



인공지능 기반의 디지털 경험

Marketing Innovation

SAP KOREA
2018.06.

Types of Recommendations Vary on Amazon and Alibaba

amazon

Recommends More Paintbrushes (i.e., Goods)



Alibaba.com

Recommends a Painting Class (i.e., Experiences)



Source: How AI is currently powering retail's growth, Deborah Weinswig, FGRT

AI Offers Personalization and Higher Conversion Rates

Alibaba uses AI to integrate data across a single value chain.

2016년 광군제 기간 동안
알리바바의 인공지능
마케팅 플랫폼이 4억 건의
광고를 만들어냄

개인화 콘텐츠
광고

광군제 때 상인들은 타오바오와
Tmall에서 개인화
쇼핑페이지를 600억 개 생성

맞춤형 검색

*타오바오, Tmall 은 중국 오픈 마켓

알리바바의 AI 고객
서비스가 95%의
문의사항을 광군제 날
처리

챗봇

2016년의 광군제 때 개인화
된 랜딩 페이지의 일반적인
페이지보다 구매전환율이
20%가 높음

Source: Alizila.com

Source: How AI is currently powering retail's growth, Deborah Weinswig, FGRT

Alibaba의 LuBan(鲁班) – 인공지능 배너 디자이너

轻松

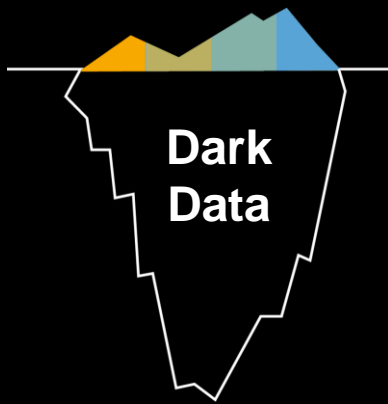
- 2017년 광군제에 4억건의 배너를 생성
약 100명의 디자이너가 150년동안 쉬지 않고
일해야 만들어 낼 수 있는 배너의 양
- 초당 8,000개의 배너를 생성해 낼 수 있음

LuBan을 구축 / 검증한 방법

1. 디자인 컴포넌트를 AI에게 학습시킴
2. 디자인 요소 센터에 디자인 데이터를 축적
3. AI가 디자인을 만들어 내도록 함
(AlphaGo와 같은 Reinforced Learning 활용)
4. AI가 만들어 낸 디자인 평가 (Click Through Rate, Aesthetics, Commercial Value등의 다양한 평가지표 활용)

데이터 기반의 고객 경험 창출

The Next Generation, **Intelligent Front Office** to Deliver Great Experiences



데이터 스트림을
축적....



...의미를 만들어 냄...

액션을 취할 수
있는 이벤트와
데이터



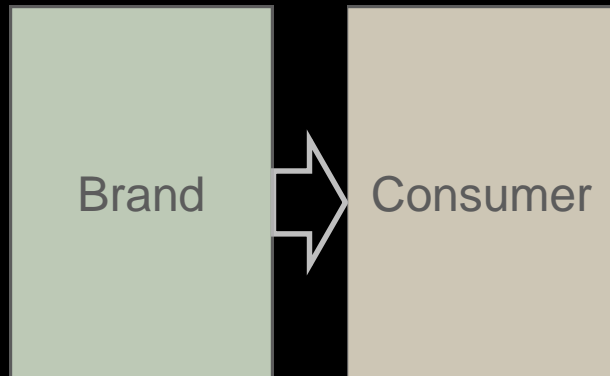
...그리고
고객에게 최상의
경험을 선사

4차 산업 혁명 시대의 새로운 Communication 방식

Communication through Things

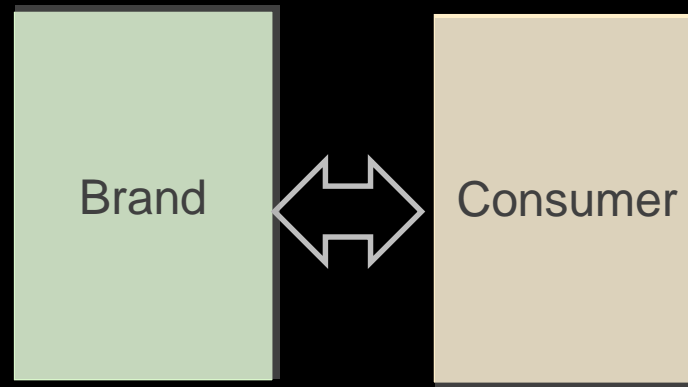
Communication의 진화

단방향 Communication



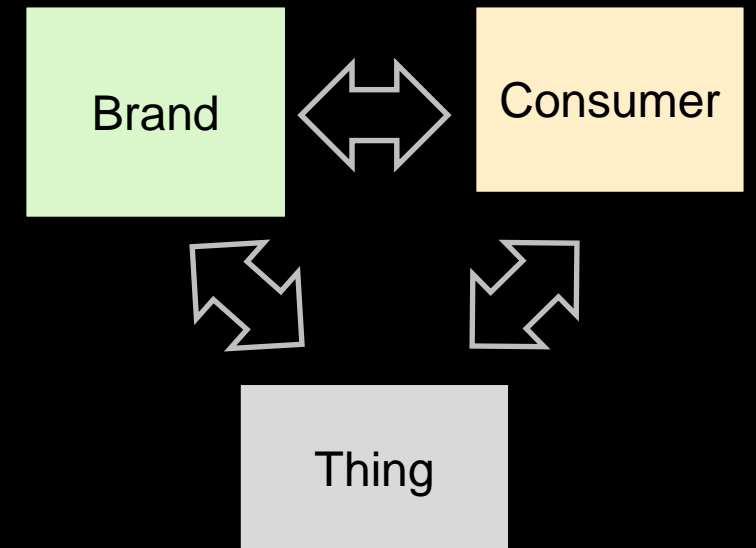
Overtime

쌍방향 Communication



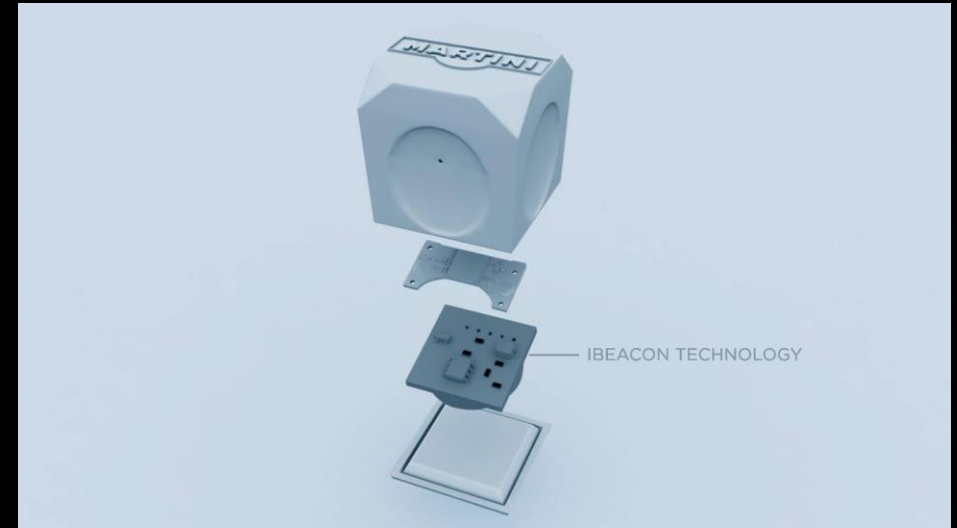
Near Real Time

다방향 Communication



Real Time + Predictive

Smart Ice Cube(Thing): New way of Communication



Source: <https://www.independent.co.uk/arts-entertainment/smart-ice-cube-knows-when-your-drink-is-running-low-and-automatically-orders-you-another-a7222381.html>

챗봇(Chatbot)을 매개로 한 브랜드와의 커뮤니케이션



Moment Marketing

Asics



결승점을 통과하는 순간
최적의 개인화된 Offering 제공

**Congratulation!!
You Made it!**

Here's our special recovery Package
for your achievement! Enjoy it!

