Each audience will have unique, rule-based actions. By the time a customer is in an audience, the insight has been generated and is available in real-time to either drive customer engagement (ads, personalization, messages, etc), or update systems of insight with that piece of data (update CRM or web analytics to identify this user has a particular attribute).

Example Chart

Step 1

Step 2

Step 3

Web Data

Offline/POS

Mobile

Teallum
AudienceStream CDP™

Unified Profiles

Products Owned

Product Affinity

Lifetime Value

Loyalty Level

Audience Creation

Inactive Customer

New Product Owner

Ad Served

Segment Analysis

Segment Analysis

On-site Personal-ization

Ad Suppressed

Ad Suppressed

Record Updated in POS

Record Updated in CRM
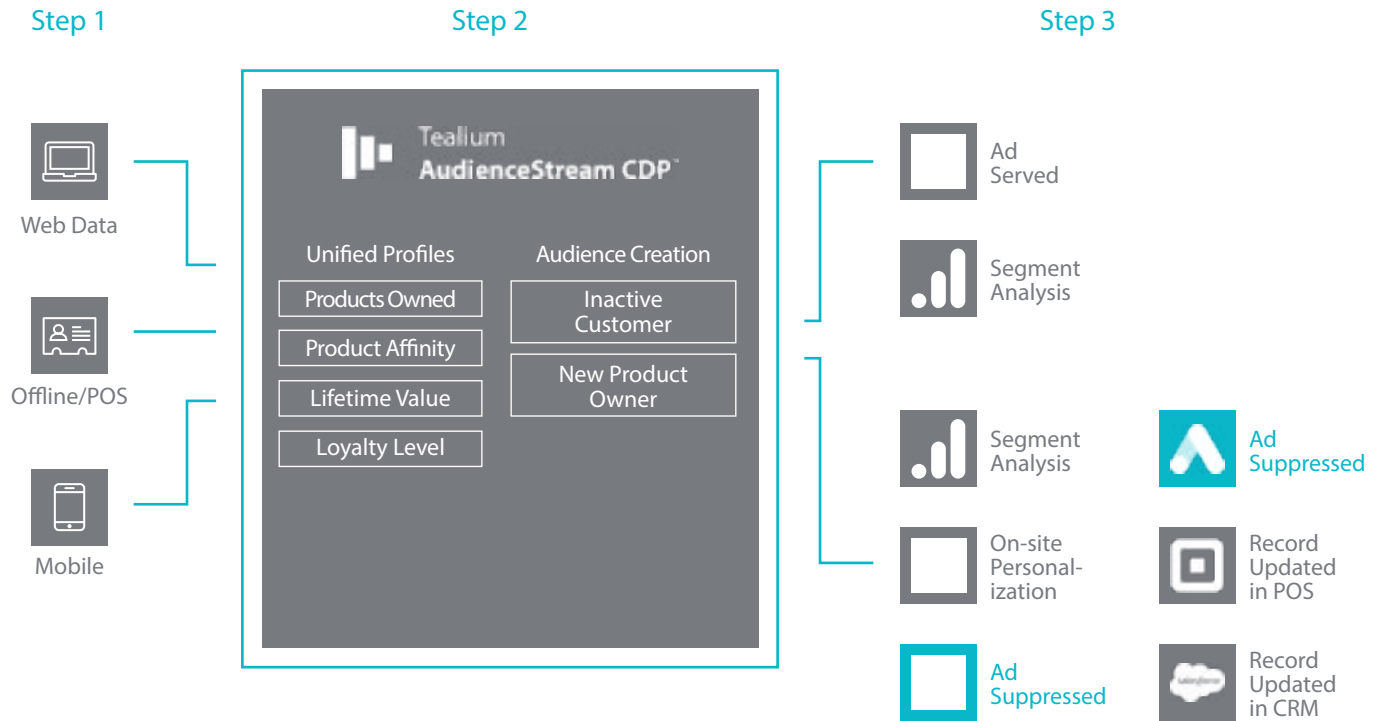
Recipe 2: Drive Personalization Across Digital Channels

Let's look at how we can use a CDP to generate a single view of the customer to drive cross-channel insights and engagement.

Problem

Every individual customer experience channel has a unique view of the customer, causing an inconsistent and uneven experience.

Solution

Use centralized cross-channel customer profiles as a foundation for orchestrating customer experience actions.

Example Lists

<table>
<tr><td colspan="2">Web</td></tr>
<tr><td>Products searched</td><td>Content interests</td></tr>
<tr><td>Products viewed</td><td>Email</td></tr>
<tr><td></td><td>LTV</td></tr>
<tr><td>Purchases</td><td></td></tr>
<tr><td colspan="2">Offline/POS</td></tr>
<tr><td>Customer support inquiries</td><td>In-store purchases</td></tr>
<tr><td></td><td>Contact center engagement</td></tr>
<tr><td>Preferred store location</td><td></td></tr>
<tr><td colspan="2">Mobile</td></tr>
<tr><td>App installed</td><td>Push notification engaged</td></tr>
<tr><td>App opened</td><td></td></tr>
<tr><td>Push notification received</td><td>Login history</td></tr>
</table>

Ingredients

Web Analytics
eCommerce Site
Display Advertising (DMP, DSP)
Website Personalization
CRM
Mobile Engagement Platform
Email Service Provider

Kitchen Tools

Your Lists

Web

Offline/POS

Mobile

Ingredients

Kitchen Tools

I want to… Use my single customer view to drive cross-channel personalization

In order to… Orchestrate a consistent, relevant, and timely customer experience

Step 1 — Get Your Ingredients

You can see that for this example we are unifying three different sources of data to understand shopper intent and engage accordingly across channels. If our goal is to personalize for a consistent customer experience, we'll want data from all channels representing the full customer relationship:

1. **Web data:** First-party data such as products searched, purchases, cart abandonment, orders completed, login history
2. **Offline data:** First-party data such as store location, in-store purchases, contact center engagement, customer support inquiries
3. **Mobile data:** First-party data such as location data, application installed, application opened, push notification received, push notification engaged, login information
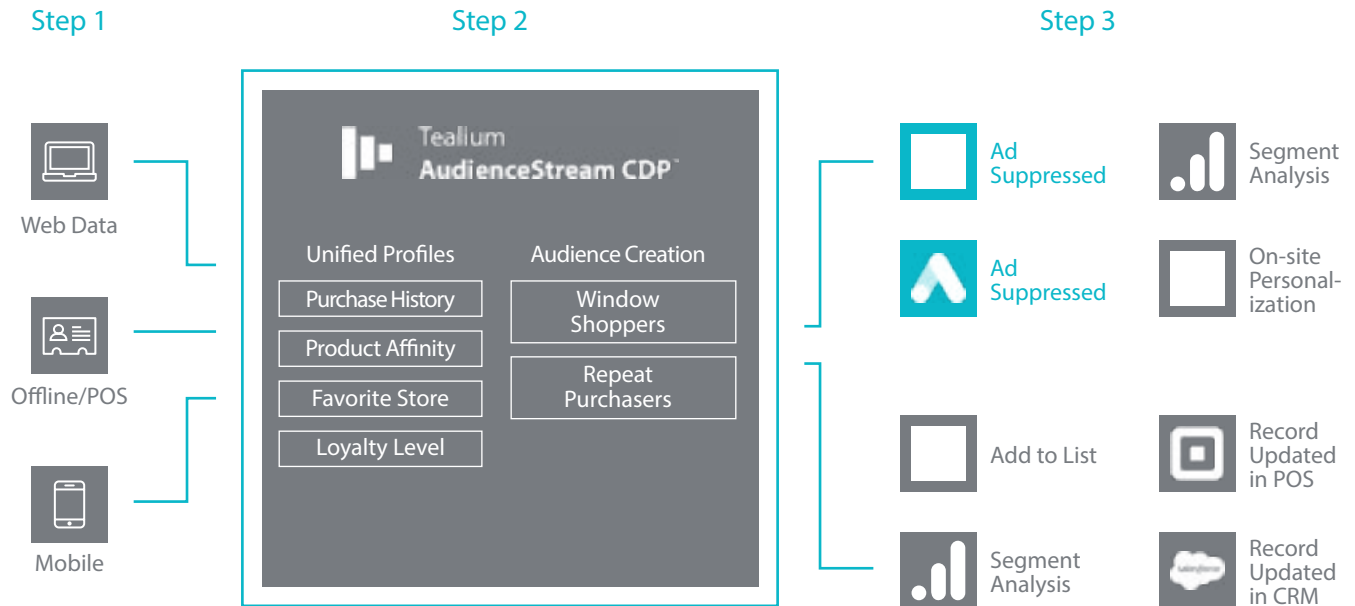
Step 2 — Build a Customer Profile

To get all this data in one place for understanding complete context you need two things: the ability to organize the data around a person (the customer profile) and a common taxonomy for that data so the data in the profile can be understood. In this example recipe, we are building attributes about our audiences based on data points like purchase history, product affinity, favorite store, and loyalty levels in order to deduce intent.

Step 3 — Take Action

Now you can use these centralized profiles to put customers into audience segments for the purposes of engagement or analysis. Data from each of these three channels lets you properly place a customer in one of two segments: window shoppers or repeat purchasers… yet, what you'd do to engage these two groups is drastically different.

Now that we have a unified view of our customers, we can build audiences and orchestrate them across all engagement and analysis channels. The single view of the customer is used to pass insights to key systems that benefit from having a more complete view of the customer, like CRM and POS. By updating CRM systems, customer service teams are enabled with customer insights in order to deliver more personalized customer support. By enriching POS systems, in-store experiences can be improved with knowledge of online behavior. Insights can drive improved customer experiences and increased revenue.

Example Chart

Step 1	Step 2	Step 3

Step 1

Web Data

Offline/POS

Mobile

Step 2

Tealium
AudienceStream CDP™

Unified Profiles	Audience Creation
Purchase History	Window Shoppers
Product Affinity	
Favorite Store	Repeat Purchasers
Loyalty Level	

Step 3

Ad Suppressed

Ad Suppressed

Add to List

Segment Analysis

Segment Analysis

On-site Personal-ization

Record Updated in POS

Record Updated in CRM

Real World Recipe Success

How *Gap Inc.* Encouraged Repeat Shopping Habits Across Multiple Brands and Devices

Leading retailer and Tealium customer, Gap Inc., wanted to encourage repeat customers and increase shoppers across their multiple brands. To achieve this, they wanted to be able to deliver more personalized experiences across their brand websites based on prior purchases and behavior rather than simply delivering the same experience to every customer. After implementing Tealium, they were able to collect customer data from multiple sources, unify it into a comprehensive profile and integrate it with their marketing tools. This allowed them to build new and meaningful experiences for their customers that drove deeper engagement.

The result? By using the audiences they built using the Tealium Customer Data Hub, the Gap Inc. team was able to move from a one-size-fits-all website to 87 different data-driven experiences. Nailed it!
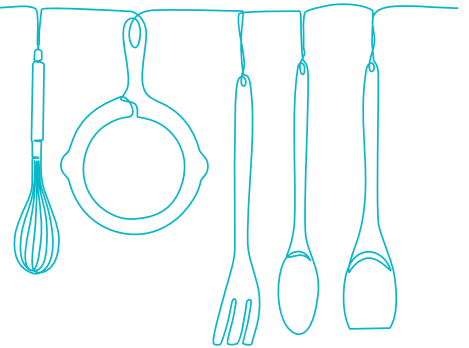
Chapter 2

Developing Customer Loyalty and Retention Strategies that Delight Buyers

Customer loyalty and retention are two crucial levers for generating growth and overall business success. Industry studies show that it costs five times more to acquire a new customer than it does to keep an existing one.

Customer data is the key ingredient to driving customer loyalty and retention campaigns because you can only proactively identify and target customers at risk for churn *(as well as those high-value customers most likely to buy more products)* when you have a complete and accurate picture of the relationship.

While we would ideally like to speak personally to each of our customers, it doesn't scale. We need data to illustrate if buyers are happy, engaged, or at risk. If buyer behavior changes (ex: purchases dramatically slow down or drop), we want to identify the problem and see what marketing strategies can be applied for retention.

Another customer strategy, outside of identifying risk, is spotting when and where you can drive expansion revenue. If you're not selling additional products into your existing customer base to increase their customer lifetime value (CLV) then you're missing out on a huge revenue opportunity. But you need to do this in a way that drives marketing efficiency by targeting only those customers that are more likely to buy.

What do you need to begin driving these powerful programs? It starts with accessing high-quality data that leverages the capabilities of a vendor-neutral customer data platform. This allows you to fuel loyalty and retention programs with rich insights that allow for accurate identification and targeting of the segments you want.

Let's get started with our recipes to bake up loyalty programs your customers can't resist!

Recipe 1: Identify At-Risk Customers and Proactively Reduce Churn

Problem

Customers have high expectations that change frequently. It has become exponentially more challenging to create the right experiences across key channels, especially when there are fragmented data and identity challenges.

Solution

Proactively identify and target customers who are likely to churn using predictive insights to trigger real-time advertising, site personalization, and emails.

Example Lists

Ingredients

Web
Signed in / Signed out	Time since last sign-in
Email	Order canceled
Trial period start / end	

Offline/POS
Preferred store location	Customer support inquiries
In-store purchases	

Mobile
App launched	Push notification bounced
App installed	
Sign-in history	

Kitchen Tools

Advertising tools
eCommerce CMS
Website personalization
Email service provider

Your Lists

Ingredients

Web

Offline/POS

Mobile

Kitchen Tools

I want to… Reduce churn by driving proactive advertising and experiences for high-risk customers

In order to… Increase revenue growth and overall customer lifetime value (CLV)

Step 1 — Get Your Ingredients

In this recipe, we are identifying customers of a subscription service that have given signals that they may soon cancel.

