

# Digital Innovation

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H A R V A R D | B U S I N E S S | S C H O O L



### **Fast Facts (Nov 2022)**

- In first 5 days, ChatGPT surpassed 1 million users
- Over 180.5 million monthly active users

# Will generative AI have a very large impact on business and the world?

*e.g., at the level of the internet or personal computing*



Very Large Impact



Large Impact



Some Impact



Little to None



Mini-Mainframe



Personal Computer



Internet



Mobile + Social



AI/Gen AI?

1970 1980 1990 2000 2010 2020 2030

*Every decade, we see paradigm shifts that lead to massive redistribution of profits and new players becoming the most valuable ones in the world.*



## Technology

Blockchain  
Internet of Things (IoT)  
Artificial Intelligence and  
General Artificial Intelligence  
Automation  
Extended Reality  
Quantum Computing

## Business Model

Platform  
Ecosystem  
Crowdsourcing  
Freemium Model  
Software as a Service (SaaS)  
On-demand Service

## Macro

Pandemic  
Geopolitics  
Supply Chain  
Climate Change

## Competition

New entrants  
Tech giants



# Building a sustainable and thriving business in the age of digital/AI/...

Amplify your competitive advantages

Craft your own path to compete differently

# Amplify Your Competitive Advantages



# SEPHORA



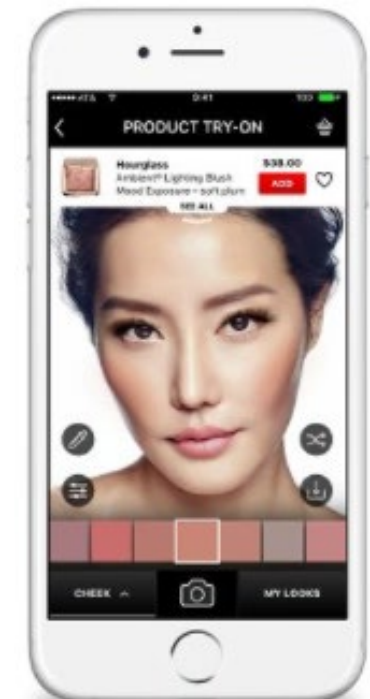


# Sephora's Differentiation

- Sephora pioneered the concept of “try-before-you-buy” for cosmetics.
- In its offline stores, Sephora beauty advisors offer customers suggestions on products that may work best for them. It also offers in-store customized makeups and group classes.
- “Personalization has always been important in the beauty industry as one customer’s optimal makeup or skincare is rarely appropriate for another.”

# Personalization in the digital age

- Virtual Artist. Empowered by AI facial recognition technology, the app helps customers sample products digitally and try different shades of makeup after face-scanning via the app.
- Pocket Contour. After instructing you how to take the perfect selfie, it determines your face shape for you before recommending products and provides step-by-step process on how to use them on your face (e.g., where to highlight, what shade to use, and how to contour).
- Introduced an online social platform, “Beauty Insider Community.”
- Integrated online and offline data to provide personalized instore experience.
- Ranked #1 for multiple years for Retail Personalization









# Amazon and Best Buy Announce Exclusive Multiyear Partnership to Offer New Fire TV Edition Smart TVs



SEATTLE & MINNEAPOLIS

April 18, 2018

- Amazon (NASDAQ: AMZN) and Best Buy (NYSE: BBY) today announced a collaboration to bring the next generation of Fire TV Edition smart TVs to customers in the United States and Canada.
- As a first step in the partnership, Best Buy will launch more than ten 4K and HD Fire TV Edition models from Toshiba and Insignia, beginning this summer.

# Constancies and Changes

VUCA: volatility, uncertainty, complexity, and ambiguity

Change is the only constant

Survival depends on the fit between the organization and environment



Agility and Adaptability

Too much diversification (often justified as related diversification in the digital era)

Chasing trends

Lack of focus; Chaotic Organization; Difficult to build core capabilities to achieve the organization's mission