THOMAS A. CIAMPA/GETTY IMAGES

Moment Marketing

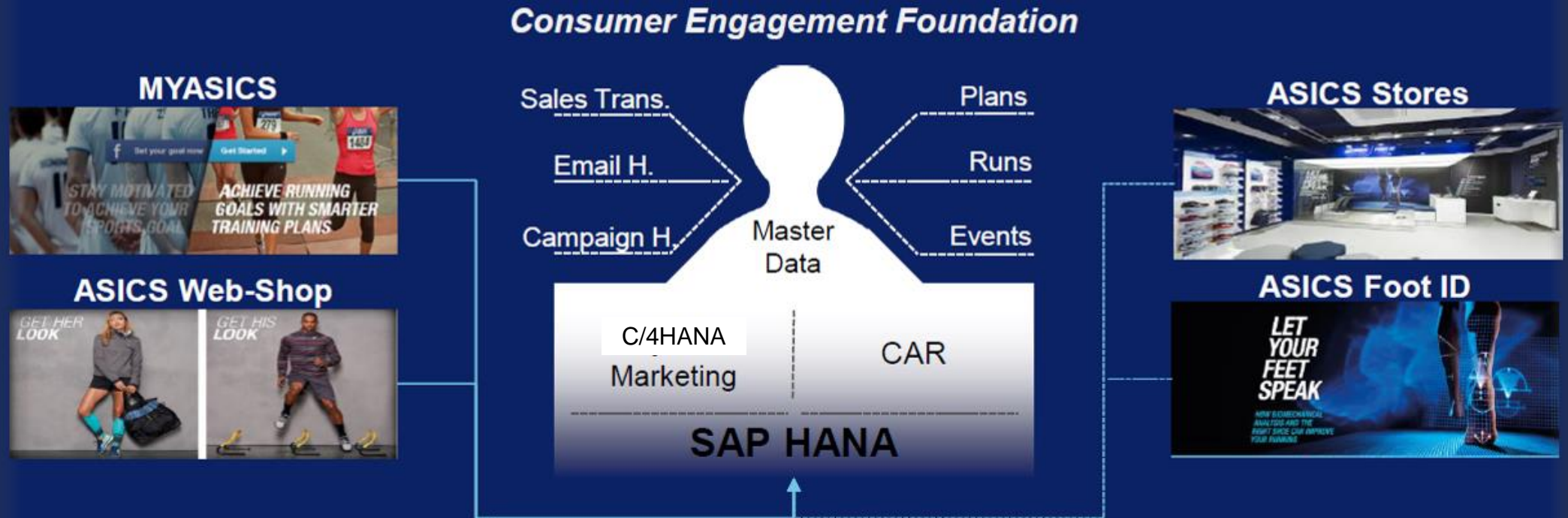
Asics



NYC 마라톤에 참석한 고객대상
개개인 별로 설정된 완주 목표와
실시간 위치정보를 기반한 Offering

CONSUMER CENTRIC; GLOBALLY

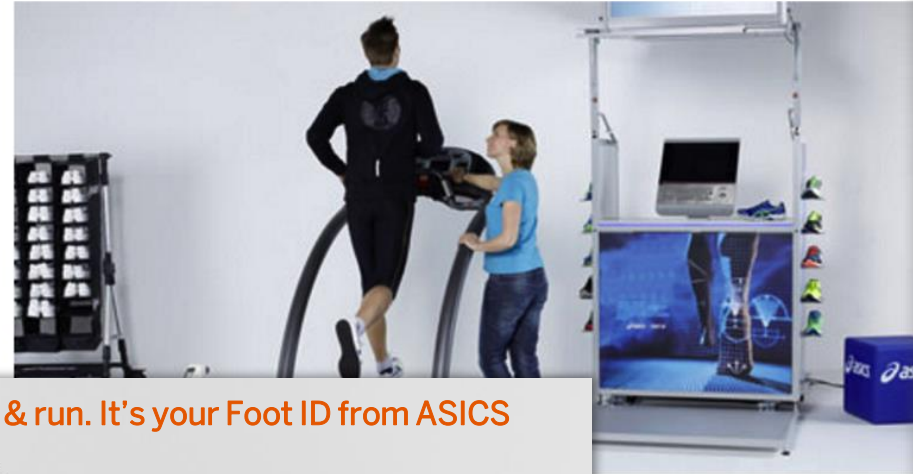
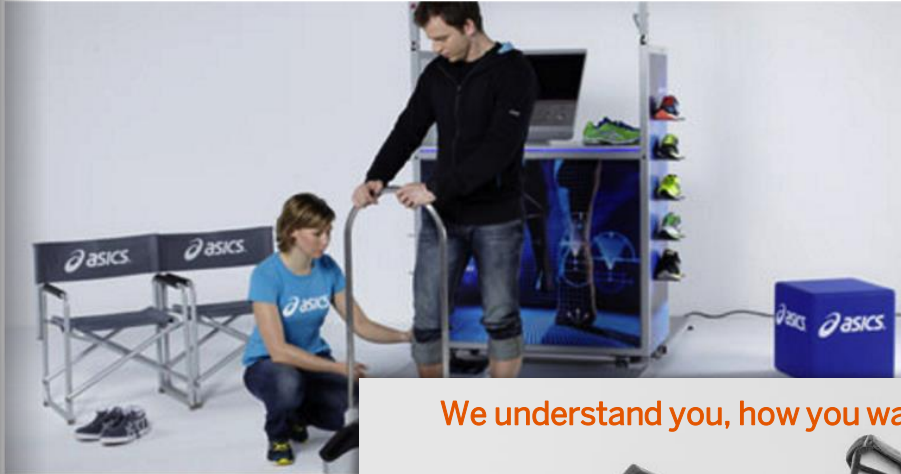
ASICS 내부에서 확보할 수 있는 **Online / Offline** 고객 데이터를 통합하여 고객 Context를 이해



Moment Marketing

Asics

FOOT ID



We understand you, how you walk & run. It's your Foot ID from ASICS

3D FOOT MAPPING STEP 1

The advanced 3D Foot Mapping system uses multiple micro cameras. The result is a 3D model of your foot, which is added to a database to find the shoes that

Measurements made by the system include foot length, forefoot width, ball girth, arch height and heel tilt.