Let's first get the data that we need to be able to proactively identify which customers may cancel. We can get relevant data ingredients from three sources: web, mobile and point-of-sale (POS) systems.

This unified data feeds into the visitor profiles created by Tealium AudienceStream CDP. From there, any behavior that is tracked in AudienceStream, such as daily, weekly, or monthly renewal events, can also be predicted with Tealium Predict ML by analyzing this customer data.

Tealium Predict ML leverages machine learning capabilities to provide a simple, transparent, and flexible way to score visitors with their likelihood to renew (or complete any behavior for that matter).
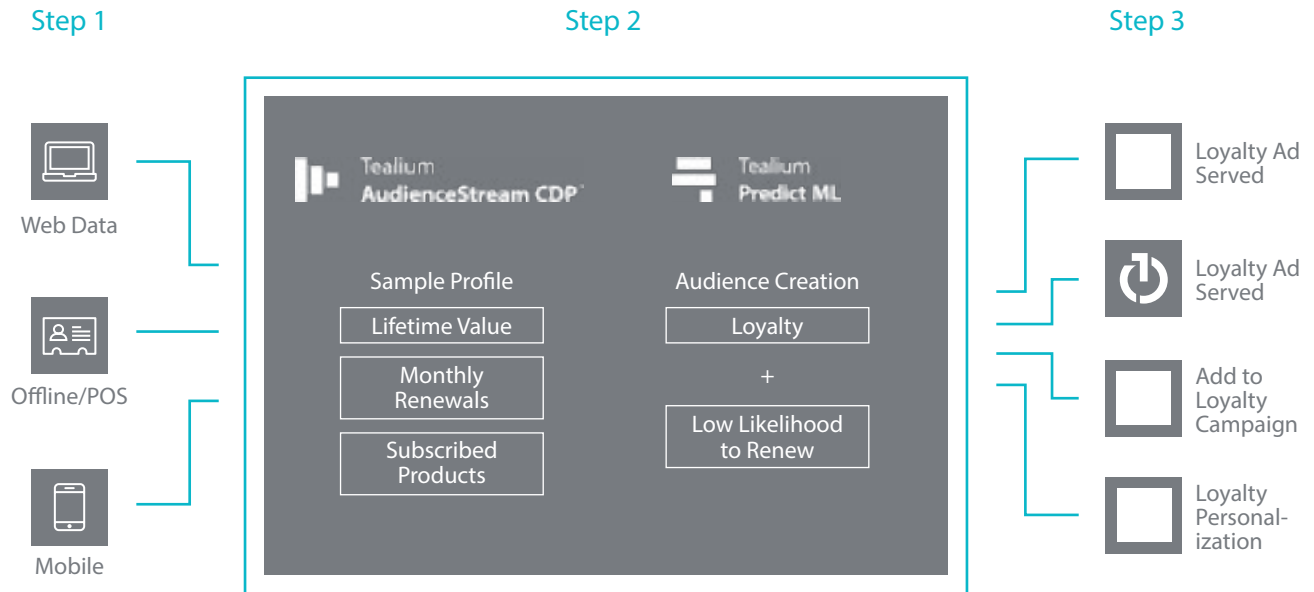
Step 2 — Create a Likelihood Score

You can now generate a score indicating the likelihood of this customer to renew. This likelihood score becomes another data point in the visitor profile (just like loyalty status, interest categories, etc.) and will let you know which customers are at risk and how much risk there is.

Step 3 — Take Action

Now you are ready to use this likelihood score to target the identified customers and engage them with real-time and relevant advertising, site personalization, and emails to reduce their likelihood to churn. The benefit of targeting only customers that are at risk is that you can efficiently maximize lifetime revenue by taking proactive action while the customer is still subscribed.

Example Chart

Step 1	Step 2	Step 3

Step 1

Web Data

Offline/POS

Mobile

Step 2

Tealium
AudienceStream CDP

Tealium
Predict ML

Sample Profile

Lifetime Value

Monthly Renewals

Subscribed Products

Audience Creation

Loyalty

+

Low Likelihood to Renew

Step 3

Loyalty Ad Served

Loyalty Ad Served

Add to Loyalty Campaign

Loyalty Personal-ization

Recipe 2: Fuel Customer Loyalty Campaigns with Predictive Insights

Problem

Data and analytics teams need to drive timely actions and derive relevant insights across the many systems where customer analysis may live. These teams require access to high-quality data to produce rich insights to fuel effective loyalty campaigns.

Solution

A vendor-neutral CDP allows data and analytics teams central access to data across many systems to gain a 360-degree view of the customer to generate high-quality customer predictions (or other insights, by the way). Predictions can be leveraged via business rules to drive customer experience actions.

Example Lists

Ingredients

Web
Products searched	Purchase history
Products viewed	Content interests
Cart history	Login history
Email	

Offline/POS
In-store purchases	Loyalty / rewards program membership
Contact center engagements	

Mobile
App installed	Push notification engaged
Push notification received	Login history

Kitchen Tools

Social media advertising
Display advertising (DMP, DSP)
Website CMS
Marketing automation tool

Your Lists

Ingredients

Web

Offline/POS

Mobile

Kitchen Tools

I want to… Drive more targeted loyalty campaigns to customers likely to sign up for a loyalty program

In order to… To efficiently increase Customer Lifetime Value

Step 1 — Get Your Ingredients

Machine learning analysis is a powerful way to produce predictive insights. ML projects have a large need for data-wrangling and integration, which we can solve by making sure proper data collection practices are in place so data is clean from the start. In this recipe, we are unifying three common sources of data including web data, offline data, and mobile data. In order to make accurate predictions, we want to collect behavioral data across multiple channels along with product ownership data.

Data that is likely important for insights on loyalty includes product ownership, product affinities, behavioral insights, and even customer support interactions.
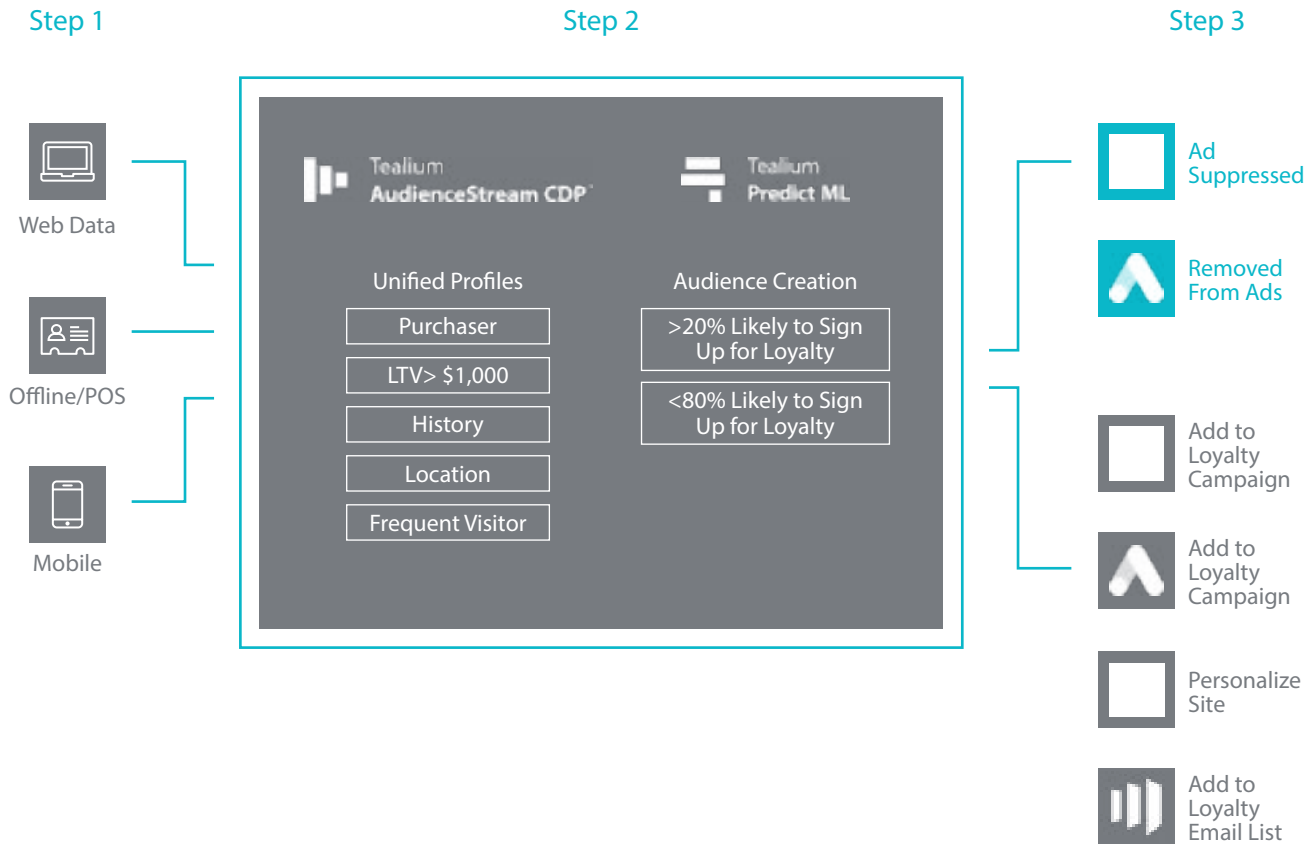
Step 2 — Build Profiles and Create a Likelihood Score

You can now generate a score indicating the likelihood of this customer to renew. This likelihood score becomes another data point in the visitor profile (just like loyalty status, interest categories, etc.) and will let you know which customers are at risk and how much risk there is.

Step 3 — Take Action

Use this unified data to mix your ingredients to perfection and bake in rich insights that allow you to identify which customers to target with your loyalty campaigns. Predictive data points can be leveraged to both define audience segments and/or in your activation rules to trigger actions. For instance, if you wanted to instead predict the likelihood of a customer to complete a purchase and combine that with an audience of known loyalty members, you'd create another highly valuable audience to activate in your campaigns by again combining predictive insights and loyalty information.

Example Chart

Step 1	Step 2	Step 3

Step 1
- Web Data
- Offline/POS
- Mobile

Step 2

Tealium
AudienceStream CDP

Tealium
Predict ML

Unified Profiles
- Purchaser
- LTV> $1,000
- History
- Location
- Frequent Visitor

Audience Creation
- >20% Likely to Sign Up for Loyalty
- <80% Likely to Sign Up for Loyalty

Step 3
- Ad Suppressed
- Removed From Ads
- Add to Loyalty Campaign
- Add to Loyalty Campaign
- Personalize Site
- Add to Loyalty Email List

Real World Recipe Success

How *Sportsbet* Placed a Winning Bet on a Unified Data Platform to Improve Customer Retention

Sportsbet wanted to shift more of their organization's attention to growing lifetime customer value and retention. They soon realized that they needed a single view of the customer to orchestrate, automate, and scale personalized customer experiences throughout the customer journey.

After integrating Tealium with their CRM they were able to gain a 15% increase in reach, achieve a 20% improvement in customer journey engagement, provide 1-click access to a customer's desired destination, and reduce homepage bounce rates by 0.4% — all of which equated to about 9 million more sessions on their site and apps each year. Now those are some major wins!
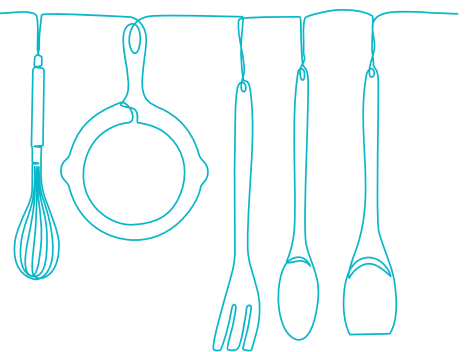
Chapter 3

Driving Omnichannel Personalization with Offline and Online Data

To cultivate happy customers, it's essential to have the right flavors and ingredients to serve up personalized experiences that are consistent across all channels — both online and offline. But meeting customers' escalating — and constantly changing — expectations can feel hard for even the most skillful digital chefs, given the large number of engagement channels customers use.

All too often, each channel presents a unique view that presents only a piece of the customer journey, creating a fragmented and frustrating customer experience — not to mention an obstacle to advancing positive outcomes like retention, loyalty, and increased lifetime value!

Why do so many businesses still face this challenge in an era where omnichannel experiences are talked about so often? Ultimately, it comes down to lacking the right data. Without a strong data foundation, many customer-focused teams struggle with wrangling different data sources, as well as challenges in identity resolution that stall efforts to consolidate information across all offline and offline data sources. This prevents brands from generating a single, unified view of their customers that ultimately can be used to drive personalized, omnichannel customer experiences.

Give you an example of how this negatively impacts the customer experience, you say? Let's talk about one that many of us have been involved in: dialing into a call center.

Call center agents often lack accurate and current data on customers' online behavior because visitors on the website are often anonymous users who haven't logged in or provided their identity. When a customer's recent online behavior is not correlated with the phone call and visible to the call center agent, the interaction lacks personalization. But it doesn't need to be this way! Let's talk about a few use cases (ahem, recipes) where a customer data platform can help.

