

تجربه های نوآوری در سیلیکان ولی  
(و نگاهی به دیگر کانون های نوآوری در جهان)

**Innovation Experiences in Silicon Valley**  
(And a look at other global innovation hubs)



The poster features a vibrant blue and green background with a stylized illustration of Silicon Valley buildings and tech logos like Oracle, Twitter, and YouTube. The title 'تجربه‌های نوآوری در Silicon Valley' is prominently displayed in white and red text. Below the title, two bullet points pose questions about Silicon Valley's status and innovation. A circular portrait of Hossein Raassi is shown next to his name and title. The event details, including date, time, and location, are listed in a white box. A QR code and a link are provided at the bottom, along with the logos for ZAVIE and Hamava.

سری سمینارهای چشم‌انداز

# تجربه‌های نوآوری در Silicon Valley

- چرا Silicon Valley کماکان به عنوان برجسته‌ترین کانون نوآوری جهان شناخته می‌شود؟
- چرا بازآفرینی Silicon Valley در نقاط دیگر جهان با مشکل روبه‌رو می‌شود؟

دوشنبه ۲۰ تیر ۱۴۰۱ ساعت ۱۴:۰۰ تا ۱۶:۰۰

تهران، میدان آزادی، اتوبان لشگری، بعد از ایستگاه مترو بیمه، کارخانه نوآوری آزادی، سالن همایش هم‌آوا

سخنران:  
حسین رآسی  
پژوهشگر فناوری‌های نوین

لینک ثبت‌نام:  
[evnd.co/SbfsE](https://evnd.co/SbfsE)

اسکن کنید

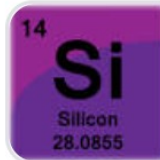
ZAVIE هم‌آوا

نخست، چند توضیح و تعریف

# Silicon or Silicone?

سیلیکان یا سیلیکون؟

- Silicon is a element or
- It's a metal nonmetals
- It's the second oxygen.



element



periodic table

and it is the 14th



Silicon - Wikipedia  
Wikipedia



Silicon: Mineral information, ...  
Mindat.org

metals and

's crust, after



Silicon			
atomic number	14	[28.064, 28.086]	atomic weight
symbol	Si		acid-base properties of higher-valence oxides
electron configuration	[Ne]3s <sup>2</sup> 3p <sup>2</sup>		crystal structure
name	silicon		physical state at 20 °C (68 °F)
Other nonmetals		Solid	
Diamond		Equal relative strength	



# Silicon or Silicone?

سیلیکان یا سیلیکون؟

- Silicone is a synthetic substance - an inorganic synthetic polymer.

