

Welcome

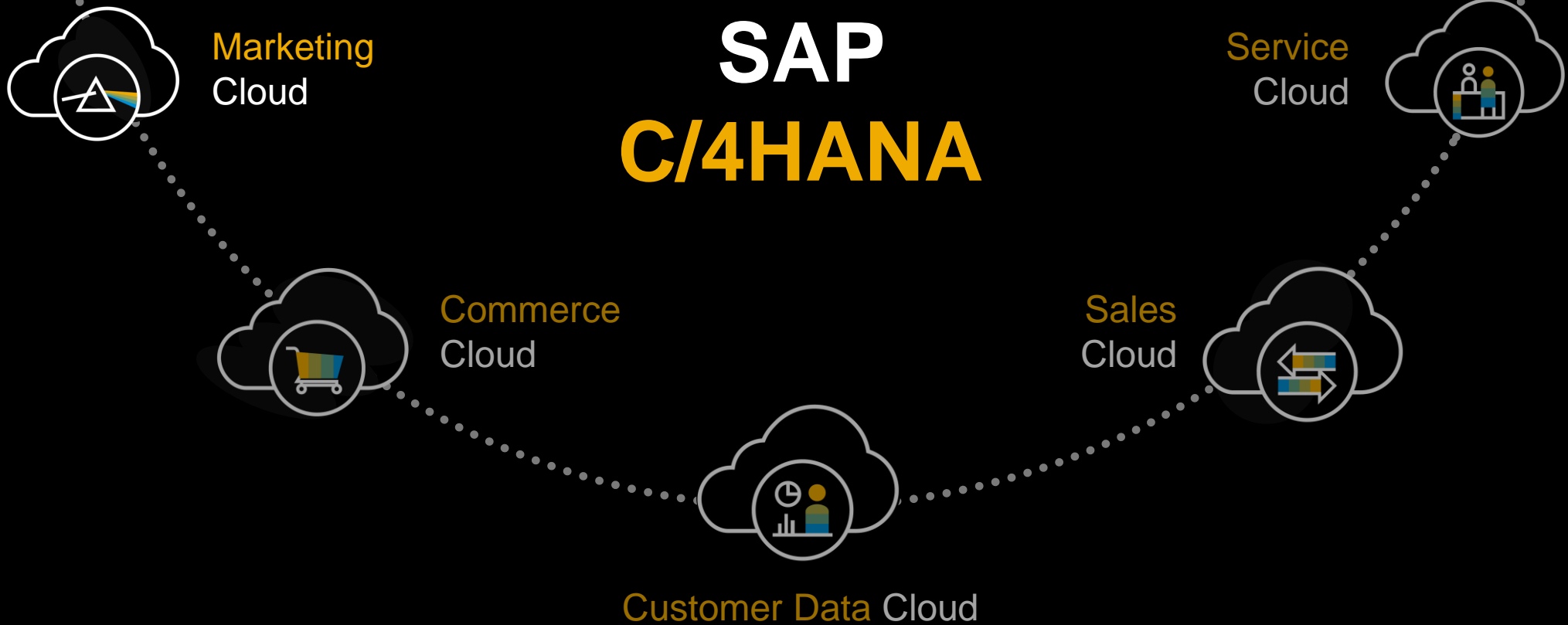


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SAP C/4HANA



Marketing as the **Trusted Source** of Business





Brand

Demand

An aerial photograph of a winding river with several loops and meanders. The water is a light, silty grey color, contrasting with the vibrant green of the surrounding grassy banks. A small red boat is visible in one of the loops. The text is overlaid on the left side of the image.

**“Your brand is a story
unfolding across all
customer touch points”**

**Jonah Sachs
Free Range Studios**

Customer experience is the brand



BRAND = CUSTOMER EXPERIENCE

BRAND = CUSTOMER EXPERIENCE = DEMAND

**It's never been easier to create
a very bad experience**



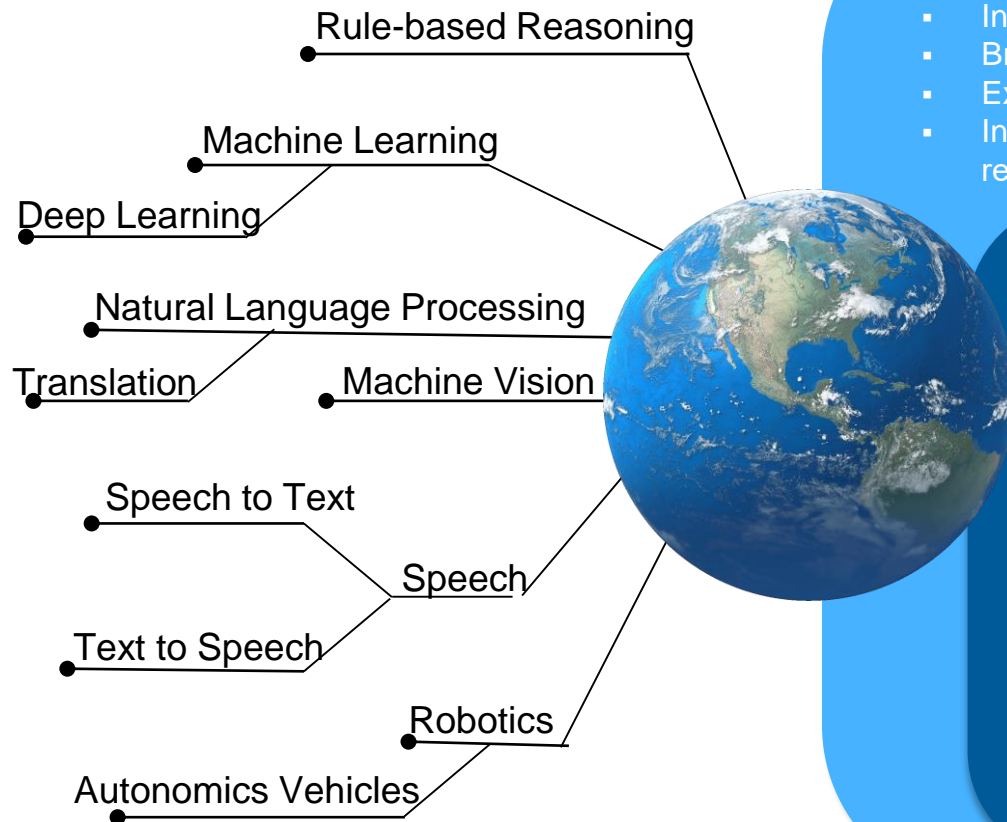


**“Don’t count the people
that you reach, reach the
people that count.”**

David Ogilvy

**An Intelligent Customer Experience is one that doesn't just
respond to customers needs
it predicts them**

Intelligent Enterprise



Artificial Intelligence (AI)

- Intelligence exhibited by machines
- Broadly defined to include any simulation of human intelligence
- Expanding and branching areas of research, development and investment
- Includes robotics, rule-based reasoning, natural language processing (NLP), knowledge representation techniques (knowledge graphs), ...

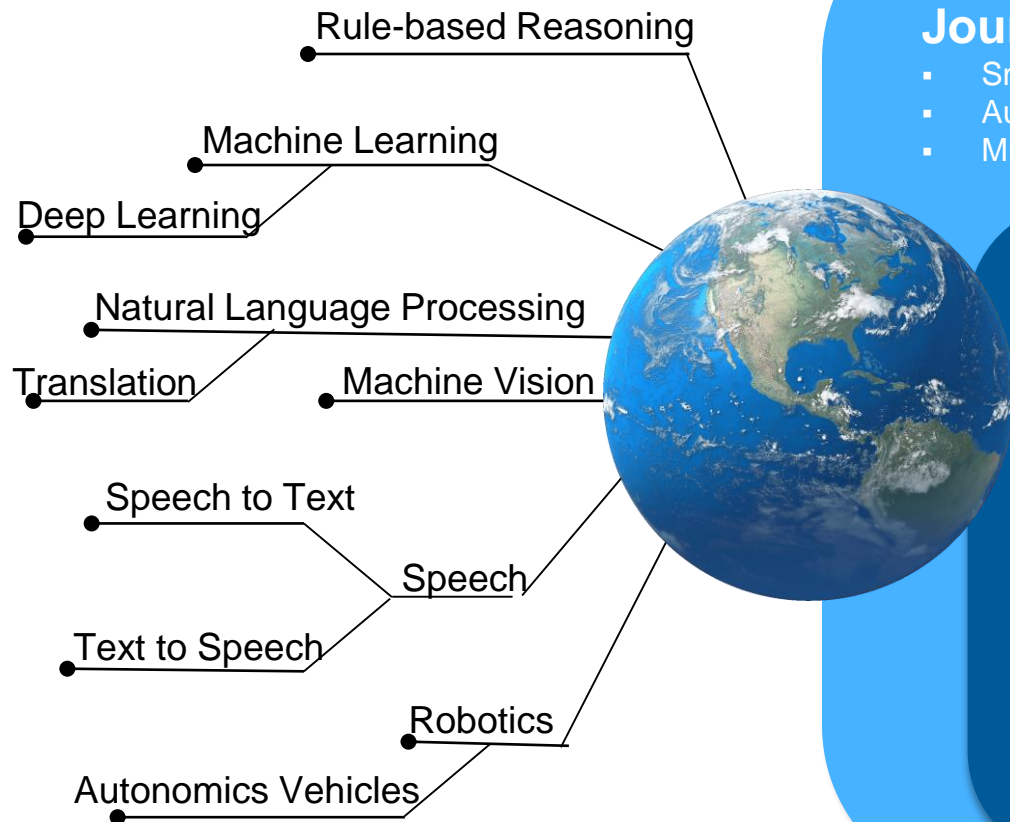
Machine Learning (ML)

- A subfield of AI which aims to teach computers the ability to do tasks with data, without explicit programming
- Uses numerical and statistical approaches, including artificial neural network techniques to encode learning
- Models are built using “training” computation runs, can also train through usage

Deep Learning (DL)

- A subfield of ML that uses specialized computational techniques, typically multi-layer (2+) artificial neural networks
- Layering allows cascaded learning and abstraction levels (e.g. line recognition -> shape -> object -> scene)
- Computationally intensive enabled by clouds, GPUs, and increasingly more specialized HW such as FPGA and new custom hardware

Intelligence in Marketing



Measure Customer Response and Optimize Customer Journeys

- Smart Campaigns and Campaign Optimization
- Automated Segmentation
- Multi-touch Attribution