Recipe 1: Driving Personalization Across Offline and Online Sources

Problem

Every individual customer communication channel has a unique view of the customer, which can cause an inconsistent and uneven experience. This prevents you from delivering the omnichannel personalization your customers expect.

Solution

Leverage a customer data platform to unify offline and online customer data and drive personalized experiences across channels.

Example Lists

Ingredients

Web
Products favorites
Email
Purchase history

Offline/POS
Preferred store location
In-store purchases
Loyalty / rewards program membership

Mobile
App downloaded
App launched
Login
Push notification status

Kitchen Tools

Website
Display advertising (DMP, DSP)
Social media advertising
Email marketing
Analytics
Point of sale systems
Customer support tools

Your Lists

Ingredients

Web

Offline/POS

Mobile

Kitchen Tools

I want to… Leverage a single customer view for omnichannel personalization

In order to… Create consistent customer engagements across online and offline channels

Step 1 — Get Your Ingredients

To provide customers with personalized omnichannel experiences, let's look at how we can use a CDP to generate a single view of the customer, including both online and offline data sources, across lifecycle data. In this example we are unifying three sources of data:

- Offline data from a point of sale system
- Web data
- Mobile data

These three sources of data in combination give us insights into purchase activity, product engagement, loyalty level, etc. that can be included in the customer profile.
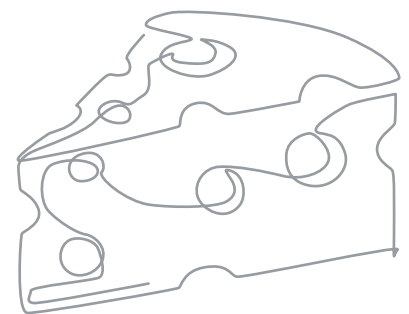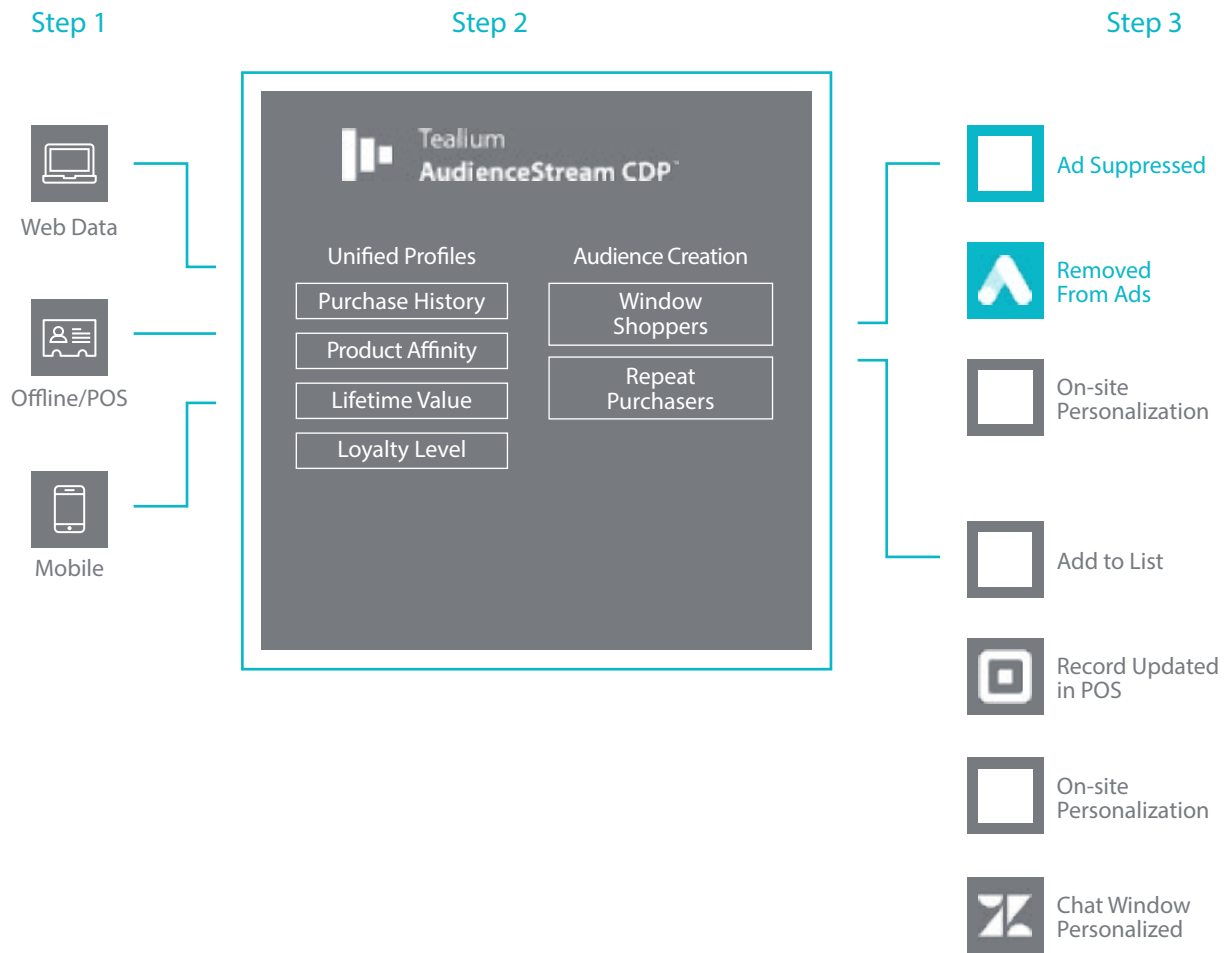
Step 2 — Organize Your Data Into a Profile

Next, these events are all stitched into a customer profile where insights can be generated and used in integrated channels.

Step 3 — Personalize Customer Support Interactions

Tealium AudienceStream CDP then enables you to take actions using these profile-based attributes to create unique audiences. With a portable and accessible single view of the customer, you can now operate with a truly 'customer-centric' approach across multiple engagement channels like advertising platforms, customer support systems, and even in-store mobile experiences.

Example Chart

Step 1	Step 2	Step 3

Step 1

Web Data

Offline/POS

Mobile

Step 2

Teallium AudienceStream CDP™

Unified Profiles	Audience Creation
Purchase History	Window Shoppers
Product Affinity	Repeat Purchasers
Lifetime Value	
Loyalty Level	

Step 3

Ad Suppressed

Removed From Ads

On-site Personalization

Add to List

Record Updated in POS

On-site Personalization

Chat Window Personalized

Recipe 2: Personalized Customer Support/ Call Center

Problem

Every interaction a customer has in the call center is an opportunity to either forge a stronger, more profitable relationship by providing efficient and effective personalized service or create a frustrating experience that can increase churn and decrease revenue.

Solution

Leverage your CDP to blend online and offline data sources to provide a more personalized call center experience. Data from the outcome of the call center experience can also be leveraged to drive further action in integrated channels.

Example Lists

Ingredients

Web
Products favorites
Customer LTV

Product searched

CRM
Known customer
Purchase history

Campaigns associated
Email

Offline/POS
Call center engagement history

Associate support tickets

Kitchen Tools

Website personalization
Display advertising (DMP, DSP)
Social media advertising
CRM

Your Lists

Ingredients

Web

CRM

Offline/POS

Kitchen Tools

I want to… Improve customer support and leverage offline call center data to personalize customer experiences

In order to… Increase efficiency with my advertising budget and create better customer experiences

Step 1 — Get Your Ingredients

First, you need to be able to access customer data from multiple sources to deliver insights to call center agents. Using the capabilities of the Tealium AudienceStream CDP, you can collect data from multiple online and offline sources such as:

- **Digital channels:** Websites and apps for behavioral insights on things like interacting with particular ad campaigns, browsing particular content on the website, completing certain online conversions, etc.
- **CRM systems:** For demographic insights, transactional data, etc.
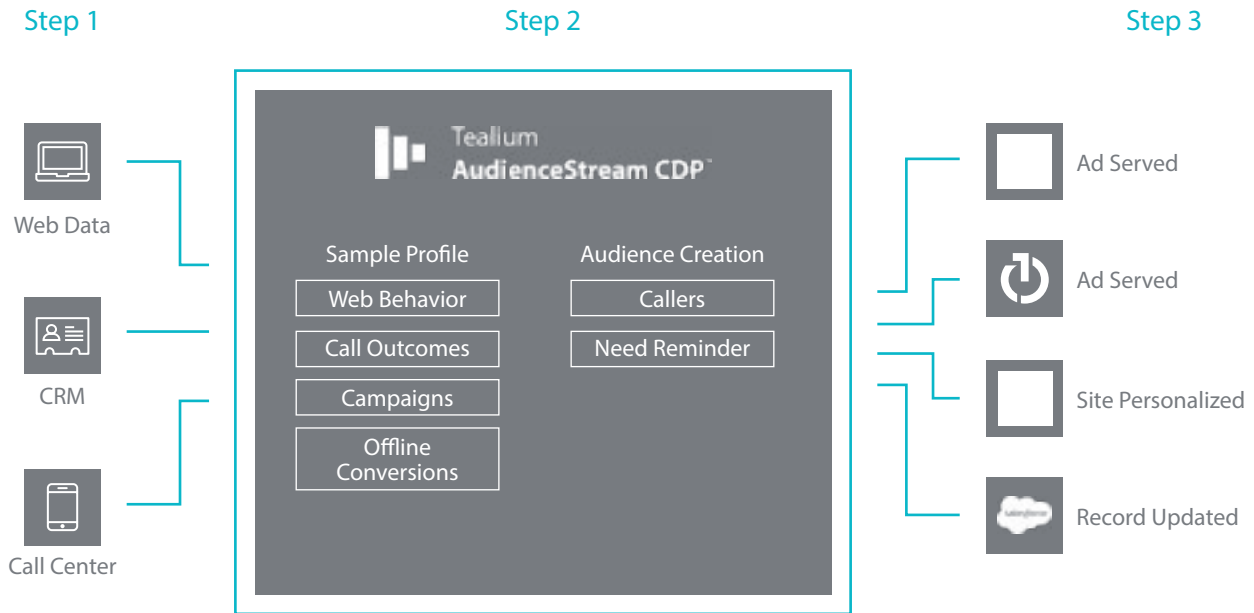- **Call center data sources:** Where a unique phone number used can be tracked

Step 2 — Organize Your Data into a Profile

Next, Tealium organizes this data and validates identity to build rich customer profiles and make them available to your tech stack. In our example, the customer's online behavior is tied to the phone call and sent to the CRM system to inform the agent's interaction with the customer based on real-time insights.

Step 3 — Go Beyond the Call

If you want to take this a step further, you can extract the outcome of the call and define additional audiences that you can then make available to other systems of insight in order to improve overall CX and further improve that customer's experience beyond the call.

Example Chart

Step 1   Step 2   Step 3

Web Data

CRM

Call Center

Teallum
AudienceStream CDP

Sample Profile   Audience Creation

Web Behavior   Callers

Call Outcomes   Need Reminder

Campaigns

Offline
Conversions

Ad Served

Ad Served

Site Personalized

Record Updated

Recipe 3: Location-Based Marketing

Problem

Marketing and analytics professionals want to be able to deliver location-based content, messaging and analytics especially around their store locations. However, location data on its own may not be useful enough to actually personalize the message or experience.

Solution

Use your CDP to combine location and behavioral data to deliver the right message at the right time.

Example Lists

Ingredients

Web
| Products searched | Products viewed |
| Purchases | Cart history |

Offline/POS
Preferred store location

Mobile
Location data	Push notifications opt-in
App installed	
Login history	

Kitchen Tools

eCommerce Site
Display advertising (DMP, DSP)
Social media advertising
Email marketing

Your Lists

Ingredients

Web

Offline/POS

Mobile

Kitchen Tools

I want to… Combine location and behavioral data to send timely, targeted offers

In order to… Deliver location-based experiences and offers

Step 1 — Get Your Ingredients

Let's start where we always start, gathering the data needed to make our use cases come to life. There are a lot of interesting options when you combine location data with other customer insights, like customer personas, customer value, product ownership, etc. In our example, we'll look at triggering promotions and CX personalization based on (1) customer interests and (2) entering or exiting a physical store location.

For this recipe, we'll need to be able to collect location data which can be consented to from usage of a mobile app. Our campaign strategy calls for combining this data with customer interests, which we can get from the customer's behavior in-app and also on the website.

