



INSTITUTE
Building Extraordinary IP Assets

Episode 04: Data Monetization in
Retail and Consumer Markets

Data Monetization Webinar Series



6–Episode Webinar Series

Episode 01 – Introduction: Why Data is so Valuable and how Data Monetization has Become Big Business
Thursday, October 8, 2020 at 12:00 PM CT

Episode 02 – Data Monetization in Medical Device, Healthcare and Insurance
Thursday, October 22, 2020 at 12:00 PM CT

Episode 03 – Data Monetization in Manufacturing, Industrial & B2B Markets
Thursday, November 5, 2020 at 12:00 PM CT

Episode 04 – Data Monetization in Retail and Consumer
Thursday, November 19, 2020 at 12:00 PM CT

Episode 05 – Data Monetization in Autonomous Vehicles, Security & Surveillance
Thursday, December 3, 2020 at 12:00 PM CT

Episode 06 – Data Monetization in Financial Services
Thursday, December 17, 2020 at 12:00 PM CT

Before We Get Started...



Recording

A link to the recording and slides will be emailed to all registrants.



Questions

Type in the question box and we will answer in real time or during the Q&A.



Social

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Today's Presenters...



Steve Lundberg

Principal & Chief Innovation Officer
Schwegman Lundberg & Woessner



Suneel Arora

Principal
Schwegman Lundberg & Woessner
Former Senior Engineer at Cardiac
Pacemakers (Guidant Corp.)



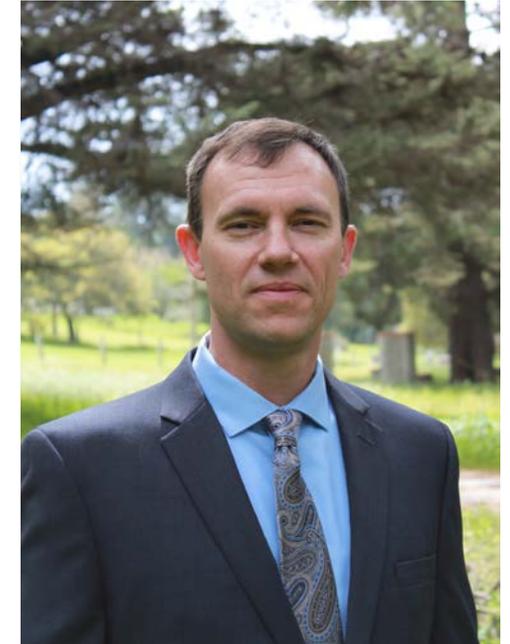
Manjeet Rege, PhD.

Director of Center of Applied
Artificial Intelligence, Professor,
University of St. Thomas
Graduate Programs in Software
Engineering, Data Science



Bill Schmarzo

Analytics Chair
Chief Innovation Officer, Hitachi
Vantara, Executive Fellow,
University of San Francisco and
adjunct professor and author of "Big
Data MBA",



Chris Hohman

VP Product Management, Bank of
the West
Lead product innovator at Amazon,
Cisco, Adobe
Founder of Connect 6

What you will learn today

- Growth of Retail and Consumer Data
- Examples of Consumer Data Monetization
- Why Companies Monetize their Data
- Consumer and Retail Data Sources
- Direct Monetization in Consumer and Retail
- Indirect Monetization in Consumer and Retail
- Success Stories



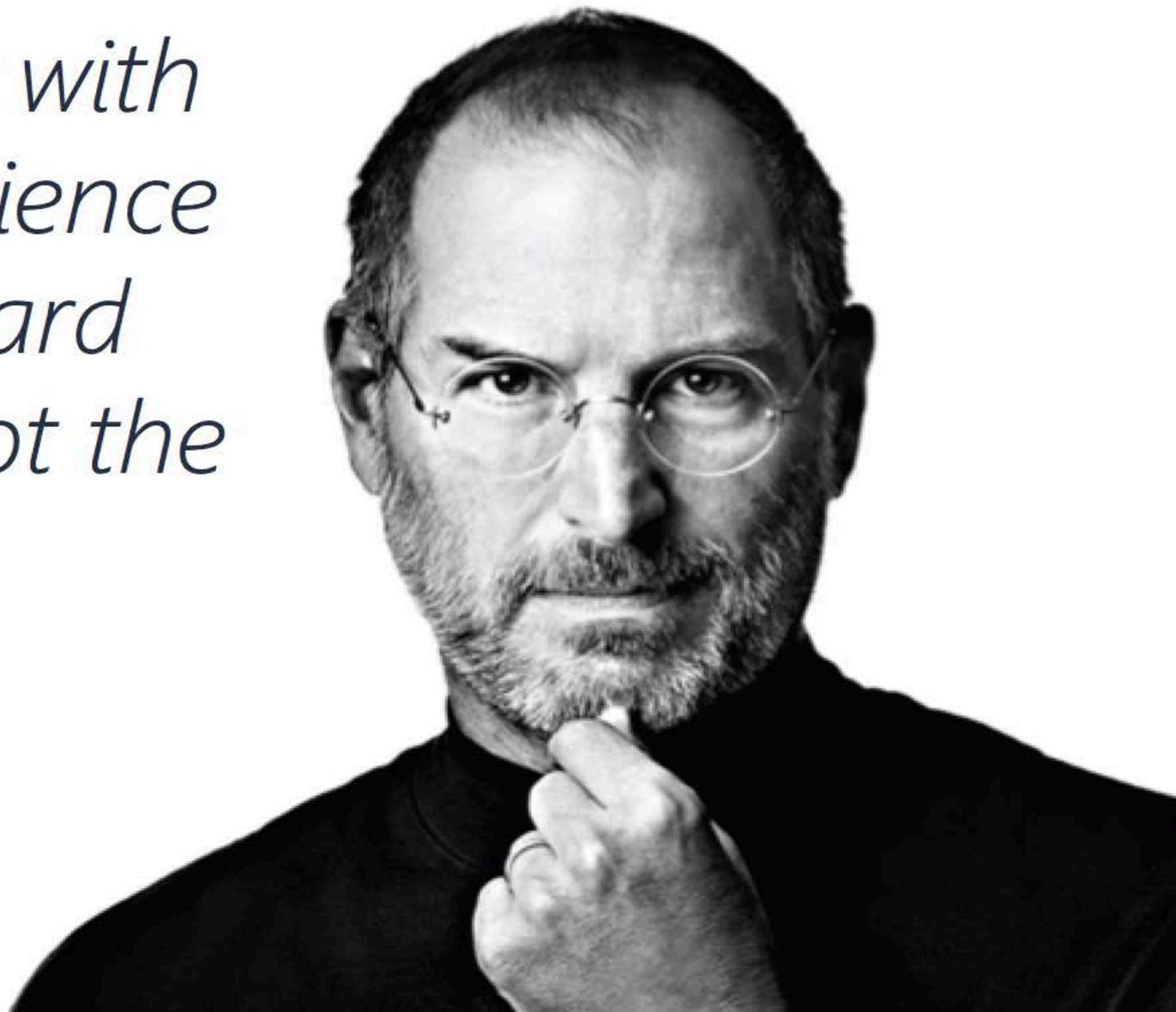
The background image shows a smartphone screen displaying a data analytics dashboard. The dashboard includes a pie chart titled 'Traffic Source Overview' with three segments: Direct Traffic (3,097.00, 40.49%), Search Engines (2,910.00, 38.04%), and Referring Sites (1,642.00, 21.47%). Below the pie chart is a line graph titled 'Visitors Overview' showing a fluctuating trend over time, with a value of 2,958 visible at the bottom left. The text 'Data Monetization in Retail & Consumer' is overlaid in large, light blue font on the left side of the image.

