Innovative Entrepreneurship Theory and Practice

Lesson 7: Dynamic Innovation

Schumpeter coined the term "creative destruction" to describe how the old is being constantly replaced by the new

the entrepreneur is a disruptive force in an economy

- Emphasized the beneficial process of 'creative destruction' in which the introduction of new products results in the obsolescence or failure of others
- Dynamic mechanism connected to the continuous process of change in capitalist development

Entrepreneurship "[i]ncessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one."

- Joseph Schumpeter









Creative Destruction – The Internet

- rendered many products, methods of production, and means of distribution obsolete.
- caused a drastic change in many jobs
 - including bank, secretaries, travel agents, and retail store employees.
- with the rise of mobile internet technology,
 - publishers of printed material
 - everything from magazines to maps—also suffered

Big Tech



- (Before the recent downturn) Collectively, the FAANMG stocks (Facebook, Amazon, Apple, Netflix, Microsoft, and Google) represent 23% of the value of the entire S&P 500
- The market values of Apple and Amazon both crossed the trillion-dollar line in 2018 (Apple was the first). In 2021 they were joined by Facebook for the first time in its history
- Further, just three companies (Samsung, Huawei, and Apple) hold nearly 50% of the worldwide market share of smartphones
- In 2007, Microsoft was the <u>only technology company</u> in the global top ten by market capitalisation. By 2022, Saudi Aramco was the <u>only non-tech company</u>

Importance of 'network effects' (also called network externalities):

- Tech firms from Facebook to Intel to Microsoft are dominant because of network effects the idea that <u>some products and services get more valuable as more people use them</u>. The same goes for <u>social networks</u>
- At a particular time, a new medium reaches the stage of critical mass, from that moment onwards the medium seems to diffuse as a matter of course until nearly all potential users are connected

However, this also means a <u>tendency towards monopoly or near</u> <u>monopoly</u>:

- The trend in all sectors of communication tends to go from public monopolies to <u>private oligopolies</u> (a market in which only a few companies are dominant), including on an international level
- There are no total monopolies on the market there is always some competition but they can split the world market among themselves, fix prices, and benefit from inter-national regulations on standardization and interconnectivity or become the dominant platform nearly every person, organization, and business needs to be on

- Contrary to its public origins, we now have an increasingly monopolised, privatised web. The internet's effect on economic concentration, however, may be even greater than the effects of the earlier communications media
- Today, Amazon alone has nearly half of online sales, Google dominates ad search, Google and Facebook dominate online advertising etc, and there are only two mobile app stores
- According to the 2021 Congressional report, just four companies (Amazon, Apple, Facebook, and Google) are worth more than \$5 trillion and now make up more than a third of the market cap of the S&P 100

- Amazon probably captures more than 50% of U.S. online retail sales. There are over 112 million Prime members in the U.S. about 44% of the adult population
- Google captures 81% of all search queries in the U.S. on desktop and 94% on mobile
- Google's Chrome and Apple's Safari control roughly 80% of the browser market
- iOS and Android run on more than 99% of mobile devices in the U.S. and globally

- Google and Facebook account for nearly all of U.S. digital advertising revenue
- Through Google Maps, Google captures over 80% of the market for navigation mapping services

JAN 2022

SHARE OF THE DIGITAL ADVERTISING MARKET

SHARE OF WORLDWIDE DIGITAL AD SPEND ATTRIBUTABLE TO THE INDUSTRY'S LARGEST PLAYERS



GLOBAL SPEND ON DIGITAL ADVERTISING



statista Z

\$466 BILLION

YEAR-ON-YEAR CHANGE +17% (+\$67 BILLION)

ALIBABA'S SHARE OF GLOBAL DIGITAL AD SPEND



8.7% YEAR-ON-YEAR CHANGE +1.2% (+1.0 BPS) GLOBAL DIGITAL AD SPEND vs. TOTAL GLOBAL AD SPEND



66.9% YEAR-ON-YEAR CHANGE +4.7% (+299 BPS)

AMAZON'S SHARE OF GLOBAL DIGITAL AD SPEND



5.8% YEAR-ON-YEAR CHANGE +11.5% (+60 BPS) GOOGLE'S SHARE OF GLOBAL DIGITAL AD SPEND



28.6% YEAR-ON-YEAR CHANGE +4.0% (+110 BPS)

TENCENT'S SHARE OF GLOBAL DIGITAL AD SPEND



2.9%
YEAR-ON-YEAR CHANGE
[UNCHANGED]