After your Foot ID session, you can also access your 3D Foot Scan online, in your personal account.



As you run on a treadmill for the Foot ID session, your gait is analysed by an

The focus of gait analysis is to measure your degree of pronation. Pronation is the way the foot rolls inward when you walk and run.

Based on this analysis you can try on shoes that match your pronation pattern. A correct shoe type will counter-balance overpronation or underpronation, thus helping to reduce the risk of injury and improving running efficiency.

Moment Marketing

Asics

The screenshot displays a customer profile for 'CONSUMER' with the following sections:

- Personal Data:** Includes 'Personal Data', 'Interactions', and 'Scores' tabs. A 'Reset Filters' button is visible.
- Product Recommendation:** A large banner for 'marathon GEL-Pursue Quick Lyte® Cushion Single Tab (3 Pack) GT-2000 3'.
- Interaction Summary:** A grid of boxes showing counts for various channels: Asics.com (5), AsicsTiger.c... (0), Haglofs.com (0), OnitsukaTig... (0), My Asics (23), Foot ID (0), Single Event (0), Campaign (0), and Email (0).
- Brand Metrics:** 'Brand Love Score' (1), 'Customer Lifetime Value' (1), and 'Net Value Score' (1) are shown with corresponding icons.
- Activity Log:** A list of recent activities categorized by month: October 2015 (two runs on Oct 12 and Oct 8) and September 2015 (three orders on Sep 21, Sep 21, and Sep 10, and two runs on Sep 10 and Sep 5).

채널별 고객 접촉 이력을 분류하고, 개별 접촉(Interaction)에서 의미 있는 키워드를 표현함
Scoring 방식을 통해서 고객의 **RFM(Recency, Frequency, Monetary) Value**를 정량화함

Moment Marketing

Asics

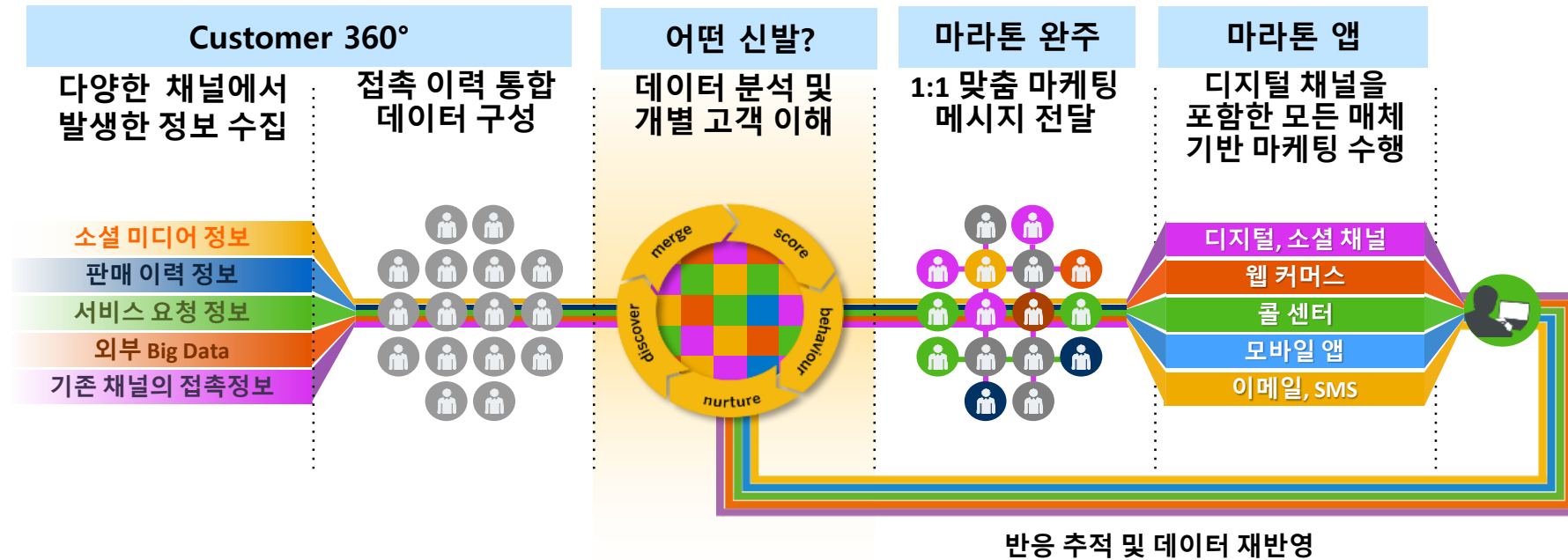
위치 기반 정보를 활용하여 고객의 현재 위치를 고려한 Location-Based Moment Marketing 세그멘테이션