Silicone

⋮





- Don Hoefler
- "Silicon Valley USA" in Electronic News
- January 11, 1971 issue



# Apple Park

A Silicon Valley Landmark



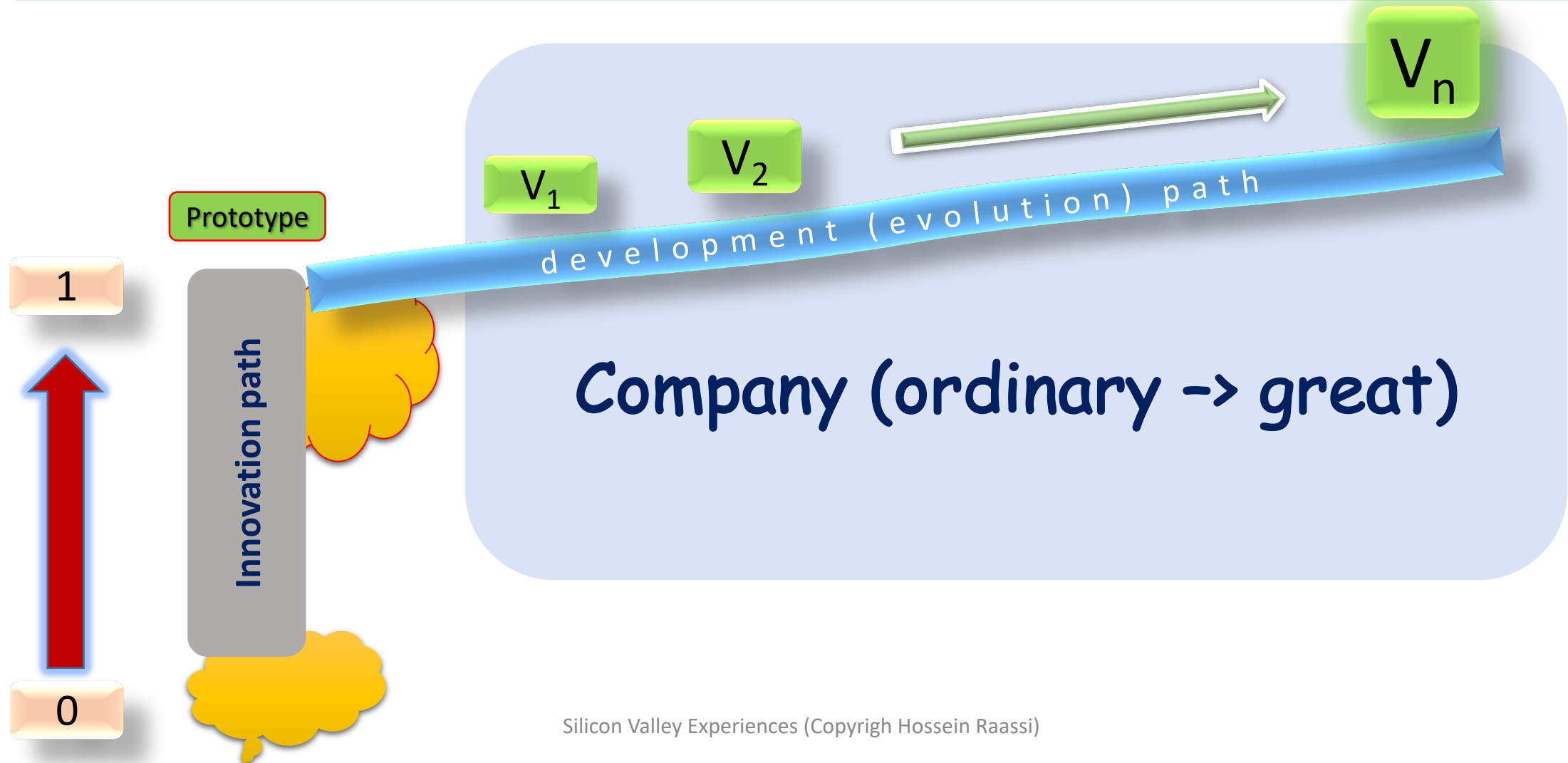
Silicon Valley Experiences (Copyright Hossein Raassi)

# Newer Thing vs. Building Anew vs. Innovation

چیز نو تر در مقابل از نو ساختن در مقابل نوآوری

- Newer Thing: Something a little cheaper, a little faster, a little more user-friendly, a little "better" in an existing market
- Building Anew: to rebuild something that already exist anew  
مهندسی معکوس، بازآفرینی، خودکفایی
- Innovation: a disruption, a paradigm shift, breaking barriers, exciting, amazing, controversial, shocking, patentable IP
- Not all startups are innovators, but the opposite is generally true

# Innovation: From zero to one, and beyond





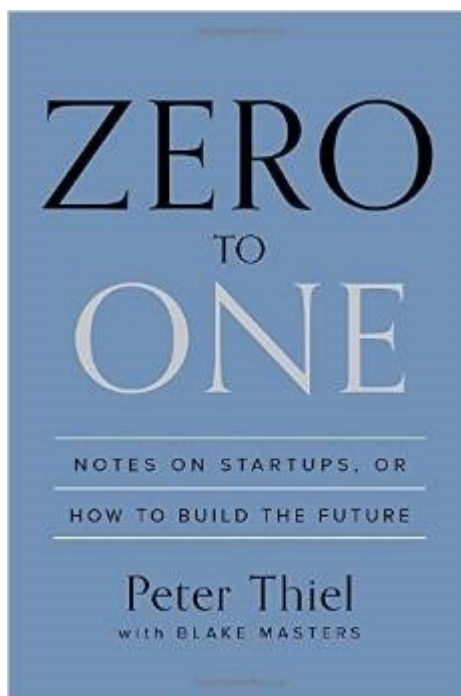
# Zero to One - the source

Peter Thiel

Entrepreneur, Author



**10 times better than the nearest competitor.**



# بحث اصلی

- "سیلیکان ولی" به عنوان برجسته ترین کانون نوآوری در جهان
- اکوسیستم و ذهنیت نوآوری در "سیلیکان ولی"
- تکرار "سیلیکان ولی" و ظهور دیگر کانون های نوآوری در جهان