META'S SHARE OF GLOBAL DIGITAL AD SPEND



23.7% YEAR-ON-YEAR CHANGE +6.3% (+140 BPS)

OTHER PLATFORMS' SHARE OF GLOBAL DIGITAL AD SPEND



30.3% YEAR-ON-YEAR CHANGE -9.6% (-320 BPS)

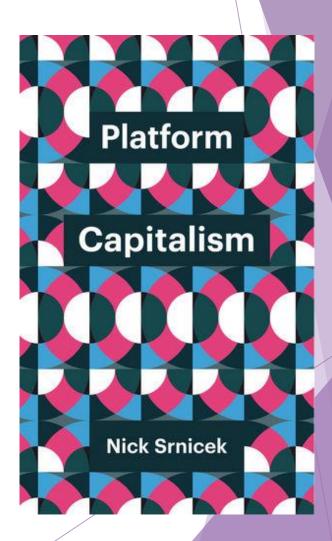
SOURCES: STATISTA DIGITAL MARKET CUTLOOK (SEE STATISTA COM FOR MORE DETAILS); BMARKETER. NOTES: AD SPEND FIGURES REPRESENT ESTIMATES FOR FULL/EAR SPEND IN 2021 IN U.S. DOLLARS, AND COMPARISONS WITH 2020 SPEND, NOT INCLUDING REVENUES ASSOCIATED WITH EMAIL MARKETING, AUDIO ADS, INFLUENCER MARKETING, SPONSORSHIPS, PRODUCT PLACEMENT, OR COMMISSION-BASED AFFILLANTE SYSTEMS. RIGURES FOR COMPANIES' SHARE OF DIGITAL SPEND INCLUDE ADVERTISING ACROSS ALLI INTERNET-CONNECTED DEVICES, NET OF TRAFFIC ACQUISITION COSTS. ALIBABA INCLUDES YOUKU TUDOU, META INCLUDES SACEBOOK AND INSTRAGRAM; GOOGLE INCLUDES YOUTUBE. ALL PRECENTAGE CHANGE VALUES ARE RELATIVE; "BPS" VALUES IDENTIFY ASSOLUTE SHARE CHANGE.

we are social



'Platform capitalism'

- *Platform Capitalism* by Nick Srnicek explains how major companies are transforming themselves into platforms
- Digital platforms (like Google, Facebook, and Amazon) are a means of consolidating or seizing a kind of monopoly leverage over not only distribution but also production
- For Srnicek "platforms are the only business model adequate to the digital age." The more users (data) a platform accumulates, the more potential it has to generate value from its users and their activities on the platform



'Platform capitalism'

- And now, the so-called 'super apps' such as Line, Grab, and WeChat
- In apps such as WeChat, users can access pretty much any business or service they need without ever leaving the platform (they are 'super sticky'). Thus WeChat derives revenues from e-commerce and not advertising
- As Srnicek sees it, the WeChat model of a monopoly platform is our most likely future: we're headed towards "one massive, closed, expansive, monopolistic platform(s)"