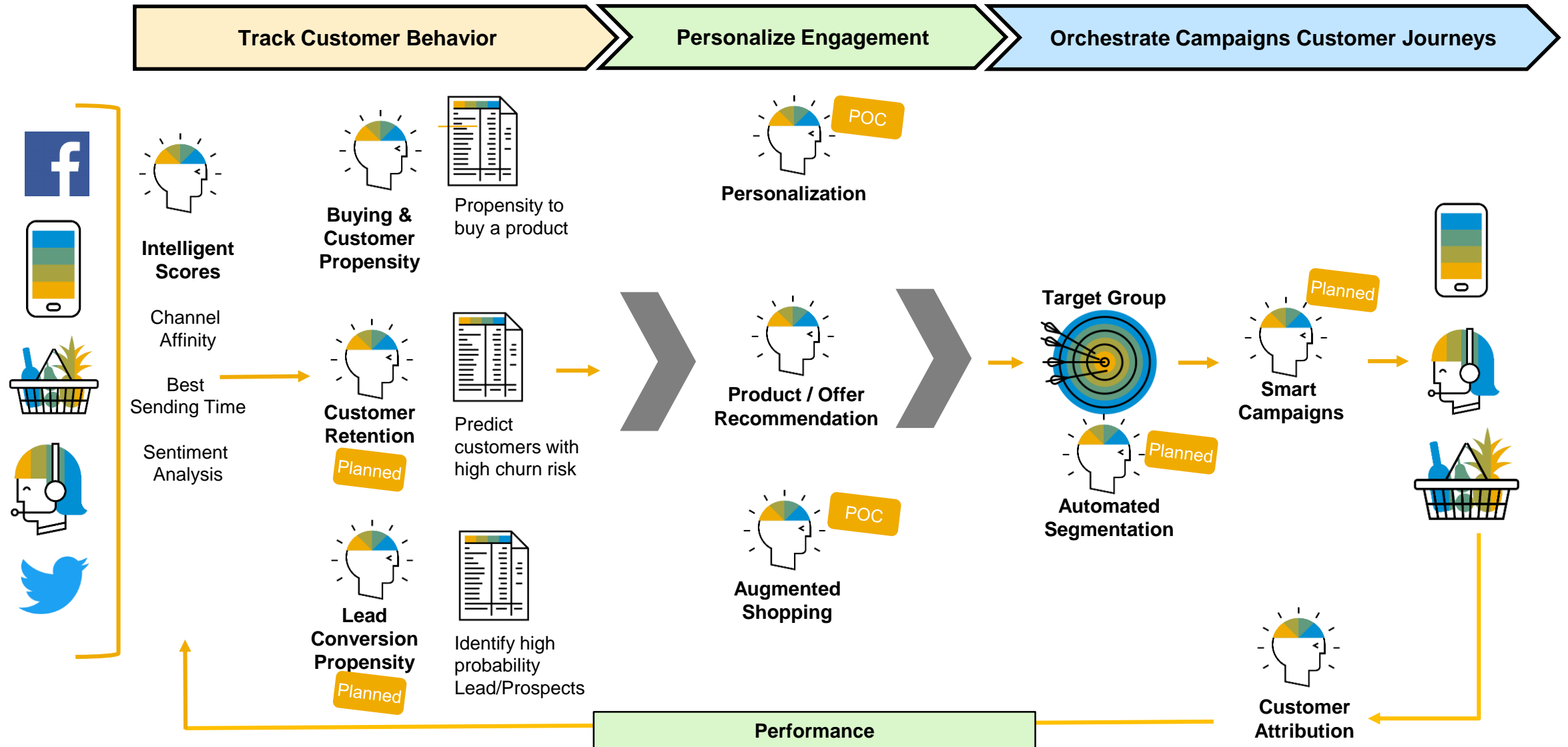
Use Customer Behavior for Continuous Personalized Engagement

- Product/ Offer Recommendations
- Content Recommendations
- Personalization Apps
- Intent Detection

Understand Customer Behavior to Build a Dynamic Profile

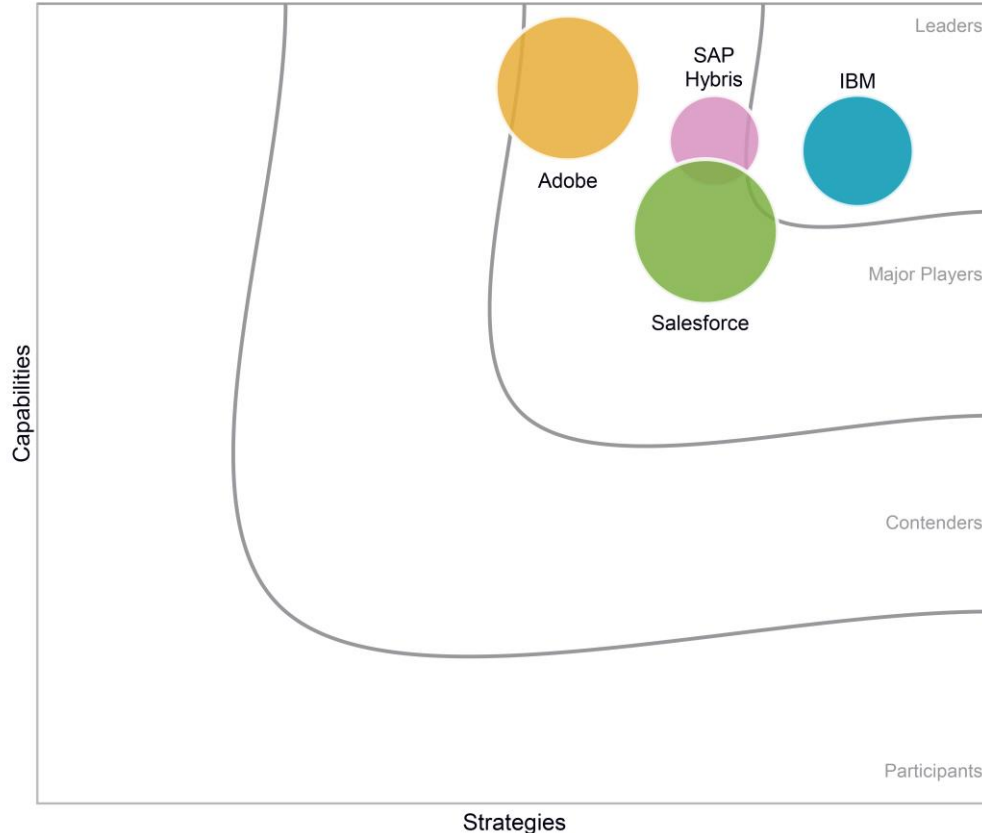
- Activity, Channel Affinity, Scores
- Sentiment
- Lead Conversion Prediction
- Buying Propensity Prediction
- Customer Churn/Retention

Intelligent Marketing: End to End process



IDC MarketScape Names SAP a Major Player for Worldwide AI in Enterprise Marketing Clouds

IDC MarketScape Worldwide AI in Enterprise Marketing Clouds, 2017



Strengths

- “The AI and ML use cases available from SAP Hybris Marketing Cloud are invaluable to digital marketers, particularly those operating at scale where rapid decision making is crucial to conversion rates, average sale value, and customer experience and loyalty.”
- “SAP Hybris offers a full range of implementation services for all of its AI and ML use cases, including planning and project management, design (UI, dashboards, visualizations, etc.), data-related services (audit, assessment, preparation, and management), model building and testing, and performance monitoring.”

Consider SAP Hybris

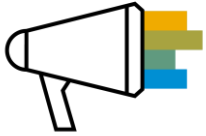
- “Today, orchestration across departments offers greater potential for differentiation than more modular functionality in any given department. That's a strong case for making a full commitment to the SAP Hybris solutions.”
- “If you are not an SAP Hybris customer, but you are an SAP customer, you should prioritize the SAP Hybris solutions especially if you are expecting to build a sustainable customer experience infrastructure. Having both the integrated applications at the front end and the shared services available to all those environments is critical to the success of any CX initiative. In fact, CX initiatives that lack this level of technological underpinning are highly likely to be ineffective and fail in the long run.”

SOURCE: "IDC MarketScape: Worldwide Artificial Intelligence in Enterprise Marketing Clouds 2017 Vendor Assessment", January 2018 IDC #US43319817

IDC MarketScape vendor analysis model is designed to provide an overview of the competitive fitness of ICT suppliers in a given market. The research methodology utilizes a rigorous scoring methodology based on both qualitative and quantitative criteria that results in a single graphical illustration of each vendor's position within a given market. The Capabilities score measures vendor product, go-to-market and business execution in the short-term. The Strategy score measures alignment of vendor strategies with customer requirements in a 3-5-year timeframe. Vendor market share is represented by the size of the circles. Vendor year-over-year growth rate relative to the given market is indicated by a plus, neutral or minus next to the vendor name.

Machine Learning in Marketing: Current and Future View

AVAILABLE



Channel Affinity



Best Sending Time



Buying Propensity Model



Product Recommendations



Best Offer



Sentiment Analysis



Brand Impact



Customer Attribution

PLANNED



Lead Conversion Propensity



Customer Retention

FUTURE



Marketing Mix/
Campaign Optimization



Voice Controlled Digital Assistant



Guided/
Automated Segmentation



Next best action



Augmented Shopping



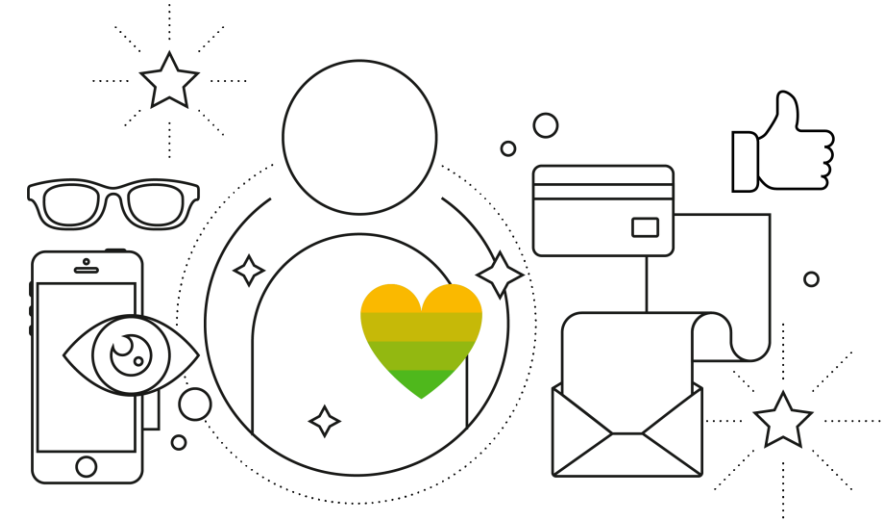
In-store Personalization App



Smart Campaigns

Intelligent Scores: Affinity Scores, Best Sending Time, Custom Scores

Use rule-based scores to optimize individual engagements with the most effective treatment every time.



Gain a better understanding of customers by ranking and classifying customers in real-time based on their interactions and behavior.

Optimize customer interactions and response behavior by using the most appropriate channel and contact time.

Utilize predictive and rule-based scores seamlessly across Marketing for customer profiles, segmentation, and campaign execution.

Allow marketers to easily consume and tailor scoring and predictive algorithms based on gained insights and business objectives.

Intelligent Scores – Building up a real-time Customer Profile

AVAILABLE

CONTACT PROFILE

Alexander Ackermann
Auf dem Bachfeld 108.000000
Schnellmannshausen
Germany
0050569181751ed68baa644e7a...
Maintain Social Media

Activity Score: 30
Best Sending Time: Evening: 6 pm - 1...