Step 2 — Build Your Ingredients into a Customer Profile

Next, we need to be able to resolve the identity of this customer so we can join data from their website visits with data from their mobile app usage. We can do this using data from purchases if it happens in both sources, or we could use logins to the app and correlate with their web behavior if they've signed up for a newsletter (using email as a common identifier).
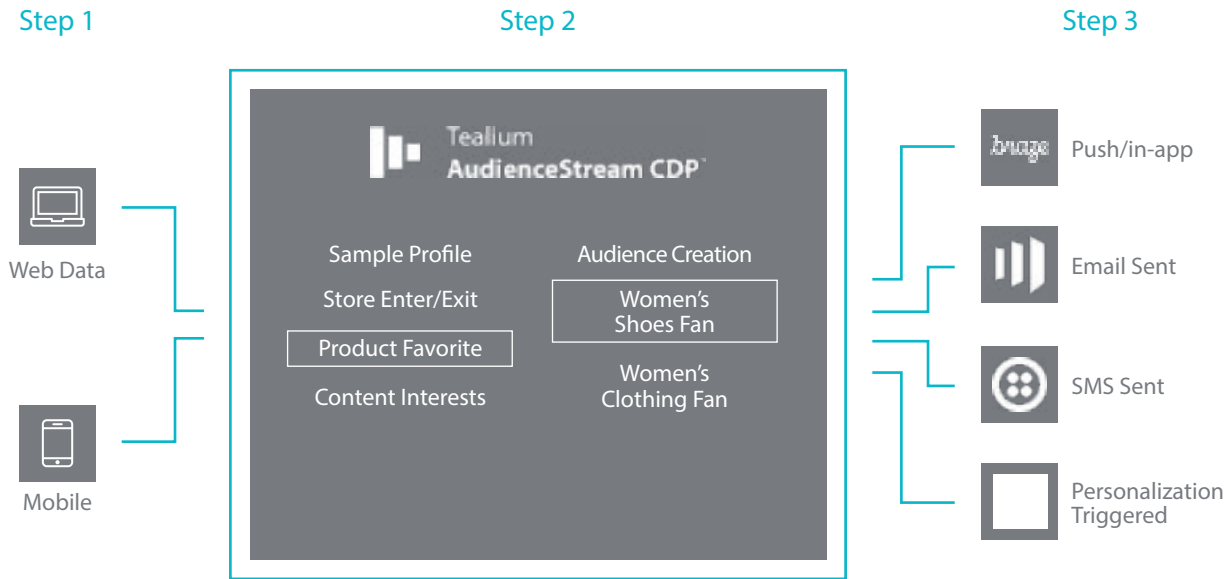
Once defined, identity resolves automatically in Tealium AudienceStream CDP and you can build in insights using the data from both sources to identify what kind of content the customer is interested in, what kind of products they've browsed or own, and you can see what stores they've visited, along with whether they are in a store, using the location data.

These attributes are then used to build audiences. In this case, let's say we know that our customer is a fan of women's shoes from her browsing behavior on the website and mobile app.

Step 3 — Orchestrate Campaigns For Timely Offers

The audiences you've now created allow you to orchestrate actions to this audience across multiple engagement channels. In this case, we can trigger a push message, email, website personalization and/or an SMS text message to these audiences, triggered by entering or exiting a physical store.

Example Chart

Step 1	Step 2	Step 3

Step 1

Web Data

Mobile

Step 2

Teallum AudienceStream CDP

Sample Profile
Store Enter/Exit
Product Favorite
Content Interests

Audience Creation
Women's Shoes Fan
Women's Clothing Fan

Step 3

Push/in-app

Email Sent

SMS Sent

Personalization Triggered

Real World Recipe Success

### How the *Utah Jazz* Leveraged Historical and Behavioral Data to get a Full Court Press on Personalization

Before Tealium, the Utah Jazz (a professional basketball team) were able to run analytics on their web properties, but those insights remained siloed away from other business units. By combining a Tag Management System with a Customer Data Platform, the Utah Jazz were able to deploy two use cases that solved fundamental data challenges.

For a quick win, they could now use first-party data from their fans' web experiences to influence email marketing and sales outreach. Furthermore, they could now stitch together fan experience data with third-party platforms like Ticketmaster to gain a complete picture of the fan experience across their eight main channels. These changes allowed them to monitor performance and adjust spend in real time and set the stage for many of their future use cases.

After bringing their fan experience data in-house with a CDP, the Jazz looked to expand the reach of it through targeted marketing campaigns. At the time, 30-year season ticket holders received the same messaging as first-time fans. With a wealth of info from surveys, ticket sales, ticket scans, and sales reps, they leveraged their CDP to unify data to create new audiences for their campaigns.

These new audiences and campaigns included abandoned cart campaigns, generating in excess of $100,000 in revenue each season; personalizing offers based on historic behavioral data (if a consumer attends games to see the visiting team, they only make offers for those games, for example); and implementing A/B testing based on insights gained from the CDP. The Jazz even ran simple A/B testing around making ticket recommendations.

The results: When visitors read an article with a ticket recommendation on their site, revenue per visitor increased 34% with that one simple change.
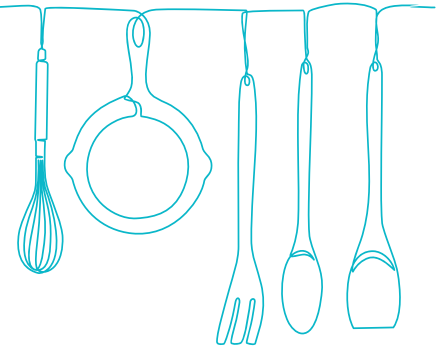
Chapter 4

Creating Scalable and Efficient Customer Acquisition and Growth

When cooking up acquisition and growth campaigns you need to be sure you have the right mix of tools and ingredients to flavor the dishes just right to satisfy your customer's appetite for personalized, timely, and relevant experiences across all channels. We all know that delivering meaningful moments to a buyer (relevant messaging/offer, a specific set of channels, and right timing) is not only expected, but it also leads to better conversion and business impact. And most importantly, buyers are happier! Sounds good, but where do you start?

Well, Digital Chefs, you should know by now that customer data is the main ingredient in fueling these experiences and it's the right place to start!

Step one begins with building a customer data foundation that lets you create a single view of the customer across many sources of data. With an accurate and timely view of your buyer, you can do a much better job doubling down on audiences that are more likely to convert. These audiences help drive benefits down the line such as driving more efficient ad campaigns where dollars can be spent on highly engaged groups or building better lookalike audiences to go find customers that are a good fit for your brand but whom you haven't met before.

Now, let's turn to some recipes to see how to dish this all up in a way that makes your prospects hungry for more!

Recipe 1: Automate New Cross-Channel Abandoner Campaigns

Problem

Lost time and efficiency by manually creating new campaigns causing inefficiency. This leads to long timelines and expensive resources being impacted.

Solution

Use a customer data platform to create rule-based triggers to automate repetitive tasks for your most-used campaign types (ex. conversion abandonment).

Example Lists

Ingredients

Web
Products searched   Products viewed
Cart history

Offline/POS
In-store purchases

Mobile
App installed   App login

Kitchen Tools

eCommerce Site
Display advertising (DMP, DSP)
Social media advertising
Email service provider

Your Lists

Ingredients

Web

Offline/POS

Mobile

Kitchen Tools

I want to… Automate triggering one of my most valuable use cases, conversion abandonment retargeting

In order to… Acquire new customers and increase conversions without manual work

Step 1 — Get Your Ingredients

First off, we start by scoping out what customer data we need to use to make this use case come to life. In this case, we have three data sources (mobile, offline POS systems and web) to monitor all potential product browsing and purchasing behavior.

Step 2 — Combine Ingredients Into a Profile and Set Business Rules

After the data is collected, it is then standardized, transformed into visitor profiles, and enriched with other information that might prove valuable for engaging the customer. This value is based on your own business rules to automate the process of building insights into the visitor profile. Purchases and behaviors across these three channels are used to assign visitors to audiences using badges and attributes like "cart abandoner" or a "product favorite" based on the cross-channel history of items browsed. Then, as always, we build our audiences to include in (or exclude from) campaigns and customer engagement tools.

Step 3 — Reap the Sweet Rewards

Combining your audiences with business rules you've previously set up is how we will automate the data orchestration process. Because we've included offline point of sale system data, users who purchase in-store can be automatically removed from online campaigns as well to be as efficient with our reengagements as possible.

This automation enables marketing departments to scale effective campaigns that dynamically react in real time to generate revenue.
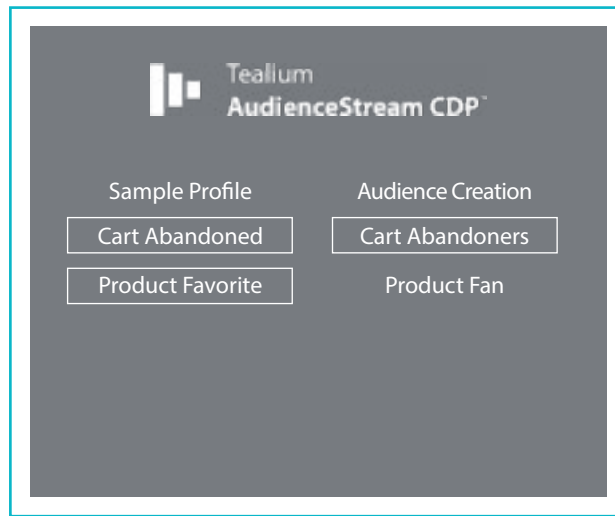
Example Chart

Step 1	Step 2	Step 3

Web Data

POS

Mobile

Tealium
AudienceStream CDP

Sample Profile

Cart Abandoned

Product Favorite

Audience Creation

Cart Abandoners

Product Fan

Ad Served

Ad Served

Email Sent

Site Personalized

Recipe 2: Lookalike Audiences

Problem

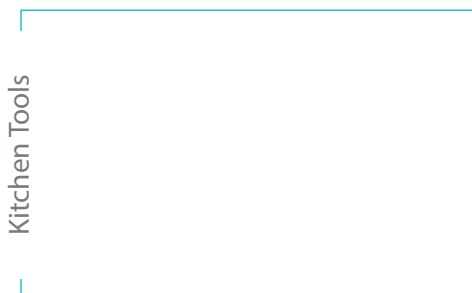It's difficult to accurately target high-value lookalike audiences for campaigns across applications like Facebook, Salesforce, and Doubleclick to acquire new customers.
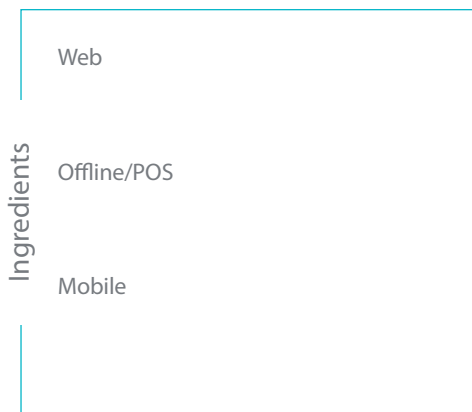
Solution

Leverage what you know about your existing customers using the advanced segmentation capabilities of a CDP to generate the best possible list of existing customers or users for lookalike modeling. By supplying the best possible list to the ad venue, you'll be able to generate better lookalike modeling results and find new customers.

Example Lists

Ingredients

Web
Products searched	Cart history
Products viewed	Content preferences
Purchases	

Offline/POS
Loyalty / rewards member

Mobile
App launch history	App download

Kitchen Tools

Display advertising (DMP, DSP)
Social media advertising

Your Lists

Ingredients

Web

Offline/POS

Mobile

Kitchen Tools

I want to… Drive better performance from my cross-channel lookalike campaigns

In order to… Find and acquire new customers efficiently

Step 1 — Get Your Ingredients

First, let's identify what group you want to use as a model for lookalikes. In the example you can see that we've unified three sources of data — web, offline, and mobile data — to identify a customer group with a particular lifetime value, loyalty level, and product ownership. You can also generate lookalikes for your customers from content interests like sports or business news.

Step 2 — Build Your Audiences

Build audiences based on the customer attributes that you want to target.

In this example, we are creating lookalike lists from our best customers. We label those customers in an audience that we'll call Product 1 VIPs. These are owners of "Product 1", who have a lifetime value over, let's say $2,000.

Next, individual customer purchase events from each channel can be added up into a "Lifetime Value" attribute. Depending on your strategy, you can also identify visitors' attributes based on the products they own, loyalty status, and more.

Step 3 — Take Action

Now that you have the audiences ready, you can orchestrate this audience data to the many venues where you can use a list to generate lookalikes to expand the scale of your acquisition program in a relevant way using your greatest asset — your customer data!

Example Chart

| Step 1 | Step 2 | Step 3 |

Step 1

Web Data

Offline/POS

Mobile

Step 2

Teallum
AudienceStream CDP

Sample Profile	Audience Creation
Lifetime Value	Product 1 VIPs
Loyalty Level	Discount Shoppers
Product 1 Owner	Window Shoppers

Step 3

Ad Served

Ad Served

Ad Served

Ad Served

Recipe 3: Optimizing Spend with Media Suppression

Problem

Every marketer needs to get creative with their budget occasionally. Most start economizing by trying to reduce wasted ad spend due to poor targeting (ex. showing a customer an ad for something they just bought). This is usually due to siloed customer data resulting in a fragmented view of the customer in a particular marketing system.

Solution

Create a single view of relevant customer data with your CDP so marketing teams can suppress customers who have already purchased or converted from advertising campaigns.

Example Lists

Ingredients

Web
Products searched
Products viewed

Purchases
Cart abandonment

Offline/POS
Store location
In-store purchases

Loyalty program
sign-up email

Kitchen Tools

Website
Display advertising (DMP, DSP)
Social media advertising
Email marketing
Personalization tool

Your Lists

Ingredients

Web

Offline/POS

Kitchen Tools

I want to… Reduce wasted ad dollars due to targeting an audience with an irrelevant offer

In order to… Optimize ad campaign dollars on customers who are mostly like to take action

Step 1 — Get Your Ingredients

First, let's identify our customer data sources for this recipe. We have online event data from a website such as visits, products viewed, content preferences, and cart status. We also want to bring in offline point-of-sale data in order to have an accurate view of purchase behavior. In this case, the customer abandoned the online funnel, but purchased offline.

Step 2 — Create Visitor Profiles

Next, let's turn all the event data into a visitor profile through identity resolution. This allows you to map event data to one person so that there's a place where the full view of the customer can live and be used.