# Jeff Bezos (2007)

“

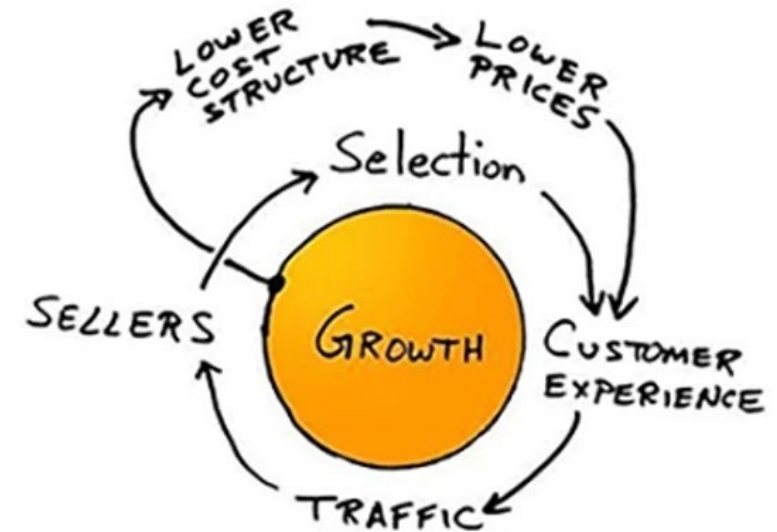
When I'm talking with people outside the company, there's a question that comes up very commonly: "What's going to change in the next five to ten years?" But I very rarely get asked **"What's not going to change in the next five to ten years?"**

”