4차 산업 혁명 시대의 마케팅 패러다임

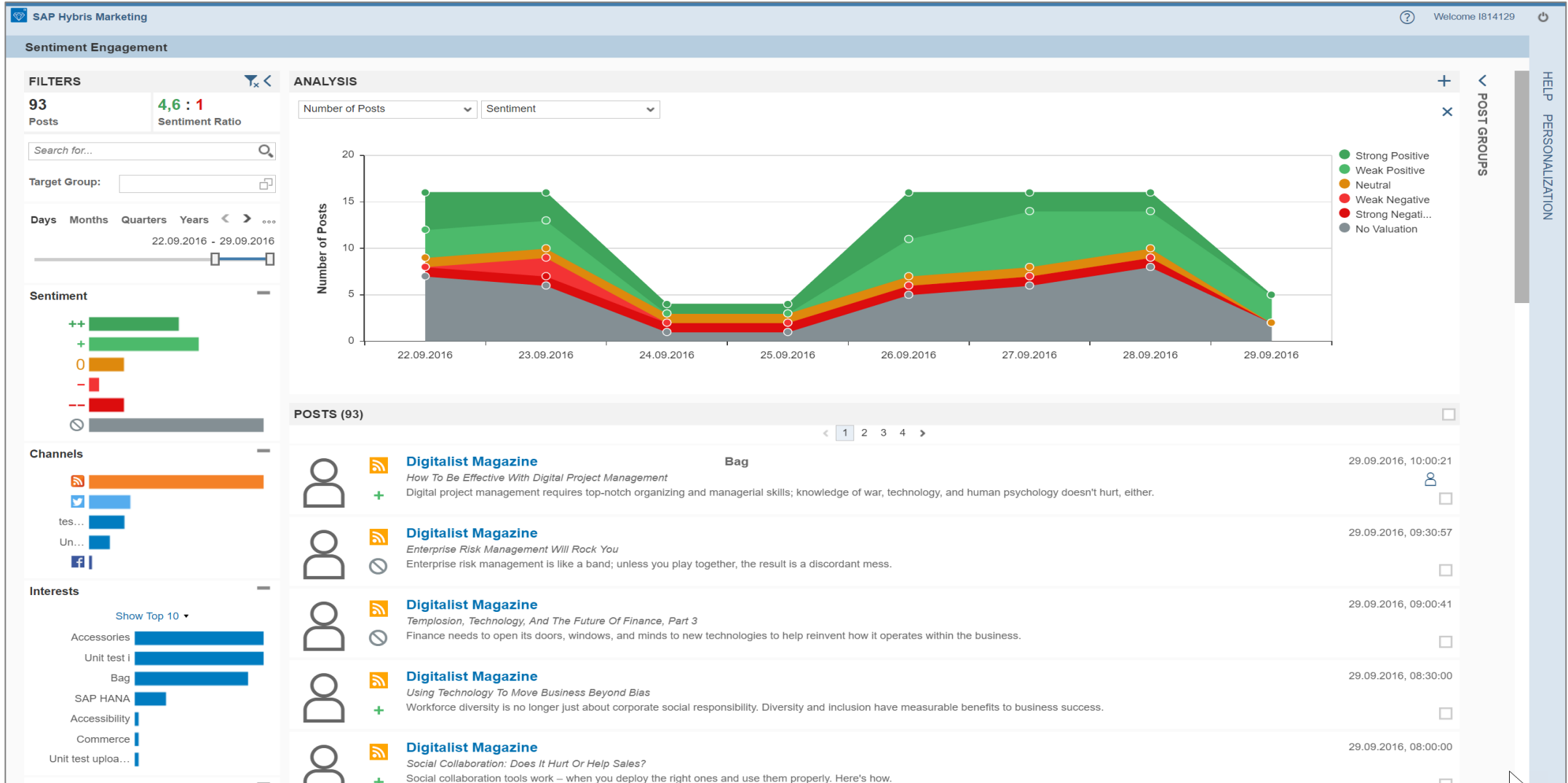
End-to-End Customer Engagement

다양한 채널로부터의 데이터를 취합하여 고객에 대한 Insight를 확보하고 캠페인의 계획단계부터, Segmentation, Recommendation 을 통한 개인화된 Contextual 캠페인 수행과 이에 대한 분석 및 효과 측정, 최적화에 이르는 디지털 마케팅의 과정을 효과적으로 지원해야 합니다.



SAP Key Message 실시간 분석 기술, AI, 머신 러닝, IoT 기술을 통해서, 통합 고객정보 관리 - 마켓 센싱 - 타겟팅 - 캠페인 자동화 - 실시간 추천 등의 핵심 마케팅 프로세스를 지원해야 함.

소셜 채널의 Sentiment (감정) 분석



개인화 마케팅, 서비스 프로세스



머신 러닝 기반 Segmentation, Buying Propensity

PREDICTIVE MODEL
Niels SII (DO NOT C...

KEY INFORMATION
ID: 613
Predictive Model: Niels SII (DO NOT...
Predictive Scenario: * Demo Buying F...
Status: Released
Owner: Niels Schmitt
Training Set: * Niels SII
Target Variable: * Interest Shown...
No. of Hits: 2999
No. of Members: 7628

DESCRIPTION
|

ADMINISTRATIVE DATA
Changed By: Dr. Carsten Heuer
Changed: Tuesday
Created By: Niels Schmitt
Created: Monday

Details Notes

Applicable Scope (0)

| Attribute | Value |
|-----------|-------|
| No data | |

[+ Add Scope](#)

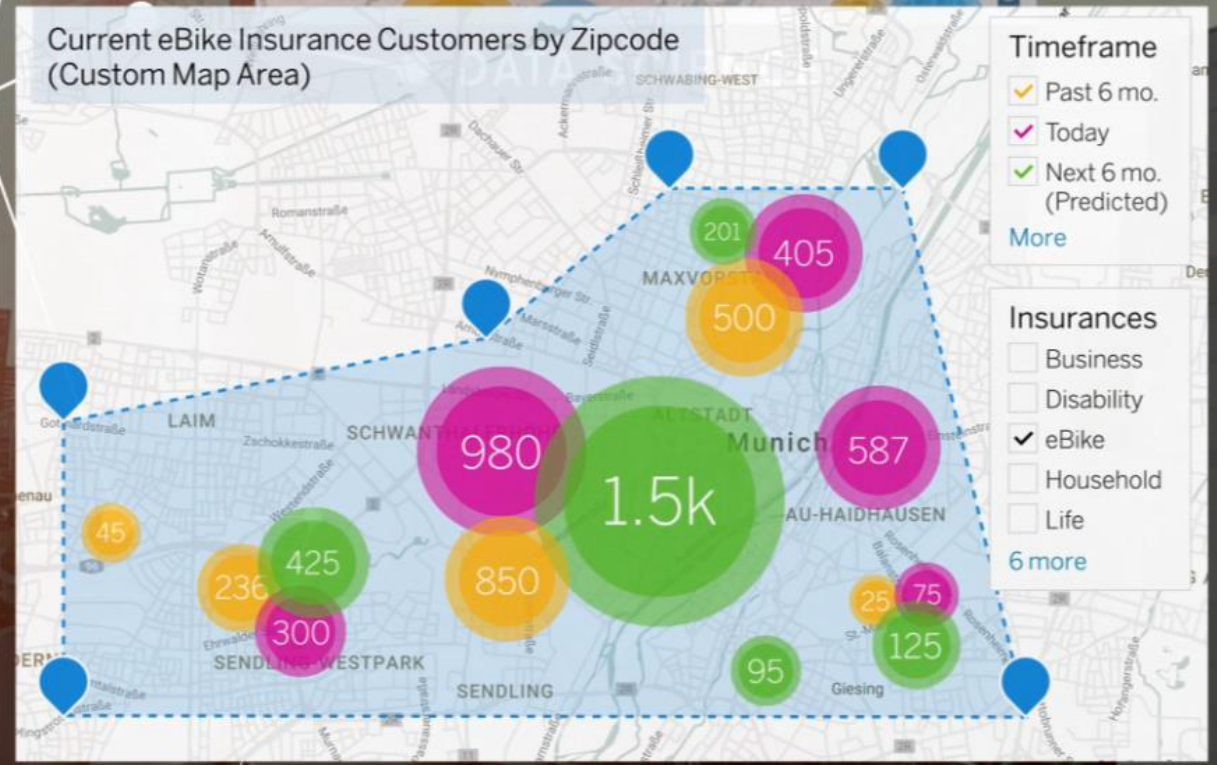
Model Fits (4)

| Chart | Name | Description | Implemen... | Quality C... | Best Fit | Publish... | Last Train... | Changed By |
|-------------------------------------|--------|-------------|--------------|--------------|----------------------------------|-------------------------------------|---------------|----------------|
| <input checked="" type="checkbox"/> | Fit 01 | | Demo Bank... | 0,186 | <input type="radio"/> | | Monday | Niels Schmitt |
| <input checked="" type="checkbox"/> | Fit 02 | | Demo Bank... | 0,141 | <input type="radio"/> | | Tuesday | Dr. Carsten... |
| <input checked="" type="checkbox"/> | Fit 03 | | Demo Bank... | 0 | <input type="radio"/> | | Monday | Dr. Carsten... |
| <input checked="" type="checkbox"/> | CH_Fit | | Demo Bank... | 0 | <input checked="" type="radio"/> | <input checked="" type="checkbox"/> | Tuesday | Dr. Carsten... |