Response Activity Score: Very high response

Personal Data Interactions **Scores** Commerce Account Team Leads

Select Scores

| | | | |
|--|---|---------------------------|--------------------------------|
| Sentiment Score No Valuation | Activity Score 30 | Email Affinity 0 | CustomerSatisfactionScore 0 |
| Best Sending Time Evening: 6 pm - 10 pm | Response Activity Score Very high response | Latest Activity Recent | |

Select Scores

- ☒ Activity Score
- ☒ Contact Level
- ☒ Latest Activity
- ☒ Lead Propensity
- ☒ Profile Score
- ☒ Recent Interactions
- ☒ Sentiment Score
- ☒ Test of heuristic Score AGE

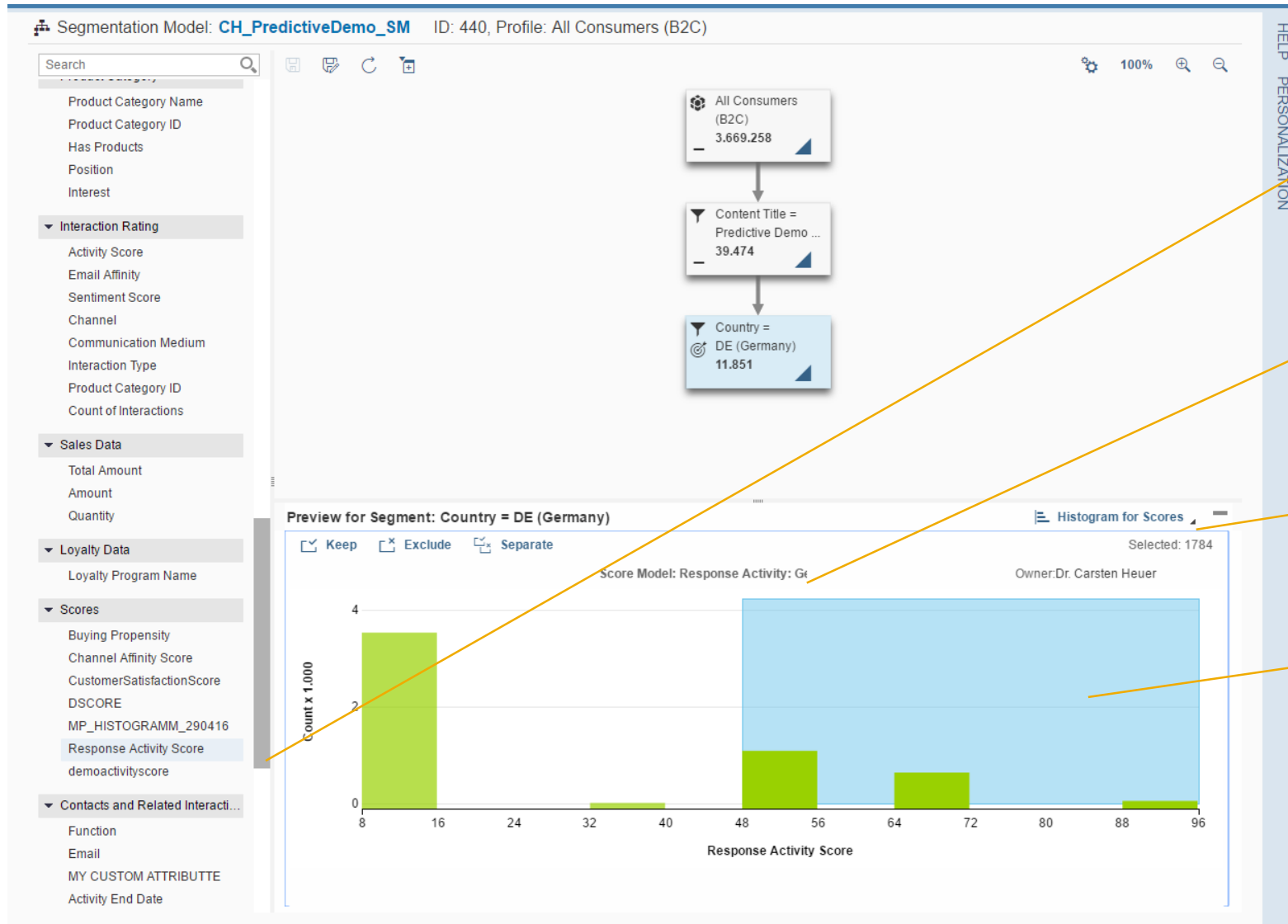
Ok Cancel

Scores created using a ScoreBuilder App within SAP Marketing Cloud

Profile can be customized by selecting relevant scores

Personalization of tiles flag those tiles, which shall be visible on the screen.

Intelligent Scores – Using Scores in Segmentation



Score appears in the defined attribute group. When both segment and score are selected the scores are calculated and the distribution of the score values is shown as histogram in the preview area.

Score name and owner is shown. If the score is persisted the date and time of score calculation is displayed as well. Otherwise the score is calculated in real time; in this case no data/time information is given.

Histogram shows the distribution of score values for the selected segment.

Marked Area which selects the share of top scoring members of the segment. Press Keep-button, if these should become the next sub-segment.

Sentiment Analysis

Track Customer Behavior

AVAILABLE

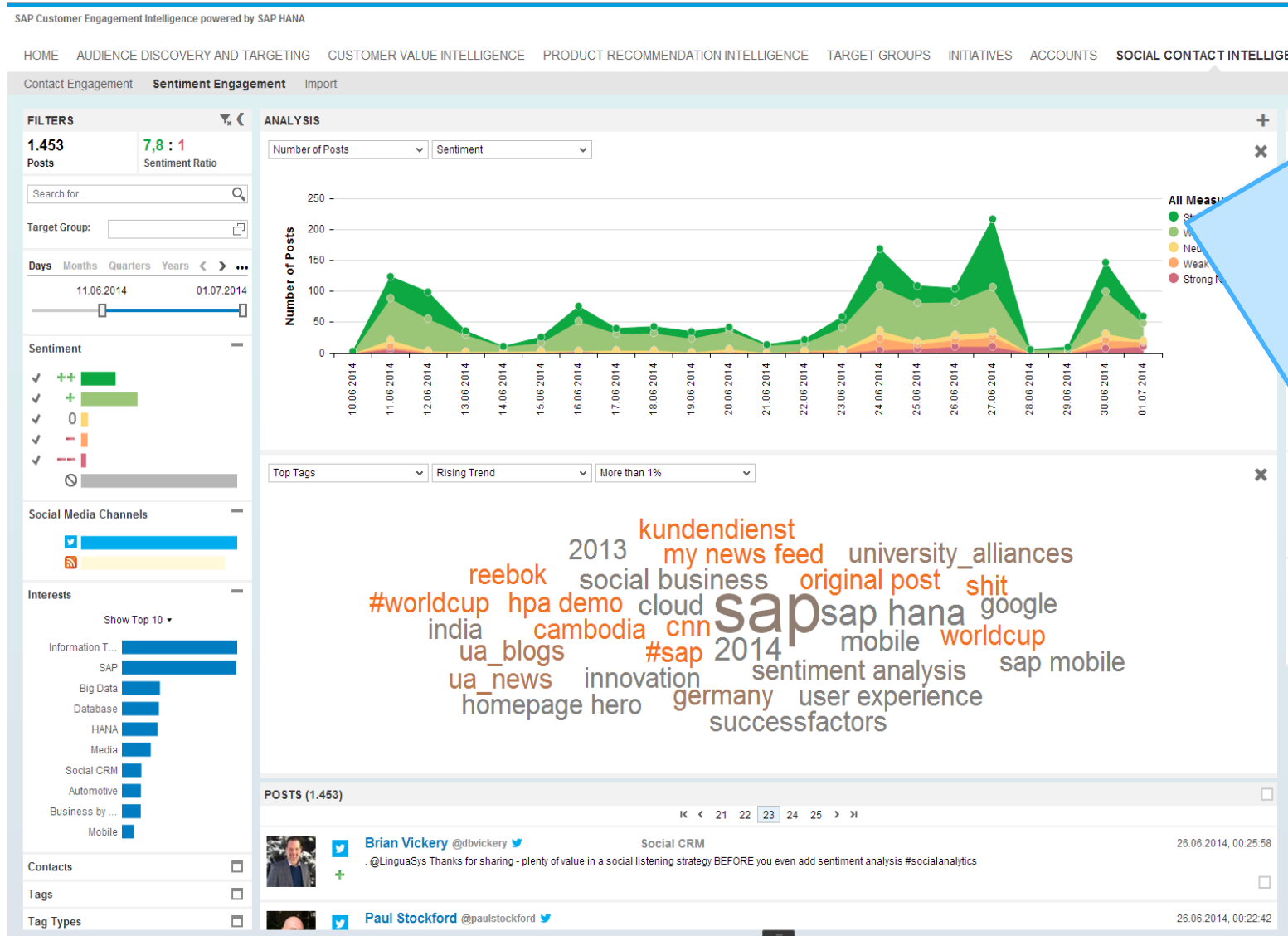
Increase customer understanding with Sentiment and Interest Analysis by using structured and unstructured data.

Gather deeper insights into customers and predict their behavior through social media channels like Twitter, Facebook, and so on.



Gain insights into customer's sentiment and interest by analyzing social posts, emails, complaints, reviews using embedded Natural Language Processing technology

Sentiment Analysis – Capturing the Customer's Voice



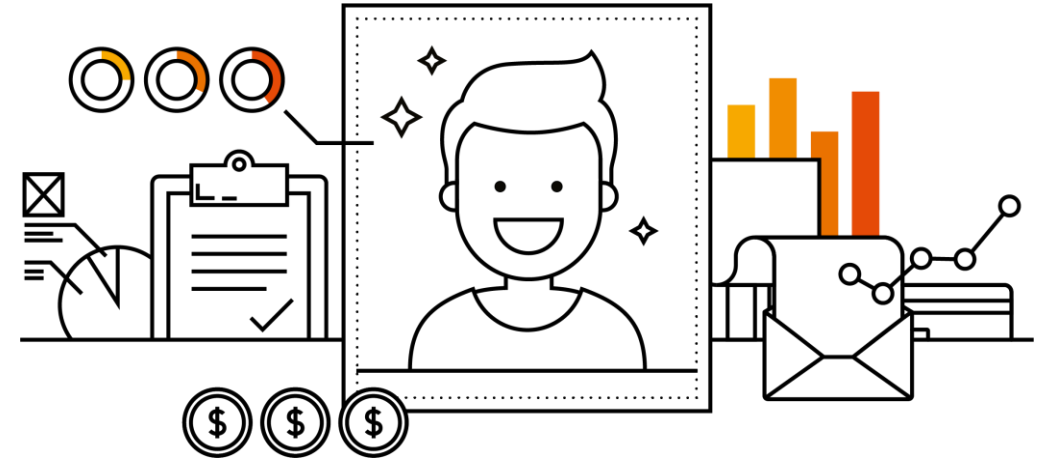
Unstructured text from social posts, call center notes, complaint emails automatically get transformed into sentiment scores

Sentiment can be tracked as a function of time, channel and areas of interest.

Consumer Buying Propensity and Custom Propensity Models

Business View and Benefits

RESONATE BETTER WITH CUSTOMERS IN THEIR CUSTOMER JOURNEY LEVERAGING PROPENSITY SCORES.



Leverage predictive modelling without advanced data modelling techniques.

Easily extend the predictive model beyond the standard buying propensity.

Use buying propensity and the new predictive models to intelligently target customers.