Once you have the visitor profile populated with behavioral data from online and offline you can begin to create audiences based on your view of customer behavior. For the data in this example, two common audiences could be customers who researched a product but didn't buy it, as well as an audience of customers who just bought a particular product. Each customer segment requires a unique experience, but without a full view you could place customers in the wrong group.

Step 3 — Orchestrate Customer Experiences

Finally, using our CDP, we can create an action rule to remove offline purchasers from the online retargeting campaign list (in any channel where the campaign is running). The final result of this is an orchestrated customer experience where offline purchasers are removed from online campaigns so that money can be used more efficiently towards customers who have a better chance to buy.

Example Chart

Step 1	Step 2	Step 3

Web Data

Offline/POS

Teallum AudienceStream CDP

Sample Profile

Lifetime Products Viewed

Product Favorite

Product History

Audience Creation

Product Fan Retargeting

New Product Buyers

Ad Suppressed

Email Suppressed

Ad Suppressed

Personalization Suppressed
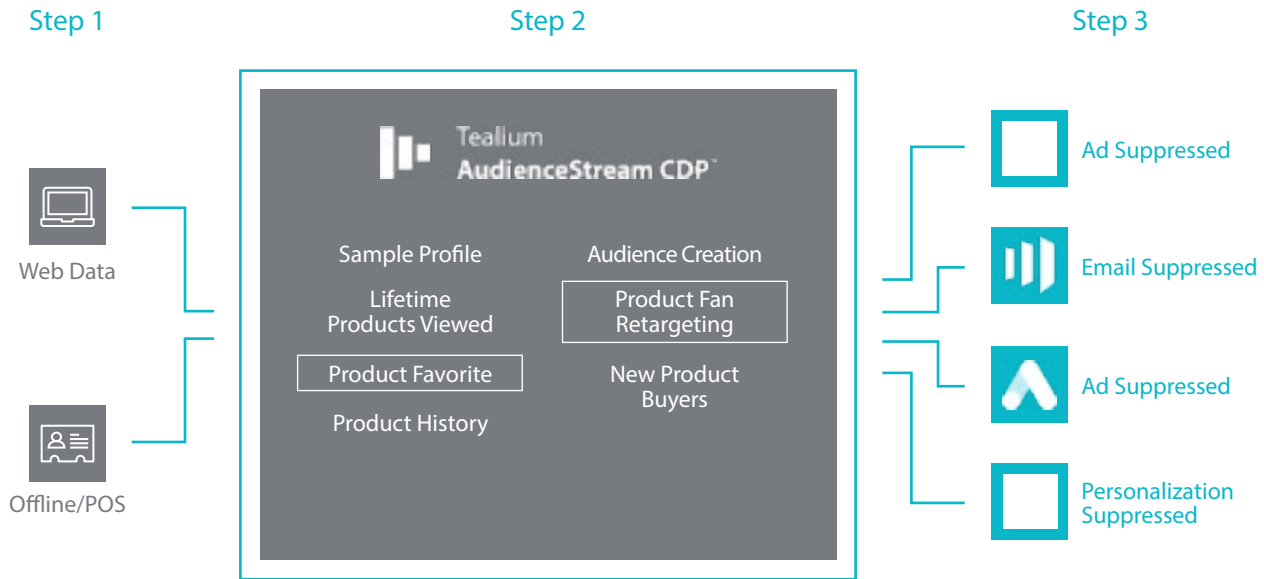
Real World Recipe Success

How *Adore Beauty* Increased Engagement Rates by 400%

Tealium customer and leading online beauty retailer in Australia, Adore Beauty, wanted to know their customers more intimately so they could deliver personalized beauty advice while improving sales.

Leveraging real-time data collected by a combination of Tealium iQ Tag Management and Tealium EventStream API Hub, Adore Beauty was able to provide advice to customers with skin and hair concerns by harnessing recent browsing behavior data.

The beauty retailer was able to surpass their engagement goals exponentially. Their average order value increased 9%, conversion rates skyrocketed 17%, and engagement rates increased 400%. Plus they boosted their overall conversion rates by 17% and have seen revenue growth of 249% since launching the campaign!
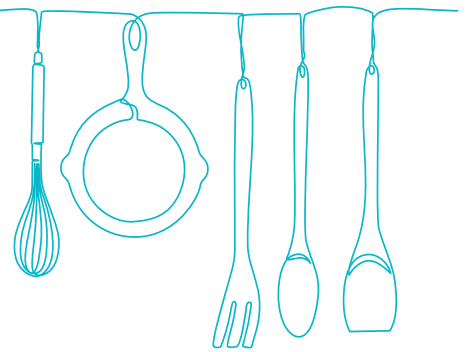
Chapter 5

Generating Predictive Insights and Customer Analytics that Drive Marketing Effectiveness

The best chefs in the world can't always predict what dishes their customers are going to order when they sit down to dine. But data chefs can!

As marketing, analytics and data professionals, wouldn't it be great if you could predict which steps your customers are most likely to take next (i.e. buy, join a loyalty program, churn, abandon shopping cart)? If you could anticipate the likelihood of your customers' next move, you'd be able to target prospects and customers at just the right time to deliver meaningful moments on the right channel to drive better engagement, retention rates, and lifetime value.

But what does it take to accurately understand and predict customer behavior? The power of machine learning (ML) can get you there! ML provides remarkably powerful capabilities to predict customer behavior based on their past actions (browsing/purchasing/viewing). Given this, it's not surprising that savvy marketing and analytics teams want to tap into the power of ML to maximize results!

To truly harness the power of ML, there are some key challenges to solve. Normally ML projects require a team of data scientists to cleanse data, extract insights, generate these into a report, and implement insights into a point solution where they can be accessed. This poses a problem, since it adds resource costs, and even worse, delays. By the time you can access customer insights, they could be stale.

What, then, is the solution to making ML projects both marketer-friendly and data scientist powerful? What you need is the right CDP coupled with ML-powered insights in a single solution!

Let's show you how you can put this all together by diving into a few recipes that show you how to anticipate meaningful moments and better target only the most relevant prospects and customers with the right message in the right channel at the right time!

Recipe 1: Predicting Likelihood to Purchase

Problem

Targeting the right customers at the right time can be difficult and requires difficult analysis of large volumes of customer behavior.

Solution

ML-powered insights built into your customer data platform to simplify analysis and targeting of customers based on likelihood to complete an action (in our example, a purchase).

Example Lists

Ingredients

Web

Products searched	Cart abandonment
Products viewed	Orders completed
Purchase history	

Offline/POS

Loyalty / rewards member	In-store coupon applied
Preferred store	

Mobile

Location data	App opened
Device type	Login email
App installed	

Kitchen Tools

- eCommerce Site
- Display advertising (DMP, DSP)
- Social media advertising
- Marketing automation
- Personalization tool

Your Lists

Ingredients

Web

Offline/POS

Mobile

Kitchen Tools

I want to… Predict the likelihood of my customers to complete an action

In order to… Drive proactive customer engagement to increase revenue growth

Step 1 — Get Your Ingredients

To know what data you need to collect, you should start with understanding the behavior you want to influence or ultimately predict. If your goal is revenue growth, for the sake of simplicity, let's say you want to influence purchases.

For our example of influencing purchases, we need to bring in purchase data from all sources. Some common examples of data to include for analysis are demographic data, device used, content preferences and products viewed. With these data points, ML analysis can identify patterns correlated with achieving your goal.

Step 2 — Create a Prediction Score

The data you've gathered is organized around the customer in your CDP, ultimately creating visitor profiles and attributes. The visitor profile provides a place where machine learning can sit "on top" and be used to predict the likelihood of purchase. In the example, this profile contains data from across engagement channels, which makes it fertile ground for generating predictive insights.

The prediction score generated by Tealium Predict ML becomes another data point that marketing and analytics teams can use with rules to trigger action and analysis.

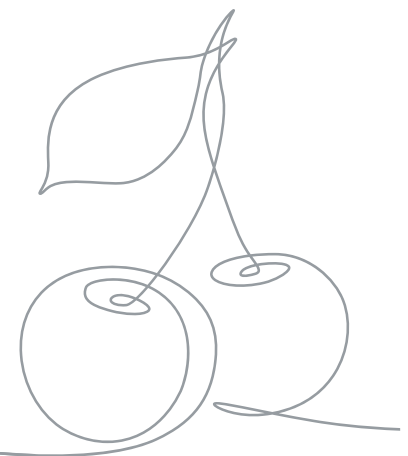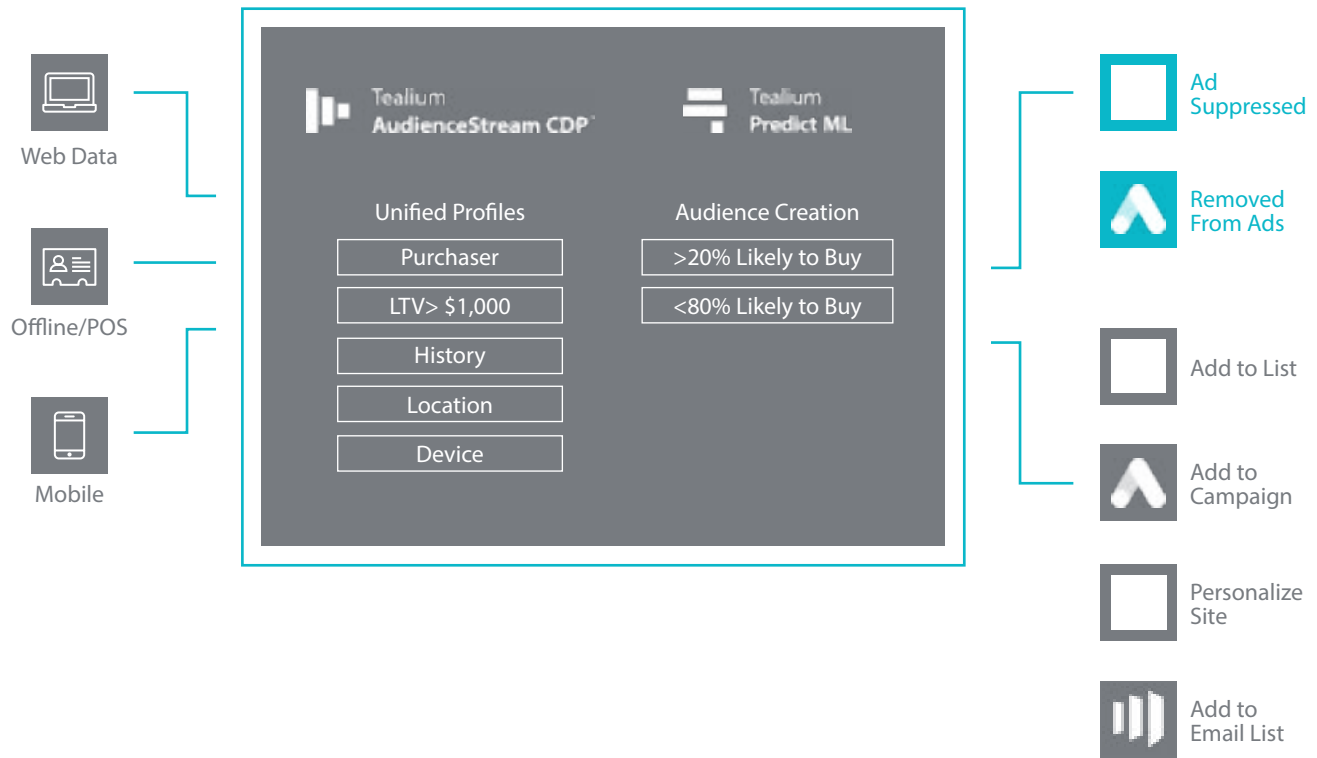### Step 3 — Define Audiences Based on Likelihood to Complete an Action

We then use these prediction scores as the basis for defining audiences. You can use scores in creative ways to target or exclude certain customers from various campaigns to drive more efficiency. The audiences allow you to orchestrate customer experience to take proactive action to produce desirable outcomes like purchase conversion.

Example Chart

| Step 1 | Step 2 | Step 3 |

Step 1

Web Data

Offline/POS

Mobile

Step 2

Tealium
AudienceStream CDP

Tealium
Predict ML

Unified Profiles

| Purchaser |
| LTV> $1,000 |
| History |
| Location |
| Device |

Audience Creation

| >20% Likely to Buy |
| <80% Likely to Buy |

Step 3

Ad Suppressed

Removed From Ads

Add to List

Add to Campaign

Personalize Site

Add to Email List

Recipe 2: Proactively Identify and Convert High-Value Customers

Problem

Marketers need to identify and increase conversion rates for high-value customers to drive higher lifetime value (CLTV) and boost revenue.

Solution

Marry predictive insights with high-value customer segments to target high-value audiences that are ready to convert with customer engagement tools like advertising, site personalization, and emails.

Example Lists

Ingredients

Web
Products searched
Products viewed
Purchases

Cart history
Content interests
Email

Offline/POS
In-store coupon applied

Mobile
Location data
App installed
Push notification received

Push notification engaged
Login history

Kitchen Tools

Social media advertising
Display advertising (DMP, DSP)

Your Lists

Ingredients

Web

Offline/POS

Mobile

Kitchen Tools

I want to… Proactively increase my engagement with high value customers who are most likely to purchase

In order to… Increase marketing budget efficiencies by engaging with my most valuable audiences

Step 1 — Get Your Ingredients

In this example, we are identifying high-value customers by first unifying three different sources of data including web, offline, and mobile data.