# گلچین محدودی از برندهای جهانی در حوزه فناوری (بدون بازیگران حوزه های انرژی، خدمات مالی، اتوموبیل سازی، صنایع نظامی، و غیره)

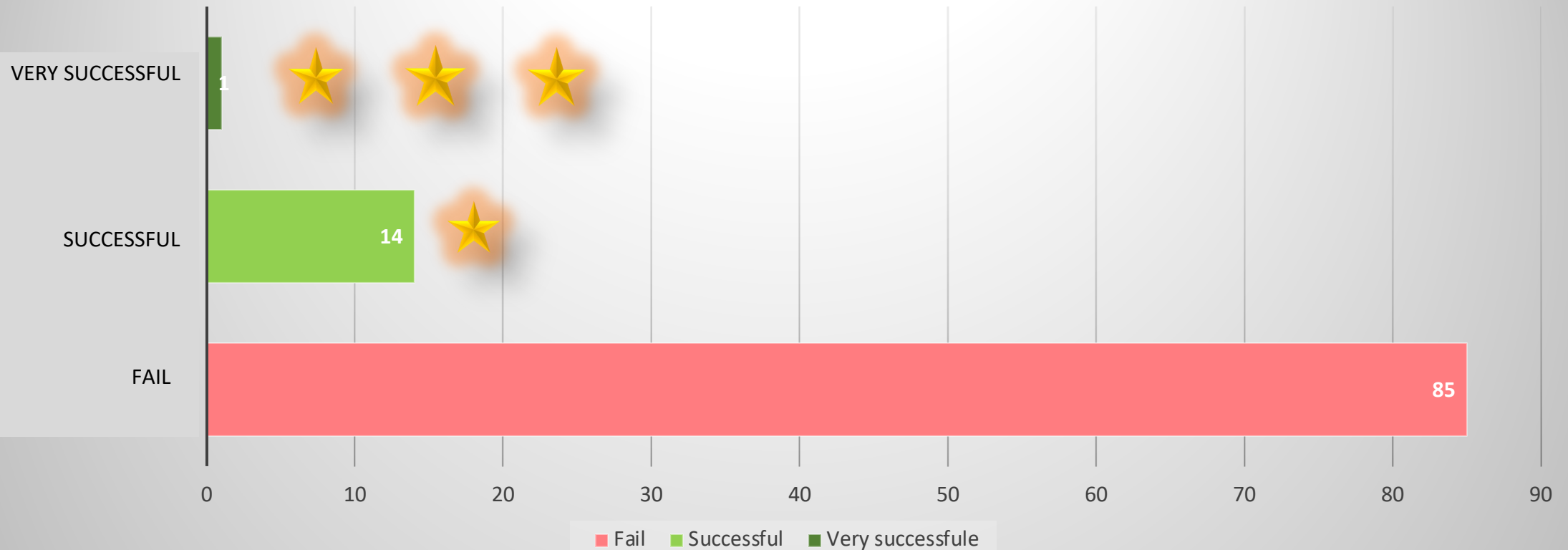
- تأسیس از 1939
- تعداد کارکنان از حدود 5000 تا 200000
- ارزش از 40 میلیارد دلار تا 2.9 هزار میلیارد
- حجم سرمایه گذاری در سال 2021 105 میلیارد دلار
- تا سال 2011، 27 شرکت چند صد میلیاردی دلاری در سیلیکان ولی فعالیت داشتند
- In 2021, Google, Apple, Amazon, Facebook, and Microsoft reported combined revenue of \$1.4T, about 10% of digital economy, and 1.6% of the world economy

# Economically speaking ...

## The Silicon Valley Model



### Startup success and failure rates





# The *Way* of Silicon Valley

# What about Silicon Valley?

- The Ecosystem
- The “Secret Sauce”
- The People, their mindset, and how they are still shaping the Ecosystem

# The Ecosystem



- Top universities (Stanford, UC Berkeley, UCSF, etc.)
- Public research centers and commercial labs (IBM Almaden Lab, NASA's Ames Research Center, UC Berkeley Emerging Technologies Research Center, Ericson D-15 Labs, Altos Labs, etc.)
- Constructive role of the government – minimal regulations, no bureaucracy
- A large pool of diverse, exceptionally talented, and motivated workforce in search of fame and fortune
- Destination and haven for new immigrants with big dreams
- Access to plentiful VC money + experience
- Vital role of visionaries and mentors
- Global competitiveness