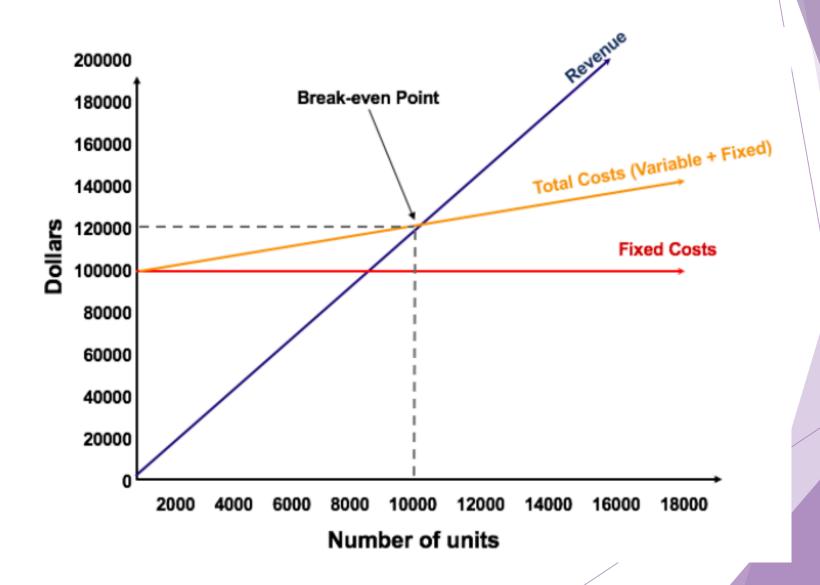
Economically Sustainable

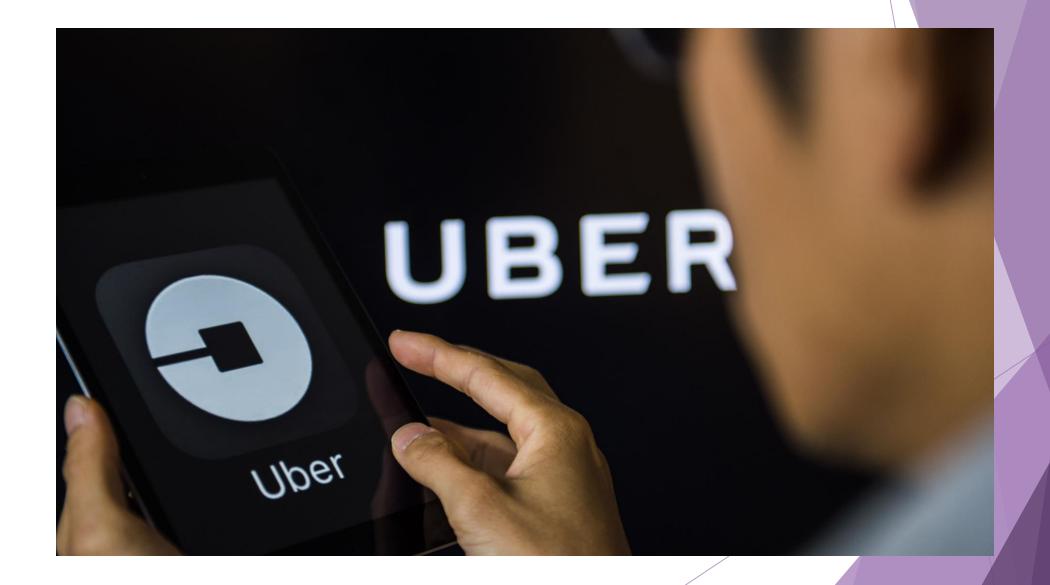
Remember

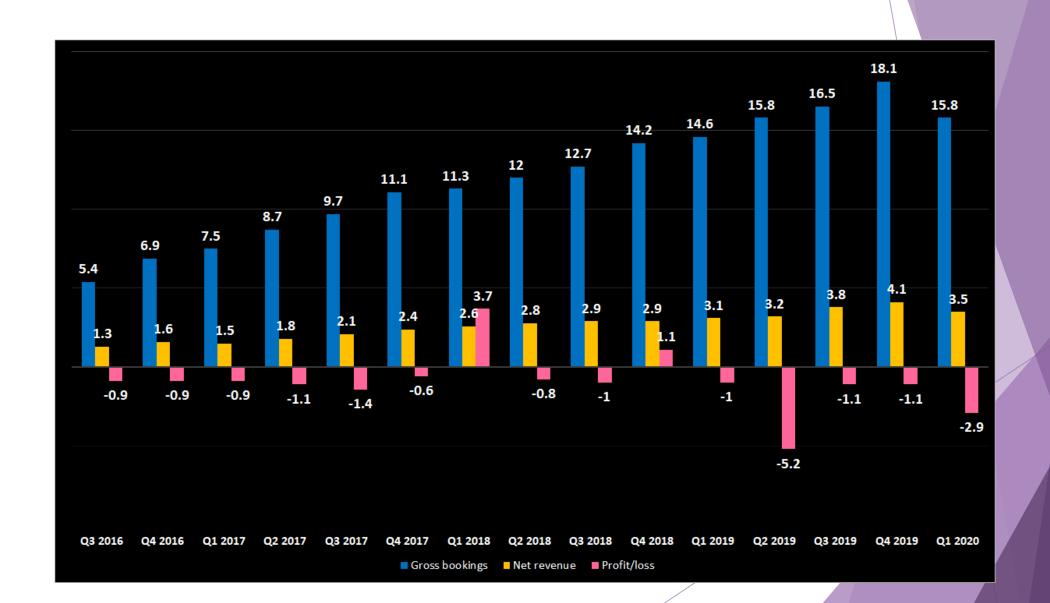
Innovation (disruption) is not the same as sustainable profitability (making money in the near future)

