AI – Helping Marketers be personal at scale

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wednesday relations

Marketer's dilemma

Who is the Audience?

What is the message?

What is the best time?

What is the customer Journey?

9%
Behavioral data used
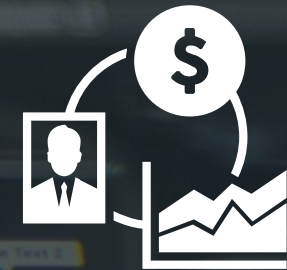
How do I increase CLTV?
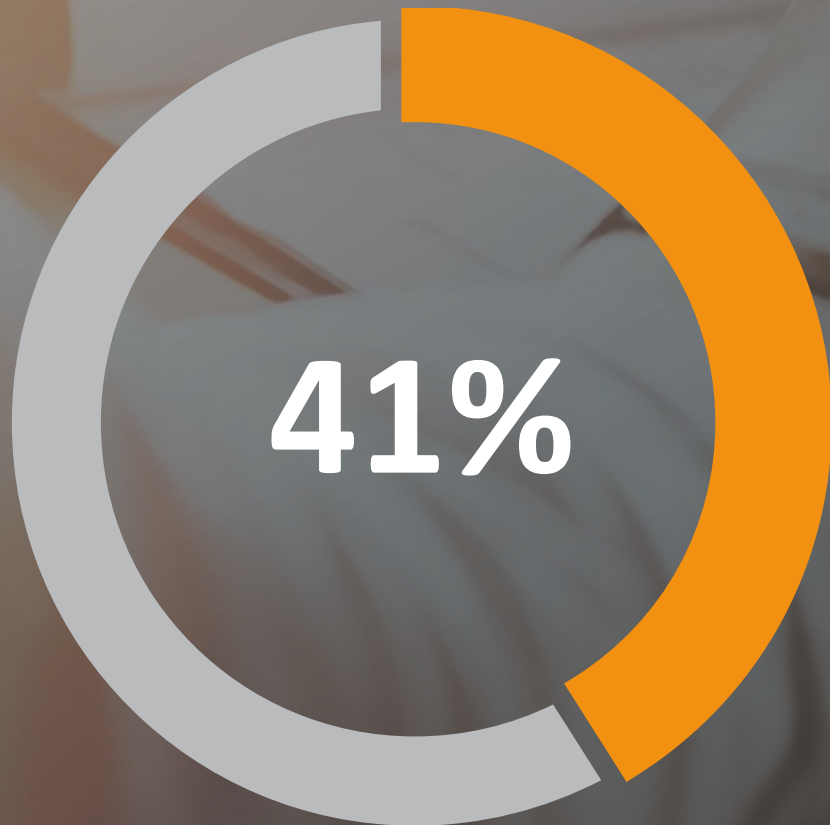
How do I create Omni-channel experience?

What is the best product?

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You aren't alone…

41%

B2C Digital Marketers Listed
**Resource Constraints as
their #1 issue**

Source: eMarketer

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Digital Marketer's Journey

Past, Present and Future

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Batch and blast: Revenue vs. Send

Point of Campaign Disengagement

Campaign Crisis

● Revenue

● # of Messages
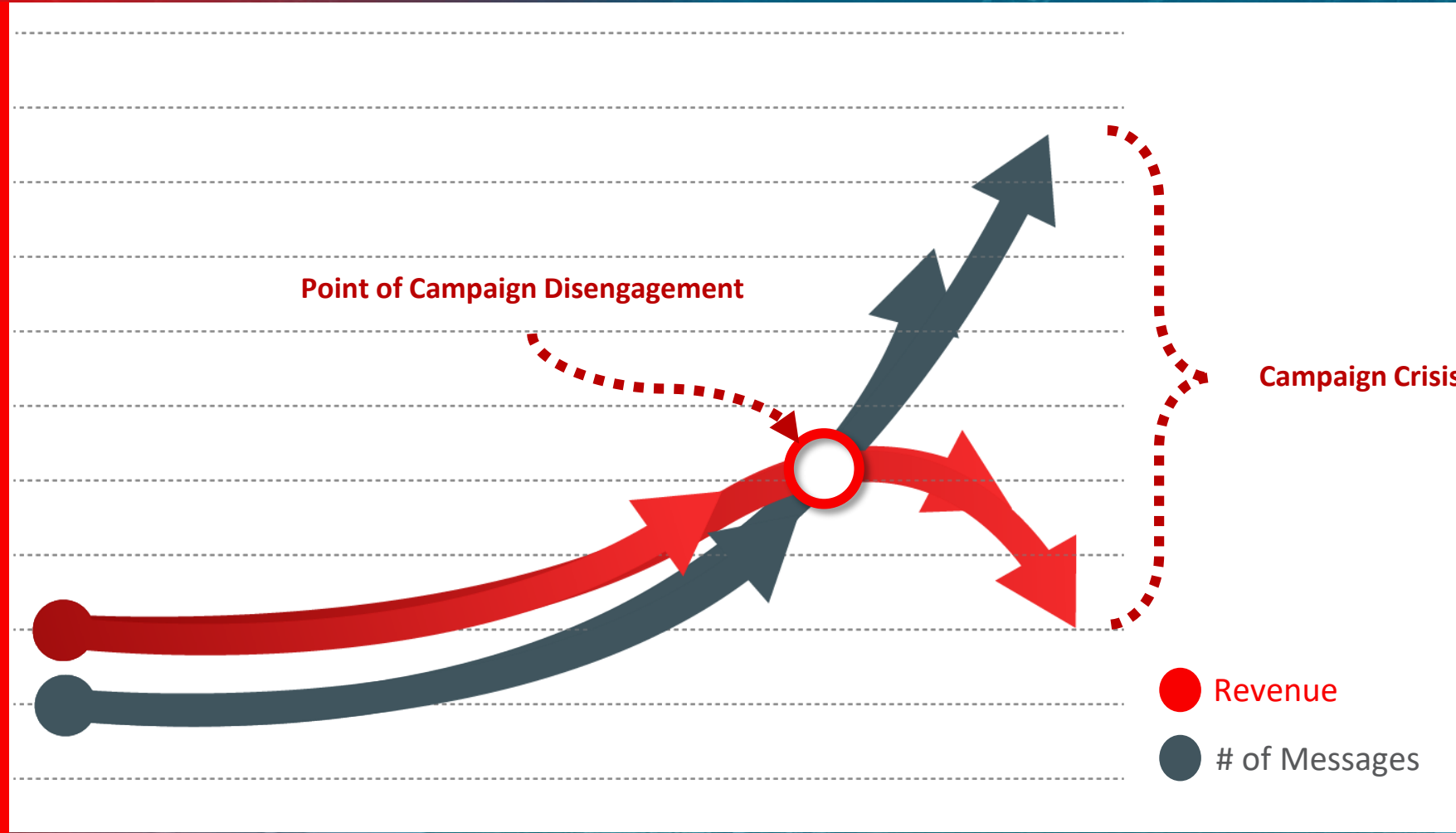
YoY impact

-14.1%
Transaction-to-Click Rate

-25.4%
Transaction Rate

-27.8%
Revenues Per Email

Source: eMarketer

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Heuristic* Data Strategy
Effectiveness limited to a marketers prediction
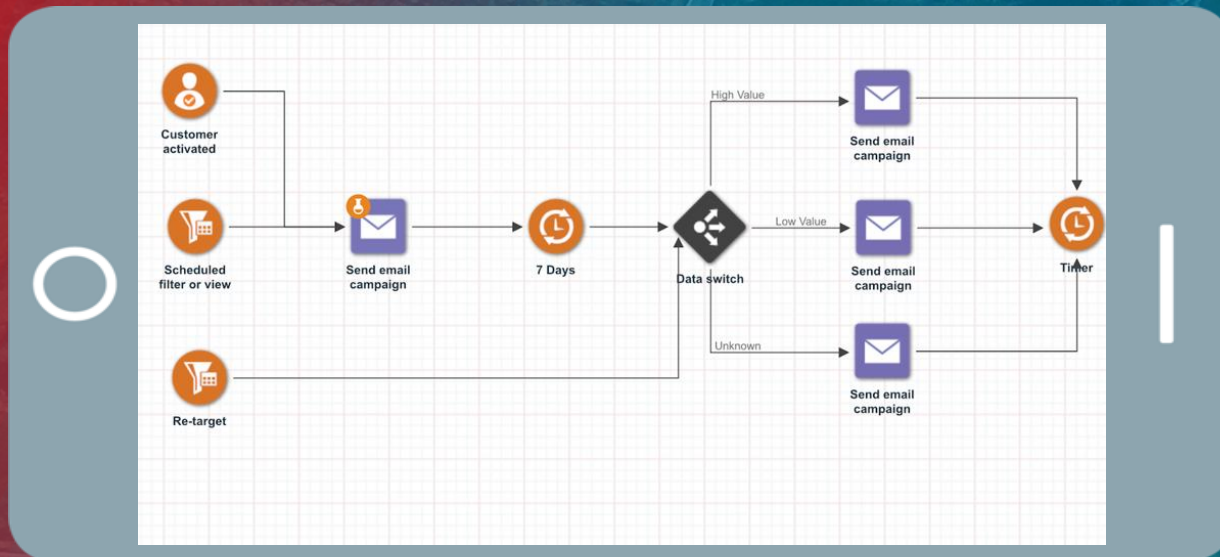
Segmentation

Data Filtering

Orchestration

Heuristic
- List-cuts
- Filters
- Segmentation

No Data Strategy
- Batch & Blast

MARKETING EVOLUTION

Heuristics are strategies derived from previous experiences with similar problems.

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Heuristic* Data Strategy

Effectiveness limited to a marketers prediction

1st Party Data

Purchase History   Recommendations   Preferences

Favorites   Web Analytics   Loyalty

3rd Party Data

Demographics   Syndicated Segments

Shopper Flags   Buyer Flags

Behavioral Data

Email | SMS | Mobile | Web   Sent   Open   Clicked

Purchased | Converted | Cart | Browse | Search Abandon

Heuristic
- **List-cuts**
- **Filters**
- **Segmentation**

↑

No Data Strategy
- **Batch & Blast**

MARKETING EVOLUTION

Heuristics are strategies derived from previous experiences with similar problems.