[+ Add Model Fit](#)

Lorenz Curve for Selected Model Fits

[Publish](#)
[Save As](#)
[Close](#)

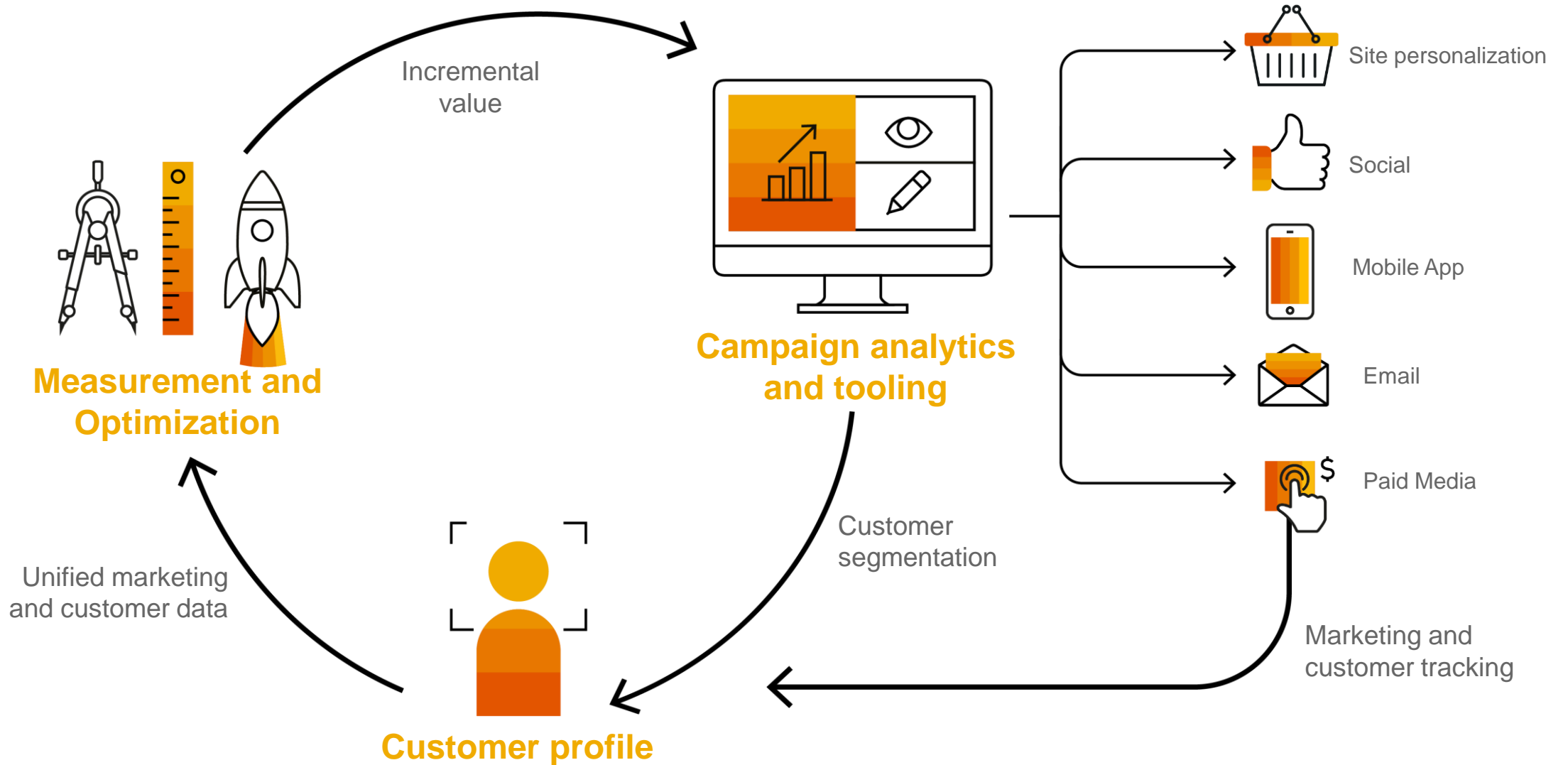


NON-TRADITIONAL DATA SOURCES

- WEATHER
- TRAFFIC
- HEALTH
- ACCIDENTS
- THEFTS

INSIGHTS FROM DATA SCIENCE & MACHINE LEARNING

인공지능 기반 마케팅 최적화 Overview



완전 자동화 된 마케팅 기술
스택 구성

자동화된 피드를 활용하여
마케팅 비용 효율화 구현

↑ 23%

Increase in new
customer activations

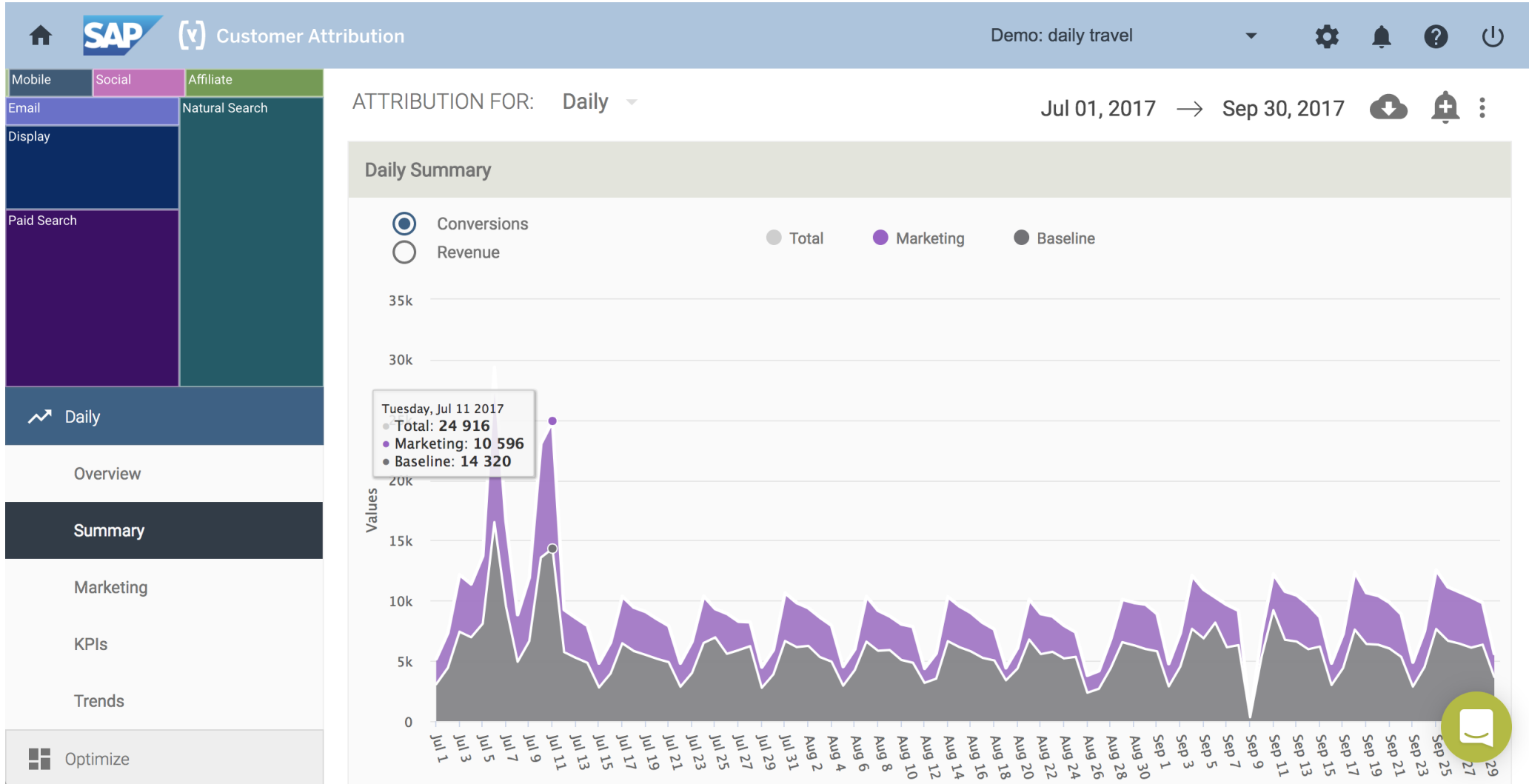
↓ 24%

Reduction in cost
per activation

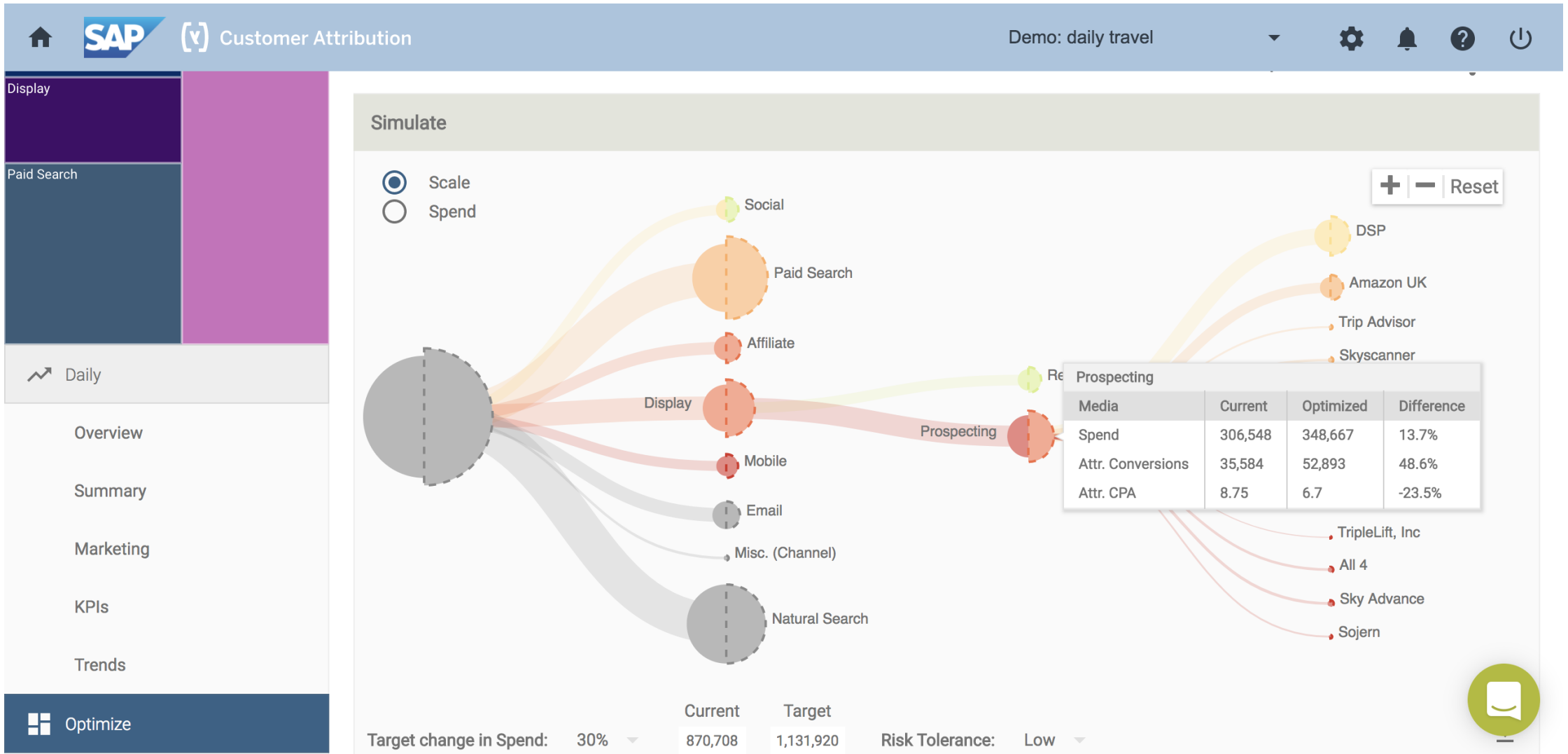
The screenshot shows a dashboard for 'A-b-a-k-u-s.' with a sidebar menu and a main table. The sidebar menu includes: Data Setup, Client Configuration, Closed Loop, Client Facing (highlighted), Data Status, Taxonomy, Client Status, and Admin Tools. The main table displays campaign data with columns: Client, Campaign, Date, Status, Attribution, Opt. Taxonomy, and Allocated Cost. The table contains 14 rows of data, all with a 'Complete' status.

| Client | Campaign | Date | Status | Attribution | Opt. Taxonomy | Allocated Cost |
|------------|--------------------------------|------------|----------|-------------|---------------|----------------|
| JetAdWords | Durable - New Activations | 2017-05-06 | Complete | Complete | Complete | Complete |