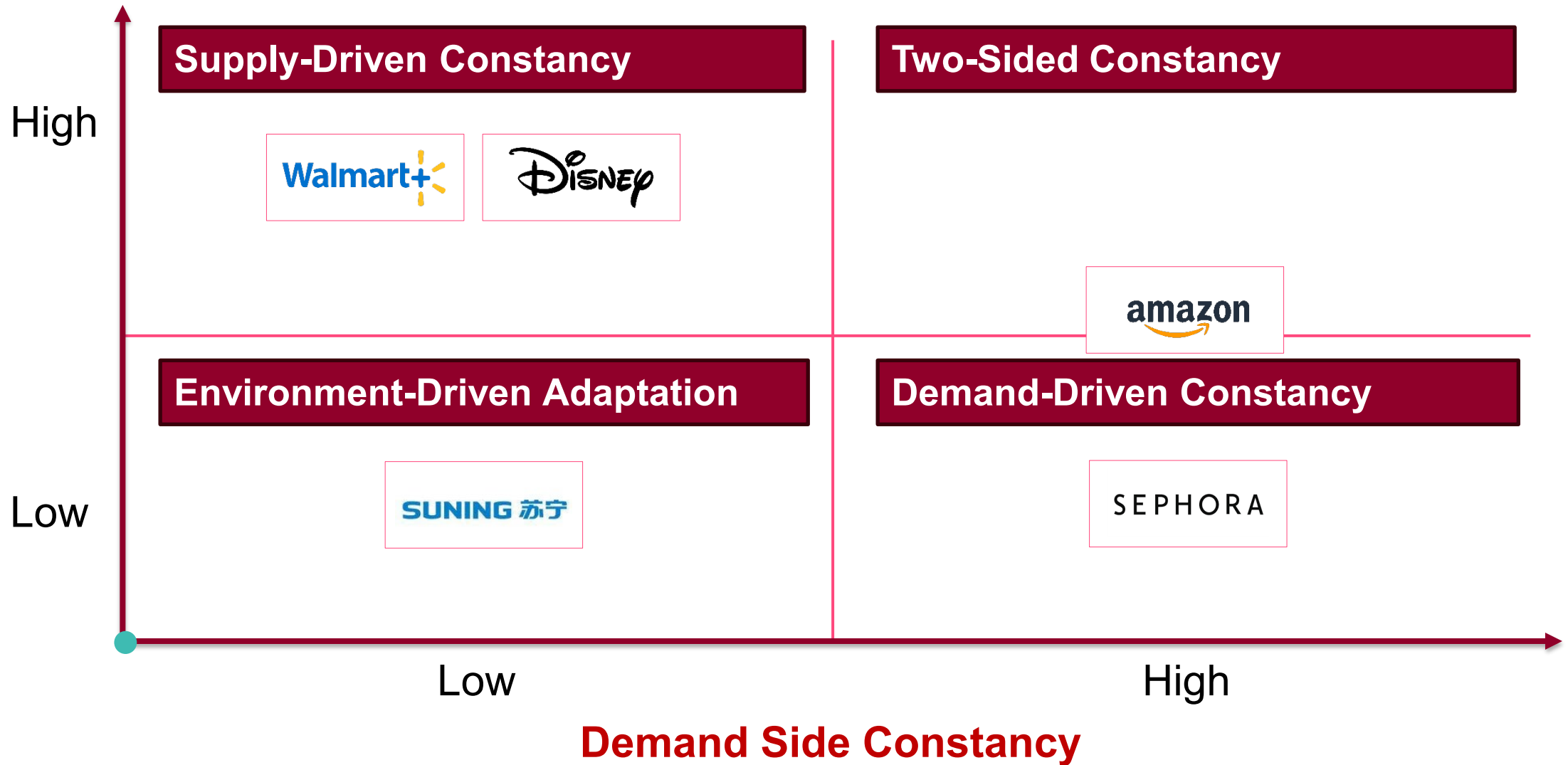
“

At Amazon we're always trying to figure that out, because you can really spin up flywheels around those things. All the energy you invest in them today will still be paying you dividends ten years from now.

”



Supply Side Constancy





# Suning

2011-2012

Expanded its products beyond electronics and aimed to become “Walmart + Amazon”  
Planned to build more than 300 Suning.com Stores and 50 Suning Plazas by 2020  
Acquired a leading e-commerce seller of maternal and baby products, Red Baby

2013

Decided that Suning needed to develop Internet-focused mindset and the core asset of the retail business is channel.

10/2013

Acquired PPTV, a video streaming platform, for \$420 million, the largest strategic acquisition of the firm at that time, to gain access to consumers’ living room.

Growing into multiple businesses

- Real Estate
- Financial Service
- Media & Entertainment since 2015, including Dragon Ball Live, Suning Cinema, Suning Youth Innovation Park.
- Sports: Jiangsu Suning Football Club (acquired for 523 million yuan in 2015), Inter Milan Football Club (70% stake) & Jiangsu Suning Women's Football Club.
- Investment 2015-2019: 71.6 billion yuan, including 4 billion yuan of equity investment in China Unicom, 4.8 billion yuan for 80% stake in Carrefour China.

# Direction for Digital Innovation

Identify constancies in your industry and (build) the competitive advantages on these factors.  
Find certainty in uncertainty.

Focus on digital innovation around these competitive advantages to enhance and amplify these strengths.

Strategic adaption is important but should build on strategic constancy.  
Remain calm in the face of sudden changes.

## In the next 10 to 15 years, which human qualities will still be useful?

Looking ahead to the next 10 to 15 years, despite rapid technological progress and changing global patterns, several human traits will still retain their value.

1. **Emotional Intelligence (EQ):** Understanding and managing one's own emotions, as well as recognizing and influencing the emotions of others, will continue to be crucial. High EQ fosters better communication, empathy, leadership, and the ability to work effectively in teams.
2. **Leadership:** The ability to inspire and guide others towards a common goal. Effective leadership involves a mix of strategic thinking, vision, empathy, and the ability to foster collaboration.
3. **Interpersonal Skills and Collaboration:** The ability to work well with others, communicate effectively, and build relationships is vital in both personal and professional settings. This includes negotiation, conflict resolution, and the ability to work in diverse teams. Understanding and appreciating cultural differences, as well as the ability to interact effectively with people from different backgrounds, are essential.
4. **Critical Thinking and Problem Solving:** The ability to analyze information, think critically, and solve complex problems is essential for navigating the complexities of modern life and work. This involves creativity, innovation, and the ability to look beyond the surface to address challenges.
5. **Lifelong Learning:** Being willing and able to continuously learn and upgrade skills is crucial for keeping up with technological advancements and changes in the job market.
6. **Digital Literacy:** Although traditionally not seen as a human trait, the ability to effectively use and understand technology will be indispensable. This is not just about basic computer skills but also includes understanding digital platforms, cybersecurity, and data analysis.
7. **Resilience and Perseverance:** The ability to quickly recover from difficulties and the determination to pursue goals despite obstacles are essential for personal and professional success.
8. **Ethical Judgment and Integrity:** As the ethical considerations become more complex with technological advancements, the ability to make ethical decisions and maintain integrity will become increasingly important.