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Statistical Models Data Strategy
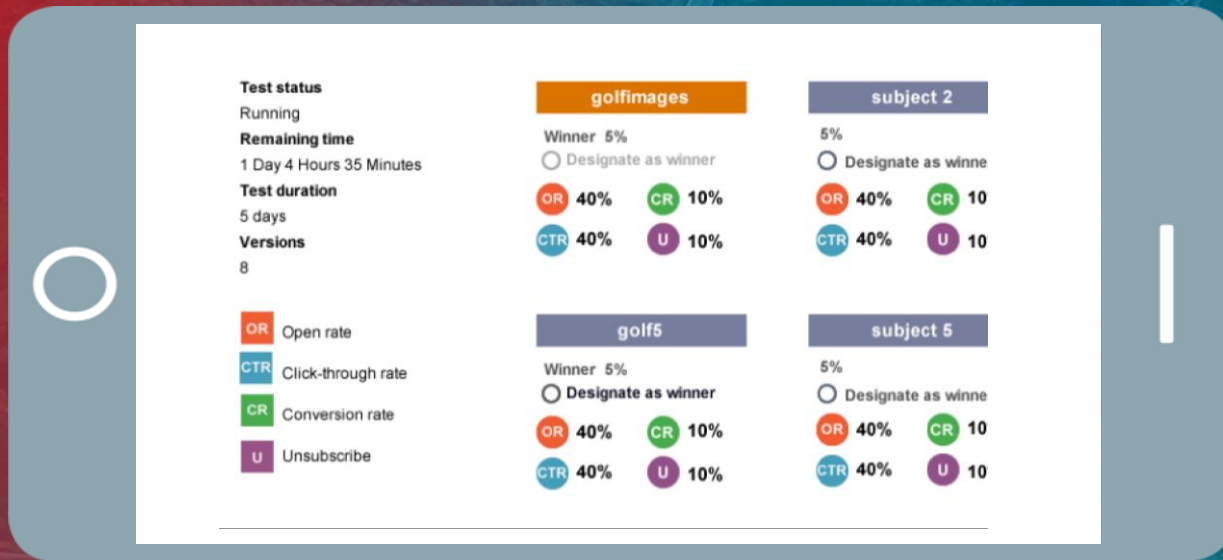*Matured marketers use data for testing*

Make Testing Easy

Win Every Time

Learn More Faster

Phone screen content:

Test status
Running

Remaining time
1 Day 4 Hours 35 Minutes

Test duration
5 days

Versions
8

OR	Open rate
CTR	Click-through rate
CR	Conversion rate
U	Unsubscribe

golfimages
Winner 5%
○ Designate as winner
OR 40%   CR 10%
CTR 40%   U 10%

subject 2
5%
○ Designate as winne
OR 40%   CR 10
CTR 40%   U 10

golf5
Winner 5%
○ Designate as winner
OR 40%   CR 10%
CTR 40%   U 10%

subject 5
5%
○ Designate as winne
OR 40%   CR 10
CTR 40%   U 10

Statistical Models
- Behavioral data
- A/B MVT Testing
- Send Time Optimization
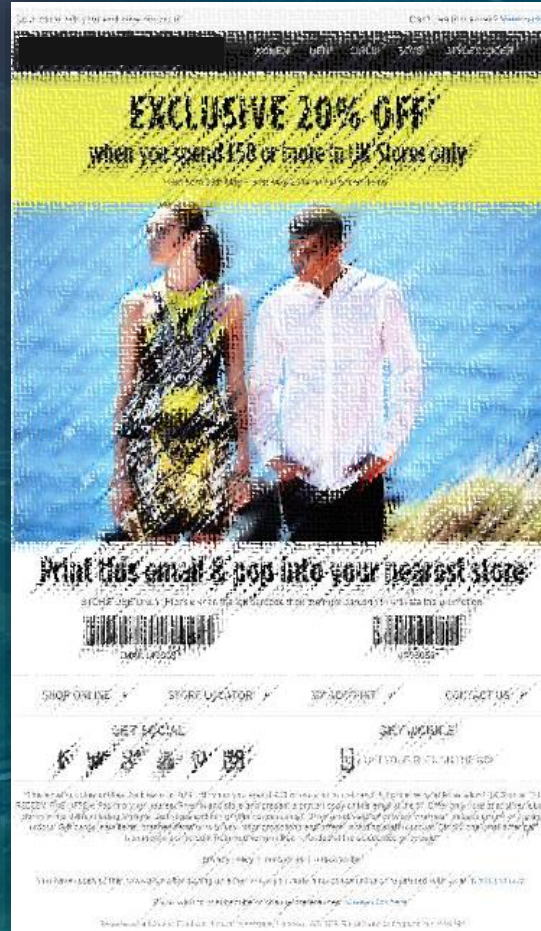
Heuristic
- List-cuts
- Filters
- Segmentation

No Data Strategy
- Batch & Blast

MARKETING EVOLUTION

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Statistical Models Data Strategy
Matured marketers use data for testing

Send Time Optimization Results

+22%
Open rates vs. non STO emails

+100%
Click through rate vs. non STO emails

+33%
Revenue vs. non STO emails

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Data – a numbers game

Every minute, 1.7MB of data is created for every person on the planet. All 7.3 billion of us

90% of the data in the world today was created in the last 2 years

2.5 QUINTILLION Bytes of data created every day! Quintillion = 30 zero's!

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Old wine in new bottles

Data Models

AI

Processing Power

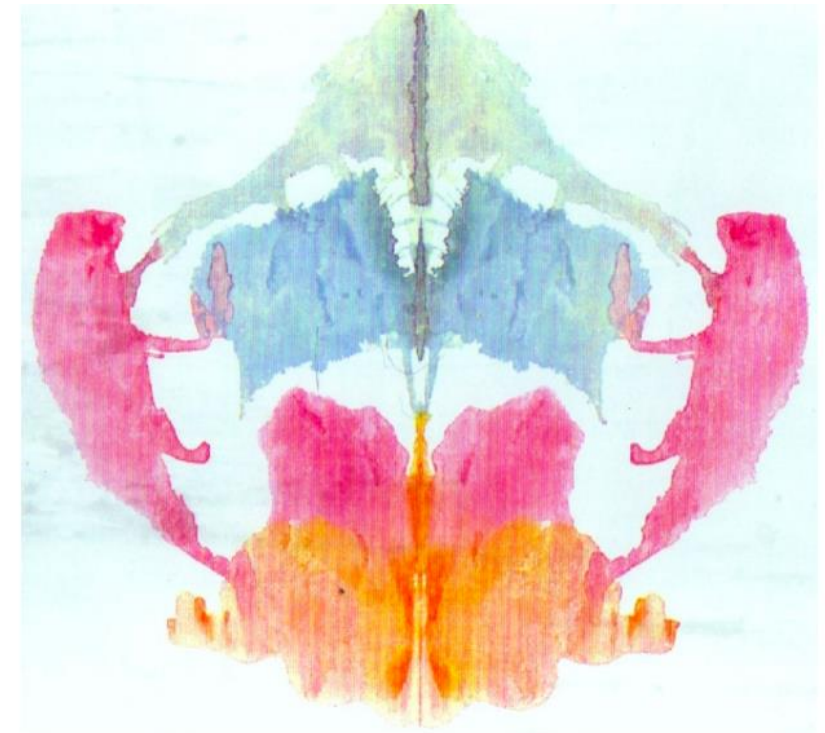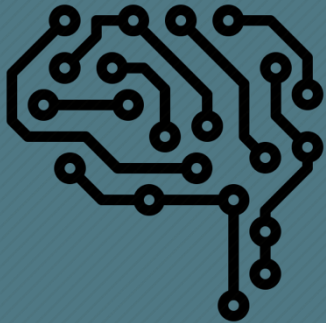Big Data

When we get data wrong...

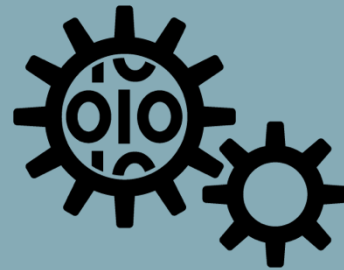# ARTIFICIAL INTELLIGENCE IS NOT A NEW CONCEPT

ARTIFICIAL INTELLIGENCE

Any technique which enables computers to mimic human behavior

MACHINE LEARNING

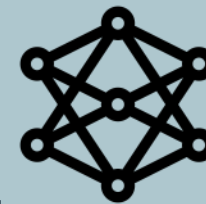AI techniques that give computers the ability to learn without being explicitly programmed to do so

DEEP LEARNING

A subset of ML A branch of AI inspired by the structure of the human brain

1950's   1960's   1970's   1980's   1990's   2000's   2010s

From Alpha Go to Super Intelligence?

Anger
Contempt
Disgust
Fear
Happiness
Neutral
Sadness
Surprise

ANI

AGI

ASI

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Humans VS. Computers as today!

COMPUTERS BETTER	ALMOST EQUAL	HUMANS BETTER
CALCULATION SPEED	FACIAL REGOGNITION	NON- ROUTINE PRACTICAL JOBS –COOKING, HAIRDRESSING
GAMES – CHESS, POKER, GO	IMAGE SORTING	READING FACIAL EXPRESSIONS
MEMORIZATION	VERBAL IQ TEST	LANGUAGE TRANSLATION
ERROR FREE PROCESSING	BASIC CHAT	WRITING AND CONVERSATION
MULTITASKING		CAPACITY TO LEARN
COMPUTING AND LOGIC		ART AND MUSIC
		TRUE EMPATHY
		PHYSICAL ADAPTABILITY – CLIMBING STAIRS, USING TOOLS

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Humans VS. Computers as today!

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FACIAL REGOGNITION		TRUE EMPATHY
BASIC CHAT		PHYSICAL ADAPTABILITY – CLIMBING STAIRS, USING TOOLS

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Artificial Intelligence Powers Services We Use Every Day:

- Listen to personalized music sets (Pandora)

- Meet well- suited people (eHarmony)

- Find optimized directions (Waze)