| JetAdWords | Consumable - New Activations | 2017-05-06 | Complete | Complete | Complete | Complete |
| JetAdWords | New Activations - AdGroup View | 2017-05-06 | Complete | Complete | Complete | Complete |
| JetAdWords | New Activations | 2017-05-06 | Complete | Complete | Complete | Complete |
| JetAdWords | All Sales - AdGroup View | 2017-05-06 | Complete | Complete | Complete | Complete |
| JetAdWords | Durable - New Activations | 2017-05-07 | Complete | Complete | Complete | Complete |
| JetAdWords | Consumable - New Activations | 2017-05-07 | Complete | Complete | Complete | Complete |
| JetAdWords | New Activations - AdGroup View | 2017-05-07 | Complete | Complete | Complete | Complete |
| JetAdWords | New Activations | 2017-05-07 | Complete | Complete | Complete | Complete |
| JetAdWords | All Sales - AdGroup View | 2017-05-07 | Complete | Complete | Complete | Complete |
| JetAdWords | Durable - New Activations | 2017-05-08 | Complete | Complete | Complete | Complete |
| JetAdWords | Consumable - New Activations | 2017-05-08 | Complete | Complete | Complete | Complete |
| JetAdWords | New Activations - AdGroup View | 2017-05-08 | Complete | Complete | Complete | Complete |