These traits highlight qualities that are likely to remain relevant and in demand. They emphasize the importance of human capabilities that are not easily replicated by machines, underscoring the value of combining emotional, social, and ethical dimensions with technical skills.

Craft Your Own Path to Compete Differently



# Harvard's Experience with Online Education

- Coursera, LinkedIn Learning, and Udemy were emerging in the online learning market
  - Coursera offers over 7000 courses to more than 100 million learners
  - Taught by experienced university professors and professionals
- Not long after Coursera was founded in 2012, Harvard and MIT jointly established the online learning platform edX and opened it up to other academic institutions.

# Harvard and MIT to Sell edX for \$800 Million

June 29, 2021

HARVARD, MIT, AND EDX ANNOUNCED TODAY that edX, the two institutions' 2012 joint venture into online education, would be sold to leading educational technology company 2U for \$800 million. 2U, a publicly traded company listed on the NASDAQ, with revenues expected to approach \$1 billion in 2021, is an online program manager. The company provides digital platforms and marketing and logistical support that allows colleges and universities to offer online instruction but does not itself provide degrees.



**Provost Alan M. Garber**

PHOTOGRAPH COURTESY OF HARVARD  
PUBLIC AFFAIRS AND COMMUNICATIONS

2U

0.28 USD

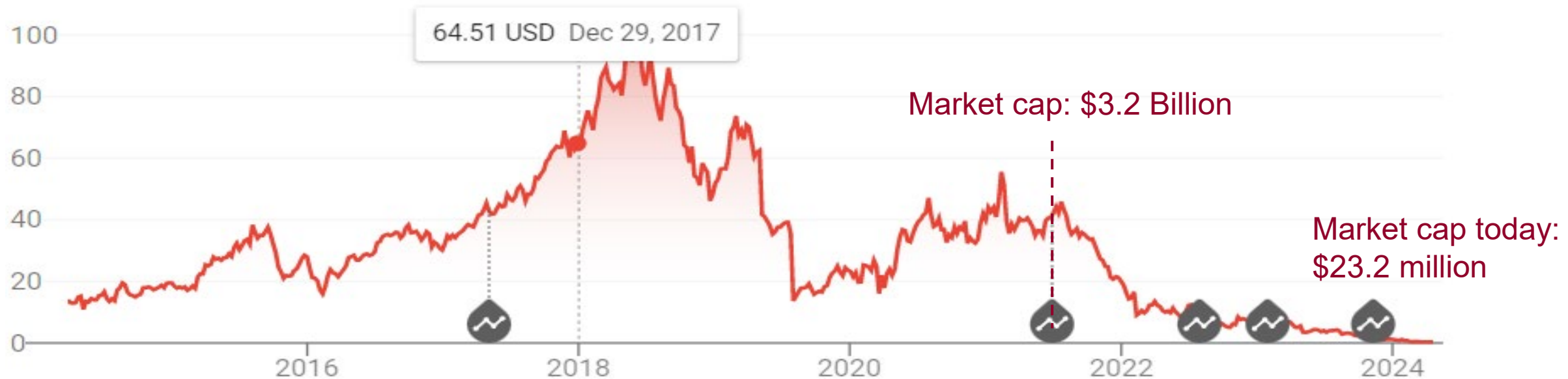
+ Follow

-13.70 (-97.99%) ↓ all time

Closed: Apr 17, 8:00 PM EDT • Disclaimer

After hours 0.29 +0.0079 (2.81%)