Consumer Buying Propensity Model - Using Prediction scores in Segmentation

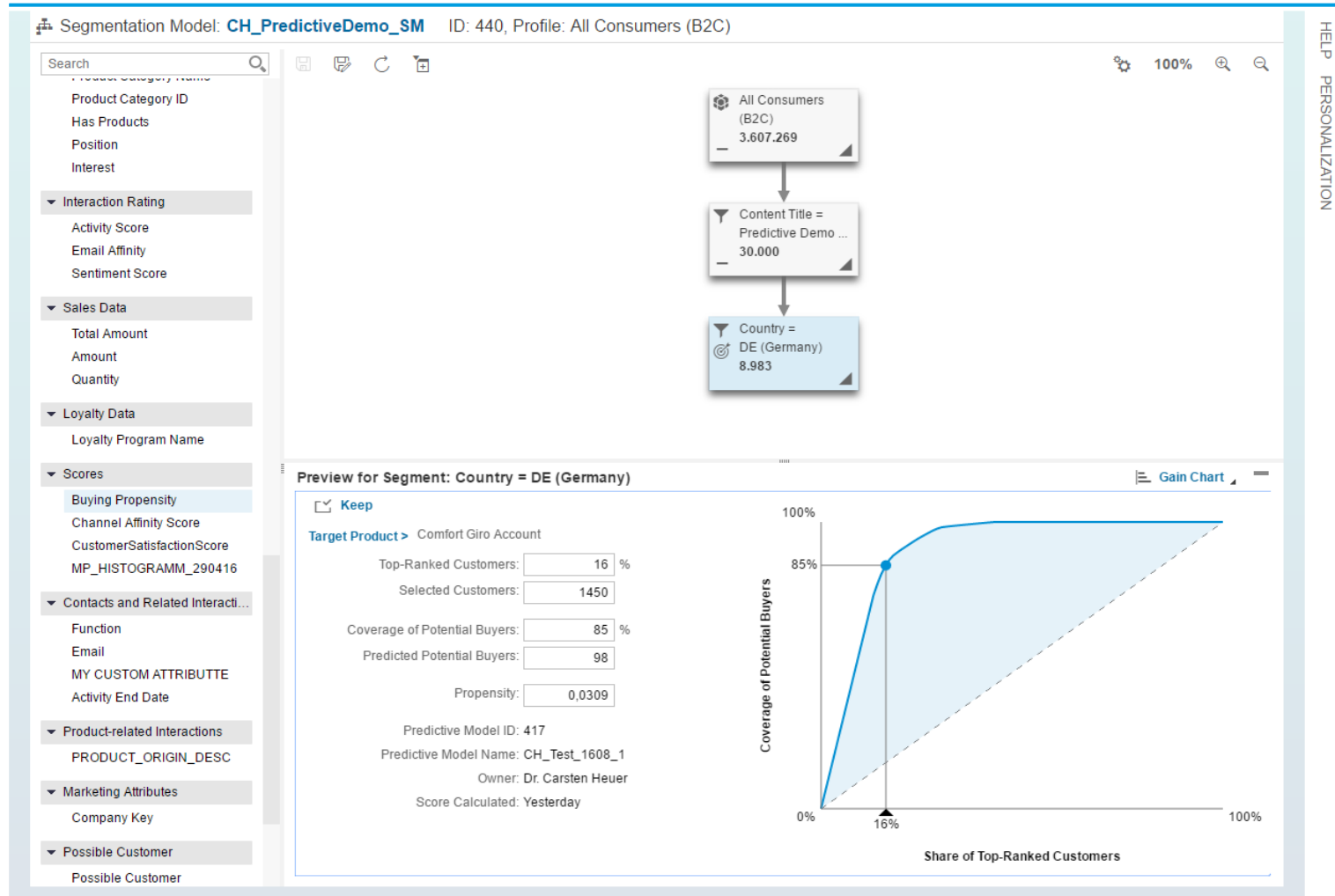
AVAILABLE

Select consumers in Germany

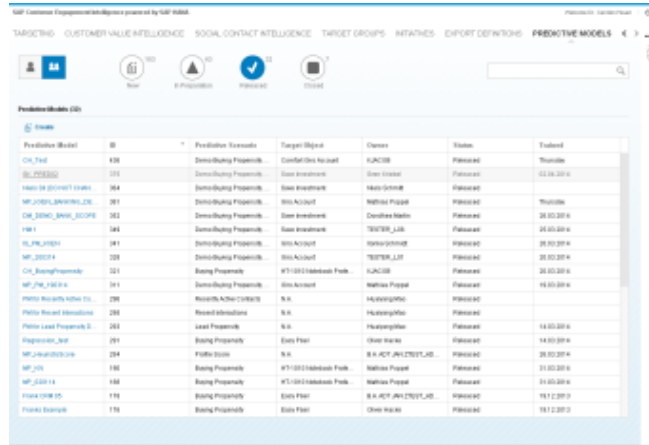
Select consumers with high Buying Propensity

Create Profile with Buying Propensity Score

Create target group for special offers

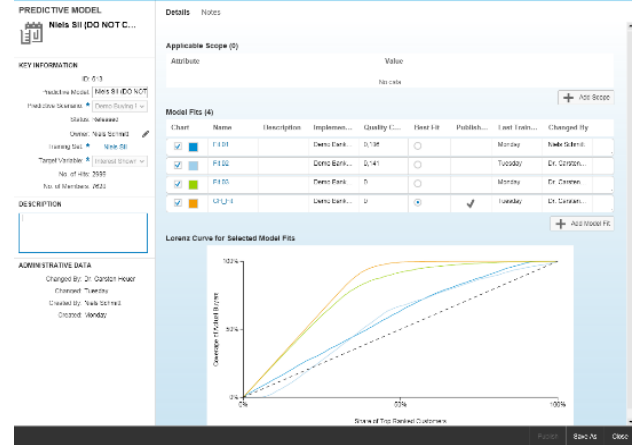


Consumer Buying Propensity: Predictive Model Management



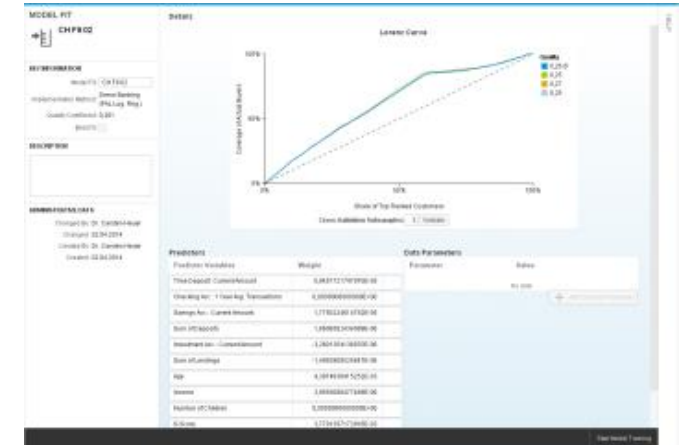
Select Model and Target data

Select the predictive model in the Predictive Model Management



Train Models

- Train models based on selected data
- Review contributing parameters



Select & Use Model

Select right model based upon fit

Use Predictive Models to identify consumers with high probability of buying

A Case Study on Predictive Buying Propensity Model

An Auto Company

**SAP Marketing with
Predictive Models
for Purchase**

**Customer
Satisfaction
+4%
points**

**Time to
Market
-90%**

**Sales
Conversion
+100%**

Product and Offer Recommendations

PROVIDE CONTEXT-AWARE INTELLIGENT PRODUCT AND OFFER RECOMMENDATIONS IN REAL-TIME ACROSS MULTIPLE CHANNELS.



- Provide context-relevant real-time product and offer recommendations.

- Increase conversion rates and average sales order value.



- Increase customer loyalty and satisfaction.

- Reduce marketing costs.

Product Recommendations

Part of Consumer 360 View


CORPORATE ACCOUNT


Hana Company
Manufacturing
Bahnhofstrasse 61
69190 Walldorf
Germany
<https://www.hanacompany.com>


Customer ABC Classif... Customer Churn Proba...


2 1 3

A Customer




0 %

Main Contact



Chris Balmer
Fin. accountg manager
Financial department
+49622754321
+491514123142
cb1@balmer.de


Owner




Dr. Rolf Schumann
Developer
PI CEC Marketing WDF I
+496227746549

Whitespace Analysis Sales Analysis Additional Data Account Team Score Card Customer Contacts Interactions Scores Commerce


Recommendations based on Buying History




Clean Dump CDFJ Adapte...
Fitting is designed for the ...



Camco 39761 RhinoFLEX 1...
Camco's RV RhinoFLEX ...




Camco 43041 15' Sidewind...
Camco RV 15' Sidewinde...




Flojet 18555000A Waste Wa...
Flojet Waste Water Pump...


Buying History over Last 12 months




ACC-CMFG
Accessory kit: 1775.05 EUR



EasyShare M 763
EasyShare M 763
1775.05 EUR



Flojet 18555000A Waste Wa...
Flojet Waste Water Pump...
208.57 EUR



Jeans
WSA PROD NAME Jeans...
76 EUR

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Product Recommendations

Personalize E-Commerce and Web Channels

- **Personalized Product recommendations** served on the web-shop based upon the scenarios enabled
- **Real-time** Delivery of recommendation is done in real-time when the customer logs into the website
- **Integrated to SAP Commerce Cloud** but can link to any webshop

The screenshot displays the B2C Accelerator web interface, which is integrated with SAP Commerce Cloud. The interface shows a navigation menu with categories like BRANDS, DIGITAL CAMERAS, FILM CAMERAS, HAND HELD CAMCORDERS, WEBCAMS, POWER SUPPLIES, FLASH MEMORY, and CAMERA ACCESSORIES & SUPPLIES. A search bar is present at the top.

Under the "Category Recommendations" section, four digital cameras are displayed: PowerShot A480 (\$99.85), DSC-T90 (\$541.34), DSC-T20 Cyber-shot Silver (\$347.55), and Cyber-shot DSC-W55 (\$260.87). Below this, a "Shop by Stores" section is visible.

The main product view shows the Sony Cyber-shot N1 camera. The product details include a star rating of 4.5 (17 reviews), a description of the camera's features (8.1 effective Megapixels, high sensitivity, 3.0" Clear Photo LCD Plus screen, touch-screen operation, and a ZEISS 3x Optical Zoom), and a price of \$99.85. A "Pick Up in Store" button and a "out of stock online" button are also present.

Below the product view, a section titled "CUSTOMERS ALSO LOOKED AT THESE ITEMS" displays a carousel of related products: DSLR-A230 + DT 18 - 55 mm, 10.2 Megapixel D-SLR with Standard Zoom, PowerShot A480, NV10, PowerShot A480, and PL60 Silver.