This unified data feeds into the visitor profiles created by Tealium AudienceStream CDP where any behavior that is tracked can also be predicted. The data is correlated with the customer's lifetime value, products owned, and propensity to buy.

Step 2 — Add Context

You can now generate a score indicating the likelihood of this customer to complete an action using Tealium Predict ML. Now, this likelihood score is yet another data point in the visitor profile (just like loyalty status, interest categories, etc.) and you can predict how likely these customers are to complete an action based on data.

Step 3 — Generate Insights

Now you are ready to use this likelihood score to target the identified high-value customers and engage them with advertising, site personalization, and emails to increase conversion rates.
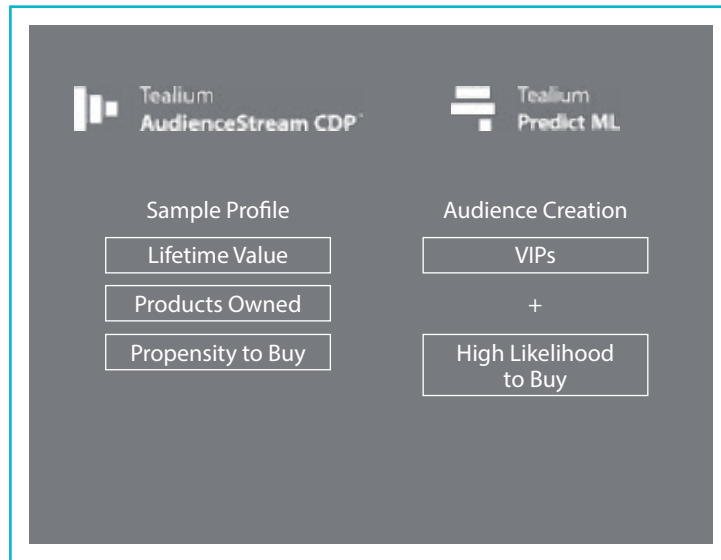
Example Chart

Step 1	Step 2	Step 3

Step 1

Web Data

Offline/POS

Mobile

Step 2

Tealium
AudienceStream CDP

Tealium
Predict ML

Sample Profile

| Lifetime Value |
| Products Owned |
| Propensity to Buy |

Audience Creation

| VIPs |
| + |
| High Likelihood to Buy |

Step 3

Ad Served

Ad Served

Ad Served

Ad Served

Recipe 3: Intelligent Cart Abandonment Campaigns

Problem

Between 2006 and 2019, 69.57% of digital shopping carts were abandoned, resulting in incomplete purchases and lost sales.

Solution

Create intelligent cart abandonment retargeting by adding predictive insights to your customer data to refine targeting and improve return on marketing efforts and investment.

Example Lists

Ingredients

Web
Products favorites | Orders completed
Cart abandonment | Purchases

Offline/POS
Store location | Customer support inquiries
In-store purchases |

Mobile
Application installed | Login history

Kitchen Tools

Web analytics
eCommerce site
Display advertising (DMP, DSP)
Social media advertising
Email service provider

Your Lists

Ingredients

Web

Offline/POS

Mobile

Kitchen Tools

I want to… Increase the efficiency of one of my most valuable use cases, cart abandonment retargeting

In order to… Proactively increase purchase conversion

Step 1 — Get Your Ingredients

Let's start where we always start, by getting our data all together across channels. In the example shown below, we have three sources to monitor all potential product browsing and purchasing. Tealium AudienceStream CDP uses all of the purchase and behavior data across each of the three channels to resolve identity, build profiles, and identify attributes.

In this example, we are identifying abandoned carts based on behavior and product favorites based on a cross-channel history of items browsed. Remember, all of this data is enriched at collection, based on your own business rules to automate the process of building insights into the visitor profile.

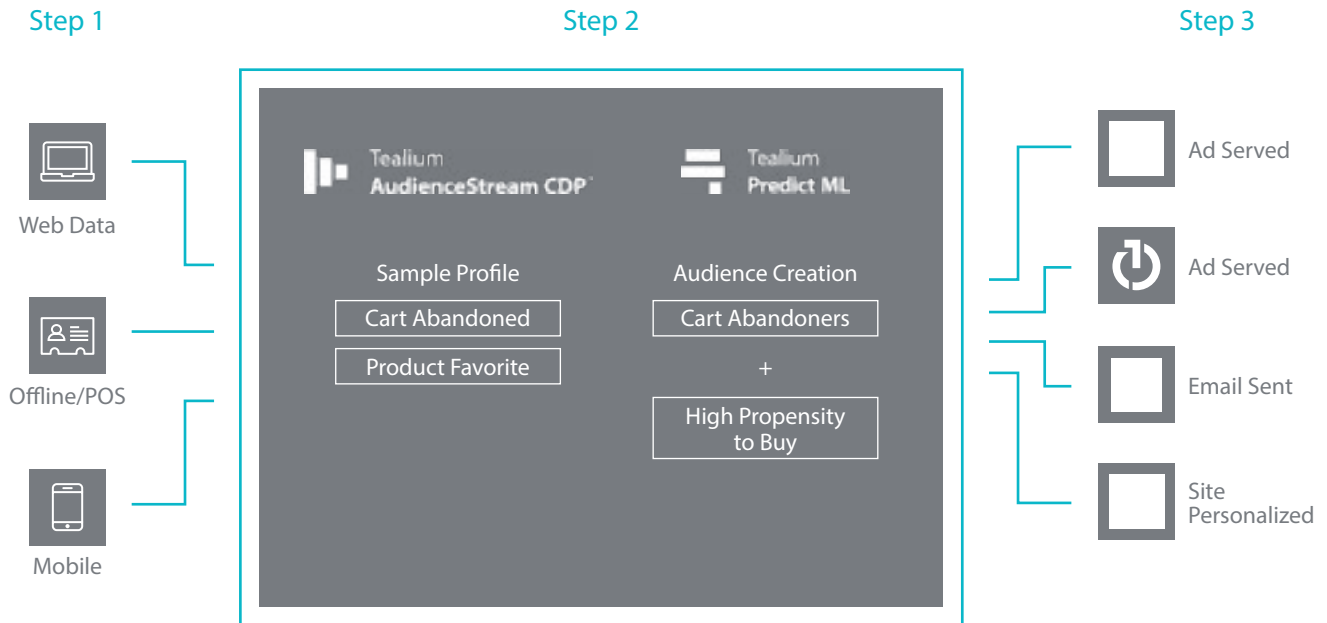### Step 2 — Combine Audiences with Rules to Automate Targeting

We can now build these audiences for inclusion (or exclusion) from campaigns. They can also be further refined using predictive insights. This allows you to automatically target cart abandoners on an ongoing basis with no additional work.

You don't need to worry about wasting spend on customers who purchase in store, since these are automatically removed from retargeting campaigns based on rules. And because all data sources are included in one visitor profile, product interests are extremely well identified.

Step 3 — Reap the Sweet Rewards

This automation, combined with ML-powered insight from Tealium Predict ML, enables marketing teams to scale effective campaigns that dynamically react in real time to generate revenue. The end result is a more effective way for marketers to identify conversion drop-off with predicted high-value customers and automatically generate campaigns to re-engage.

Example Chart

Web Data

Offline/POS

Mobile

Tealium AudienceStream CDP

Tealium Predict ML

Sample Profile

| Cart Abandoned |
| Product Favorite |

Audience Creation

| Cart Abandoners |
| + |
| High Propensity to Buy |

Ad Served

Ad Served

Email Sent

Site Personalized

Real World Recipe Success

### *Monash University* Enrolled a CDP to Deliver Higher Quality Engagements and Conversions

To better understand the prospective student's journey and help inform their decisions when choosing where to study, Monash University needed to gain insights into their online customer journey, from initial searches to evaluation, through to final selection.

Using the Tealium Customer Data Hub, Monash was able to create a 360-degree view of a single student by orchestrating both historical and real-time data from multiple touchpoints. This comprehensive view allowed Monash University to provide relevant educational information and a positive experience during a student's selection process and Open Day.

The results of their Student Open Day pilot program?
- +19% more 'quality' leads generated
- +20% more events were added to those who received a more personalized experience
- 4.2 out of 5 respondents stated it was easier to find activities relevant to them

That's an Instagram-worthy result!
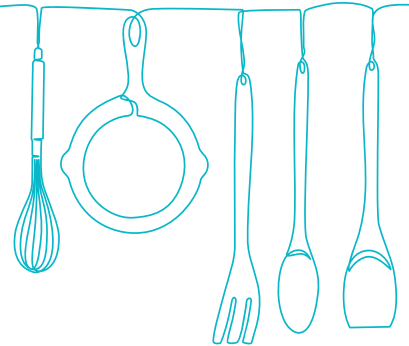
Chapter 6

A Mixed Bag! Recipes to Drive Greater Operational Efficiency and Empower Consumer Privacy

One of the hallmarks of a master digital chef is balancing diverse flavors to adapt to changing customer appetites! For example, customers expect better, and more personalized, experiences than ever before, but they don't want these personalized moments to come at the expense of their privacy.

Upping the stakes, stringent consumer data privacy regulations are rapidly evolving – which means that staying compliant with existing privacy regulations like GDPR, CCPA, and a variety of others is critical to mitigating risk (financial, brand reputation, etc.). At the same time, protecting customer privacy and data security can enhance your brand reputation and be a source of competitive advantage for companies that are able to manage data effectively. The upside to getting this right is huge!

The requirements go well beyond acquiring customer consent, since the use of this consent data needs to be managed and orchestrated across all your tech in order for those preferences to actually be honored. Under CCPA and GDPR, customers have the right to know if data has been sold or disclosed and to whom. They also have the right to access their personal information and request that it be erased. This opens up companies to risk, since responding to such a request can be an extremely expensive proposition for a business if they lack the ability to automate and manage customer data management so as to gain visibility into how it's being used.

What's the solution? Businesses need to create a more governable, unified, secure, and compliant data supply chain in order to keep track of their customer data and remain compliant with evolving consumer data privacy regulations. We recommend you accomplish this by leveraging the right CDP to create a single source of trusted customer data to help ensure that privacy preferences are collected and honored throughout all channels. In this way, privacy offices can more easily respond to customer data privacy requests such as "right to be forgotten".

Let's put this into action by looking at recipes that allow you to standardize data collection for improved data quality and efficiency, as well as collect and manage consent data in order to better manage privacy across the entire customer data lifecycle.

Recipe 1: Standardize and Syndicate Data Collection

Problem

Customer data commonly exists across many systems and is managed within silos. This creates challenges to standardizing data because the task requires a lot of manual effort that is prone to error and typically slow.

Solution

Collect customer data where all incoming data is mapped to a common taxonomy across all systems and defined in your own business terms. The result is that data is standardized as it is collected and available to be sent downstream immediately to many locations in a consistent, efficient, and automated fashion.

Example Lists

Ingredients

Web

Products favorites

Purchases

Content engagement

Email

Mobile

Push notification received

Login history

Location data

Push notification engaged

Kitchen Tools

Web analytics
eCommerce Site
Display advertising (DMP, DSP)
Social media advertising
Email service provider

Your Lists

Ingredients

Web

Mobile

Kitchen Tools

I want to… Standardize my customer data across all systems

In order to… Minimize time spent on repetitive data tasks as well as lower technical barriers to analyzing data

Step 1 — Get Your Ingredients

We've mentioned data standardization throughout this guide; now let's take a look at an example of how you can make this more efficient across the lifecycle of the data. In this example, we are working with both web and mobile data using Tealium. Having one tool for multiple sources of data collection not only increases the efficiency of collecting the data, but also dramatically increases the efficiency of using the customer data later. That's because the data is collected in a central place and that collection is done based on your own business rules — reducing the amount of extensive post-processing needed.

Step 2 — Define Audiences

Next, as data is collected, we map it to a data layer, which is a vendor-neutral definition of every data point about your customers. This data layer becomes a data dictionary that data from all technology is mapped to from your vendor's proprietary naming. This makes re-use of the data in different channels much easier and efficient. And it makes combining data from different places easier.

Once the data from all the channels is standardized it can be easily combined to define audiences. For example, the definition of your VIP audience can include data from multiple sources, not just from one set of web or mobile events.
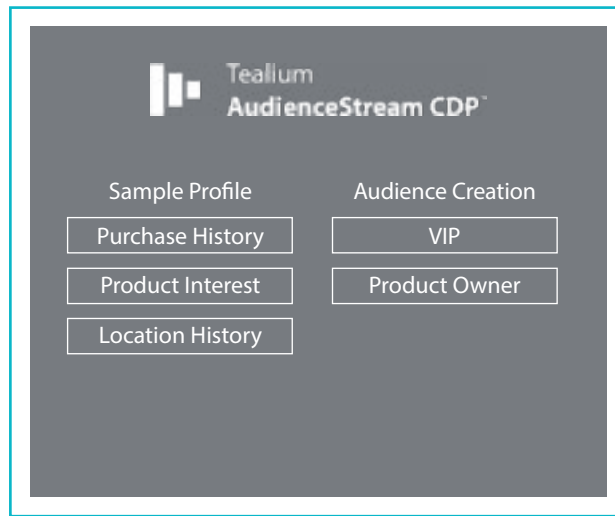
Step 3 — Activate Across Channels

These audiences can be managed centrally, but activated in each channel of your tech stack using rules. With rules in place, you no longer need to manage customer data within silos. Instead, all channels can share the same customer data insights, and every system for customer insight and engagement is populated with the same customer data in an efficient and agile manner.
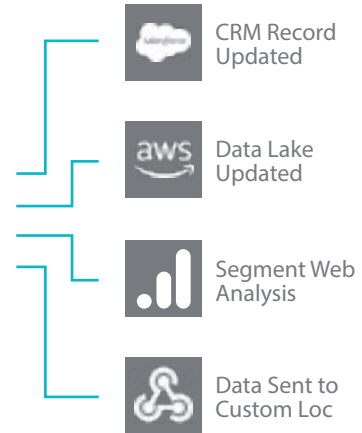
Example Chart

| Step 1 | Step 2 | Step 3 |

Step 1
- Web Data
- Mobile

Step 2

Teallum
AudienceStream CDP

Sample Profile	Audience Creation
Purchase History	VIP
Product Interest	Product Owner
Location History	

Step 3
- CRM Record Updated
- Data Lake Updated
- Segment Web Analysis
- Data Sent to Custom Loc

Recipe 2: Orchestrate and Honor Customer Data Privacy Preferences

Problem

Many sources of data come from disparate systems resulting in lack of visibility into where data is coming from, what kind of data it is, and where it's being used.