1D | 5D | 1M | 6M | YTD | 1Y | 5Y | Max

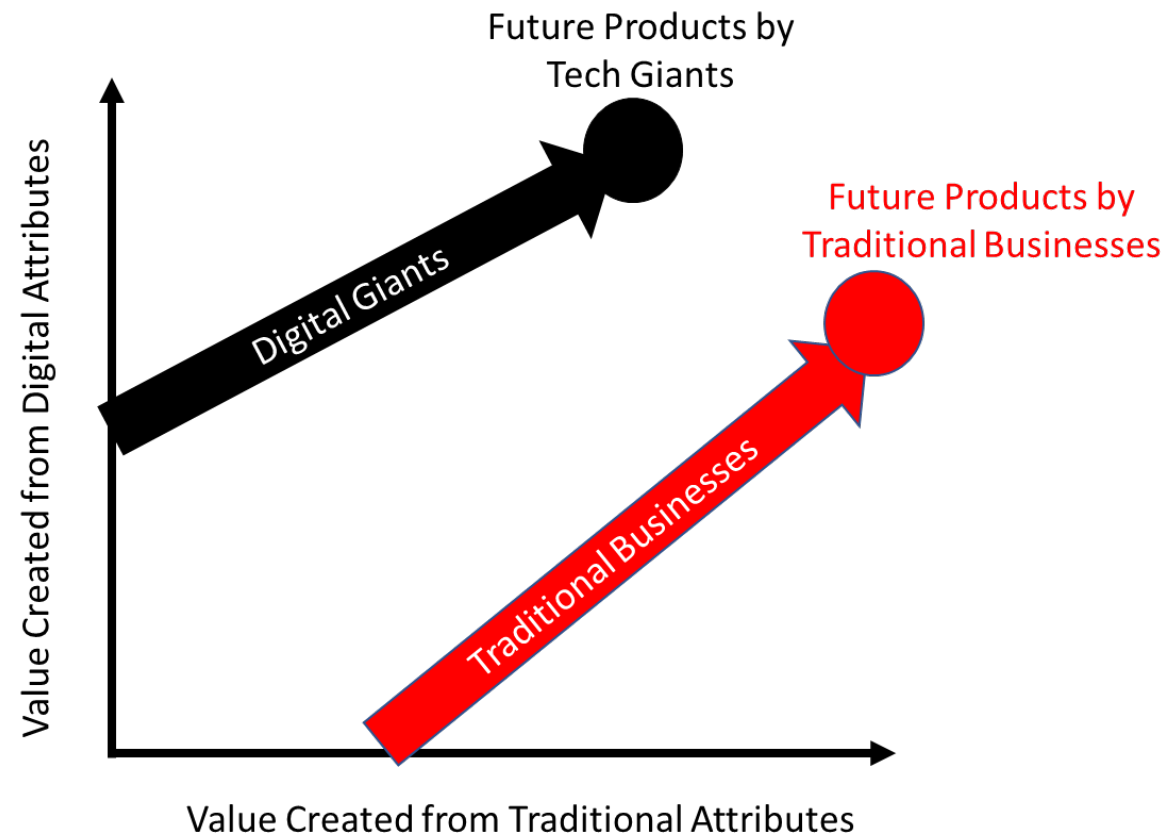
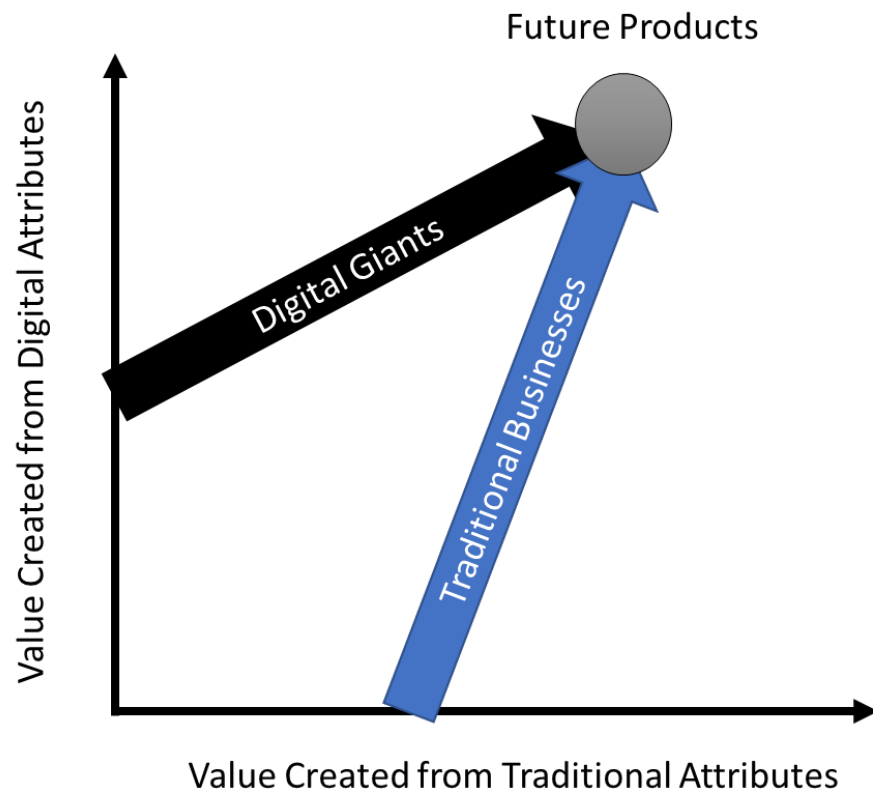