A Case Study on Product Recommendations Model

**An online B2B
Company**

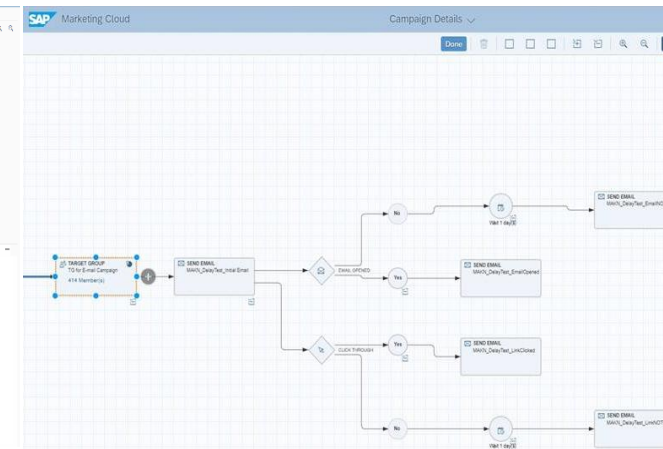
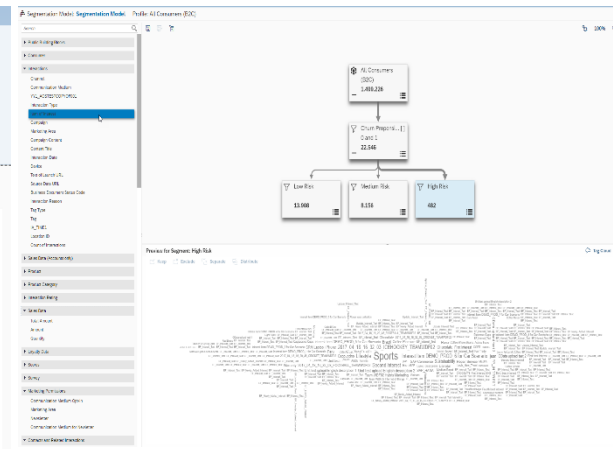
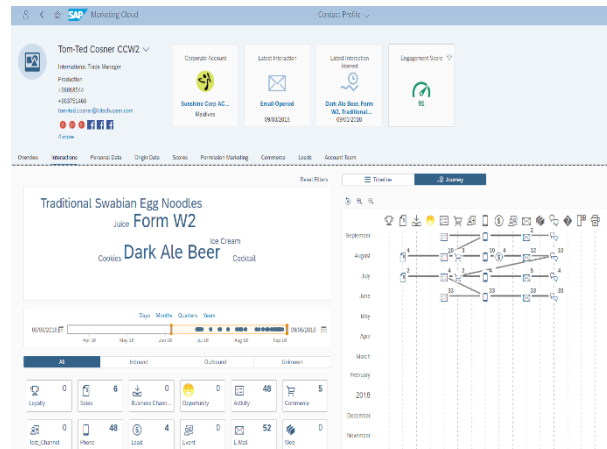
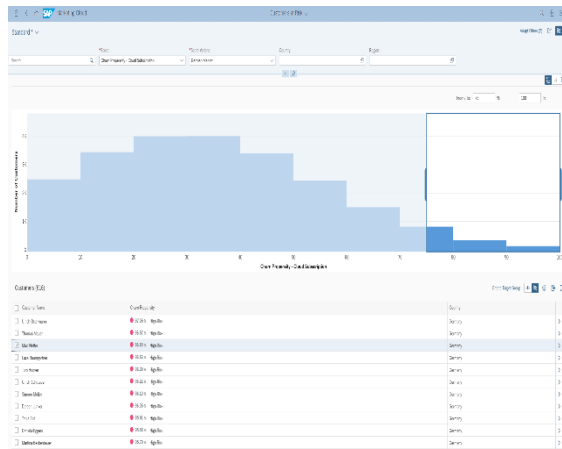
**SAP Marketing
Cloud with Product
Recommendations
linked to E-
Commerce Website**

**Number of E-
Commerce
Touchpoints
4**

**Increase in
Revenue
+300%**

Customer retention enables you to . . .

PLANNED



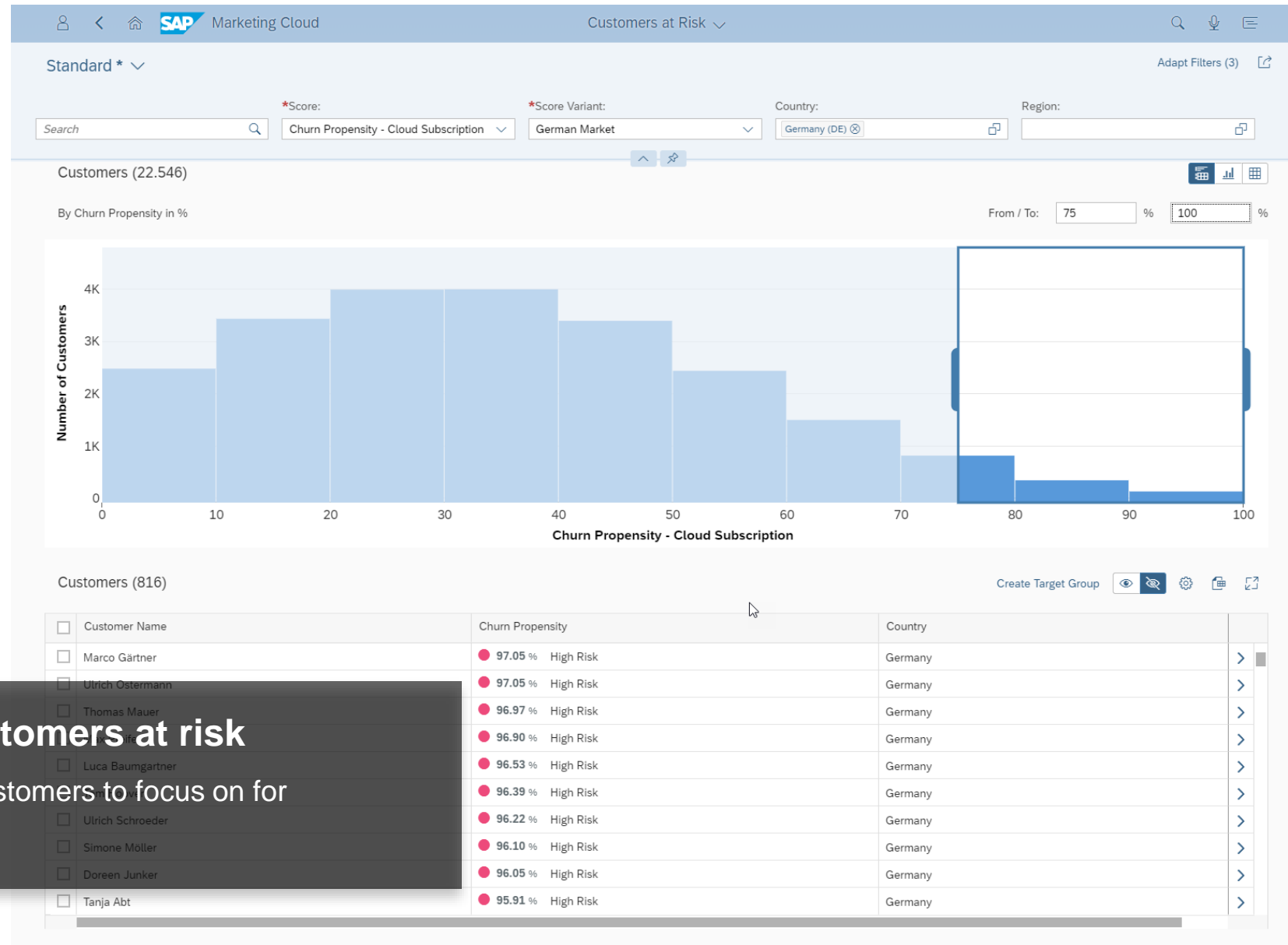
Identify at-risk customers early

Track the customer journey

Gain insights

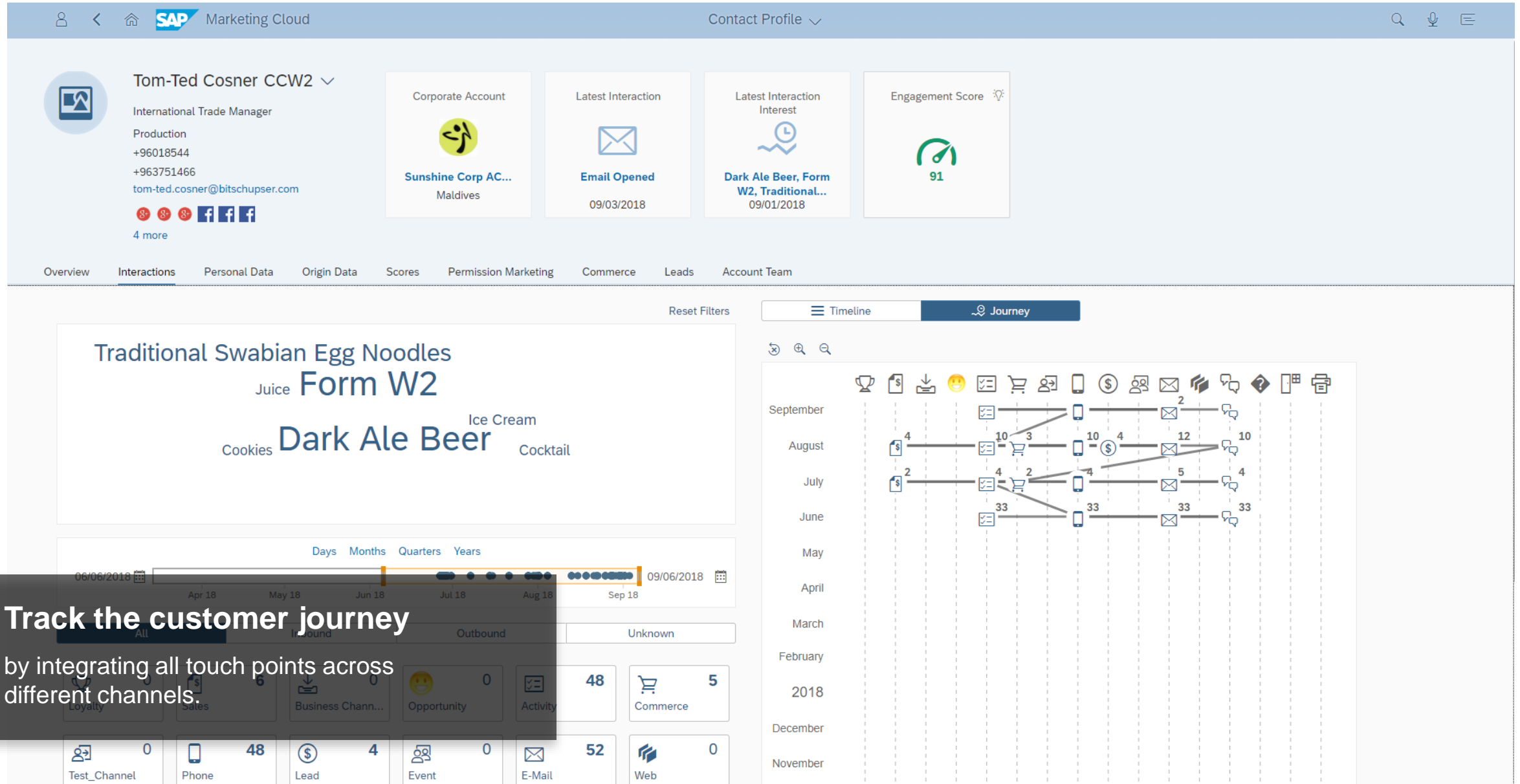
Take proactive action

At-risk customers



Identify customers at risk
and the right customers to focus on for retention.