Data Monetization in Retail & Consumer

- More data has been created in the past two years than in the entire history of the human race. Yet, despite this, only about one half of one percent of that data is ever analyzed, let alone applied to productive use in business.
- 83% of the organizations in a recent study by the Economist Intelligence Unit say that by using data wisely, they're able to make their products and services more profitable.
- However, the same study found that less than 60% of companies in the US are actually using their data to generate value.

"You've got to start with the customer experience and work back toward the technology – not the other way around"

Steve Jobs



Business Questions in Retail

- Why are the mints and gums at the checkout?
- Why do you have to walk the entire store to pick up milk or meat?
- At what time of the day does bread sell the most?
- How does the ethnic mix of the neighborhood influence the sales?
- Are the customer looking for VFM products or premium products?

Consumer Data

Descriptive Data	Interaction Data	Behavioral Data	Consumer Loyalty
<ul style="list-style-type: none">• Attributes• Characteristics• Self-declared info• Demographics• Geolocation	<ul style="list-style-type: none">• Email• Call center notes• Chatbot transcript• Web click streams• In-person dialogs	<ul style="list-style-type: none">• Transactions• Online Search & Browsing history• Payment history• Usage history	<ul style="list-style-type: none">• Market Basket Analysis• Market Segmentation• Recommendation Systems
			

Market Basket Analysis

- Data analysis focusing on the composition of consumer's market basket
- What items are frequently bought together?



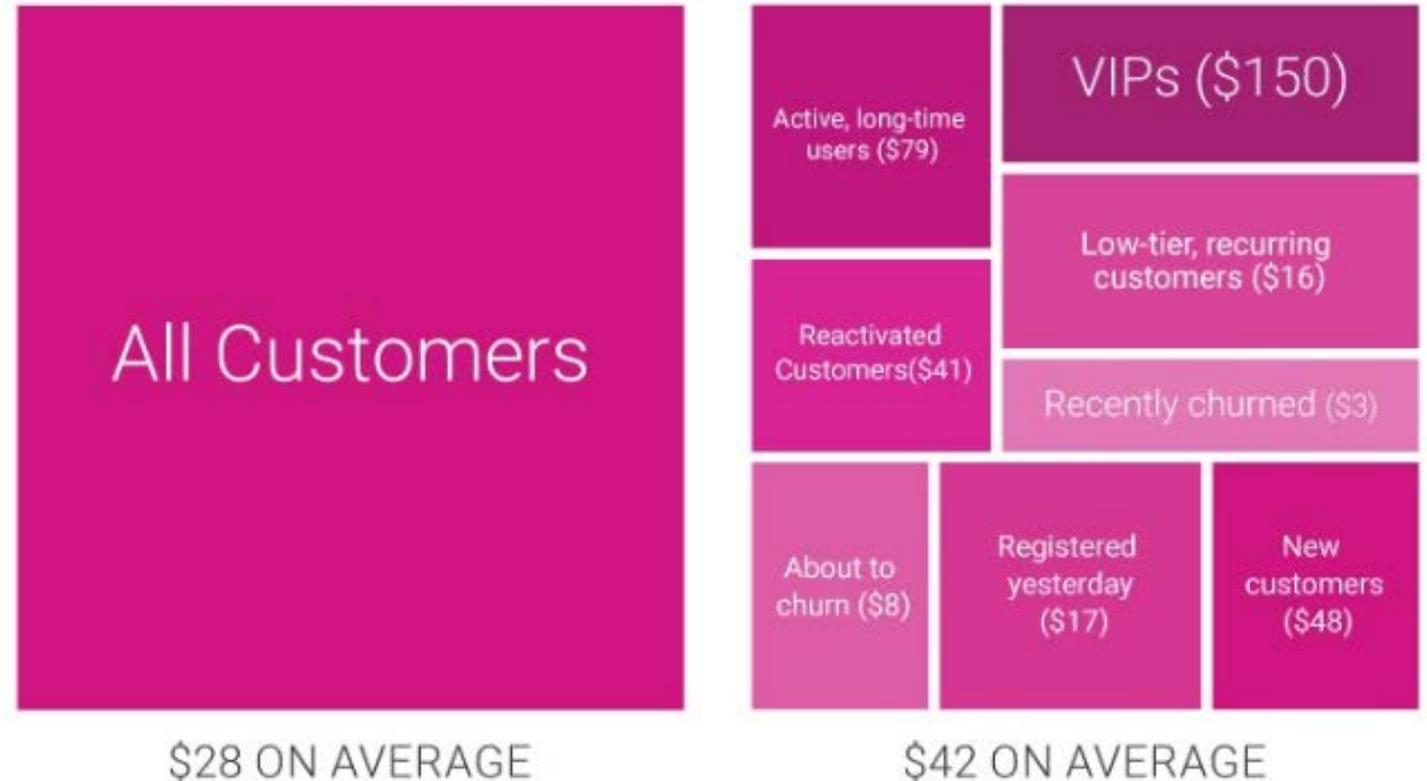
Walmart Study

<u>Product</u>	<u>Placed Near</u>
Bananas	Oatmeal, Produce
Kleenex	Paper goods, Cold Medicine
Flashlights	Hardware, Halloween Costumes
Little Debbie cakes	Coffee