- Watch recommended movies (Netflix)
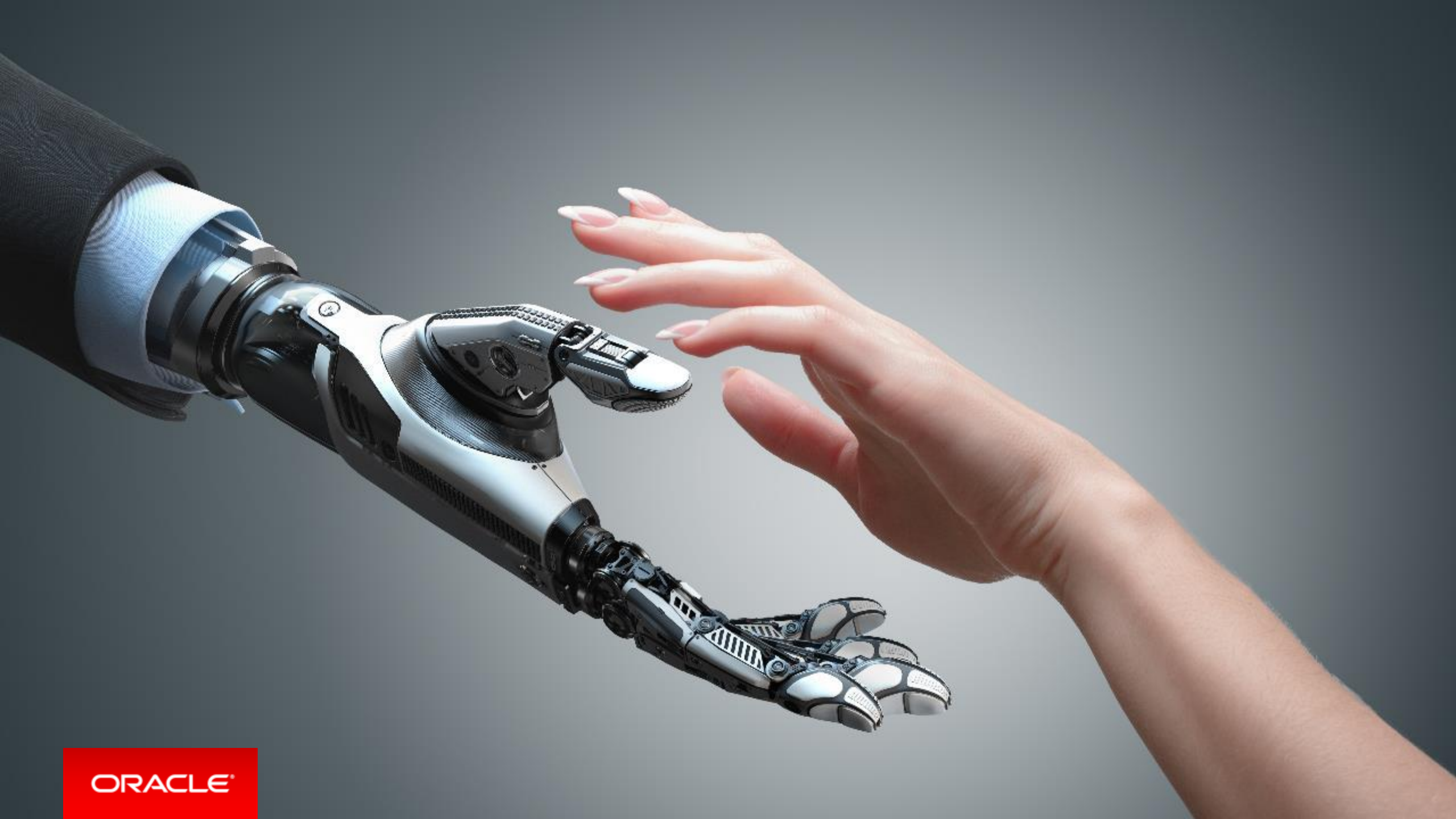
- Use personalized shopping recommendations (Amazon)

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Prediction

Perception

Decision

Automation

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What can AI do for Marketing?

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Better, Faster Decisions With Deep Learning.

Hyper Personalization through Predictive Analysis.

…beware! Are you fitting into the generation bucket you do belong to?

Generation	Greatest /Silent	Baby Boomers	Gen X	Millennials	Gen Z
Years Born	1923 - 1945	1946-1964	1965-1980	1981-1997	1998-2016
Communication Style	Letter	Telephone	Email /SMS	Instant Message	Emojis
Key Technology	Car	TV	PC	Smartphone	AR/VR
Hobby	Reading	Watching TV	Surfing the Internet	Video Games	Music Streaming
Digital Proficiency	Pre-Digital	Digital Immigrants	Early Digital Adopters	Digital Natives	Digital Innates
Iconic Figure	Franklin D. Roosevelt	John F. Kennedy	Kurt Cobain	Mark Zuckerberg	Malala
Music	Jazz / Swing	Elvis / Beatles	Nirvana / Madonna	Britney Spears / Justin Timberlake	Justin Bieber / Taylor Swift
How They Get Around	'55 Ford Thunderbird	SUV	Bicycle / Car	Uber / Lyft	Mom's Prius
Current Living Situation	Retirement Home	Semi Detached House	Own Small Apartment	Sharing an Apartment	Parents' House
Social network other than Facebook	The Rotary Club	Match.com	LinkedIn	Tinder	Snapchat
Deepest Fear	The world in 2016	No longer center of attention	What about my generation	Paying off student debt	Low batteries
Key Life Question	How did the country go so wrong?	Where's the Viagra?	What's the point?	What's a career?	What's a landline?
Defining Condition	Permanently Aggrieved	Erectile Dysfunction	ADHD	Gluten-Intolerant	Peanut Allergy
What They Spend On	Oklahoma Community Dinner Theater	VIP tickets to The Rolling Stones	Burning Man	Coachella	Minecraft

Source: iKinetic, McCrindle, Pew Research, Bruce Feirstein – Vanity Fair, various sources, BofA Merrill Lynch Global Research

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Best-in-Class Customer Service Via Virtual Assistant

Efficient Lead Nurturing and Customer Acquisition

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WeChat BingoBox Store Of The Future

Faster Insights - No longer limited to PoS or surveys

Oracle's Differentiated Position

Domain & Industry Apps	Data	Decision Science	Compute
Purpose-Built with domain knowledge	Powered by the largest data marketplace	Bundled & pre-tuned decision science	Delivered insights within milliseconds

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Connected Intelligence Powers AI Apps for CX

- Coordinates Data Insights And Surfaces Outcomes
- Derives Insight Not Humanly Possible
- Smart Outputs >> Smart Inputs >> Best Outcomes

Only Oracle has the breadth and depth and the data foundation across pillars to deliver connected intelligence

HCM

ERP

BUSINESS

CX

SCM
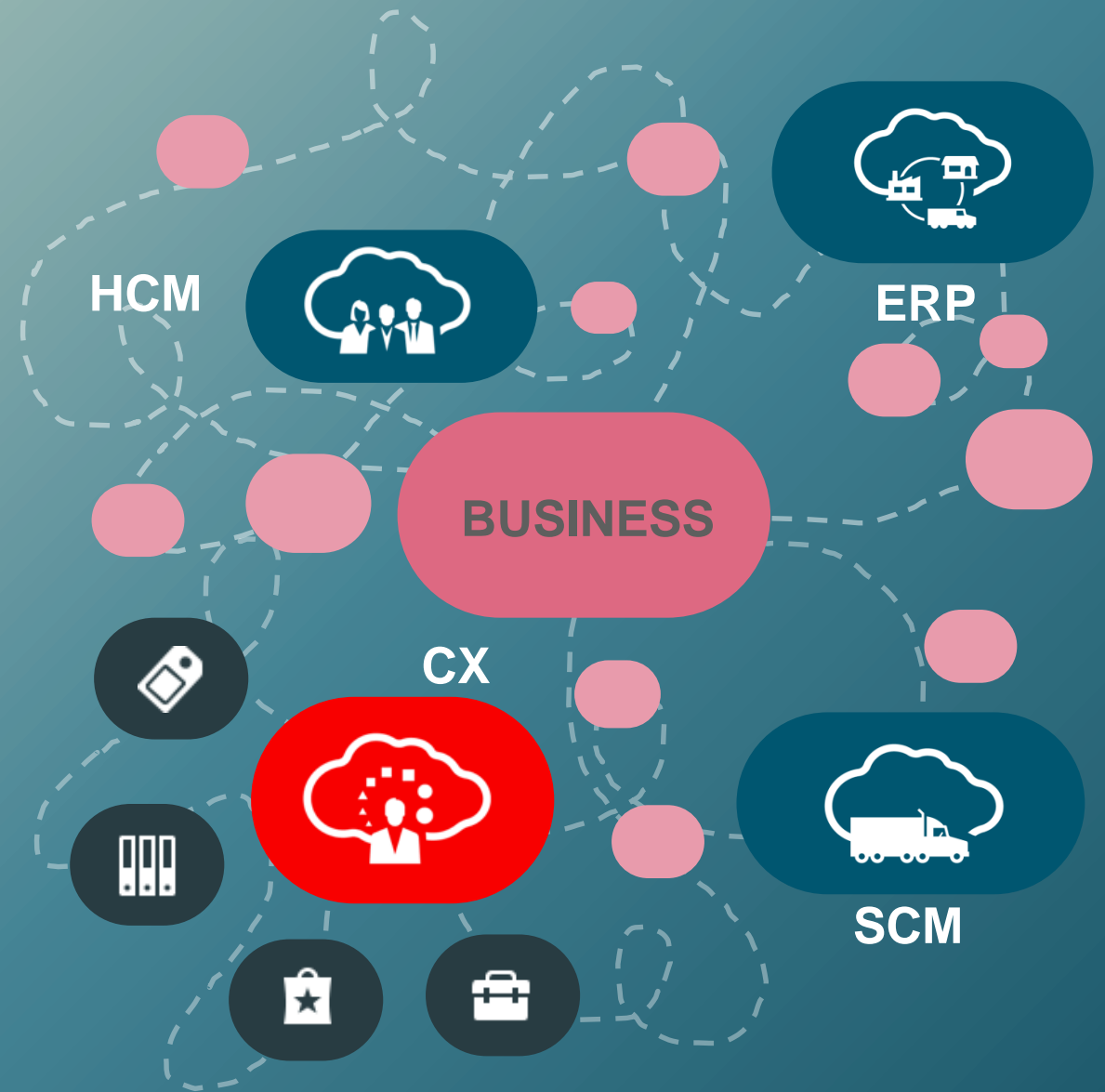
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CX Adaptive Intelligent Apps

- Purpose-Built and Ready-To-Go
- Build on the Oracle Modern Cloud
- Driven and Enriched by Data
- Augments Human Potential
- Connected Intelligent Outcomes

Company Data

Trusted Data

Decision Science ( ) **Machine Learning**

Connected Outcomes

| Next Best Offers | Marketing Orchestrations | Best Sales Actions | Automated Answers |