# The Ecosystem



- Marketing & sales wizardry
- Inspired to “change the world” – it’s an obsession
- Uncompromising leadership – discipline coexisting effectively with freedom of thought and expression
- No nonsense teamwork, great attitude, laser sharp focus
- Confronting (and managing) change, decisively
- Professional networks and fora (forums) – the network effect
- Specialist support system (bankers, lawyers, accountants, incubators, accelerators, angel investors, etc.)
- Beautiful climate, outstanding quality of life
- Solid work ethics, obsession for deadlines, 70-80 hour work weeks are common

# The Secret Sauce



**Dare to risk**  
جسارت ریسک

**The power of  
imagination**  
نیروی خیال

**Learning  
through failures**  
درس از ناکامی ها



# The People of Silicon Valley

## ۳۰ سال پیش

ش در

- Social Media  
comput  
Metave
- VC inve



- اینترنت
- iPhone
- شرکت اپل
- Cloud
- \$,

My interview at Network Appliance

# What do you want to do?

Dave Hitz

Co-founder, NetApp Corporation



میخواهم دنیا رو متحول کنم.

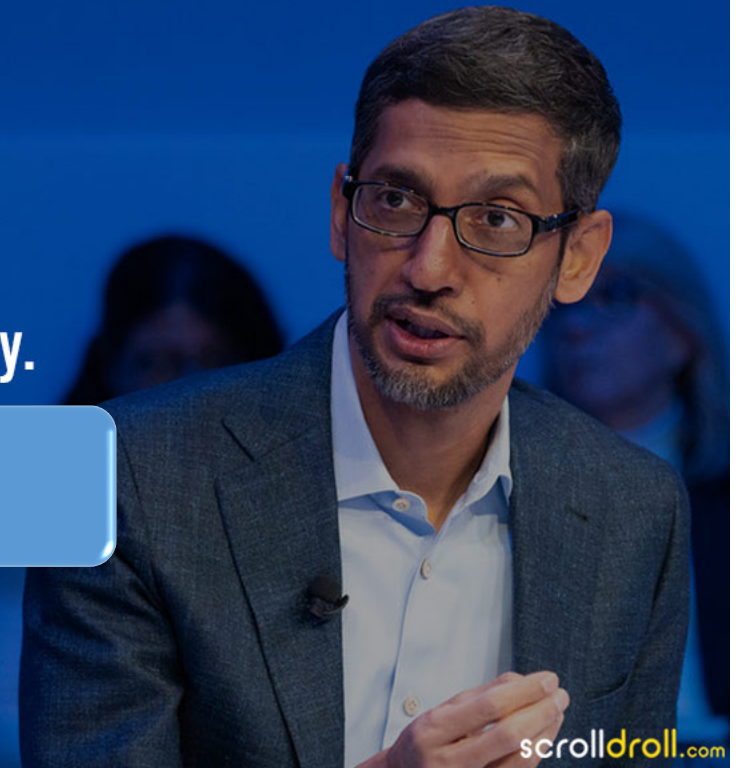
# On changing the world

Sundar Pichai

CEO, Alphabet (Google)

We try to work  
on things which  
billions of people  
will use every day.

میخواهیم دنیا رو متحول کنیم.



# On changing the world

Mark Zuckerberg

Founder & CEO, Meta Platforms (Facebook)