Market Segmentation

Identifying our customers

Undifferentiated (Mass) Marketing	Differentiated (Segmented) Marketing
	
<p>Whole market with one offer → Ignore segments</p>	<p>Decide to target several different market segments, separate offers for each</p>



Market Segmentation

Where does my consumer buy?



Small stores



Supermarket



Specialty store

Personalization with Recommendation Systems



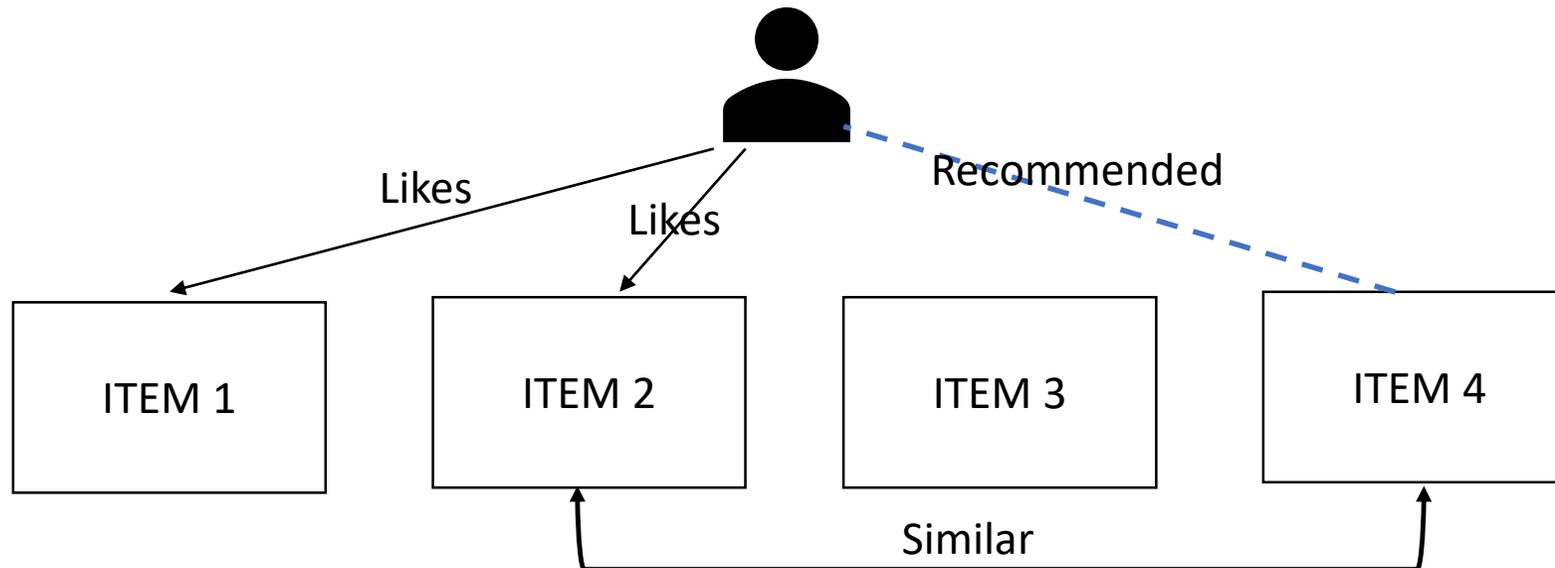
35% sales are from recommendations

75% of the rented movies are from recommendations

38% more click-through due to recommendations

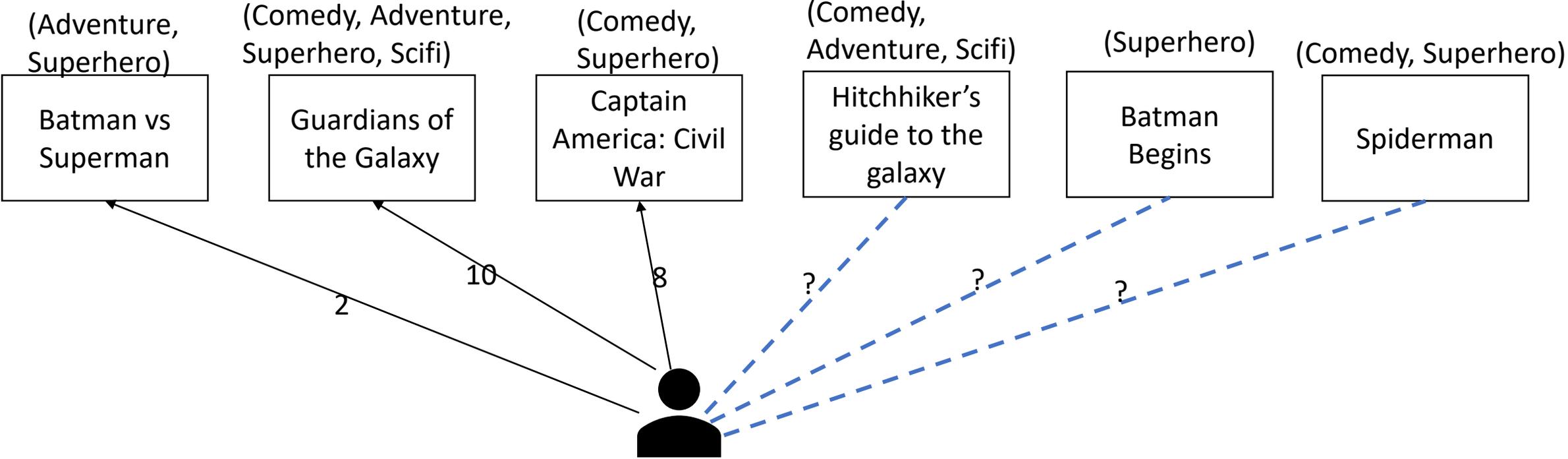
Personalization with Recommendation Systems