Commerce   **Marketing**   **Sales**   **Service**

CX
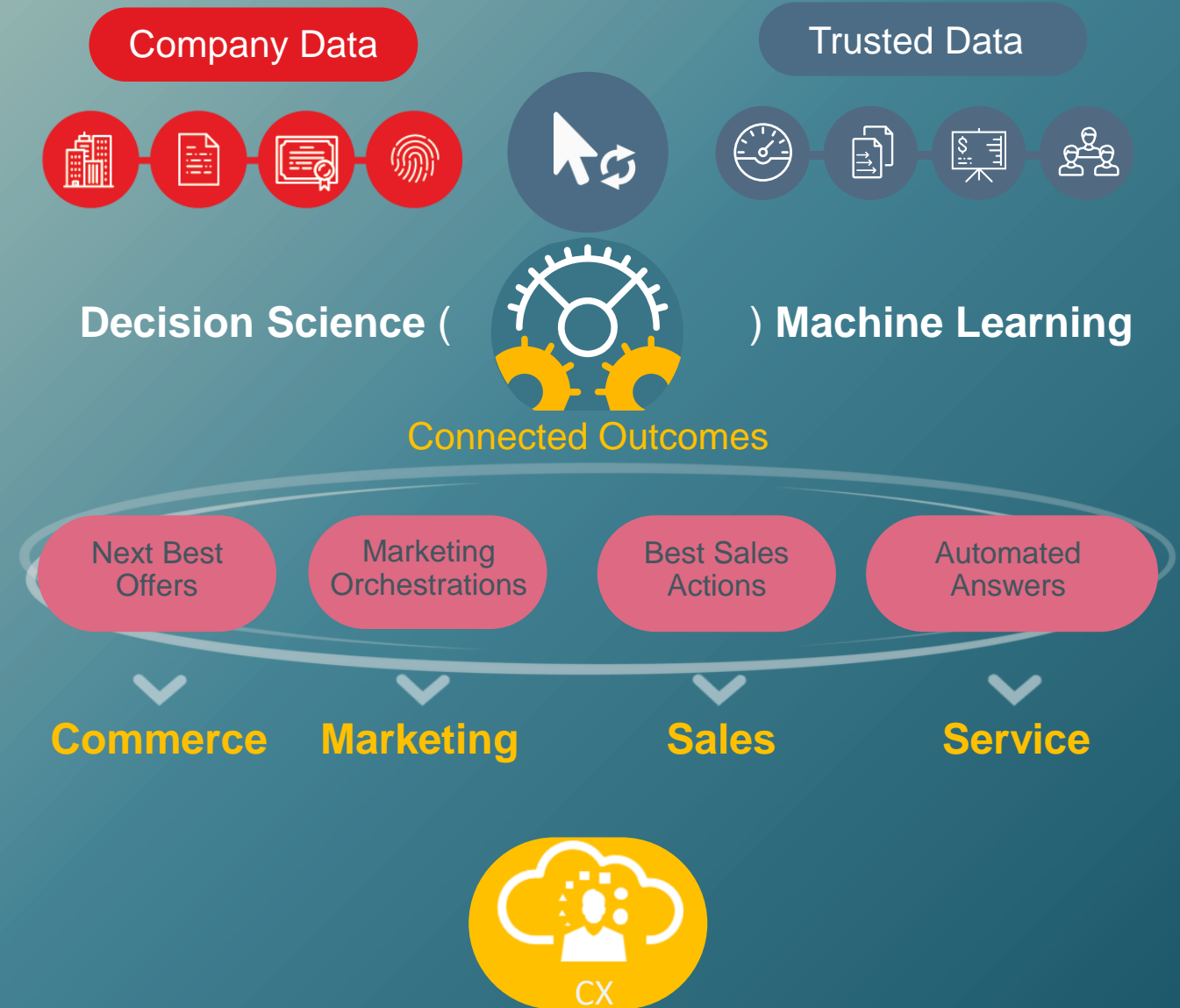
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Oracle AI Apps For CX

AI-POWERED APPS DESIGNED TO HELP YOU CREATE **SUPERIOR CUSTOMER EXPERIENCES**

Engage Smarter

Next Best Offers and Recommendations
Coordinated Open-Time Content
Intuitive Search Experiences
Connected Audiences
Optimized Marketing Orchestrations (B2C)
Lead Optimization
Optimized Marketing Orchestrations (B2B)
Program Simulation

Sell Smarter

Win Probability Scores
Next Best Actions
Deal Acceleration
Smart Call Points
Smart Account Development

Serve Smarter

Automated Answers

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Examples for Marketing

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AI Apps for CX: **Marketing**

Provide an optimized, **seamless experience** for your customers by delivering timely marketing communications through the best channel for them.

- Personalized product & promotion recommendations
- Coordinated content at email open-time
- Marketing event and consumer data ingestion
- AI Intelligent Switch for Oracle Responsys Program
- Supervisory controls
- Full GDPR & DP support

Program Designer
Cross Sell Program

Settings | Close | Save

Folder: Cross Sell   Last tested: 2018-10-22 06:27 AM PDT   Last saved: 2018-10-22 06:27 AM PDT

Design | Test | Publish | Analyze

Validate

Laptop Category → Message

General Home User
Best Time to Reach

25% → Morning → Best Channel
- 20% Laptop Email
- 30% Laptop Push
- 40% Laptop SMS
- 10% Laptop Display

25% → Lunch Time → Best Channel
- 20% General Home User - Lunch
- 30% General Home User - Lunch
- 40% General Home User - Lunch
- 10% General Home User - Lunch

25% → Early Evening → Best Channel
- 20% General Home User - Evening
- 30% General Home User - Evening
- 40% General Home User - Evening
- 10% General Home User - Evening

25% → Night → Best Channel
- 20% General Home User - Night
- 30% General Home User - Night
- 40% General Home User - Night
- 10% General Home User - Night

Students
Best Time to Reach

25% → Morning → Best Channel
- 20% Students
- 30% Students
- 40% Students
- 10% Students

Program Designer

Cross Sell Program

Settings | Close | Save ▼

Folder: Cross Sell   Last tested: 2018-10-22 06:27 AM PDT   Last saved: 2018-10-22 06:27 AM PDT

Design | Test | Publish | Analyze

Validate

General Home User

Best Time to Reach | Morning | Best Channel

20% | 30% | 40% | 10%

Laptop Email | Laptop Push | Laptop SMS | Laptop Display

Laptop Category | Message

25% | Lunch Time | Best Channel

20% | 30% | 40% | 10%

General Home User - Lunch | General Home User - Lunch | General Home User - Lunch | General Home User - Lunch

25% | Early Evening | Best Channel

20% | 30% | 40% | 10%

General Home User - Evening | General Home User - Evening | General Home User - Evening | General Home User - Evening

25% | Night | Best Channel

20% | 30% | 40% | 10%

General Home User - Night | General Home User - Night | General Home User - Night | General Home User - Night

Students

Best Time to Reach | 25% | Morning | Best Channel

20% | 30% | 40% | 10%

Students - Morning | Students - Morning | Students - Morning | Students - Morning

25% | Lunch Time | Best Channel

20% | 30% | 40% | 10%

Students - Lunch | Students - Lunch | Students - Lunch | Students - Lunch

25% | Early Evening | Best Channel

20% | 30% | 40% | 10%

Students - Evening | Students - Evening | Students - Evening | Students - Evening

25% | Night | Best Channel

20% | 30% | 40% | 10%

Students - Night | Students - Night | Students - Night | Students - Night

Gamers

Best Time to Reach | 25% | Morning | Best Channel

20% | 30% | 40% | 10%

Gamers - Morning | Gamers - Morning | Gamers - Morning | Gamers - Morning

25% | Lunch Time | Best Channel

20% | 30% | 40% | 10%

Gamers - Lunch | Gamers - Lunch | Gamers - Lunch | Gamers - Lunch

25% | Early Evening | Best Channel

20% | 30% | 40% | 10%

Gamers - Evening | Gamers - Evening | Gamers - Evening | Gamers - Evening

25% | Night | Best Channel

20% | 30% | 40% | 10%

Gamers - Night | Gamers - Night | Gamers - Night | Gamers - Night

Program Designer

Cross Sell Program

Design   Test   Publish   Analyze   Validate

Laptop Category

Message

Laptop Email

Laptop Push

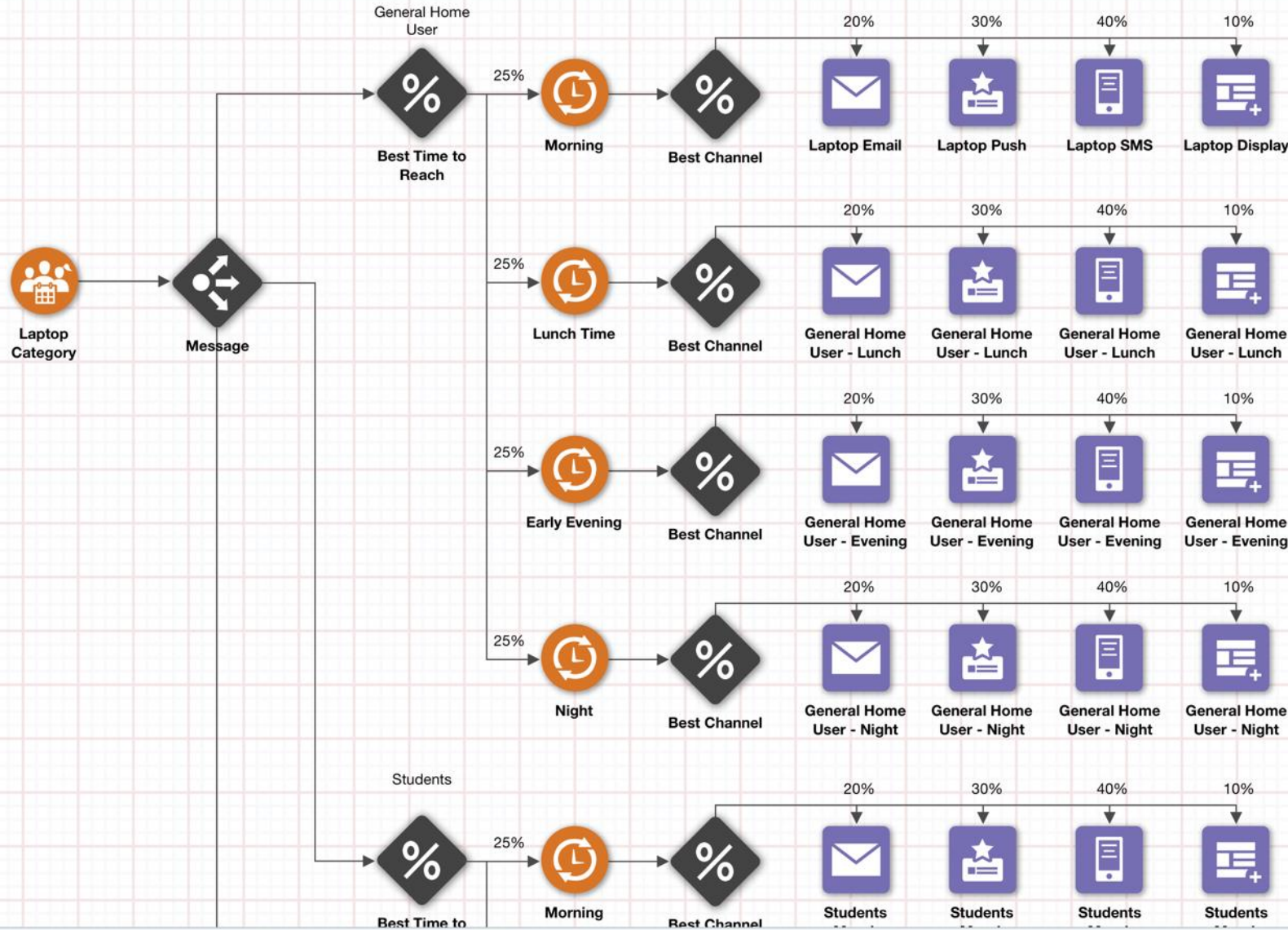**Laptop SMS**
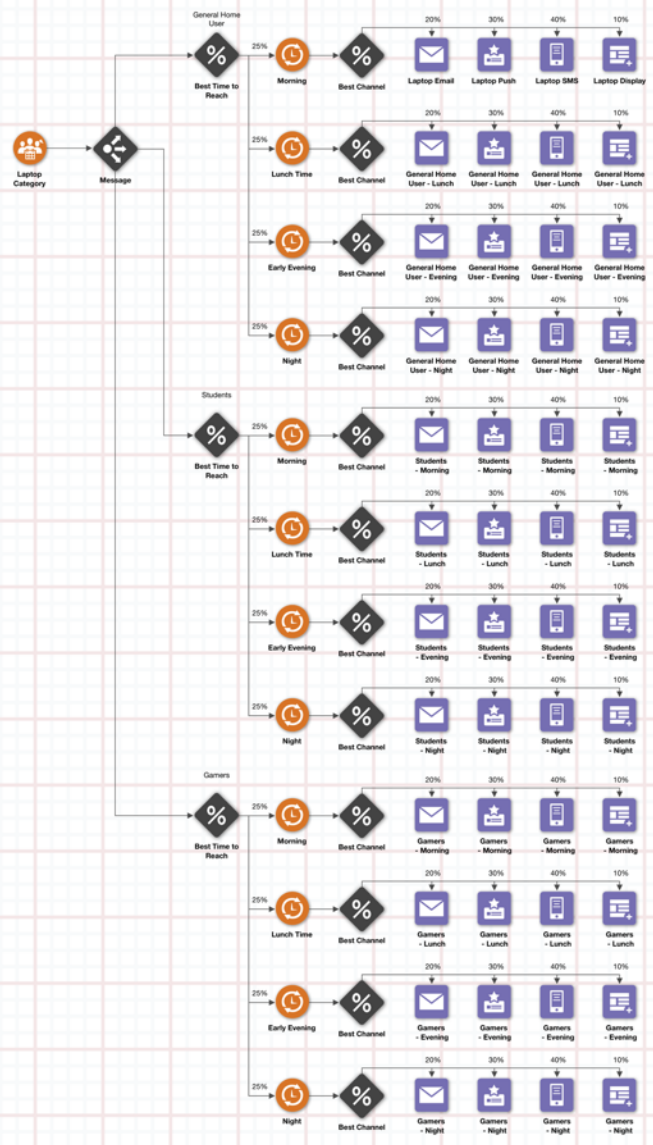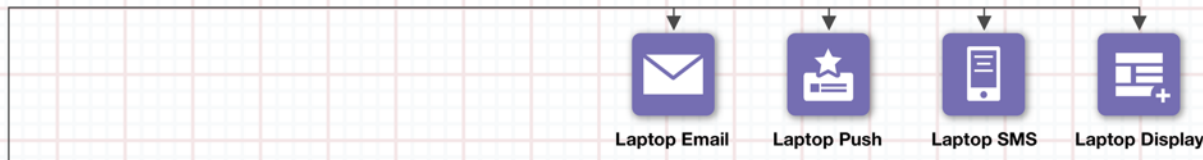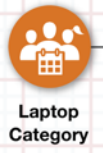
Laptop Display