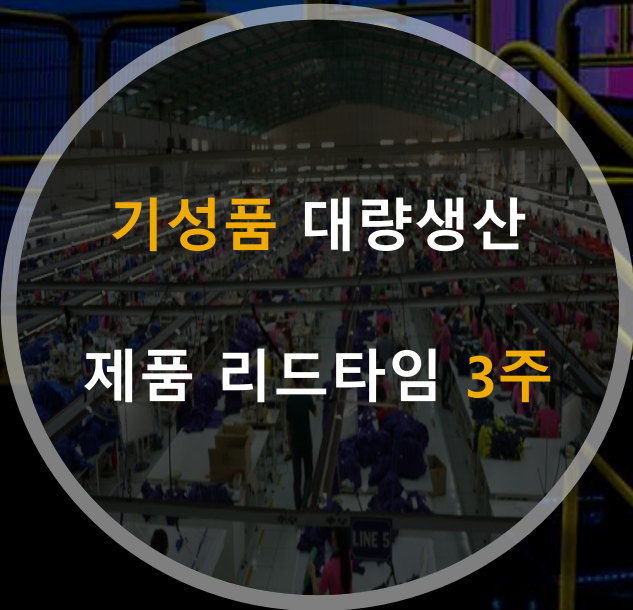
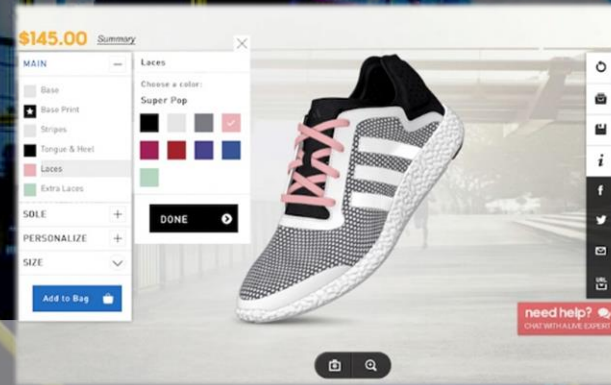
인공지능 기반 마케팅 비용의 효과 분석 (Game Theory)



인공지능 기반 마케팅 예산 최적화 (Collaborative Game Theory)



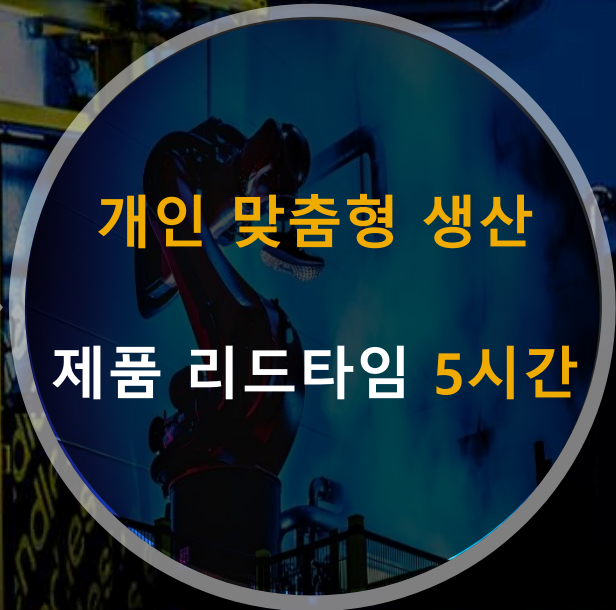
Personalized Product ADIDAS – Speed Factory



기성품 대량생산

제품 리드타임 3주

- 깔창, 색깔, 소재 등에 대한 맞춤형 주문
- 3D 프린팅 등 최신 기술 적용한 스마트 공장



개인 맞춤형 생산

제품 리드타임 5시간



아시아 소재
기존 공장

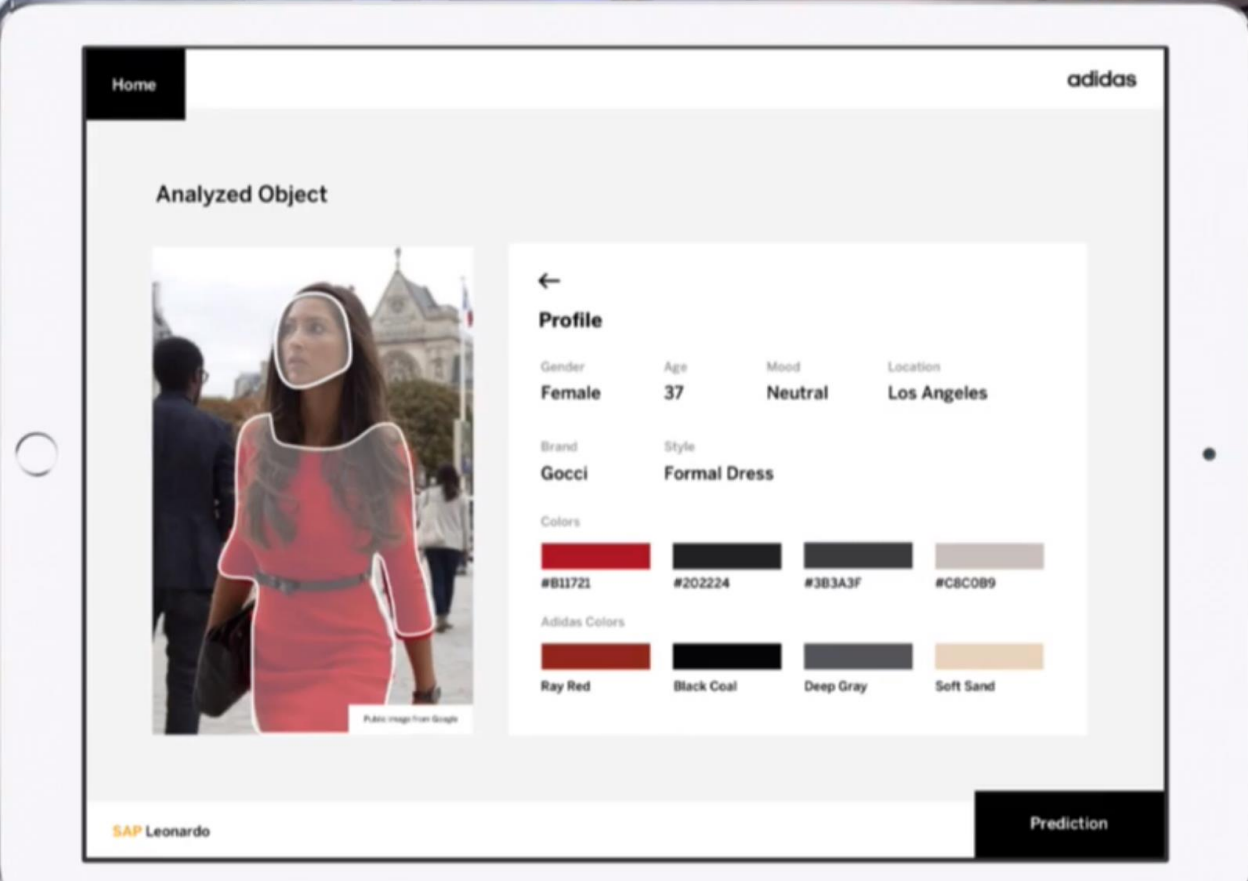


ADIDAS
SPEEDFACTORY

New Product Development with Machine Learning

ADIDAS – Color Trend Prediction

SAP's Impact Around the World - adidas: SAPPHIRE NOW in 2018 Highlights | SAP and ASUG - Google Chrome
Secure | <https://events.sap.com/sapandasug/en/PlayerPopup.aspx?sessionID=37486&offsettime=474.536896>