Breakeven analysis

- The entrepreneur should know how many products/services etc they have to sell before attaining a profit
- The breakeven point is the <u>production level where total</u> revenues equals total expenses
- It is the minimum point, <u>below which the company will start</u> incurring losses, and above which the company will start having a profit







Uber doesn't make a profit



Forbes magazine (December 2017): "The taxi industry that Uber is seeking to disrupt was never profitable when allowed to expand in unregulated markets, reflecting the industry's low barriers to entry, high variable costs, low economies of scale and intense price competition – and Uber's current business model doesn't fundamentally change these structural industry characteristics. It is indeed ironic that Uber's fierce determination to avoid regulatory oversight condemns the company to unprofitable operations that the taxi industry experienced during its preregulatory era."

'Gig economy' platforms



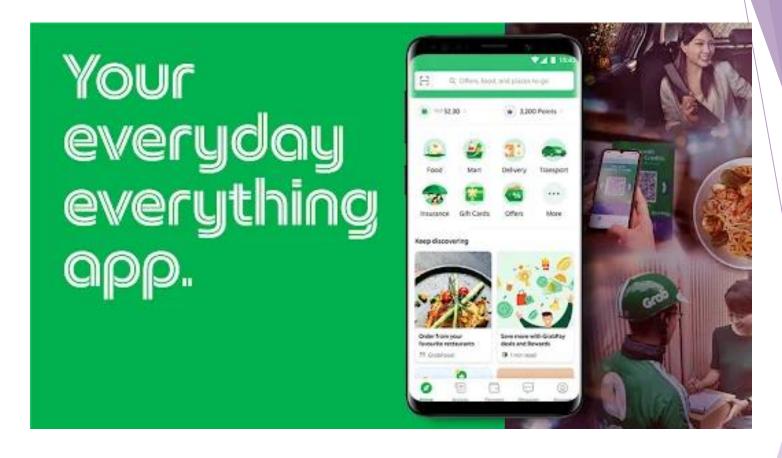








GrabFood

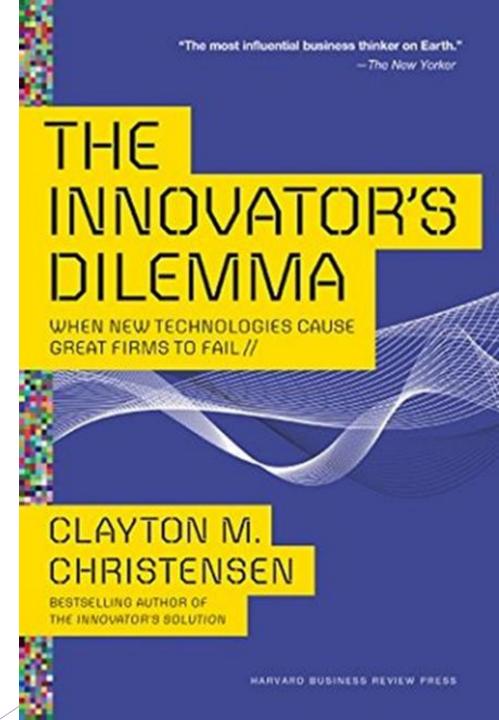


- Grab's top-line growth and market dominance is impressive, but it's still <u>deeply unprofitable</u>. Its net loss widened from \$2.75 billion in 2020 to \$3.56 billion in 2021, as its adjusted earnings before interest, taxes, depreciation, and amortization (EBITDA) loss widened from \$780 million to \$842 million
- Grab's losses are widening because it's still offering a lot of loss-leading incentives to its partners and consumers as it expands its market share

the process of transforming an expensive or highly sophisticated product or service into one that is

simpler, more affordable, and more accessible to more people

has been called the most influential business idea of the early 21st century



gets the job done - good enough

- lower quality
- cheaper
- easier to use
- can be bought and used by more people

This creates a new market or expands the existing market

Low-cost carriers (LCCs)

Low-cost airlines offer less services (no free food or drink, no free checked bags etc)

But cheaper flights means more people can afford to travel Densification of seats

Electronic ticketing

Dynamic (demand-led) pricing

Removal and charging for ancillary services (free meals, seat allocation etc)