Program Designer
Cross Sell Program

Settings　Close　Save ▾

Folder: Cross Sell　Last tested: 2018-10-22 06:27 AM PDT　Last saved: 2018-10-22 06:27 AM PDT

Design　Test　Publish　Analyze

Validate

Adaptive Intelligence switch　✕

Laptop SMS　Laptop Display

Stage label

Message

Description

Optimize the Channel and Send time

Select metric

Open ▾

Open

Click

Conversion

Path 2　Laptop Push

Path 3　Laptop Display

Path 4 (Default)　Laptop Email

Timeout (Maximum wait time)

What time range should A.I. Optimize within?

After 2 days ▾

Laptop
Category

Message

Cancel　Done
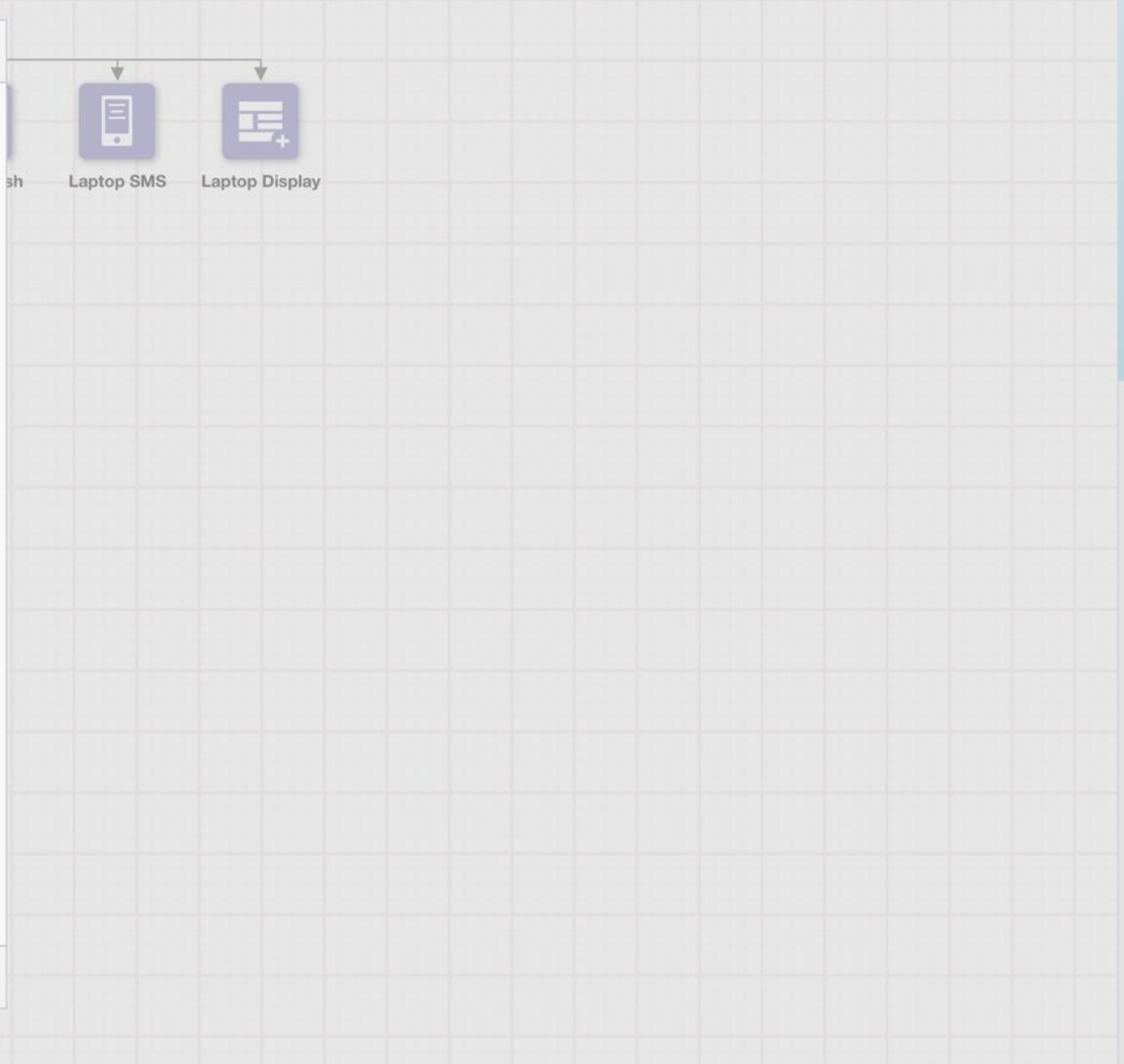
Program Designer

October 2018 Newsletter

Settings   Close   Save ▾

Design   Test   Publish   Analyze   Validate

Newsletter Audience

Best Newsletter

Newsletter A

Newsletter B

Newsletter C

Wait 1 day

Best Follow-up

Newsletter Follow-up Email

Newsletter Follow-up Push

Newsletter Follow-up SMS

Follow-up Email

Follow-up Push

Follow-up SMS

End
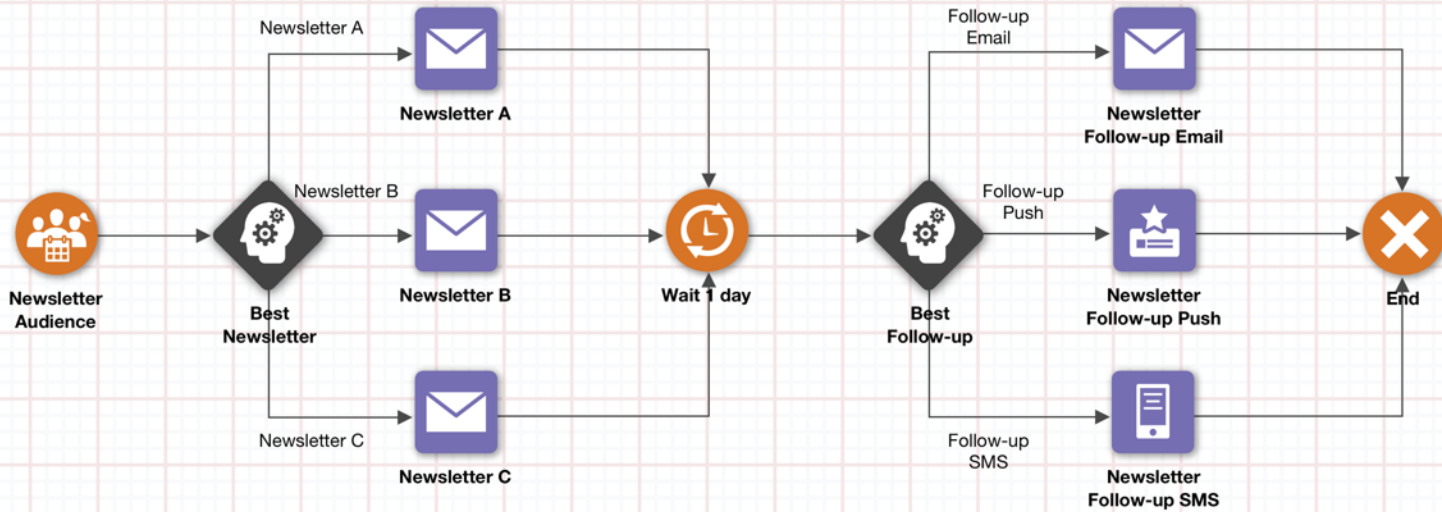
Programs ?

Search for and review the summary of programs. Click a program for details.