Customer behavior



Segmentation

Segmentation Model: Segmentation Model

Profile: All Consumers (B2C)

Search

Public Building Blocks

Consumer

Interactions

Channel

Communication Medium

YY1_AOSTESTCOPYOF001

Interaction Type

Item of Interest

Campaign

Marketing Area

Campaign Content

Content Title

Interaction Date

Device

Text of Launch URL

Source Data URL

Business Document Status Code

Interaction Reason

Tag Type

Tag

IA_TIME1

Location ID

Count of Interactions

Sales Data (Accounts only)

Product

Product Category

Interaction Rating

Sales Data

Amount

Quantity

Loyalty Data

Scores

Survey

Marketing Permissions

Communication Medium Opt-In

Marketing Area

Newsletter

Communication Medium for Newsletter

All Consumers (B2C)

1.499.226

Churn Propensi... []

0 and 1

22.546

Low Risk

13.908

Medium Risk

8.156

High Risk

482

Preview for Segment: High Risk

Keep

Exclude

Separate

Distribute

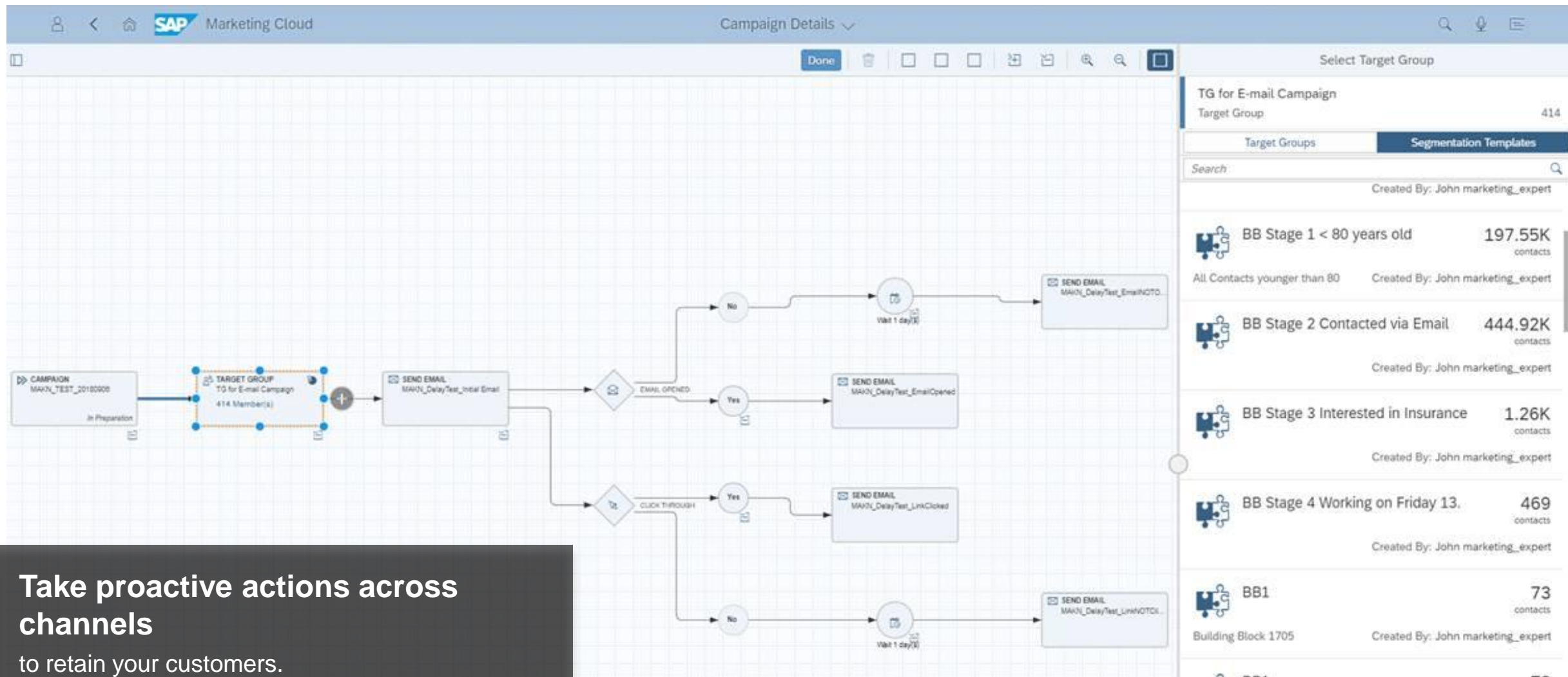
Tag Cloud

Gain insights

about various customer behaviors.

Gain insights
about various customer behaviors.

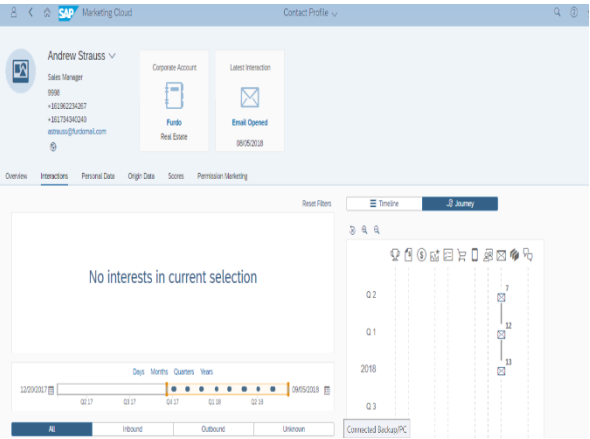
Campaigns



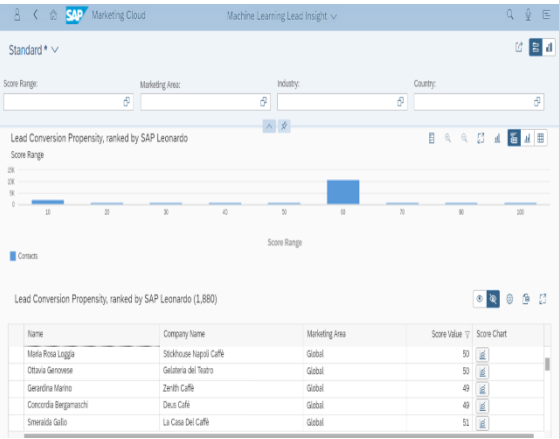
Take proactive actions across channels
to retain your customers.

Lead conversion propensity enables you to . . .