Content-based Recommendation System



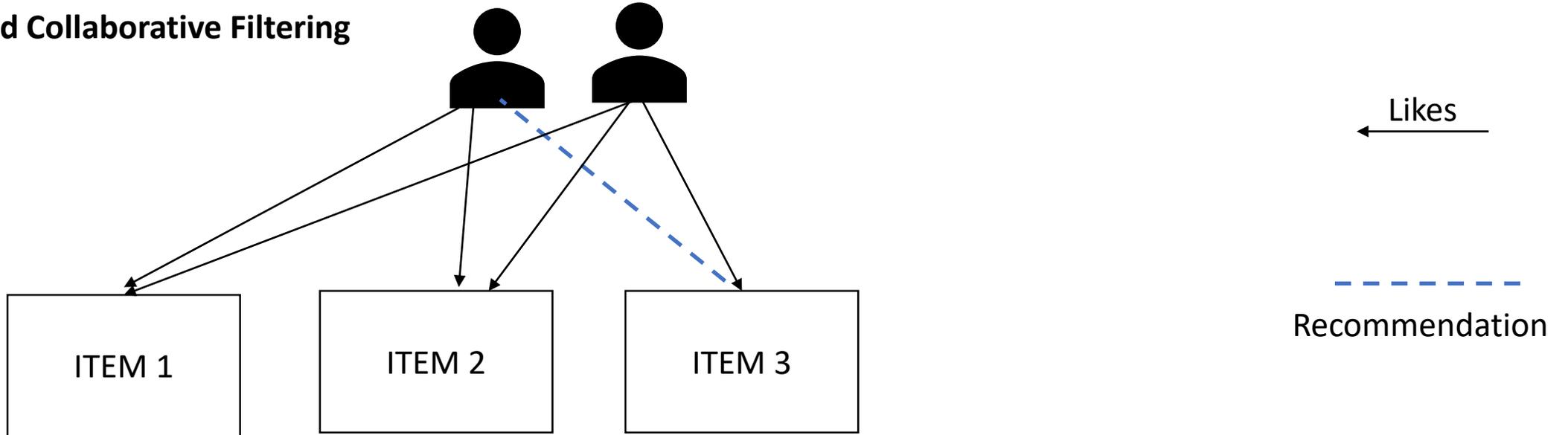
Personalization with Recommendation Systems

Content-based Recommendation System

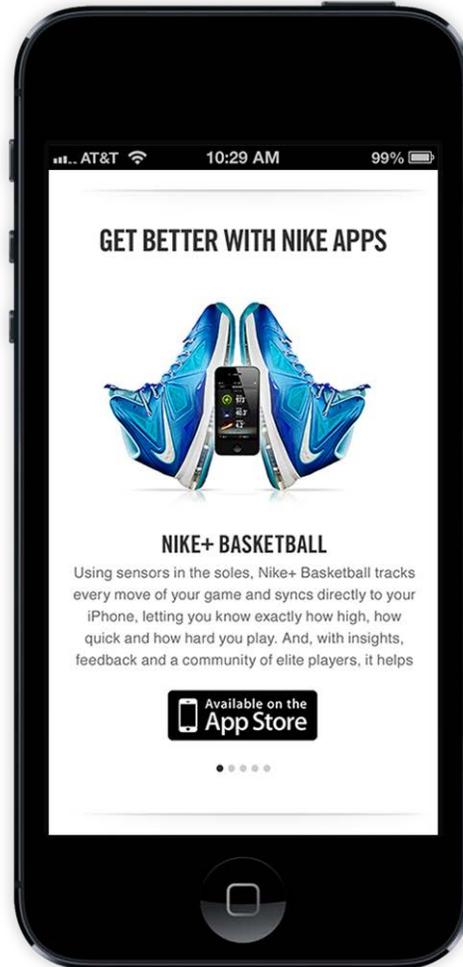
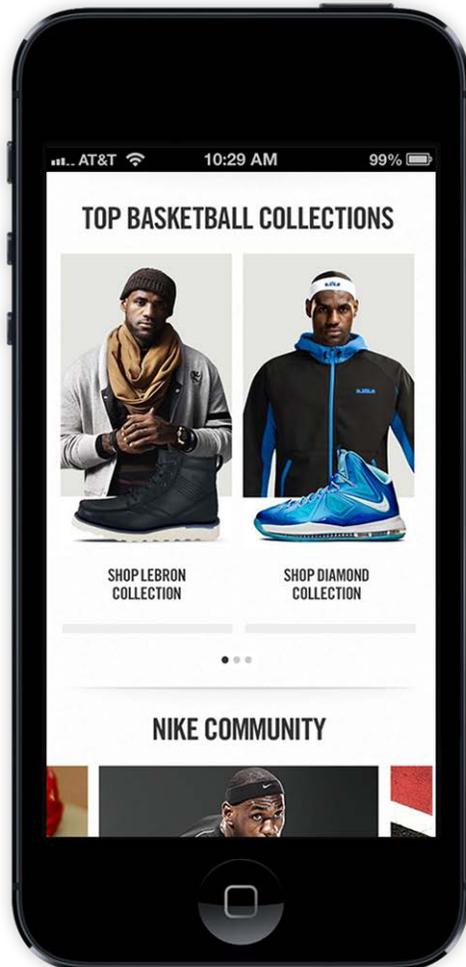


Personalization with Recommendation Systems

User-based Collaborative Filtering



Nike + Amazon – A Tale of Two Cities



- In the summer of 2017, Nike and Amazon partnered to launch a branded Nike store
- Just two years later, Nike ends the relationship. Why?
- What did Nike and Amazon learn about selling branded product in those 2 years?