All (7)   Published (3)   Unpublished (2)   Archived (2)

| Program Name 🔍 | | Date Range | Past 1 Week ▼ |

Program	Status	Last Active ▼	Switch Count	Received	Pending	Processed
Cross Sell Program	Published	Oct 22, 2018	1	22,049	888	21,161
New Welcome Program 2018	Published	Oct 22, 2018	2	22,573	971	21,602
Winback Program	Published	Oct 22, 2018	2	13,261	680	12,581
Prize Draw	Unpublished	Oct 20, 2018	2	11,439	0	11,439
Welcome Program 2017	Unpublished	Oct 20, 2018	2	8,401	0	8,401
Newsletter Summer	Archived	Oct 17, 2018	1	9,618	0	9,618
Newsletter Winter	Archived	Oct 17, 2018	1	2,345	0	2,345

Page 1 of 1   (1-7 of 7 items) |<   <   1   >   >|

Recommended Products | Promotions

Recommended Products ⍰

Reset All

Categories (46) | Brands (39) | **Products (160)**

Apply

Product Name 🔍

Sort Order Recently Adjusted ▾ ▲ ▼ ▦ ☰

Men's Free Snowboard 2017/2018
Glide | 1 Category

Daily Recommendations **271**

Adjust Recommendations − ⊕ +

Fly High Snowboard
Durham | 1 Category

Daily Recommendations **223**

Adjust Recommendations − ⊕ +

Glide
1 Category | 2 products

Daily Recommendations **813**

Adjust Recommendations − ⊕ +

Durham
2 Categories | 2 products

Daily Recommendations **722**

Adjust Recommendations − ⊕ +

Lightweight Snowboard
Glide | 1 Category

Daily Recommendations **168**

Adjust Recommendations − ⊕ +

Men's Navigator Snowboard 2017/2018
BNX | 1 Category

Daily Recommendations **103**

Adjust Recommendations − ⊕ +

BNX
1 Category | 1 product

Daily Recommendations **233**

Adjust Recommendations − ⊕ +

Stonewood
1 Category | 1 product

Daily Recommendations **103**

Adjust Recommendations − ⊕ +

Xtreme Snowboard 2017/2018
Stonewood | 1 Category

Custom Snowboard
Durham | 2 Categories

AeroPress
6 Categories | 3 products

Bodum
9 Categories | 12 products

Paths ❓

Scale | Day ▾

Display ⬤

Constrain ———○——— Boost

Email ⬤

Constrain ———○——— Boost

Push ⬤

Constrain ———○——— Boost

SMS ⬤

Constrain ———○——— Boost

Apply

18:00 19:00 20:00 21:00 22:00 23:00 00:00 01:00 02:00 03:00 04:00 05:00 Current Hour 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00

Processed | Pending

Paths ❓

Scale [Day ▾]

Display ⬤

Constrain ———○——— Boost

Email ⬤

Constrain ———○——— Boost

Push ⬤

Constrain ———————○ Boost

SMS ⬤

Constrain ———○——— Boost

[Apply]

18:00 19:00 20:00 21:00 22:00 23:00 00:00 01:00 02:00 03:00 04:00 05:00 Current Hour 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00

Processed | Pending

Paths ?

Scale [Day ▼]

Display ⬤ (on)

|————○——————|
Constrain   Boost

Email ⬤ (on)

|———○———————|
Constrain   Boost

Push ⬤ (on)

|——————————○|
Constrain   Boost

SMS ◯ (off)

|————○——————|
Constrain   Boost

[Apply]

18:00 19:00 20:00 21:00 22:00 23:00 00:00 01:00 02:00 03:00 04:00 05:00 Current Hour 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00
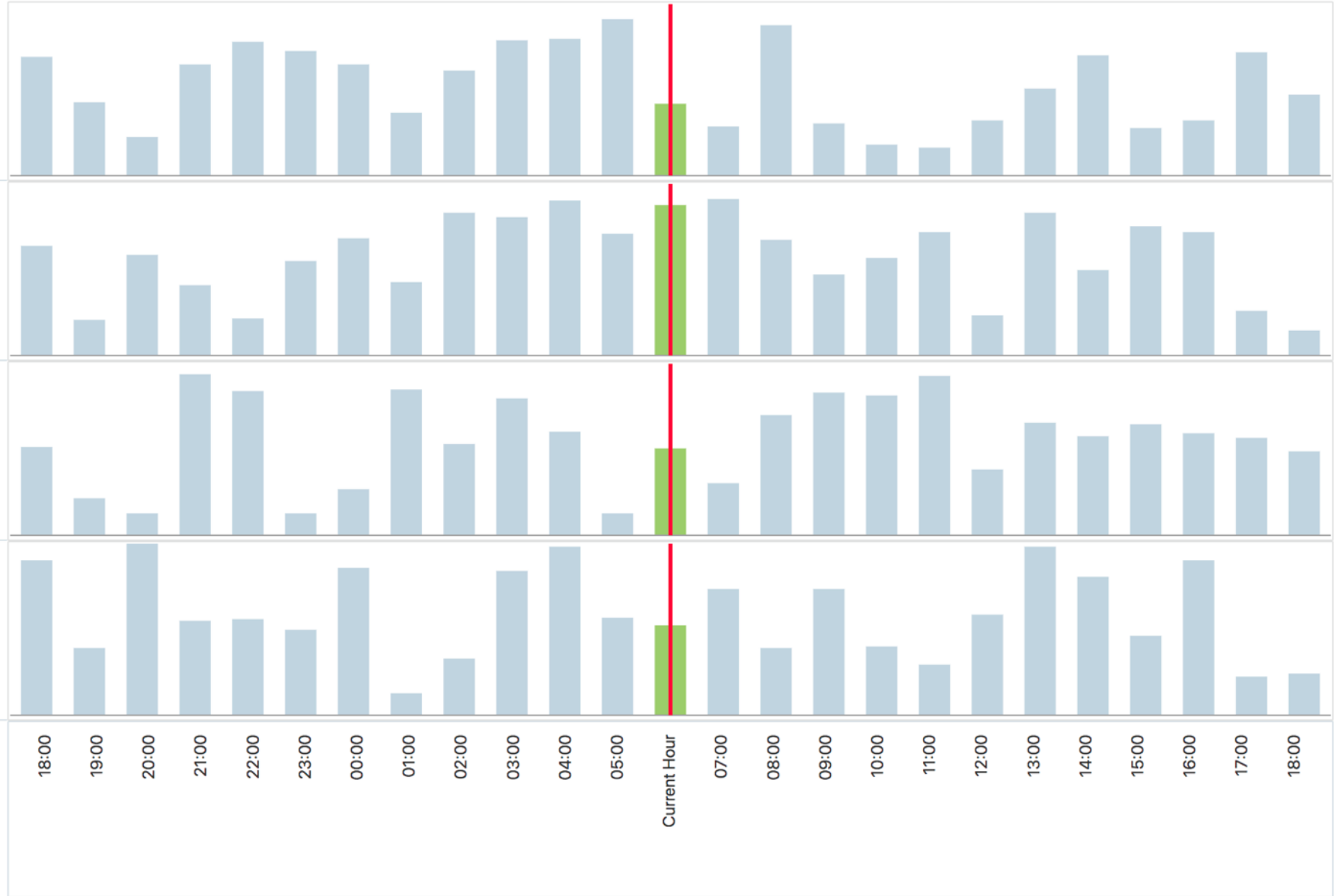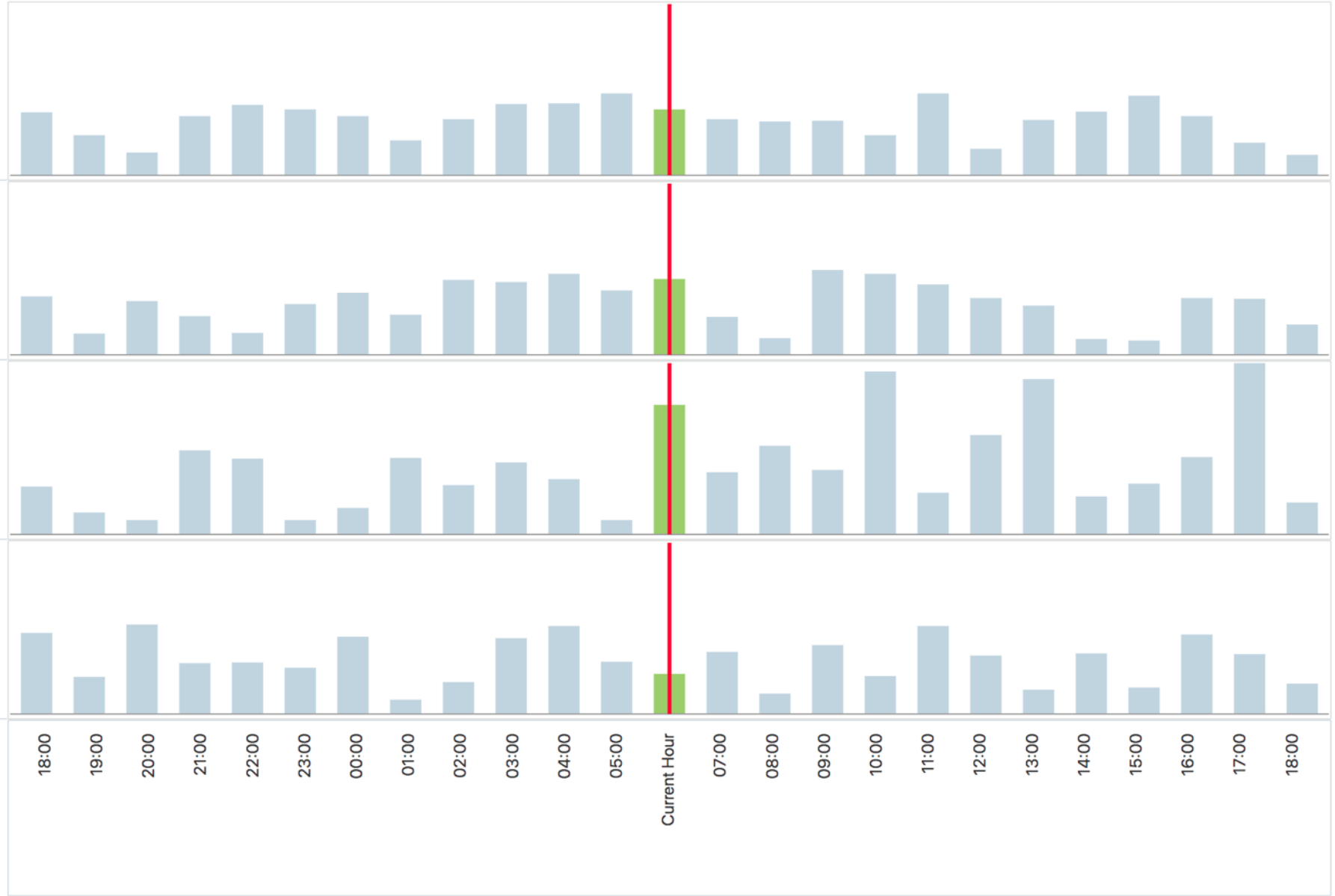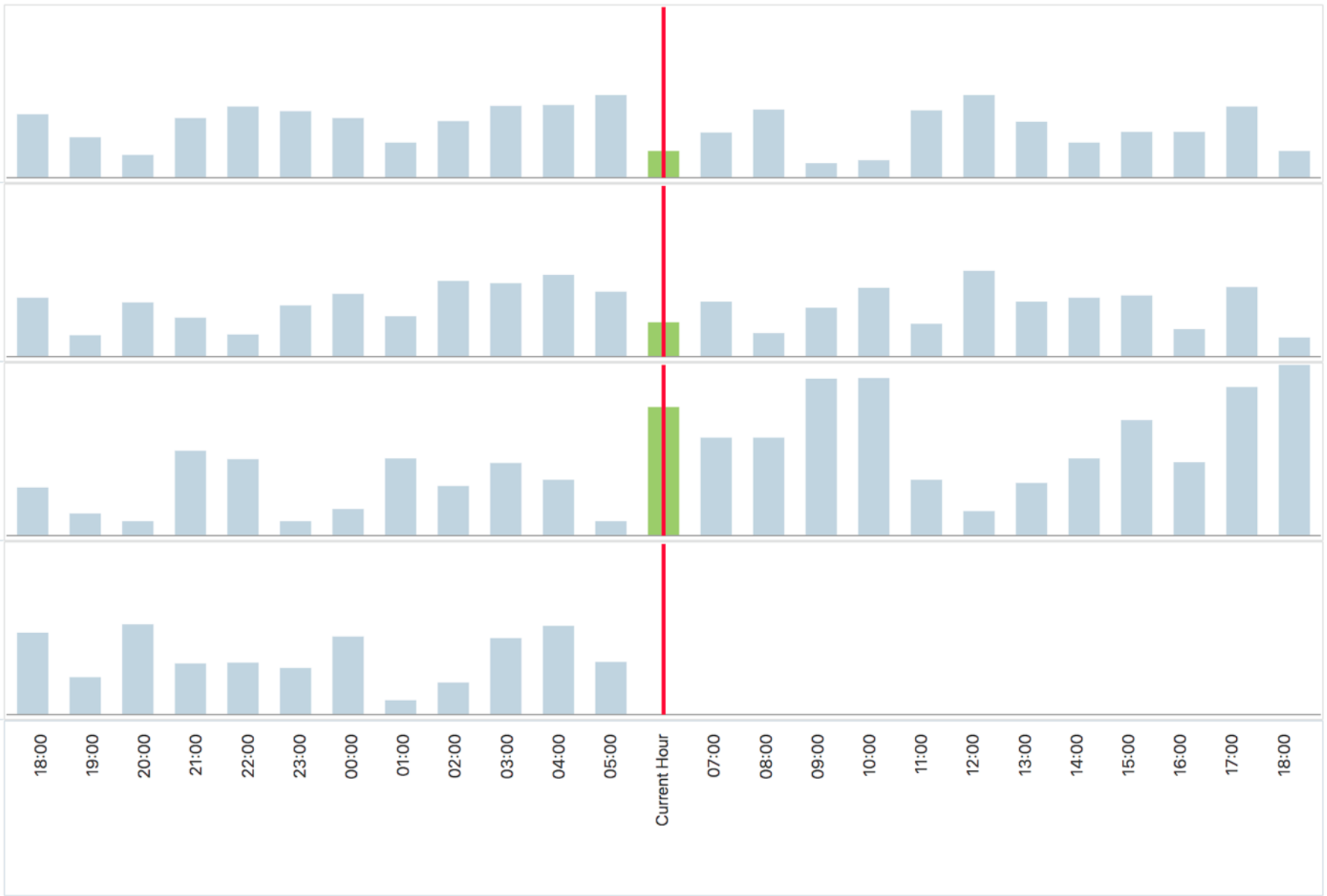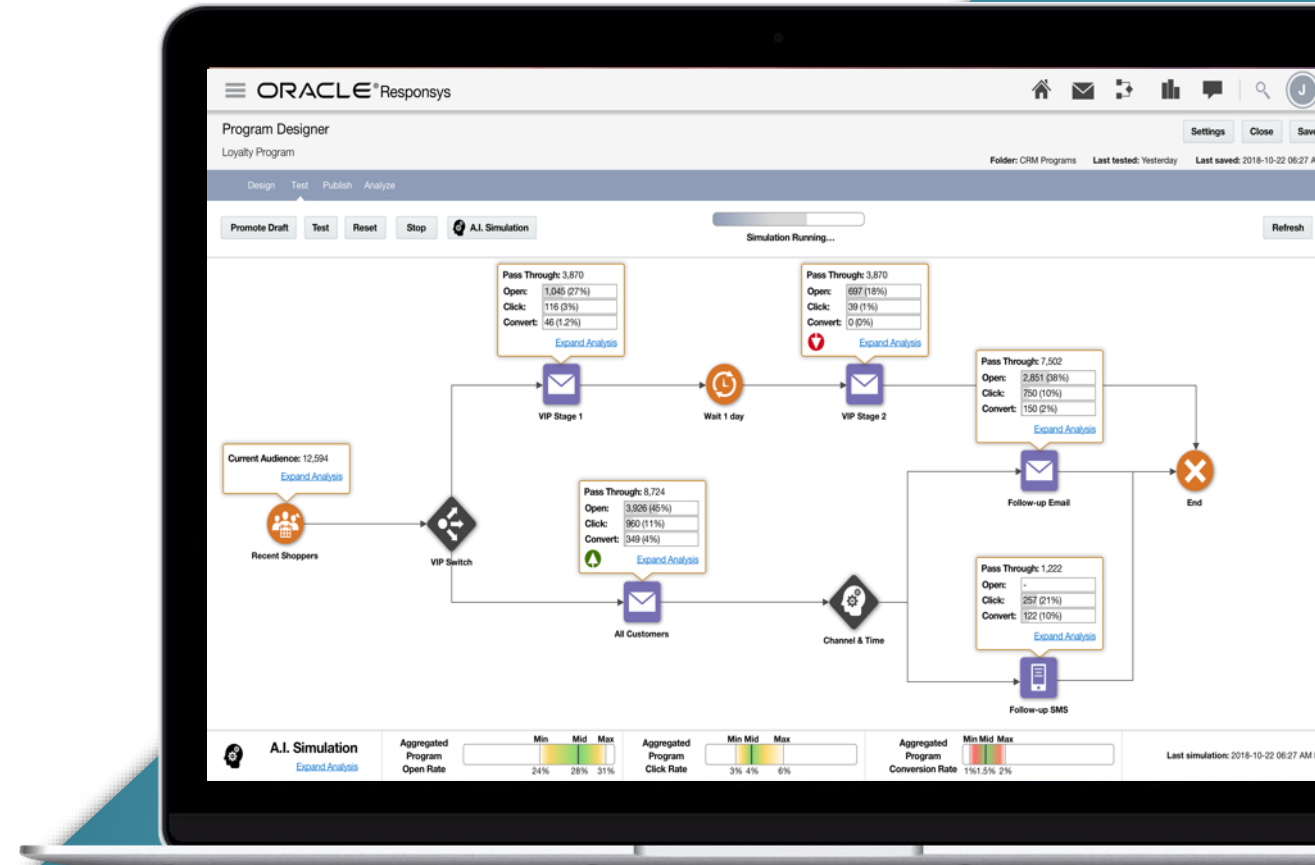
Processed | Pending