Solution

An end-to-end customer data supply chain to govern, audit and manage customer consent data, alongside all customer profile data, from collection to activation.

Example Lists

Ingredients

Web
Products favorites	Orders completed
Cart abandonment	Consent category / status
Purchases	

Offline/POS
| Store location | Customer support inquiries |
| In-store purchases | |

Mobile
| App installed | Login history |

Kitchen Tools

Web analytics
eCommerce site
Display advertising (DMP, DSP)
Social media advertising
Email service provider

Your Lists

Ingredients

Web

Offline/POS

Mobile

Kitchen Tools

I want to… Build a transparent, accessible and controllable data supply chain on which data governance can be built to comply with local regulations

In order to… Build trust with customers and reduce regulatory compliance risk

Step 1 — Get Your Ingredients

This example shows that as a user browses a brand's mobile app or website, GDPR, CCPA, and other data privacy laws require consent to be captured (whether explicit or implicit) for the use of their data in various applications. To ease compliance with user preferences, consent data should be managed alongside other behavioral data used to engage the customer.

Step 2 — Add Preferences to Customer Profile

After your customer chooses their preferences (opt-in or opt-out or consent by category), those preferences are added to the customer profile and can be acted upon.

Step 3 — Reap the Sweet Rewards

In the final step, the customer's preferences are put into action. For example, let's say a customer has said they only want to opt-out of your personalization cookies and data collection. Those preferences can then be immediately acted upon by removing this customer from some audiences but including them in others. In this example we are removing the customers from social and email campaigns but including them in on-site personalization and display advertising campaigns by using consent data.

Example Chart

Step 1	Step 2	Step 3

Step 1

Web Data

Mobile

Step 2

Teallium
AudienceStream CDP

Sample Profile

Purchase History

Product Interest

Consent Status

Consent Category

Audience Creation

Consent Status
(Opt-Out)

Consent Category
(Email)

Step 3

Ad Served

Email
Suppressed

Segment
Analysis

Personalization on
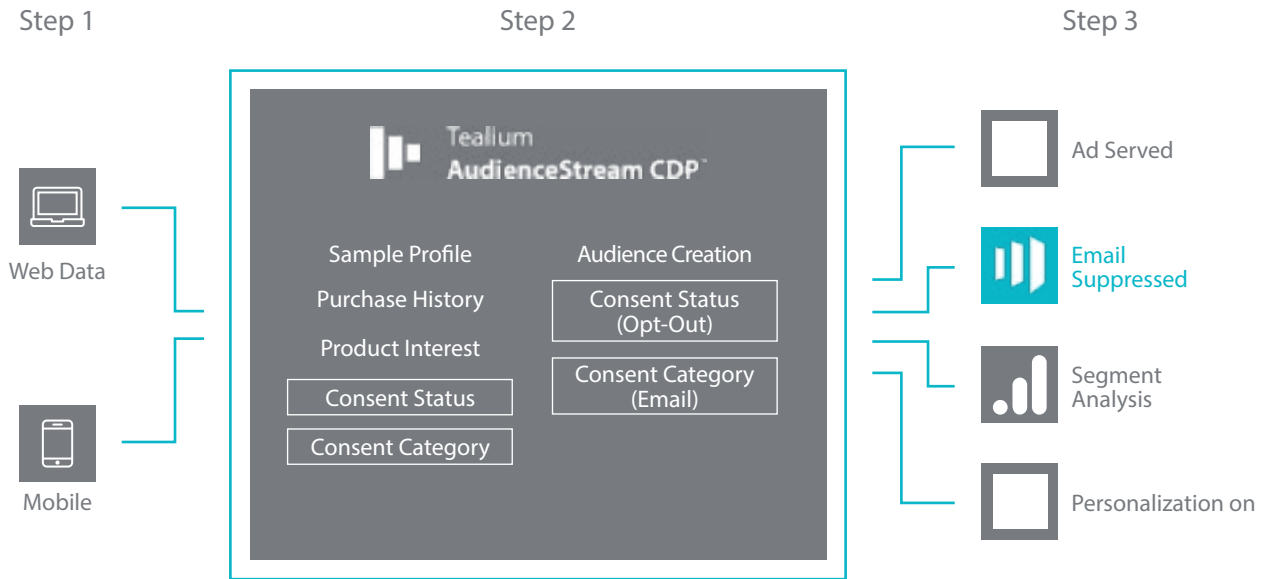
Real World Recipe Success

How *Sanofi* Achieved Regulatory Compliance and Operational Efficiency of Its Global Websites

With 7,000 websites and complex regulatory requirements, Sanofi needed to simplify its website environment, improve compliance, and gain real-time insights into their customers.

With Tealium, Sanofi implemented a global data foundation to better comply with varying data regulations, and have real-time access to its customer data for better decision-making.

With a unified customer data foundation, Sanofi has been able to gain insights allowing "next best action" marketing engagement and better efficiency in ad spend through the ability to directly target or suppress media based on visitor behavior.
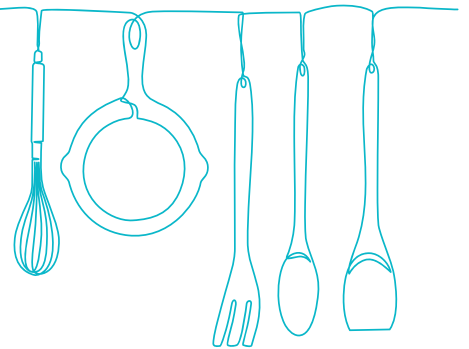
Bonus Chapter

Brewing Up B2B Use Cases with Your CDP

While B2C businesses may get all of the data-driven, personalization, and omnichannel shine, we know B2B marketing and analytics teams can put together award-winning customer experiences and insights with the best of them. If you are a B2B professional looking for new and interesting ways that you might be able to leverage a customer data platform in your stack, then this bonus chapter is for you!

B2B marketing and analytics teams are tasked with prospecting and gleaning insights about entire companies, not just individual consumers. So rather than millions of individual customers, you may be focused on a few hundred or thousand. The B2B buying process is also more complex. It often involves multiple people (in a typical firm with 100 to 500 employees, an average of seven people are involved in most buying decisions according to Gartner) and the journey isn't ever really linear. So how can a CDP help and where does it fit in a B2B marketing team's world?

Even in B2B, people still buy P2P (person to person). A CDP provides marketers with the opportunity to deliver personalized engagement across all channels at multiple different stages of the funnel. By crafting a single, unified view of your customers you can more easily cut through the complexity of the buying process and deliver the right message at the right moment in order to turn leads into customers.

In this bonus chapter, we are going to review just a few ways a CDP can help with B2B marketing and analytics efforts. Let's dive in!

Recipe 1: New Prospect Trial Nurturing

Problem

Leads coming from free trials of a product or service is a key signal in the B2B customer journey. But ensuring the prospect is nurtured with timely content to make the free-trial experience successful is difficult to do manually.

Solution

Leverage a Customer Data Platform in combination with customer engagement channels like your email marketing and messaging platform to nurture your prospect during the free trial period across channels.

Example Lists

Ingredients

Web

Products searched
Chat session started

Products viewed
Trial sign-up

Communication Apps

Newsletter sign-up
Email preferences

CRM

Email
Account

Kitchen Tools

In-app personalization, analytics and messaging
CRM
Website personalization
Marketing campaign tools
Advertising tools

Your Lists

Ingredients

Web

Communication Apps

CRM

Kitchen Tools

I want to… Provide personalized, real-time engagement with new prospects that start a free trial

In order to… Convert trial users into paying subscribers by automatically triggering personalized nurture campaigns during free trial periods

Step 1 — Get Your Ingredients

First, let's identify our customer data sources for this recipe. Even though we are executing B2B use cases, we still have a variety of data sources to unify in order to build the most complete view of our customer. In this case, we have event data coming from our website as well as communication applications like Iterable and our CRM, which in this case is Salesforce.

Step 2 — Build Your Customer Profile

After the data is collected, it is then standardized, transformed into visitor profiles, and enriched with other information that might prove valuable for engaging our prospect. As mentioned in previous chapters, Tealium allows you to base this all on your own business rules in order to automate the process of building insights into the visitor profile by defining attributes.

Behaviors across these three channels are used to assign visitors to audiences using badges and attributes, including derived metrics like "free trial starter" or an "engaged prospect" based on the cross-channel history of behaviors. Then, as always, we build our audiences to include in (or exclude from) campaigns and customer engagement tools.

Step 3 — Engage Your Prospect

Now we can leverage the "free trial starter" audience to ensure personalized messaging appears across channels where they might be engaging. In this example we are leveraging marketing automation tools to send a getting started guide, using Pendo to personalize in-app messaging, updating our CRM, and triggering retargeting campaigns to help nurture the prospect with additional content to drive more discovery of what our product can do. There are a multitude of ways to nurture your free trialers including:
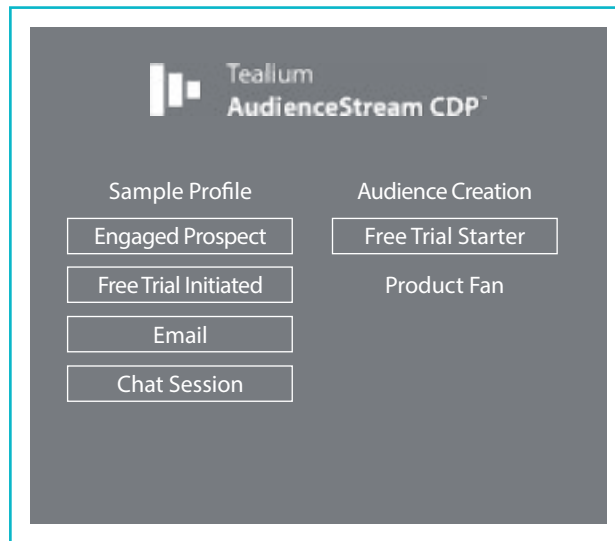
- Identifying prospects struggling in their trial
- Retargeting abandoners and welcoming new customers
- Further engaging with on-site personalization on return visits
- Updating CRM records for intelligent outreach from the sales team
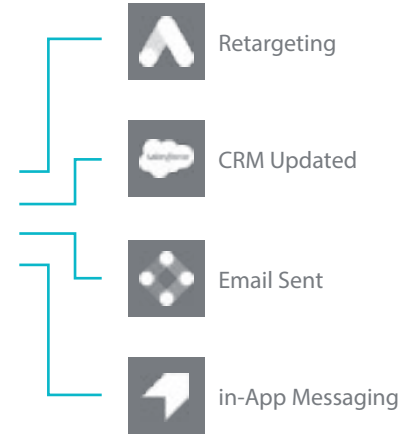
Example Chart

Web Data

CRM

Comms Apps

Teallum
AudienceStream CDP

Sample Profile	Audience Creation
Engaged Prospect	Free Trial Starter
Free Trial Initiated	Product Fan
Email	
Chat Session	

Retargeting

CRM Updated

Email Sent

in-App Messaging

Recipe 2: New Customer Onboard Nurturing

Let's quickly look at a similar use case, but through the lens of onboarding a new customer to your product rather than nurturing a prospect.

Problem

Customers that have onboarded a new SaaS tool want to get up and running quickly after a lengthy sales cycle but may face a steep learning curve leading to frustration and disappointment with the immediate return on their investment.

Solution

Leverage a Customer Data Platform to orchestrate proactive marketing to ensure timely content is delivered to new customers improving their onboarding experience and their success with the product.

Example Lists

Ingredients

Web

Products searched	Chat session started
Products viewed	Trial sign-up

Communication Apps

Newsletter sign-up	Email preferences

CRM

Email Account	Customer status

Kitchen Tools

In-app personalization, analytics and messaging
CRM
Website personalization
Marketing campaign tools
Advertising tools

Your Lists

Ingredients

Web

Communication Apps

CRM

Kitchen Tools

I want to… Nurture new customers who are onboarding to my product to drive better product adoption

In order to… Improve retention and reduce churn

Step 1 — Get Your Ingredients

Let's ensure that we have all the data we need to get an accurate view of our customer so we can personalize their experience properly. In this use case, we are going to use the same event data we set up from our last use case, which includes behavioral data from our website as well as communication applications and our CRM.