Fundamentally Different – Strange Bedfellows



“do everything possible to expand human potential. We do that by creating groundbreaking sport innovations, by making our products more sustainably, by building a creative and diverse global team and by making a positive impact in communities where we live and work.”

-Nike



“serve consumers through online and physical stores and focus on selection, price, and convenience.”

- Amazon

Nike + Amazon

Short Term benefits

Significant Omnichannel

Some control over gray market

Integrated with Fulfillment by Amazon

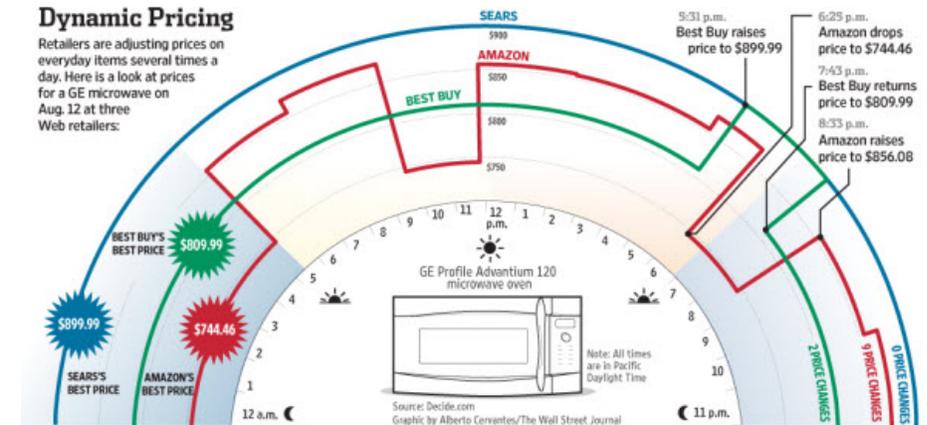


Long Term Drawbacks

Limited control over the selling experience

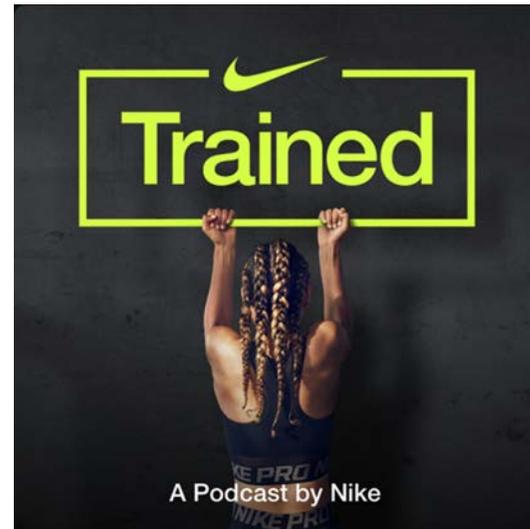
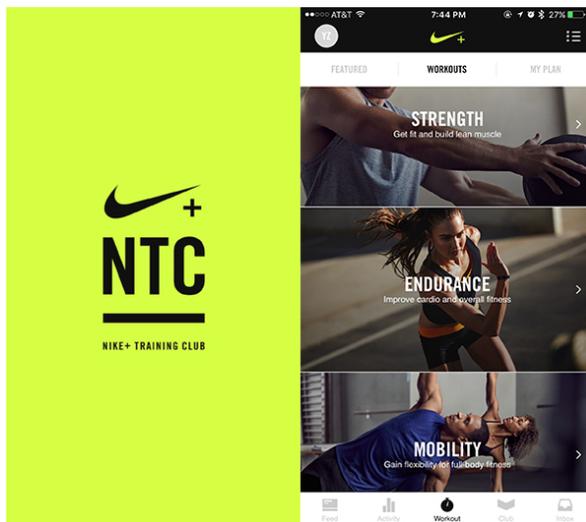
- Merchandising
- Brand placement
- Buy box pricing

No longer own the customer relationship



What does this have to do with data?

Everything! Acceleration of data collection



Double down on Direct to Consumer

- Rich analytics on its digital properties
- Tie ins with physical stores – Nike Rise, “House of Innovation” NYC, Nike by Melrose LA

New Digital “ecosystem” platforms

- Apps: Nike training club, Nike running club, SNKRS
- Media: Livestream workouts, TRAINED podcast, living room cup