Multiple flights

per plane per

day, quick

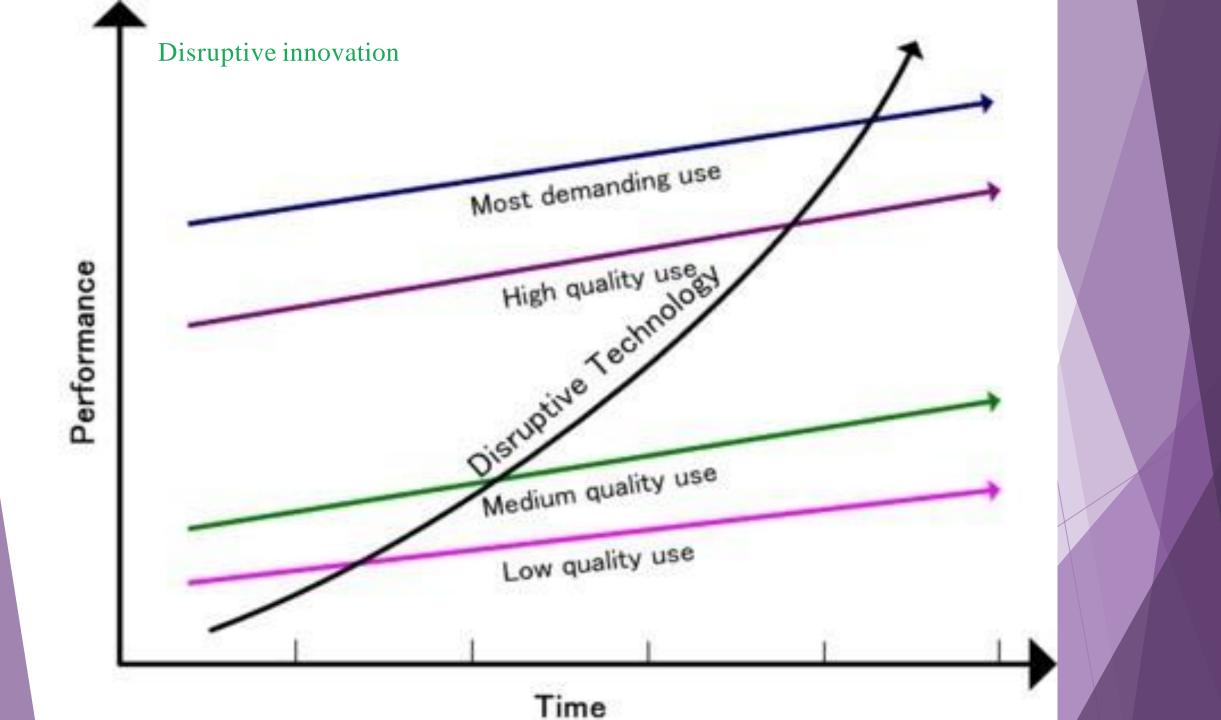
turnarounds,

maximizing plane

usage

Use of single
(new, more
efficient) plane
type to reduce
training and
maintenance costs

Previously underserved short- and medium-length routes Preference for secondary uncongested airports Point-to-point (P2P) routes, elimination of connecting flights

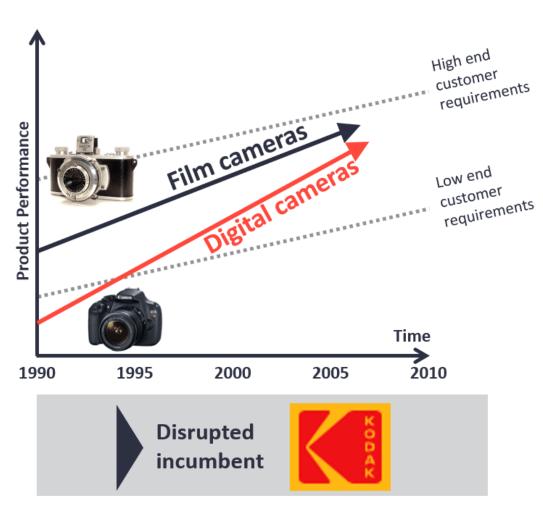


https://medium.datadriveninvestor.com/why-aldi-is-americas-most-disruptive-grocer-market-mad-house-9bf1673d6496



https://www.usatoday.com/story/money/business/2013/04/17/tesco-exits-usa/2090801/

The disruption of film cameras



So why do businesses <u>not</u> innovate?

Larger, successful companies tend to focus on:

- More expensive, higher profit margin products
- Pleasing their existing customers
- Incrementally improving their existing products
- Adding new features and complexity to existing products to improve margins
- Big, profitable new markets not smaller, emerging markets

So why do businesses <u>not</u> innovate?