**We are running the company to serve  
more people.**

**میخواهیم دنیا رو متحول کنیم.**





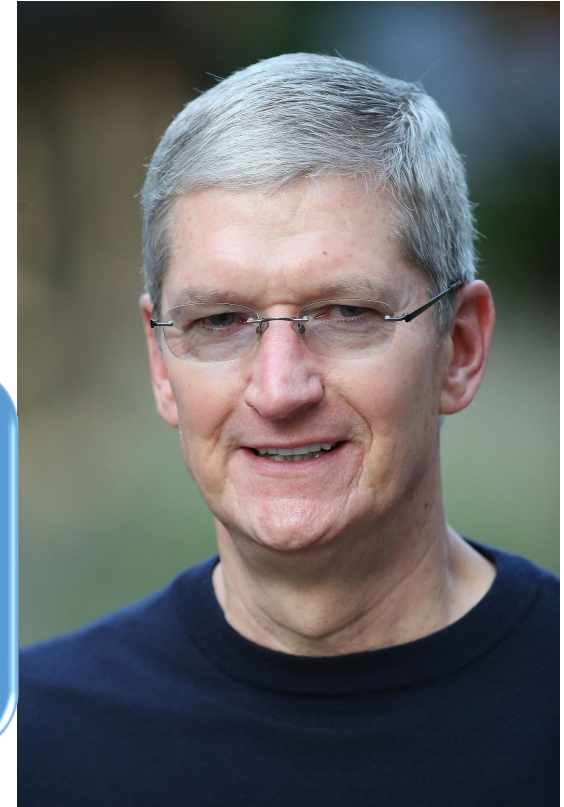
# On changing the world

Tim Cook

CEO, Apple Computer

Our goal has never been to make the most. It's always been to make the best.

میخواهیم دنیای بهتری بسازیم.



# On changing the world

Justin Rosenstein

Co-founder, Asana



Technology, community, and capitalism combine to make Silicon Valley the potential epicenter of change at an unprecedented scale and rate.

# On changing the world

Michael Arrington

Tech Editor

It doesn't matter how old you are, what sex you are, what politics you support or what color you are. If your idea rocks and you can execute, **you can change the world** and/or get really, stinking rich.



# Global competitiveness

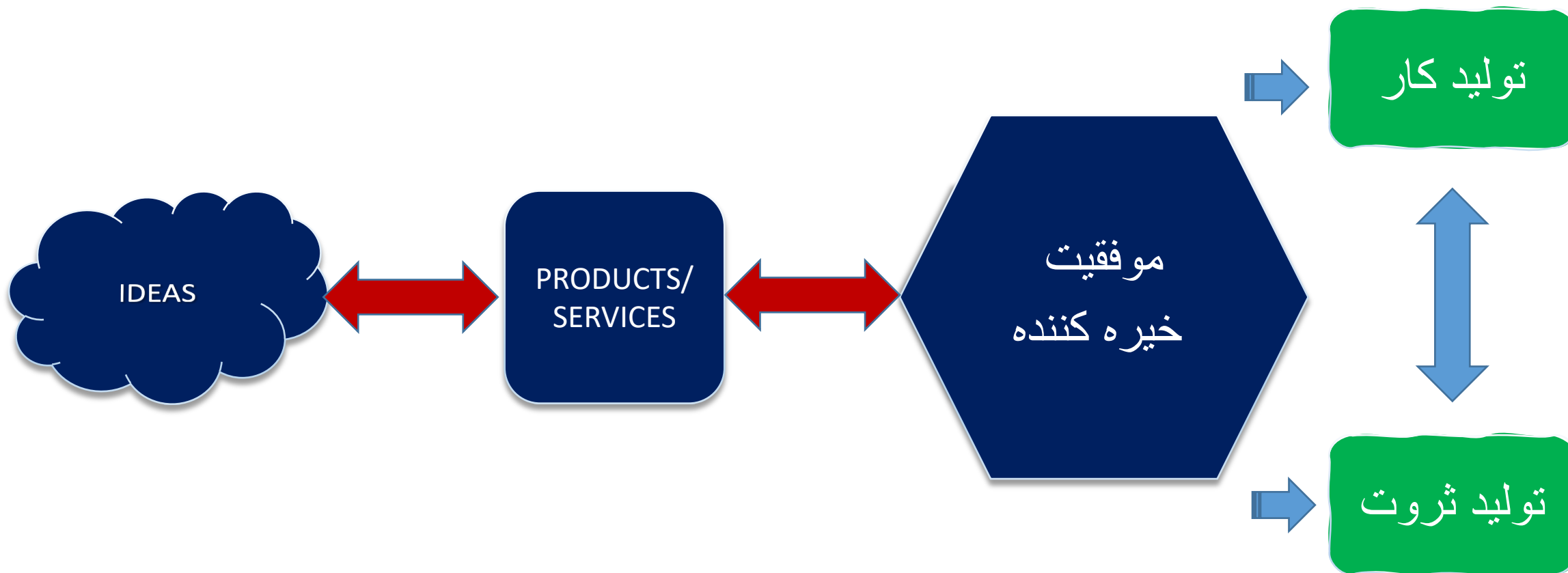
The world is our market



Silicon Valley Experiences (Copyright Hossein Raassi)