Data Science at Nike

Consumer

Marketing Science

- Holistic customer view – content amplification across channels

Consumer Data Science

- Personalization – build the direct relationship

Nike Direct Analytics

- Omnichannel commerce analytics

Commercial

Global sourcing and manufacturing Analytics

- Sustainability, optimization

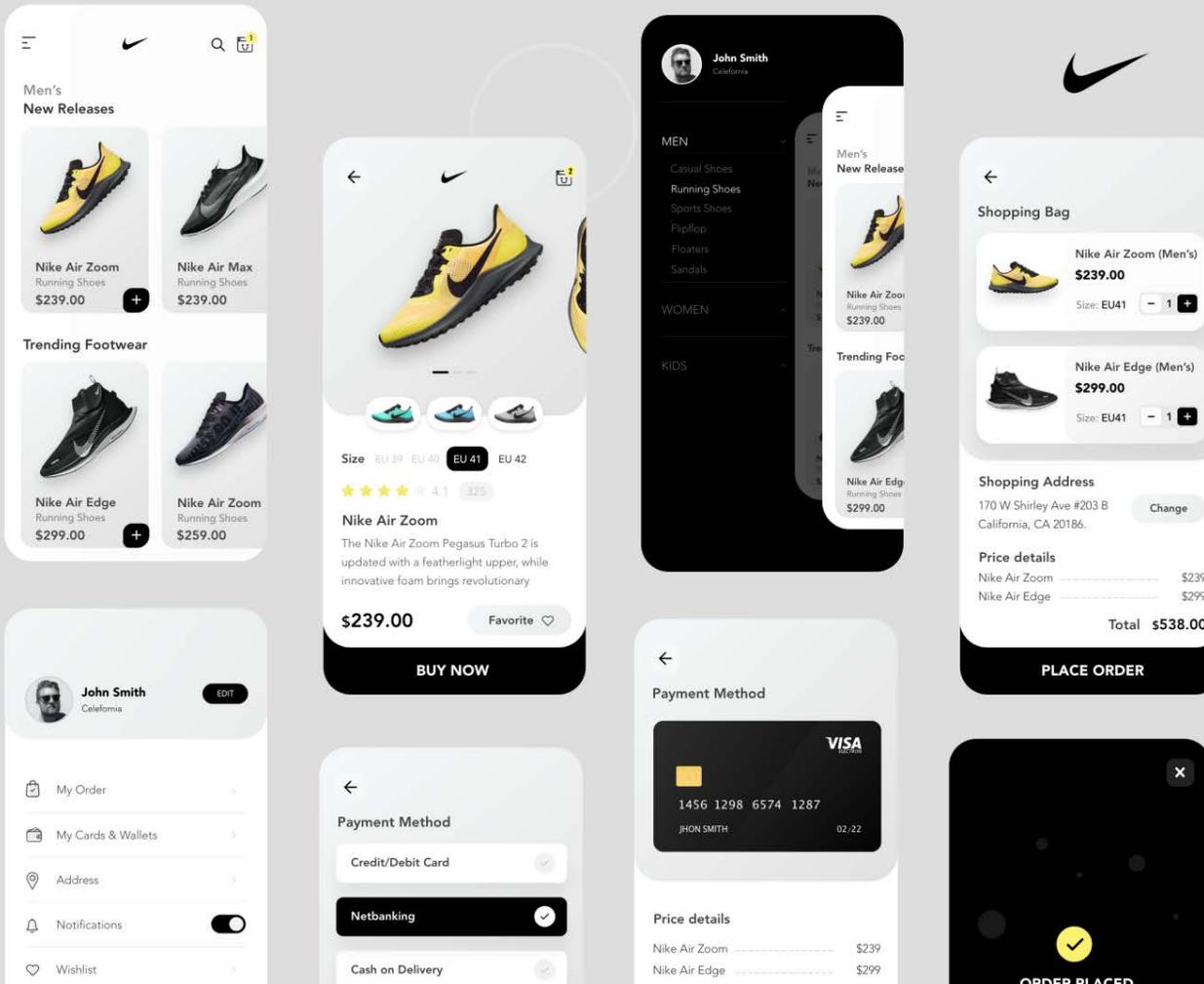
Supply chain management

- Focus on supply / demand health

Global operations and logistics

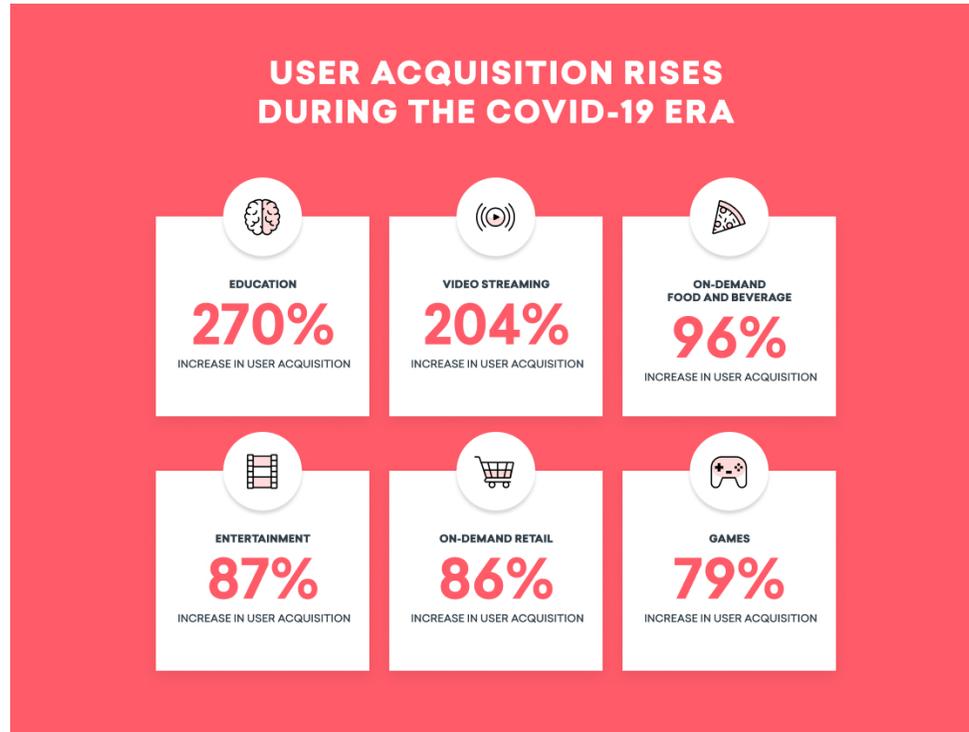
- Optimize for 1+Billion SKUs

Nike Q1 2021 update reported 8/13/20



- Even as most of its stores were reopened, Nike's digital sales soared 82% during the fiscal first quarter.
- The company is on track to have its digital sales represent 50% of total revenue in coming years.
- Nike said its online sales are more profitable than sales in wholesale channels, like department stores.
- "Digital is fueling how we create the future of retail," CEO John Donahoe said.

How is Covid-19 accelerating data acquisition?



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ECONOMY | U.S. ECONOMY
Pandemic Speeds Americans' Embrace of Digital Commerce
Consumers try new ways to get health care, buy vehicles, eat and work out as the pandemic shakes up habits

RECOMMENDED VIDEOS

- Goodbye, Laptop Fan Noise! Apple's M1 MacBooks Run Fast and Cool
- Police Fire Water Cannon at Protesters in Berlin
- With Senate Control in the Balance, Biden Faces Tricky Staffing Choices
- Virgin Hyperloop Completes First Human Test
- The End of the Mad Rush: How 2020 Is Reshaping Black Friday

WSJ MEMBER MESSAGE: NEWSLETTER
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CIO JOURNAL
Cloud Startups Ride Wave of Pandemic-Fueled Investments
'It's like digital transformation on steroids': Cloud-computing funding deals reached a three-year high in the second quarter

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CIO JOURNAL
Remote-Work Technology Fuels M&A Activity During Pandemic
Despite global economic disruption, enterprise-software M&A deals in the first half of the year were down just 5% from the second half of 2019

What does this mean to you?