- So why would they threaten their own, successful, high performance, high margin products, which have a lot of customers...
- ...with untried, lower performance, low margin products, which they don't know if there are customers for?

Google's innovator's dilemma

- Google successfully disrupted advertising (and much else) through its domination of search (Google Ads)
- Now it faces its own innovator's dilemma with generative A.I.
- Google developed some of the key A.I. technologies but OpenAI (part-owned by Microsoft) launched its ChatGPT publicly first
- Does Google risk undermining its search engine business by promoting its own A.I. or try to ignore it?

Creative accumulation

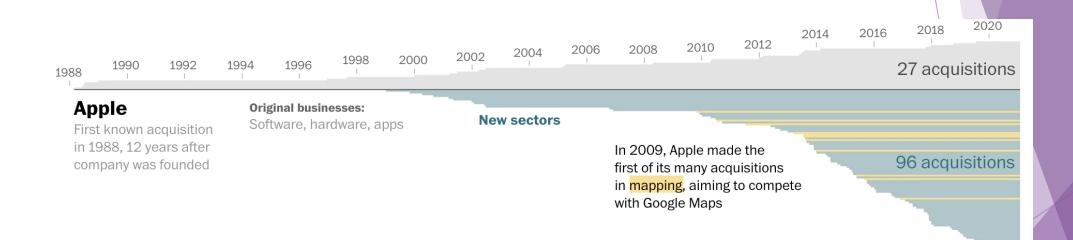
Creative accumulation

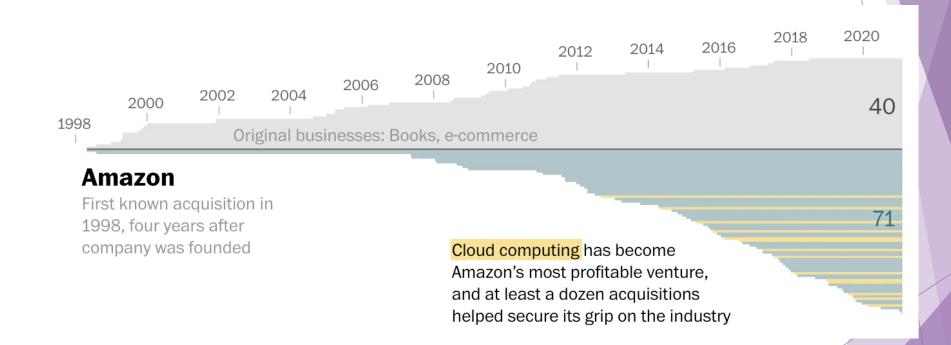
So Google needs to be successful at 'creative accumulation':

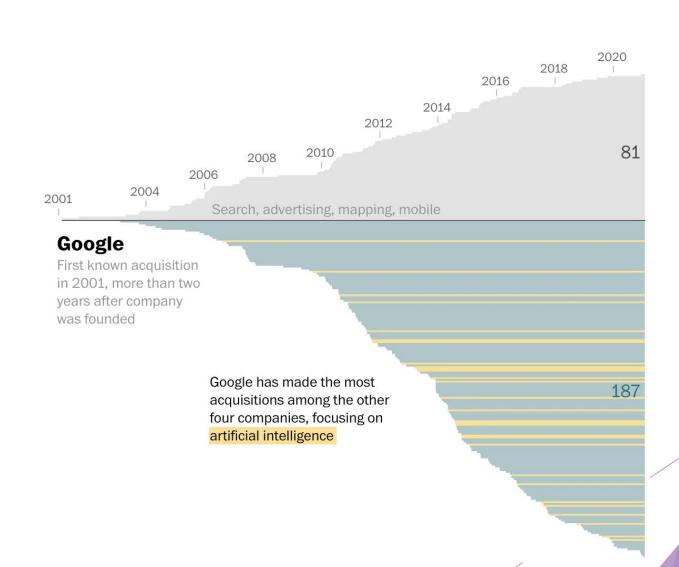
Creative accumulation requires businesses to manage three challenges simultaneously:

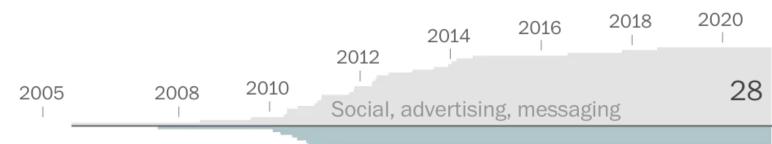
- fine-tuning and evolving existing technologies at a rapid pace
- acquiring and developing new technologies and resources, and
- integrating novel and existing knowledge into superior products and solutions

Bergek, A., Bergren, C., Magnusson, T., and Hobday, M., 2013, 'Technological discontinuities and the challenge for incumbent firms: Destruction, disruption or creative accumulation?', *Research Policy* 42, 1210–1224.