Orchestration Simulation

Predict the performance of an orchestration before it is published and make changes to improve performance

- Give predicted engagement and conversion rates for each campaign and the overall orchestration

- As the program runs, simulations are updated and refined based on actual performance data

- As consumers move through the orchestration, their simulated results are updated to improve the overall accuracy of simulations

- Simulated changes and enhancements you make, in real-time as you build out your orchestration
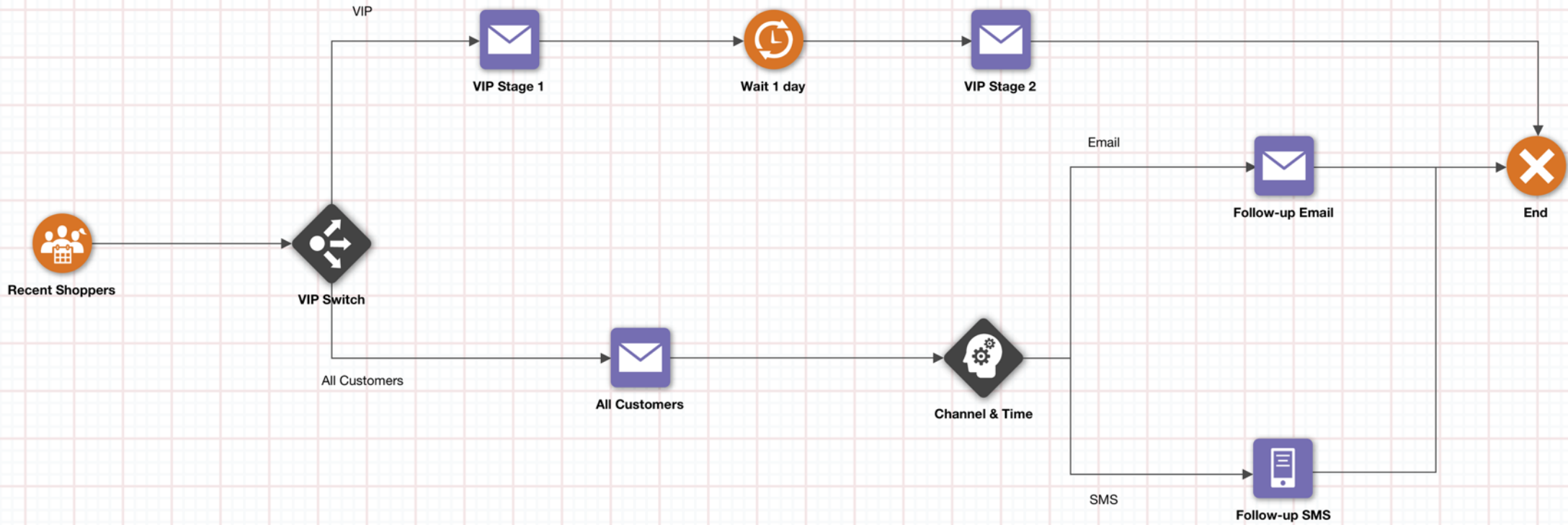
Program Designer
Loyalty Program