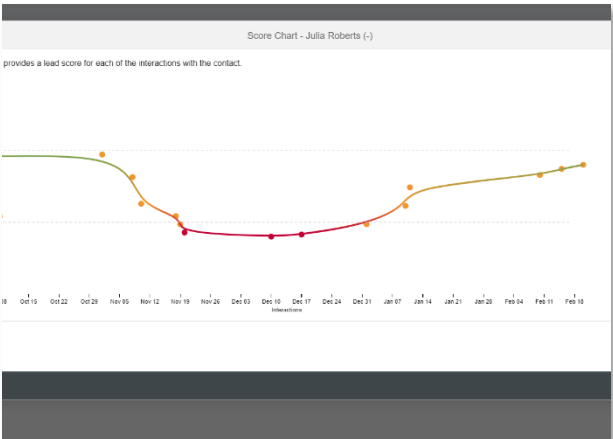
PLANNED



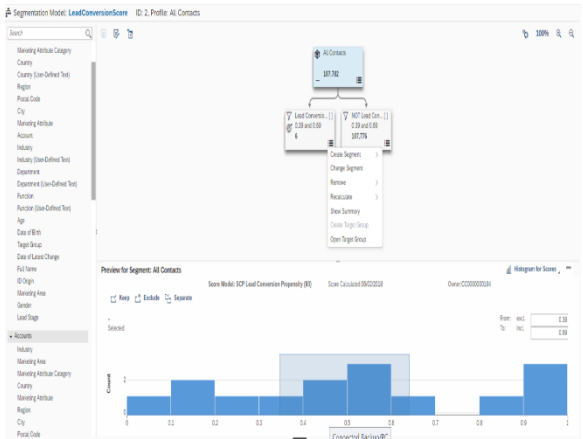
Capture the interaction history



Analyze the lead conversion score distribution

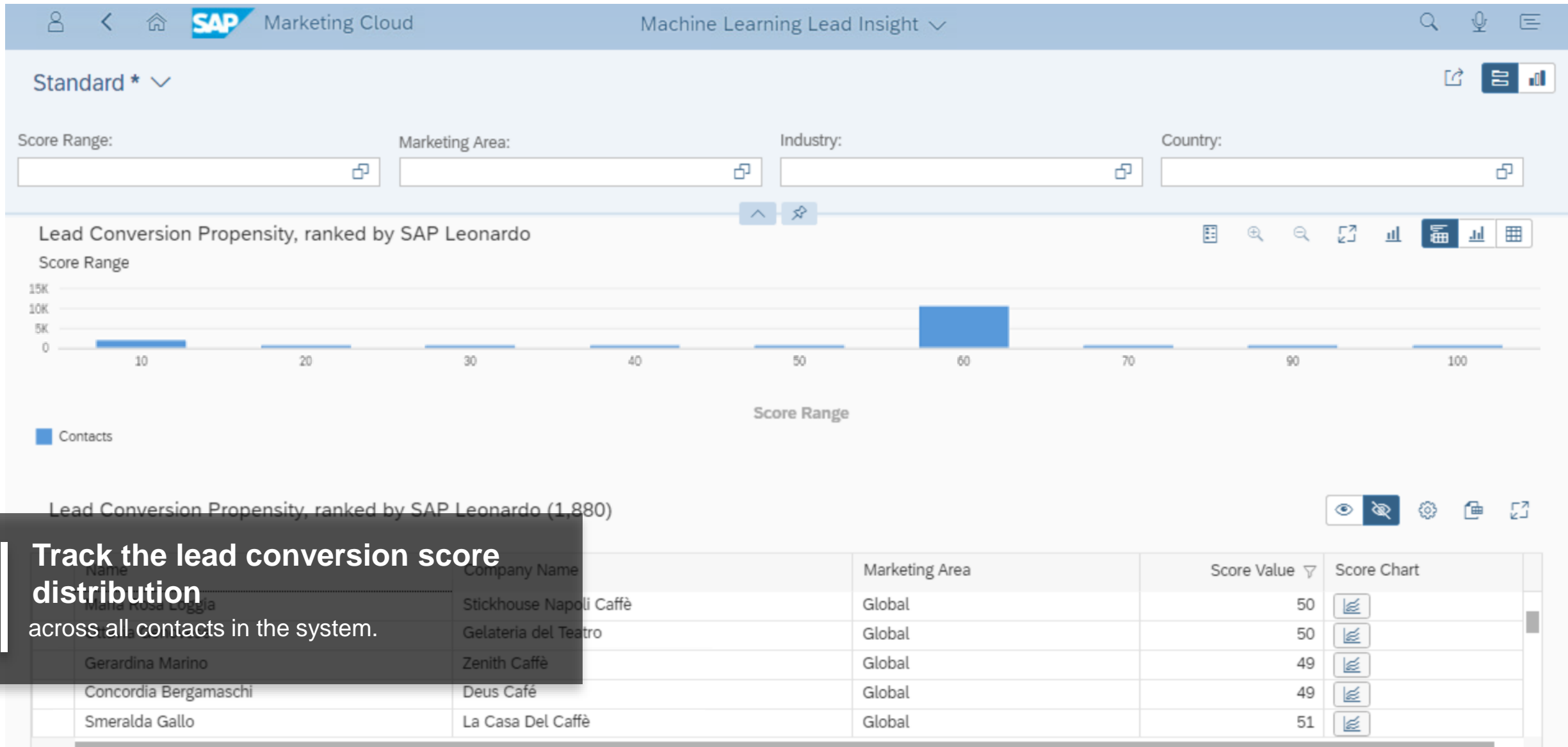


Track lead score progression



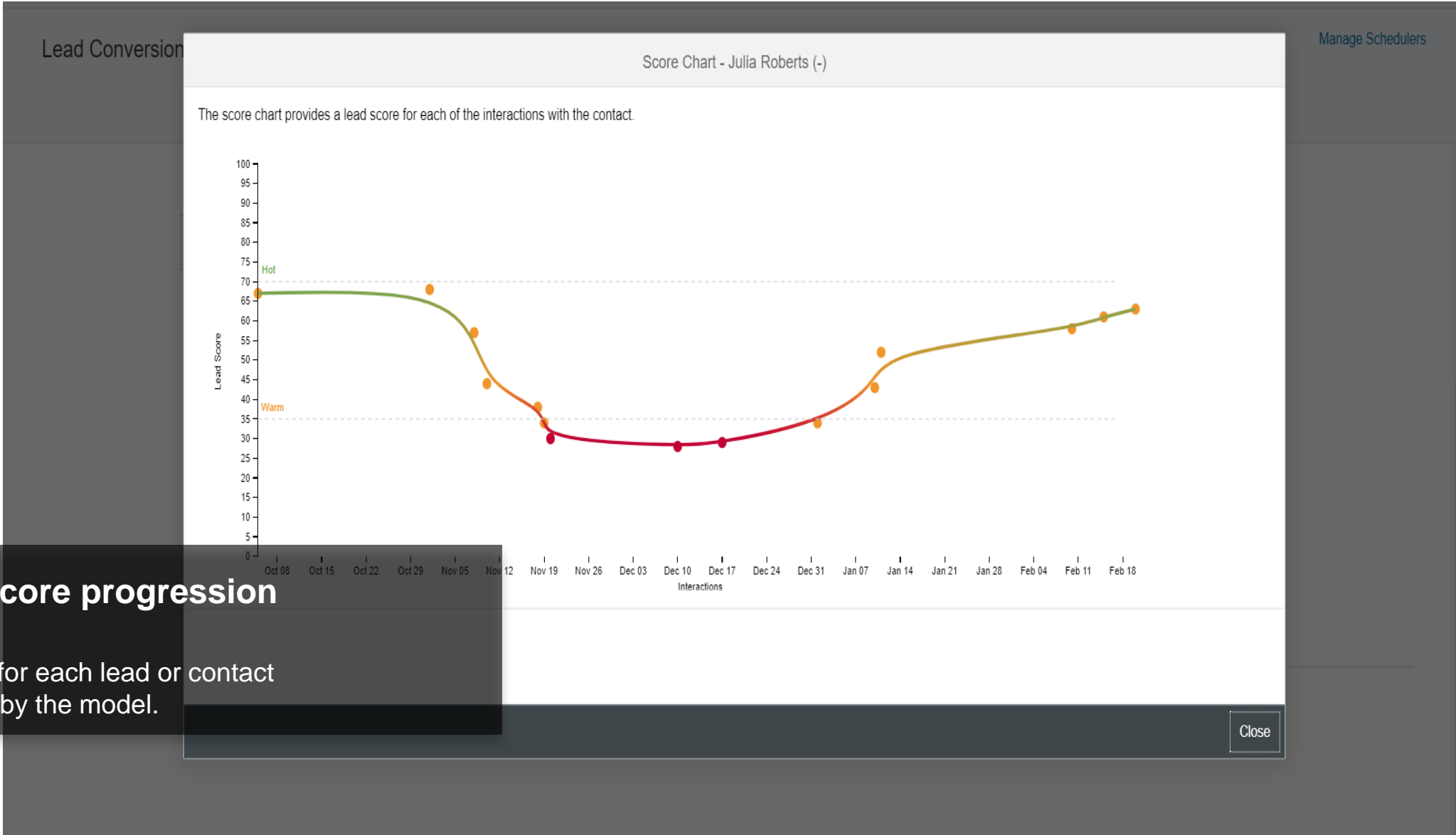
Nurture the relevant leads

SAP Intelligent Services for Marketing – Lead conversion propensity

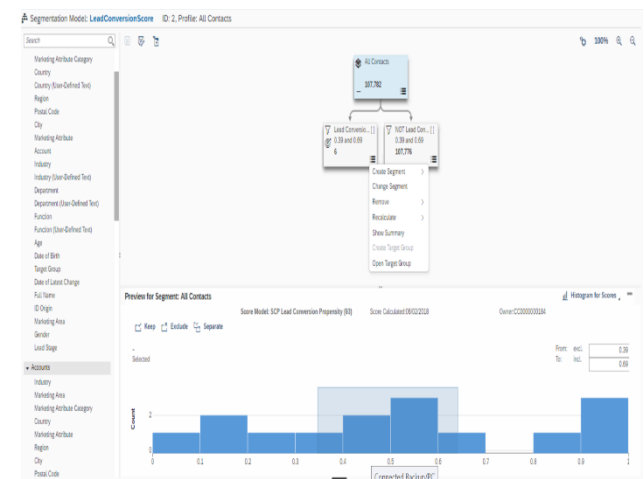


Track the lead conversion score distribution across all contacts in the system.

SAP Intelligent Services for Marketing – Lead conversion propensity

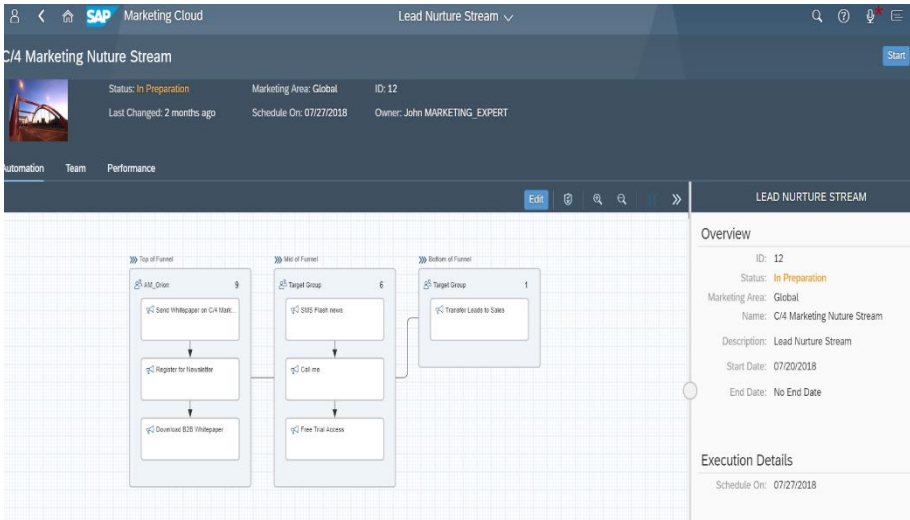


SAP Intelligent Services for Marketing – Lead conversion propensity

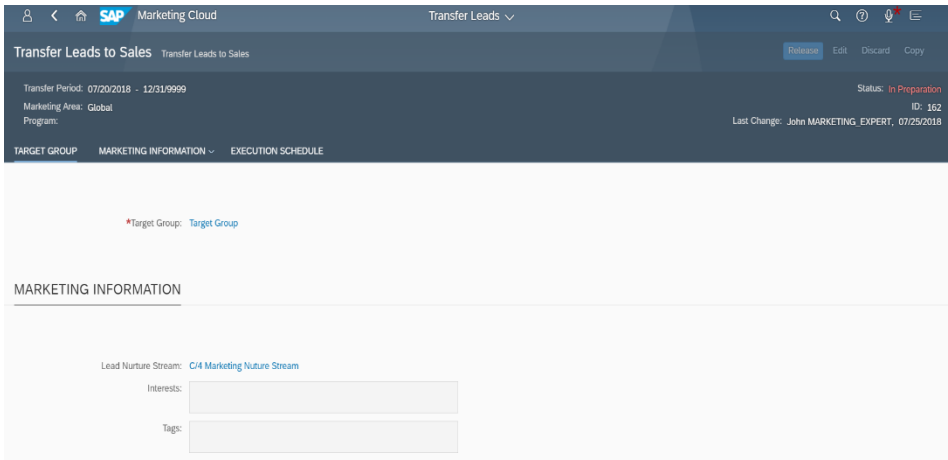


Lead score follow-up actions

Nurture leads

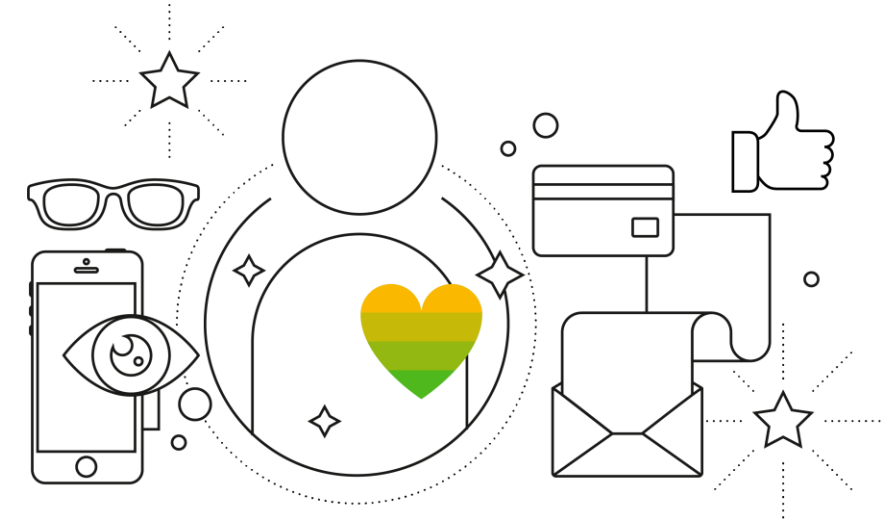


Transfer leads



Personalization and Augmented Shopping

CREATE IMMERSIVE AND PERSONALIZED SHOPPING EXPERIENCES BASED ON IMAGE RECOGNITION.



Deliver interactive shopping experiences which blend seamlessly with in-store and digital channels.

Utilize image recognition algorithms to determine consumer information.

Enable real-time capture of interactions to refine recommendations.

Allow marketers to easily consume and tailor scoring and predictive algorithms based on gained insights and business objectives.