# Marketing & Sales Wizardry

Customers will not come just because you build it



# Marketing & Sales Wizardry

Customers will not come just because you build it



# Uncompromising leadership

Dan Warmenhoven

Former CEO, NetApp Corporation



**Lead, follow, or get the hell out of the way.**

- George Patton

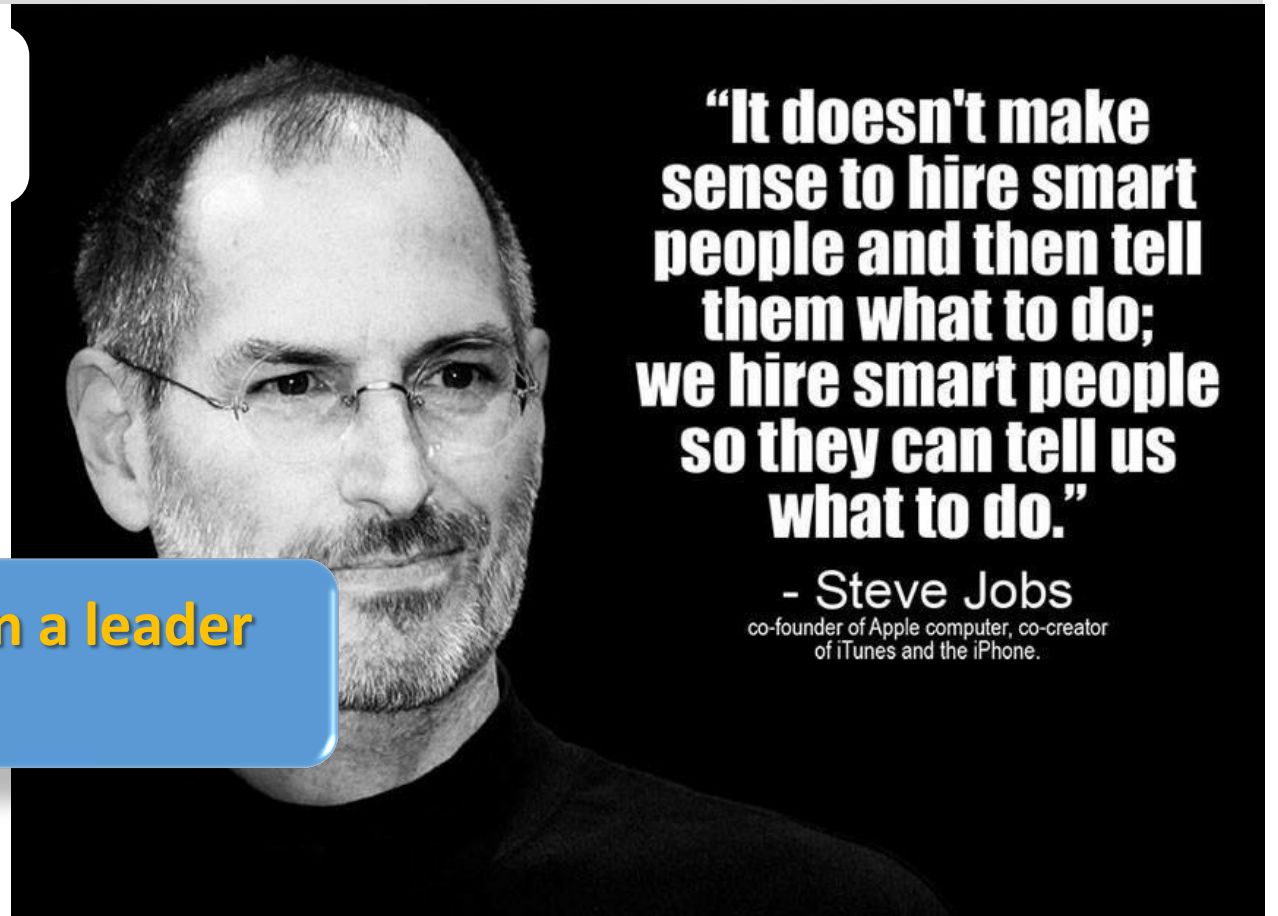


# Uncompromising leadership

Steve Jobs

Co-founder, Apple Computer

**Innovation distinguishes between a leader  
and a follower.**



**“It doesn’t make sense to hire smart people and then tell them what to do; we hire smart people so they can tell us what to do.”**

**- Steve Jobs**  
co-founder of Apple computer, co-creator of iTunes and the iPhone.

# Uncompromising leadership

Sheryl Sandberg

COO, Meta Platforms

Leadership is about making others better as a result of your presence and making sure that impact lasts in your absence.