# HBS's Online Education

- HBS has chosen to use digital technology to extend its unique case study teaching method from the traditional classroom to online, rather than merely imitating Coursera.
- The goal is to provide the best participant-centered learning experience in an online environment.
  - Digital technologies facilitated increased interaction among our students, and even those hesitant to participate in physical classrooms became more engaged in our online learning environment.

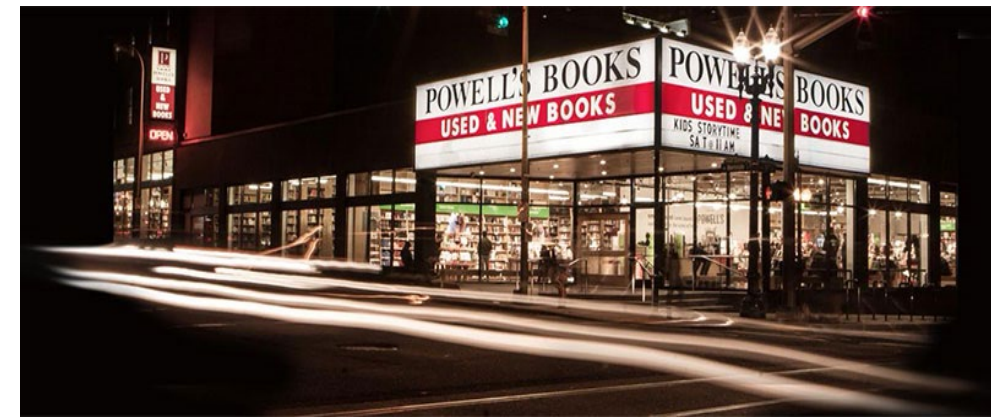
*“Potential program applicants initially assumed that our live online classes were inferior to in-person learning. They couldn’t imagine what we were offering, and the many experiments we had run to develop a transformational learning experience online. In the latest iteration, we combined the best of online and in-person learning. Once participants experience our program, we receive no pushback on program fees, which have remained the same.”*

- Although HBS does not offer as wide a range of courses on competitor platforms or attract the same number of students, its online programs have rapidly developed and become profitable.





# Leverage Your Physical Asset: Powell's Books in Portland, Oregon



- Founded in 1971, Powell's has grown into a Portland landmark and one of the largest used and new bookstores in the world. It contains over 1 million books.
- Powell's sponsors several themed book clubs that meet regularly in their stores.
- Powell's hosts over 500 author events each year, bringing readers together to meet and learn from their favorite authors in person.
- Powell's opens until 9pm every night of the year. The extended hours make it a place for connection - readers will study together, meet up with friends, or just curl up with a book into the evening.
- Shopping at Powell's and attending their events has become a way for Portlanders to support local culture and connect with one another. This brand positioning as an independent, knowledge-centered, and community-driven bookstore contrasts with Amazon's more transactional experience.

# Leverage Your Own Connections: Drive better Personalization

- Coca-Cola closely tracks its products on social media. The company uses AI-driven image recognition technology to detect when images of its products or those of competitors are uploaded.
- For example, it can identify users who post pictures with tea cups or bottles of competitors' products such as Snapple, Honest Tea, and Lipton. It then targets these users with advertisements for Gold Peak Tea.
  - The click-through rate of this type of targeted advertising is **four times** that of other targeted ads.

The Coca-Cola logo, featuring the brand name in its signature red script font.

# Questions

- What will remain unchanged in your business over the next 10 to 15 years?
- How do you amplify your competitive advantages around these constant factors?
- How do you craft your own path to compete differently from tech giants?





Preorder the e-book

August 20, Harvard Business Review Press  
Preorder on Amazon: <https://tinyurl.com/smartrivals/>

**Thank you!**

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**WhatsApp**