The tablet screen displays the following information:

- Home** (top left)
- adidas** (top right)
- Analyzed Object** (title above the image)
- Profile** (title above the data fields)
- Gender:** Female
- Age:** 37
- Mood:** Neutral
- Location:** Los Angeles
- Brand:** Gocci
- Style:** Formal Dress
- Colors:**
 - #B11721 (Red)
 - #202224 (Black)
 - #3B3A3F (Dark Gray)
 - #C8C0B9 (Light Gray)
- Adidas Colors:**
 - Ray Red
 - Black Coal
 - Deep Gray
 - Soft Sand
- SAP Leonardo** (bottom left)
- Prediction** (bottom right)

Source: <https://events.sap.com/sapandasug/en/session/37486>

The
Economist

MAY 6TH-12TH 2017

Crunch time in France

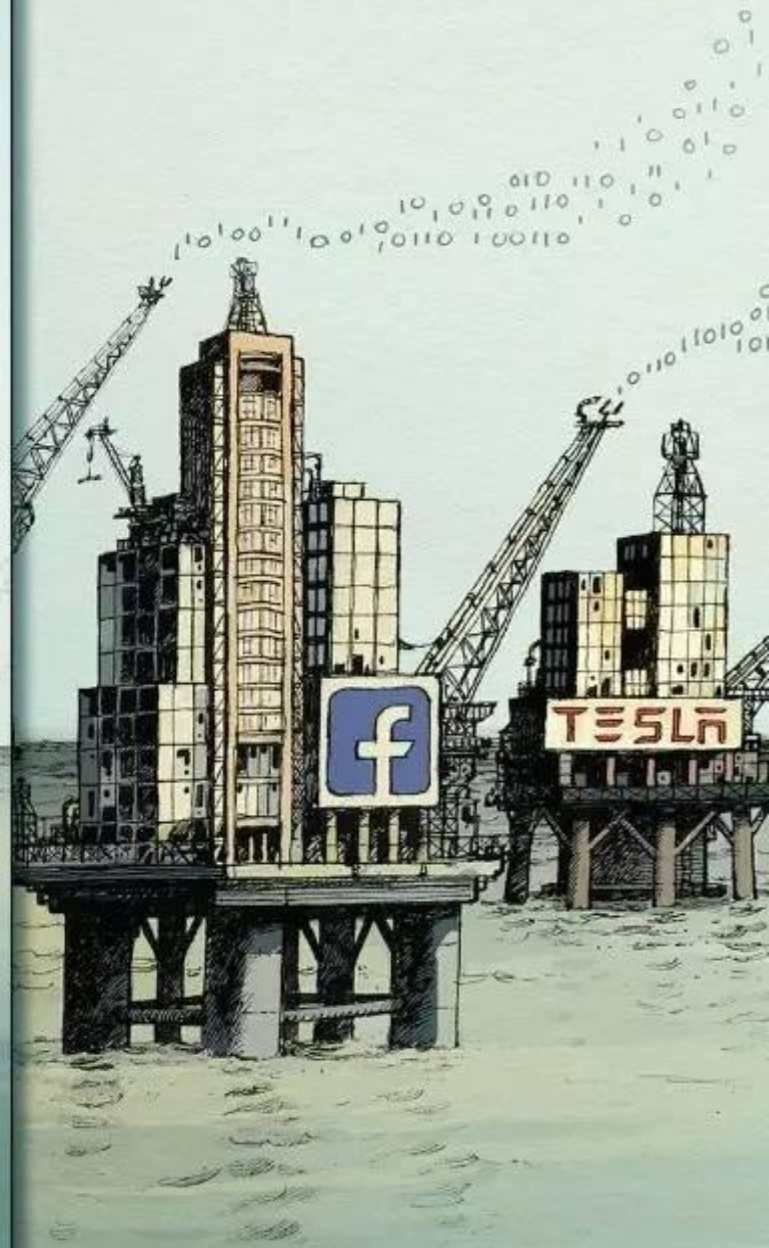
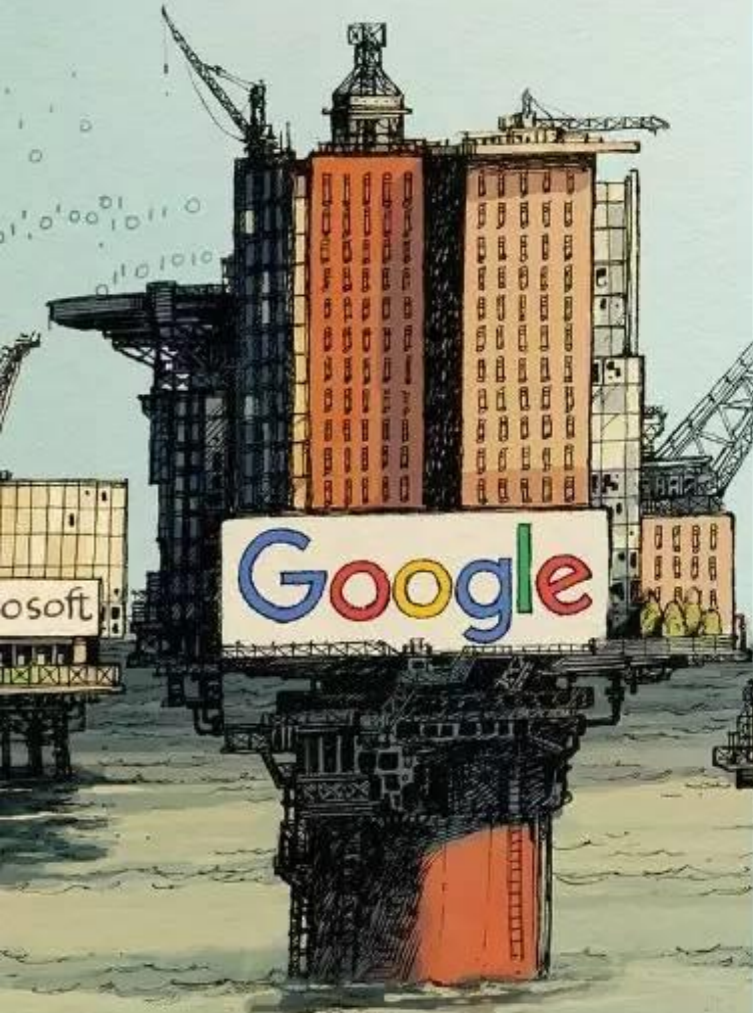
Ten years on: banking after the crisis

South Korea's unfinished revolution

Biology, but without the cells

The world's most valuable resource

Data and the new rules
of competition



Thank you.