Every retailer should be evaluating their digital strategy

- Covid-19 is accelerating digital transformation at a 3x+ pace
- Using customer data to improve digital experiences should be top of mind regardless of size.

When evaluating channel strategy, understand your data trade offs.

- How important is LTV for your business?

Embrace technology

- Online experiences, digital shopping upgrades, integrated marketing

Digital Transformation Value Creation Mapping

How does your organization identify, codify and operationalize sources of customer, product, and operational value within a continuously-learning and adapting environment and culture?

1) Identify Sources of Value Creation



2) Codify Sources of Value Creation



3) Operationalize Sources of Value Creation



4) Continuously-learn & Adapt to Sources of Value Creation

Analytic Profiles: Customer

Analytic Profiles standardize the collection and re-use of the analytic insights and propensities about individual entities that can be monetized across multiple use cases

Traditional Data

- Purchases
- Product Preferences
- Add-on Preferences
- Drink Preferences
- Visit Frequency
- Visit Recency
- Visit Monetary
- Market Basket
- Group Size
- Coupons
- Consumer Comments
- Store Manager Notes

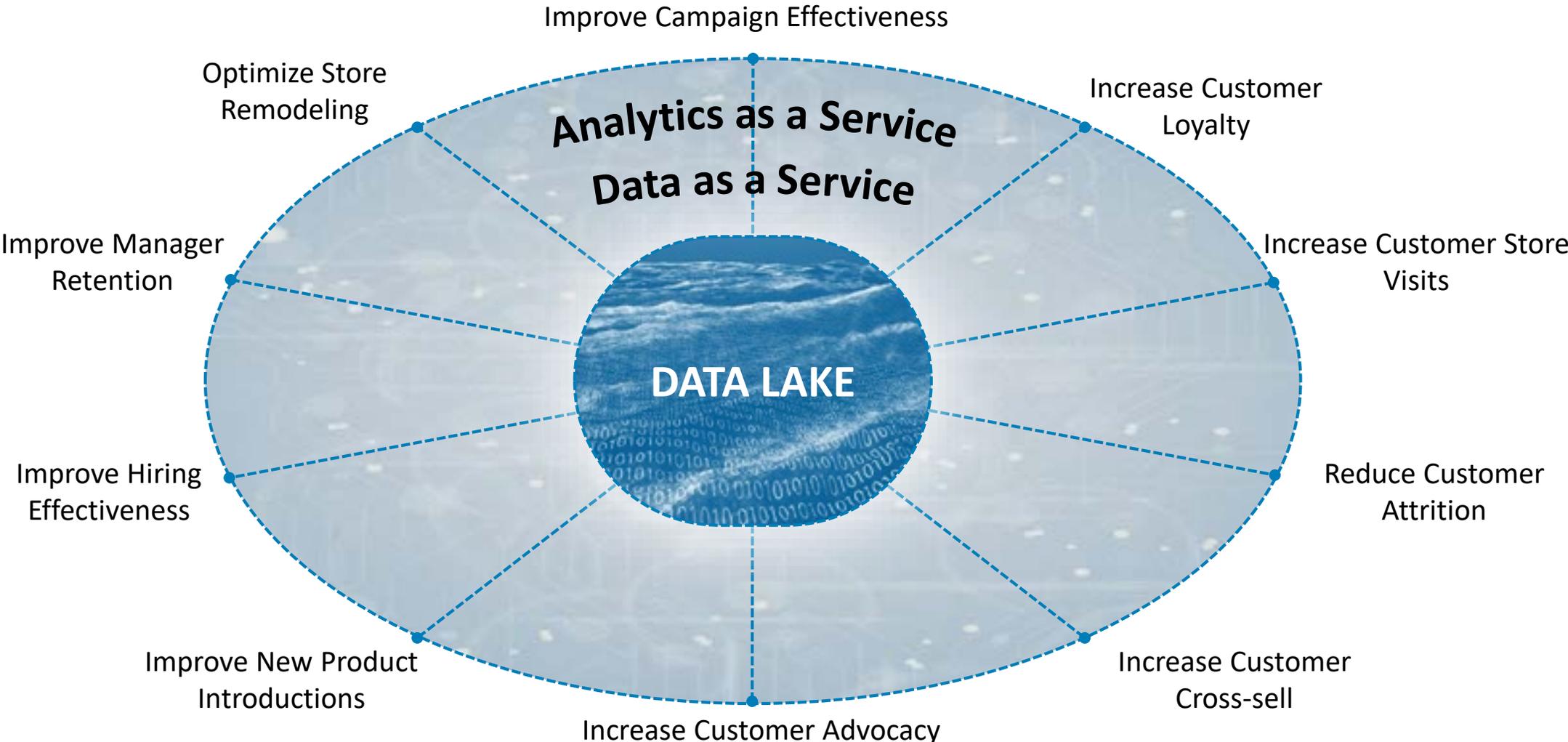
Bill Schmarzo Chipotle Analytic Profile	NCE Score	Var	Trend
Demographic segments 3.2	92	1.85	▲
Behavioral segments 3.1	67	3.25	▼
Loyalty Index 2.0	82	2.25	▲
Frequency Index 1.0	65	1.90	▼
Recency Index 1.0	92	1.89	▼
Lifetime Value Calc 1.0	99	1.05	▲
Event Propensity 1.0	14	1.74	
Promotion Propensity 1.1	02	1.15	
Advocacy Propensity 2.1	08	1.20	
Attrition Propensity 1.2	09	1.25	