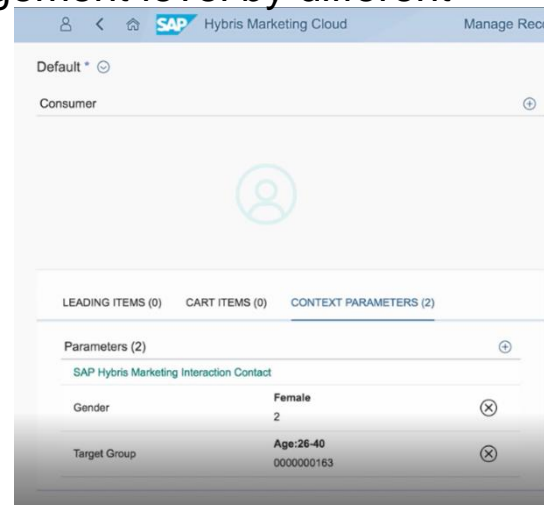
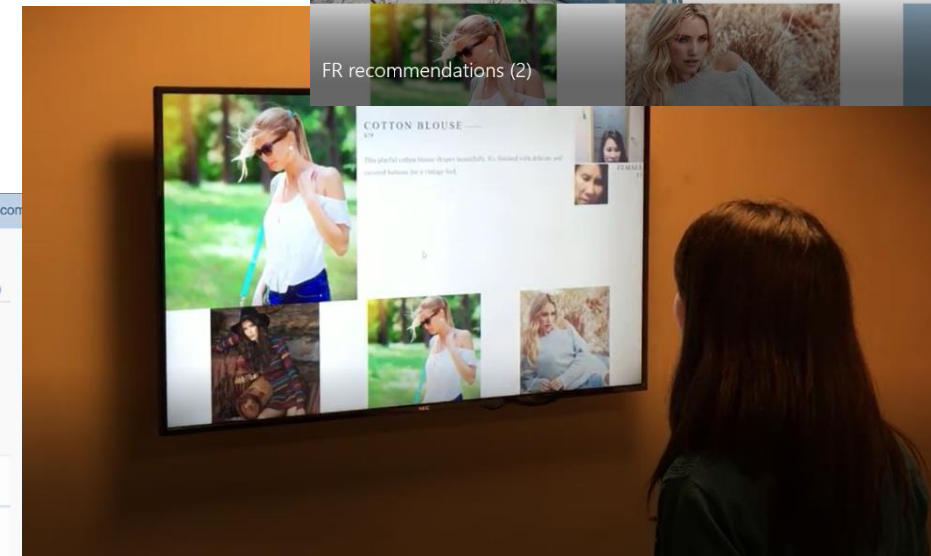
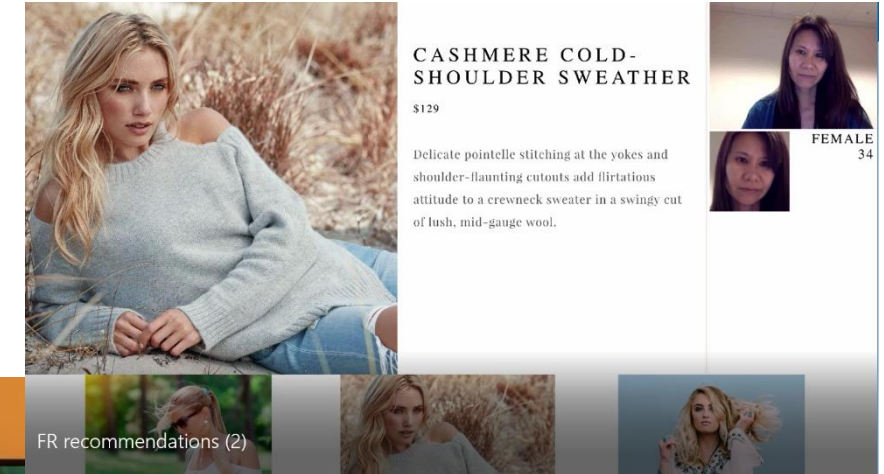
Personalization Through Image Recognition

For interactive product recommendations based on gender and age

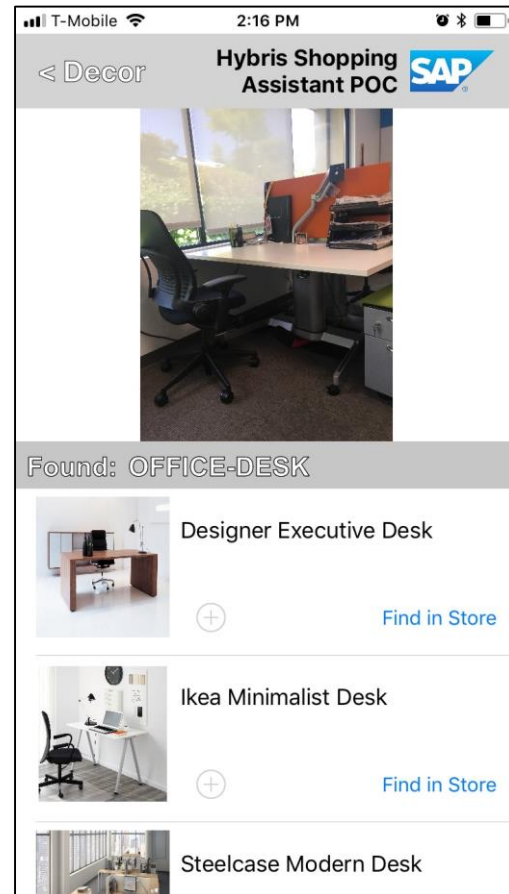
* Innovation – not part of standard delivery



- Provide a seamless personalized shopping experience in real-time
- Product recommendations can be easily integrated into applications via SAP Cloud Platform
- By allowing consumers to interact with the display many use cases can be applied to increase conversion
- More insights can be provided by enabling tracking such as engagement level by different age groups



Augmented Shopping Experience Through Image Recognition



- Enable customers to load a product that they like or want to buy easily with a mobile app.
- Classify the image of the product and provide Visual Product Recommendations to Customers.

Smart Campaigns

Personalize Customer
Engagement

FUTURE

PLAN AND RUN OPTIMIZED AND INTELLIGENT CAMPAIGNS.



Utilize machine learning to recommend combinations of campaigns and segments.

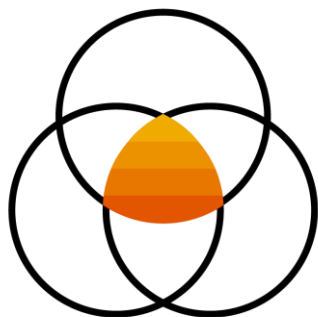
Optimize responsiveness via preferred channel and send time recommendations.

Create re-usable campaign building blocks with predefined templates and audiences .

SAP Customer Attribution

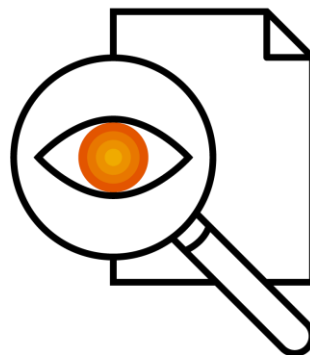
Optimize every marketing touch point to drive more efficient CX using a game theory algorithm*

Closed Loop Marketing Built on Machine Learning



ENRICH

**CAPTURE AND ENRICH USER
DATA ACROSS ALL SOURCES
INTO A SINGLE VIEW**



INSIGHT

**INSIGHTS INTO
PERFORMANCE OF EVERY
MARKETING TOUCH POINT**



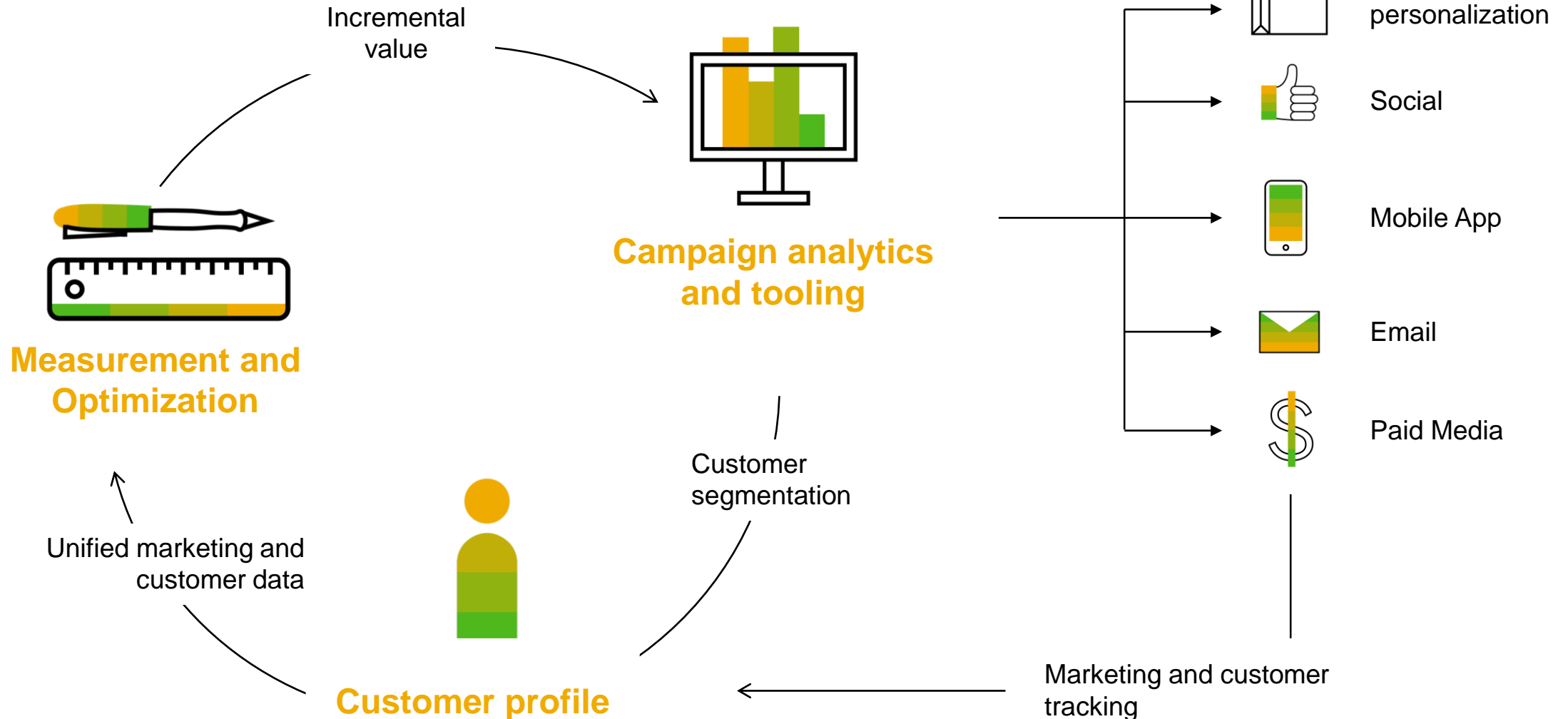
AGILITY

**REACT QUICKLY TO
OPPORTUNITIES WITH DAILY
MEASUREMENT AND
OPTIMIZATION**

SAP Customer Attribution

Closed Loop Marketing Built on Machine Learning

Availability: Today



Thank you.

Contact information:

Sumita Jayaraman

Senior Director, Product Strategy

SAP Marketing Cloud

Sumita.Jayaraman@sap.com

SAP Customer Experience

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