Design   Test   Publish   Analyze   Validate

VIP

VIP Stage 1   **Wait 1 day**   **VIP Stage 2**

Email

Follow-up Email   **End**

Recent Shoppers   **VIP Switch**

All Customers

All Customers   **Channel & Time**

SMS

Follow-up SMS
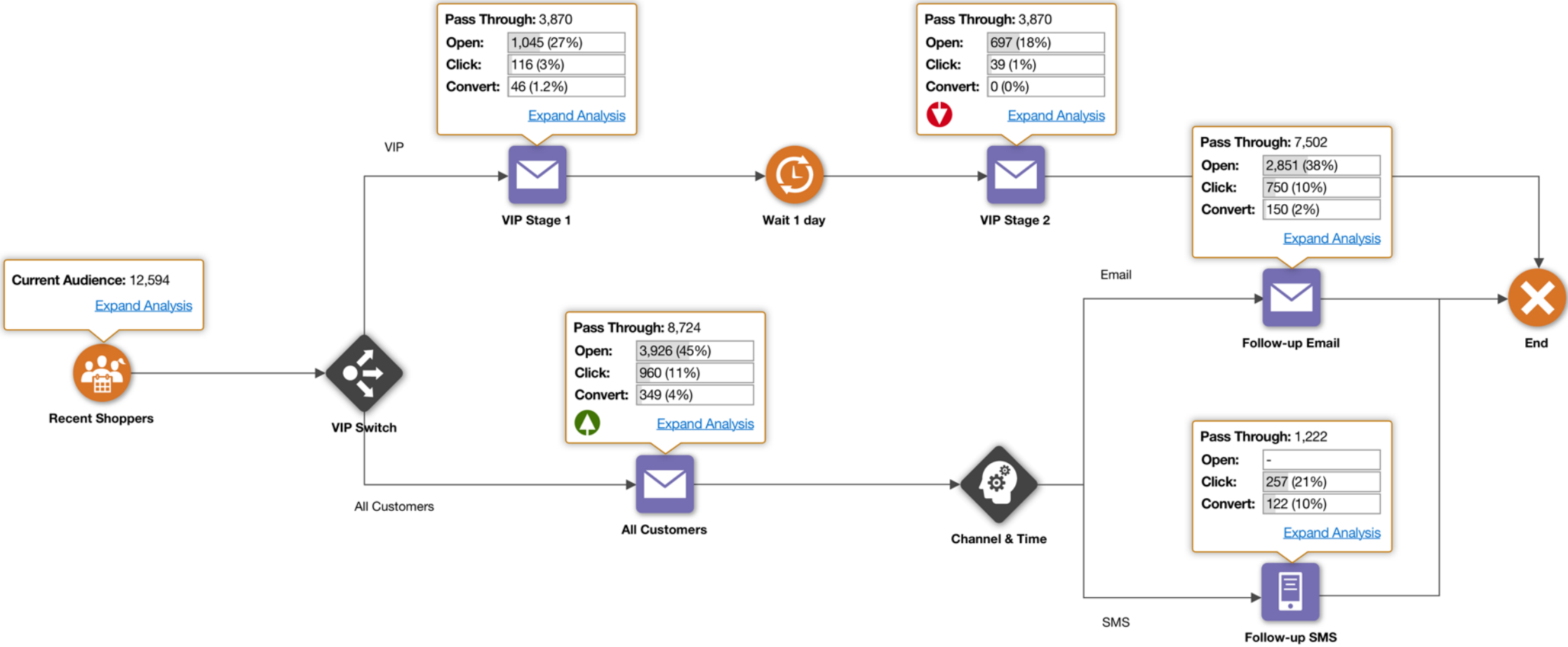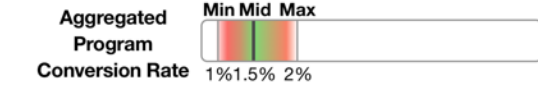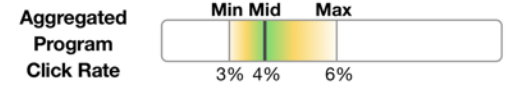
B2B Lead Optimization

Increase marketing efficiency and execution, using AI to score leads based on all available data to predict the likelihood to win and provide next best actions to prompt closure.
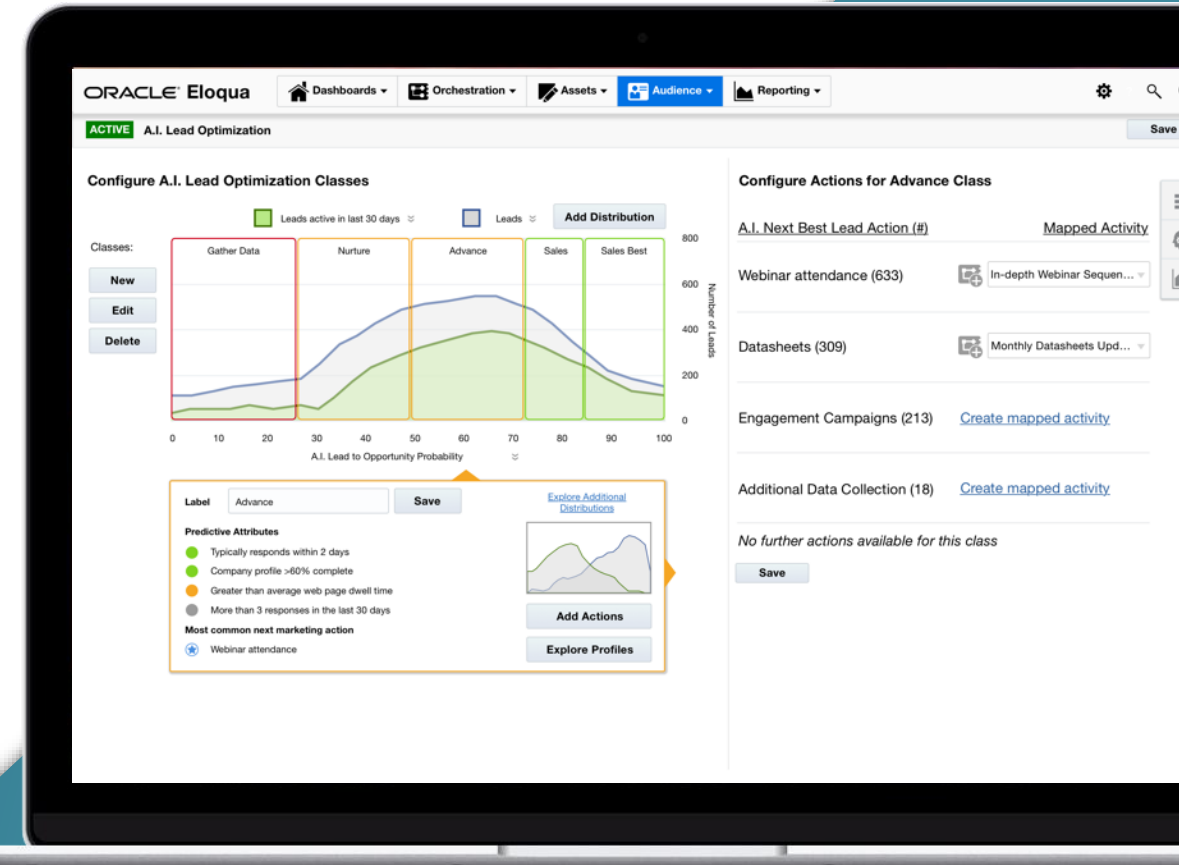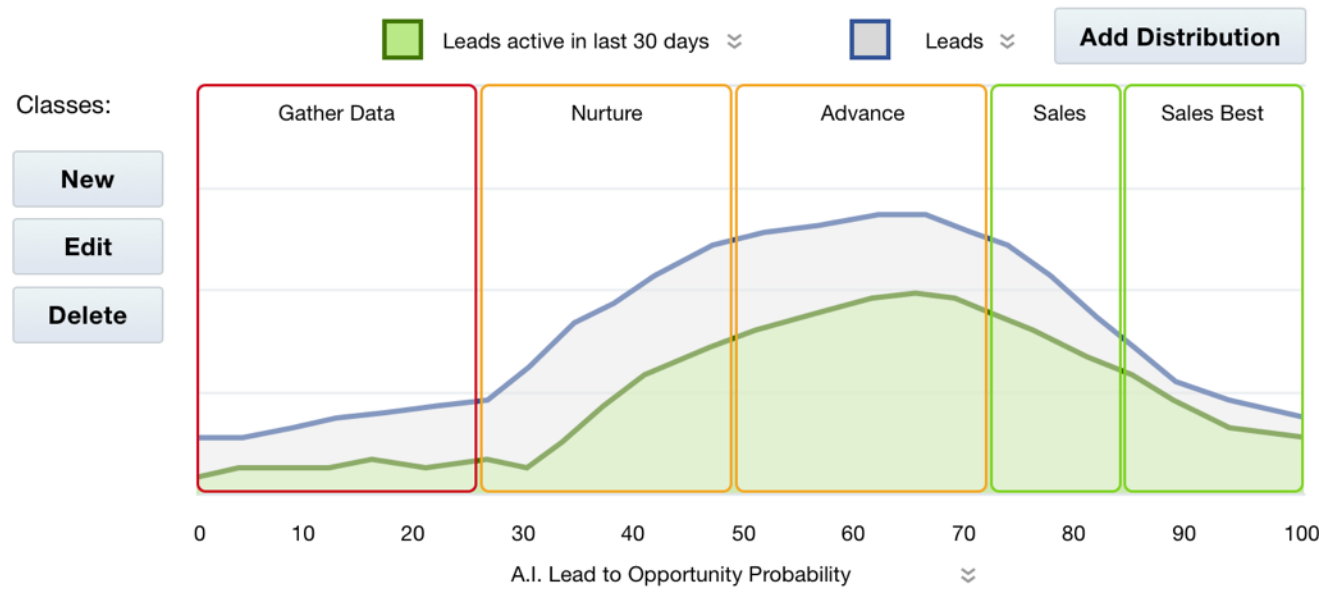
- Score leads to qualify those that can be passed to sales agents

- Provide sales teams with an objective, accurate and consistent method for prioritizing leads

- Identify the best remarketing strategies to better nurture leads in your marketing program

ACTIVE   A.I. Lead Optimization   Save

Configure A.I. Lead Optimization Classes

🟩 Leads active in last 30 days ⌄   ⬜ Leads ⌄   **Add Distribution**

Classes:

New

Edit

Delete

| Gather Data | Nurture | Advance | Sales | Sales Best |

800
600
400
200
0

Number of Leads

0   10   20   30   40   50   60   70   80   90   100

A.I. Lead to Opportunity Probability ⌄

Label [Advance]   **Save**   Explore Additional Distributions

Predictive Attributes

🟢 Typically responds within 2 days
🟢 Company profile >60% complete
🟠 Greater than average web page dwell time
⚫ More than 3 responses in the last 30 days

Most common next marketing action

⭐ Webinar attendance

Add Actions

Explore Profiles

Configure Actions for Advance Class

A.I. Next Best Lead Action (#)   **Mapped Activity**

Webinar attendance (633)   📥 [In-depth Webinar Sequen... ▾]

Datasheets (309)   📥 [Monthly Datasheets Upd... ▾]

Engagement Campaigns (213)   Create mapped activity

Additional Data Collection (18)   Create mapped activity

No further actions available for this class

Save