Facebook

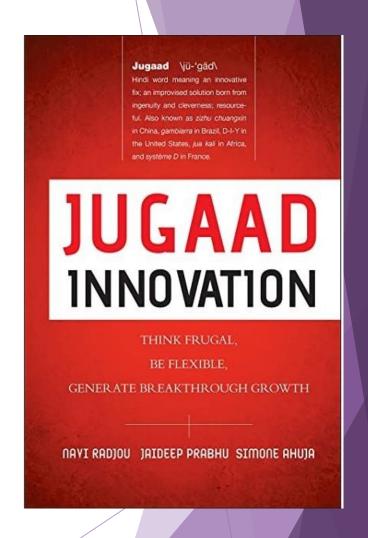
First known acquisition in 2005, one year after company was founded

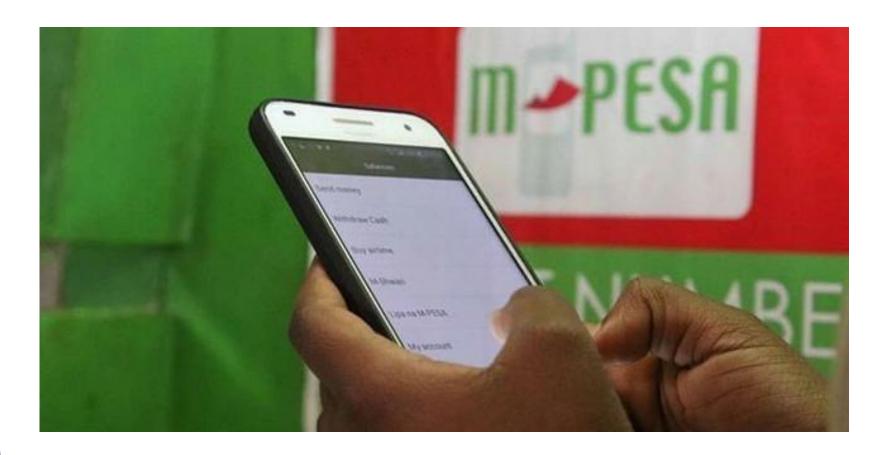
Facebook dominates social media not just on computers but on phones, thanks to the acquisitions of Instagram, WhatsApp and nearly a dozen mobile development companies

But is this – the domination of some big tech companies – part of the reason that 'we' are becoming less innovative?

Low-cost innovation

- 'Jugaad' is a Hindi word meaning an innovative fix or an improvised solution born from ingenuity and cleverness with limited resources
- (In emerging markets) Businesses are being compelled by cost-conscious and eco-aware consumers, employees, and governments to create offerings that are affordable, sustainable, and high quality
- Even more than a strategy, frugal innovation is a whole new mindset a flexible approach that sees resource constraints not as a debilitating challenge but as a growth opportunity





For example, millions of people in Africa rely on M-PESA, a service that enables them to save, spend, and transfer money using their cell phones without having a bank account





Or SELCO, which provides solar energy at very low prices to over 125,000 households in remote Indian villages, debunking the myth that poor people can't afford clean technology



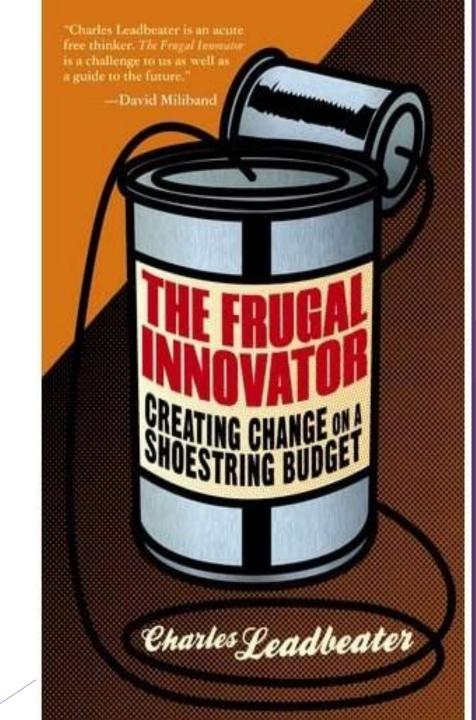
Unilever packages its washing detergents, shampoos etc in smaller single use sachets that consumers in developing and emerging markets can afford to buy, rather than bottles that could cost the equivalent of a week's wages or more. But in the wake of the Global Financial Crisis, this also proved popular in many countries in Europe.