Step 2 — Assign Attributes for New Customers

As identity is resolved in our CDP, we can again assign visitors to audiences using badges and attributes. In this case we are going to use "new customers" and "product ownership" so that we can accurately tailor the experience based on how many times our customer has logged in (indicating a new or experienced customer) and which products he or she owns. Then, as always, we build our audiences to include in (or exclude from) campaigns and customer engagement tools.
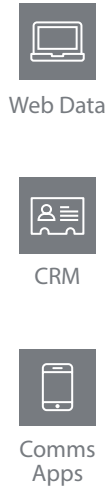
Step 3 — Engage Your Prospect

Now we can leverage the "new customers" and "product 1 owners" audiences to personalize messaging and engagement across channels. In this example we are leveraging marketing automation tools to add our customer to a nurture campaign, using Pendo to personalize in-app discovery, updating our CRM customer records, and triggering on-site personalization campaigns. There are a multitude of ways to engage and improve new customer experiences including:
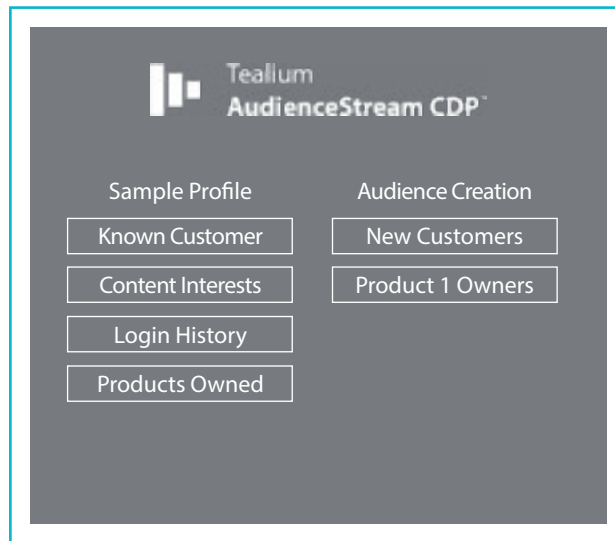
- Identifying brand new customers and those who onboard successfully
- Measuring key product usage and regular activity
- Executing on-site personalization based on product engagement and reinforce with off-site channels
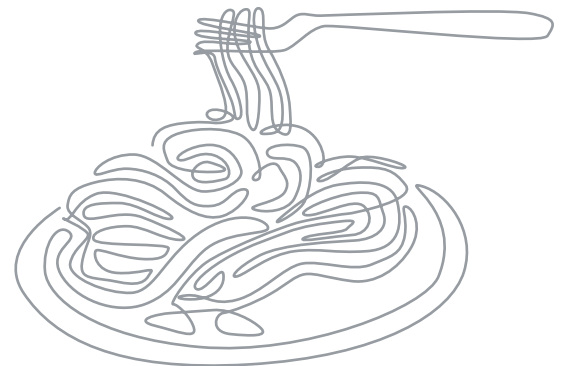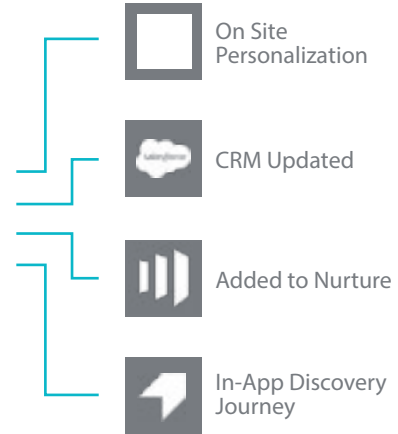
Example Chart

Step 1	Step 2	Step 3

Web Data

CRM

Comms Apps

Tealium AudienceStream CDP

Sample Profile
- Known Customer
- Content Interests
- Login History
- Products Owned

Audience Creation
- New Customers
- Product 1 Owners

On Site Personalization

CRM Updated

Added to Nurture

In-App Discovery Journey

Recipe 3: Quarterly Product Release Campaign

Problem

B2B marketers want to engage their customers and inform them of new product updates to improve adoption. However, buyers have a variety of content interests across multiple channels and it's hard to target the right messaging for the right product user.
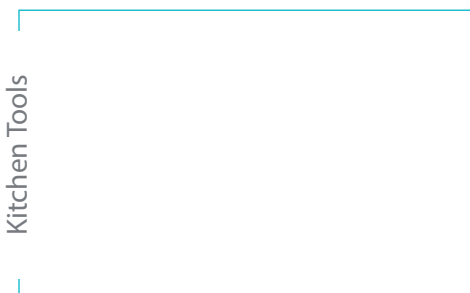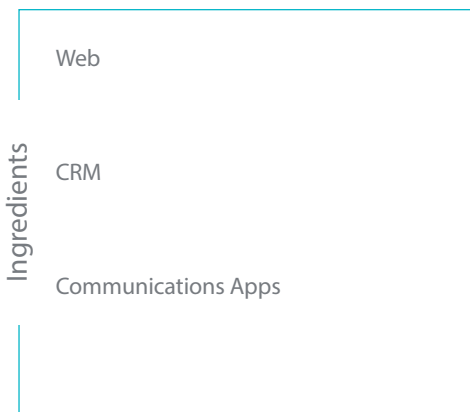
Solution

Leverage a CDP to build a comprehensive view of your customer and tailor new product campaigns to their specific interests and engagement level with the platform.

Example Lists

Ingredients

Web
Products searched   Chat session started
Products viewed   Content engagement

CRM
Customer status   Email

Communications Apps
Newsletter sign-up   Email preferences

Kitchen Tools

In-app personalization, analytics and messaging
CRM
Website personalization
Marketing automation

Your Lists

Ingredients

Web

CRM

Communications Apps
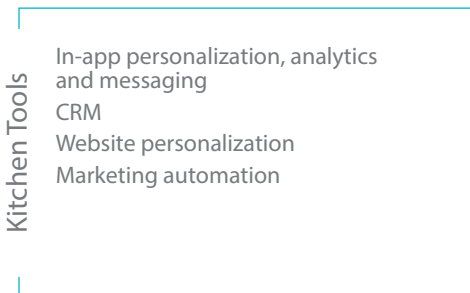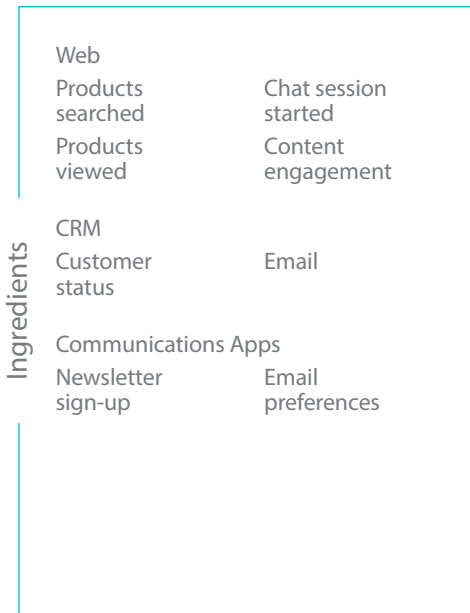
Kitchen Tools

I want to… Appropriately target product release news based on content interests and product ownership

In order to… Drive new feature / product adoption and engagement

Step 1 — Get Your Ingredients

Here we are in our final B2B recipe, and we are using the same ingredients as last time. To build this use case we are going to leverage behavior data from our website and app, along with data from our CRM, and activate our campaign with communications apps.

Step 2 — Build a Customer Profile

Without the context of a customer, events like email opens, page views, or clicks don't carry as much meaning. But with all events combined in the context of a customer and business rules, we can start to understand signals from our data enabling us to better target, segment and engage our audience.
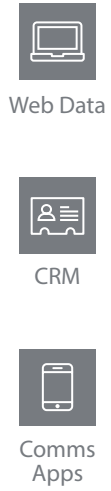
In this case we want to improve our quarterly release campaign engagement so we will want to understand what products our customer owns, as well as his or her content interests. From there we can build audiences and improve messaging to these groups of users to ensure that we get only the relevant content and information about our latest release to our customer. In this case we are going to build an audience of known customers that own "product 1" and we will ensure that our campaign content focuses on the new features released for "product 1".
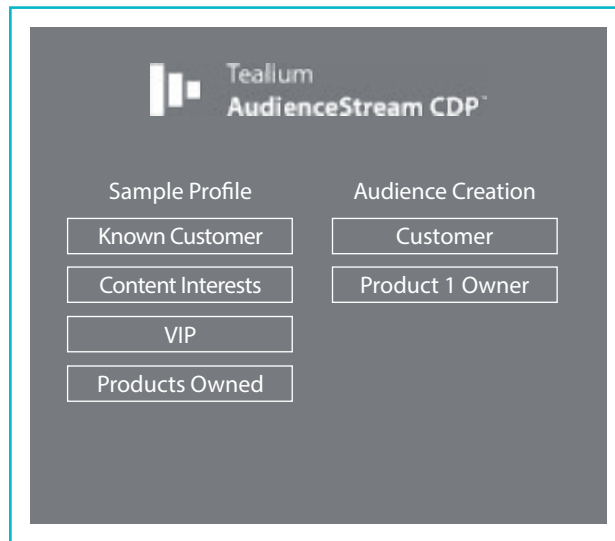
Step 3 — Orchestrate Campaigns

Now that we have our audiences defined, we can activate them across key channels like in-app messaging, new product email campaigns, and personalizing their on-site experience. We are also updating our CRM to inform our sales team of any content that they've engaged with that may indicate a new use case or product interest that they were previously unaware of. By better personalizing quarterly release campaigns we can drive more platform adoption and usage simply by better targeting the content to our customer's own product usage.
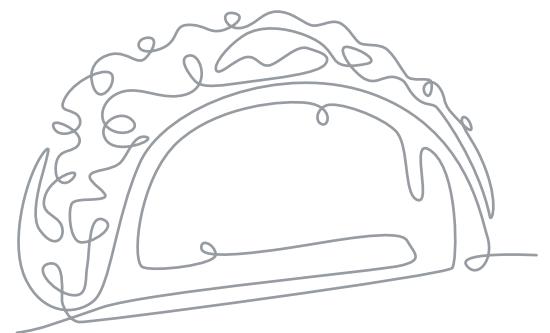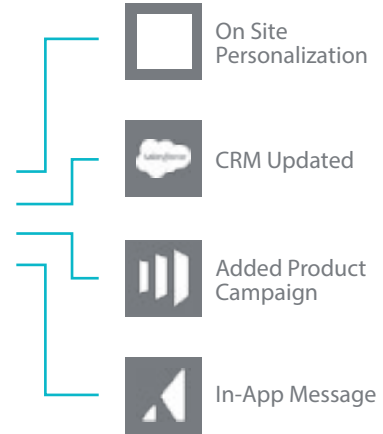
Example Chart

Step 1

Web Data

CRM

Comms Apps

Step 2

Teallum
AudienceStream CDP

Sample Profile	Audience Creation
Known Customer	Customer
Content Interests	Product 1 Owner
VIP	
Products Owned	

Step 3

On Site Personalization

CRM Updated

Added Product Campaign

In-App Message

Conclusion

Just as the "Joy of Cooking," has inspired generations of chefs, we hope Tealium's "Joy of Data" inspires you to go out and prepare delicious data-driven meals of your own.

Our aim in producing this cookbook is to help you feel a little more equipped to start rolling up your sleeves and get started concocting delightful customer-centric experiences. But we realize that at first this can seem intimidating. So how should you best get started?

We recommend that you begin with assembling and aligning your stakeholders. Just as a Five Star restaurant has roles that manage the overall culinary process (Executive Chef, Sous Chef, etc.) along with more specialized roles (Pastry Chef, Saucier, etc.) you will want to assemble and align your stakeholders for implementing and running your CDP project.

While the recipes we've provided may be able to be prepared on your own, even the most expert of digital chefs benefit from assembling the right people, processes, and tools to prepare world class meals!

It all starts with the right team, and this can take on many forms, ranging from an ad-hoc group in a smaller company to a "Center of Excellence" in a large Fortune 500 corporation. Cross-functionality is key. It's okay for single members to have multiple roles. External agency and technology partners are always welcome. But you will want all team members to have a data-first orientation – the quality of valuing data as a primary source of making decisions in business.

Staying focused on the business objectives — like improving the customer experience or meeting the requirements of customer data regulations — will help determine the timing of your projects and make sure you don't bite off more than you can chew at the start. Work alongside your CDP vendor or a trusted partner to create a timeline for your company's initiative. Whether you've created a roadmap based on your organization's needs or set the timetable according to the degree of difficulty, creating a timeline for your deployment will help you manage the changes in roles and responsibilities for your cross-functional team(s) throughout. And, if you've done a good job during the exploratory and documentary steps, there should be few surprises to derail your plan.

Here's to you cooking up customer experiences that delight your audience's appetite and may you spread joy in everything you do!

We Connect Data So You Can Connect With Your Customers

Tag Management • API Hub • Customer Data Platform and Machine Learning • Data Management

Tealium connects customer data across web, mobile, offline, and IoT so businesses can better connect with their customers. Tealium's turnkey integration ecosystem supports more than 1,300 built-in connections, empowering brands to create a complete, real-time customer data infrastructure. Tealium's solutions include a customer data platform with machine learning, tag management, an API hub and data management solutions that make customer data more valuable, actionable, privacy-compliant and secure. More than 850 leading businesses throughout the world trust Tealium to power their customer data strategies.

For more information, visit tealium.com