Non-traditional Data

- Social Media Posts
- Home Value
- Employment history
- Job Change Frequency
- Job Change Recency
- Industry certifications
- Industry awards
- Social Media Connections
- Education degrees
- Rank of college
- College donations
- Volunteer activities
- Parking tickets

Data Lake 3.0: Data Monetization Platform

Data Lake becomes the data monetization platform that facilitates the capture, sharing, re-use, refinement and monetization of the organizations data and analytic assets



Source: Bill Schmarzo "Big Data MBA" Course Curriculum

Understanding the Economic Value of Data

- Data is an asset that never depletes, never wears out, and can be used across unlimited use cases at zero marginal cost
 - **Accounting:** “Value in Exchange” methodology for determining asset valuation based upon the acquisition cost of an asset
 - **Economics:** “Value in Use” methodology for determining asset valuation
- **Economic Multiplier Effect:** ratio of the impact of an incremental increase in investment on the resulting incremental increase in value (MPC: Marginal Propensity to Consume)



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School of
Management



Customer Point-of-Sale (POS) data

Sales

Promotional effectiveness



+2.5%

Marketing

Customer acquisition



+2.0%

Call Center

Customer retention



+3.5%

Product Dev

New product intro

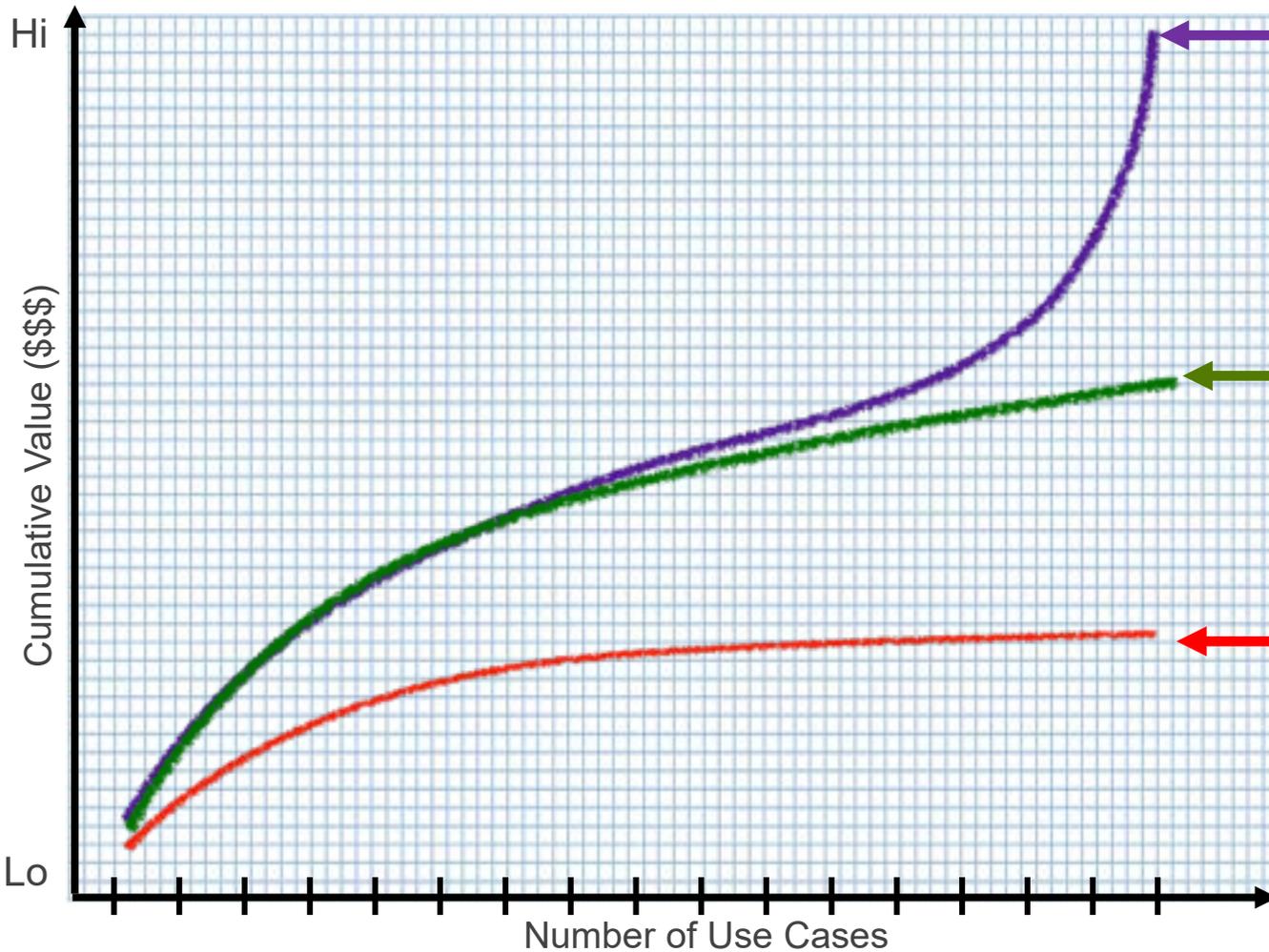


+2.6%

Schmarzo Economic Digital Asset Valuation Theorem



In knowledge-based industries, the “Economies of Learning” are more powerful than the “Economies of Scale”



Effect #3: Economic Value Accelerates

- *Refining* ASC effectiveness ripples thru previous use cases that use same ASC

Effect #2: Economic Value Grows

- Data and ASC re-use shrinks time-to-value and de-risks use cases

Effect #1: Marginal Costs Flatten

- Reusing “*curated*” data and ASC’s reduces marginal costs for new use case

The Schwegman Analytics Advantage



SLW has been helping its clients find and improve high value patents for over 20 years and has invested heavily in its Analytics processes and tools for the last decade and is now expert at helping.

- Highly efficient work
- Focused timelines
- High quality and key strategies
- IP Operations
- Fixed Fees/AFAs
- Tracking metrics
- Non-traditional providers

**Thank You For Your Interest
Questions?**

These materials are for general informational purposes only. They are not intended to be legal advice, and should not be taken as legal advice. They do not establish an attorney-client relationship.