The Dacia Logan is a family of automobiles produced and marketed jointly by the French manufacturer Renault and its Romanian subsidiary Dacia since mid-2004. Renault saw the need for a modern, reliable, but much more affordable car for some developing markets (the car has 50 per cent fewer parts). Renault then realized it could sell well in developed markets as well – and it has.

Innovation on a shoestring

- 'Reinventing' can be better than inventing use something that already works!
- These innovations are also more likely to spread, because people already understand them
- E.g. In Mexico, healthcare can be too expensive for many people. Pedro Yrigoyen set-up a call center (Medicall Home) for simple medical conditions. For \$5 a month, people can get basic medical advice
- The system earns a referral fee for people who need doctor/hospital care, part of which pays for discounted healthcare











INNOVATION

Student Inventor's Cheap, Portable Baby Incubator Wins Dyson Award

An innovative way to take care of premature babies in places with inadequate medical care has won a young inventor this year's Dyson Award.



https://www.nbcnews.com/tech/innovation/student-inventors-cheap-portable-baby-incubator-wins-dyson-award-n241251

Jobs to be done

"Make something people want"

- YCombinator's motto



Y Combinator teaches how to market their product, refine their teams and business models, achieve product/market fit, and scale the startup into a high growth business

Our job is to figure out what they're going to want before they do

- Steve Jobs

If I'd ask customers what they wanted, they would've told me a faster horse

People don't know what they want until you show it to them. That's why I never rely on market research.

- Henry Ford

The Jobs to be Done model

NOT

what features a customer might want to buy BUT

find out what job/outcome a customer is trying to accomplish

(what frustrates them),

and then develop something which helps
them achieve that

JOBS TO BE DONE

THEORY TO PRACTICE

ANTHONY W. ULWICK

FOREWORD BY ALEX OSTERWALDER

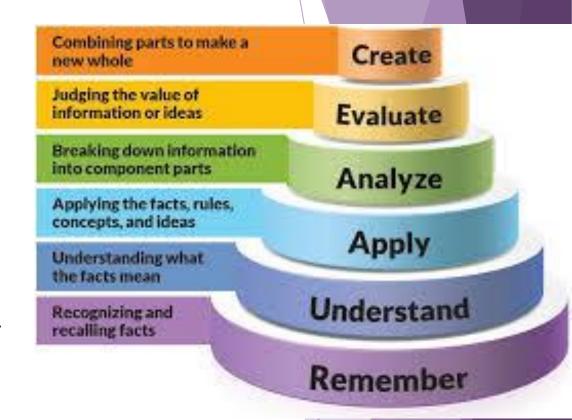
"I call him the **Deming of Innovation** because, more than anyone else, Tony has turned innovation, into a science." -PHILIP KOTLER

exam prep and practice

exam prep

no multiple choice questions (mcq)
- this is why

'A' students deserve an 'A' all students deserve to be evaluated on their ability, knowledge and skills



examples of types of exam questions

1. simple questions (3 minutes)

2. shorter questions (15 minutes)

3. essay-type questions (30 minutes)

example exam questions

simple questions (3 minutes each)

- 1. What is the term in innovation to describe how the old is being replaced by the new?
- 2. What innovation is "the process of transforming an expensive or highly sophisticated product or service into one that is more affordable, accessible and simpler"?

example exam questions

short question (15 minutes)

Why is the Internet a good example of creative destruction?

suggested answer length in an exam: write one or two paragraphs (15 minutes)

example exam questions

essay-type questions (30 minutes)

- Where does innovation come from? Give examples of ideas and opportunities
- 2. Give examples to explain what is creative destruction and why is it important.

suggested answer length in an exam: write for 20 to 30 minutes

Drucker's seven sources of innovative opportunity are 1. The unexpected, 2. Incongruities, 3. Process need, 4. Market structures 5. Demographics, 6. Changes in perception, meaning, or mood, 7. New knowledge

Thank you! any questions?