# Uncompromising leadership

Sundar Pichai

CEO, Alphabet (Google)



**“ As a leader, It is important to not just see your own success, but focus on the success of others.**

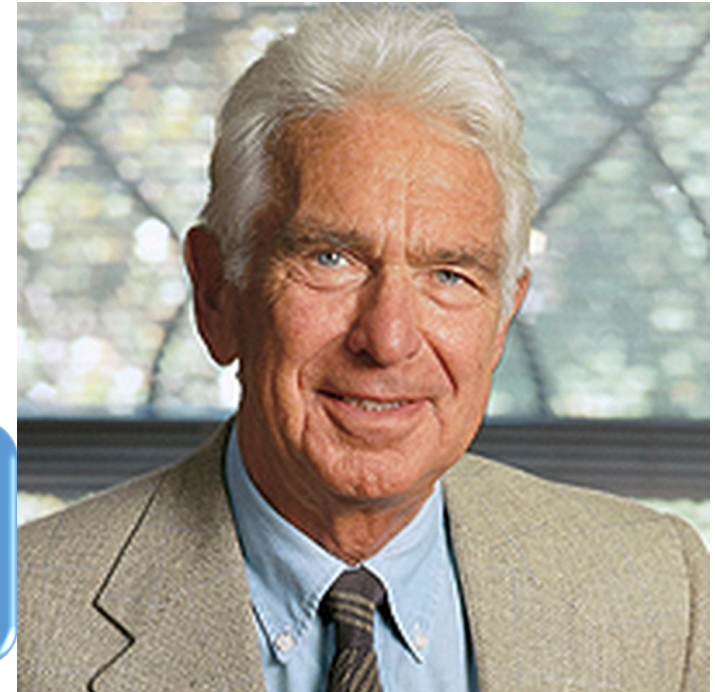
**Sundar Pichai CEO of Google**

# Uncompromising leadership

Warren Bennis

Author, Leadership Mentor

**Leadership is the capacity to translate vision into reality.**



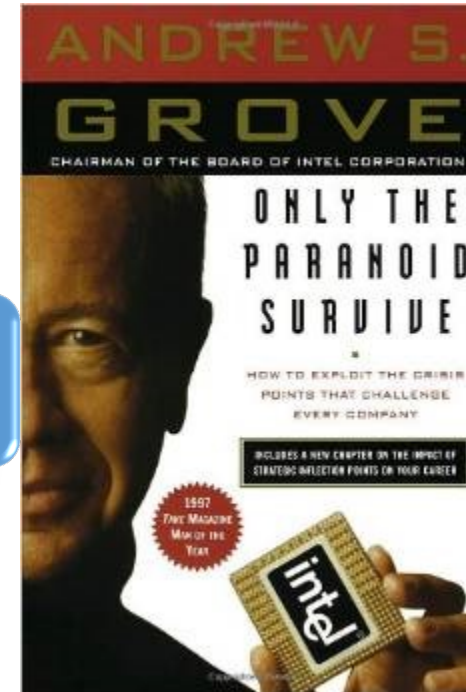
# On managing change

Andy Grove

Former CEO, Intel

Change happens “at the speed of light”.

You only have to be right once to make it all worthwhile.





# On managing change

Dara Khosrowshahi

CEO, Uber



Any time there's significant change, there's going to be some people who embrace the change and others who are against the change.

# On managing change

John Chambers

CEO, Cisco Systems





# On managing change

Drew Houston

Co-founder, Dropbox

**You must maximize the probability that tomorrow someone will show up at your door with a solution to the problem you are killing yourself to solve.**



# Risk-taking culture

Nothing is impossible

Larry Ellison  
Founder, Oracle

**We are at war with our competition.  
We're gonna win or lose big.**

**You either move very quickly and you work hard to improve your technology, or you get destroyed by some other company.**



# Risk-taking culture

No risk, no reward

Mark Zuckerberg  
Founder, Meta Platforms



**The biggest risk is not taking any risk.**

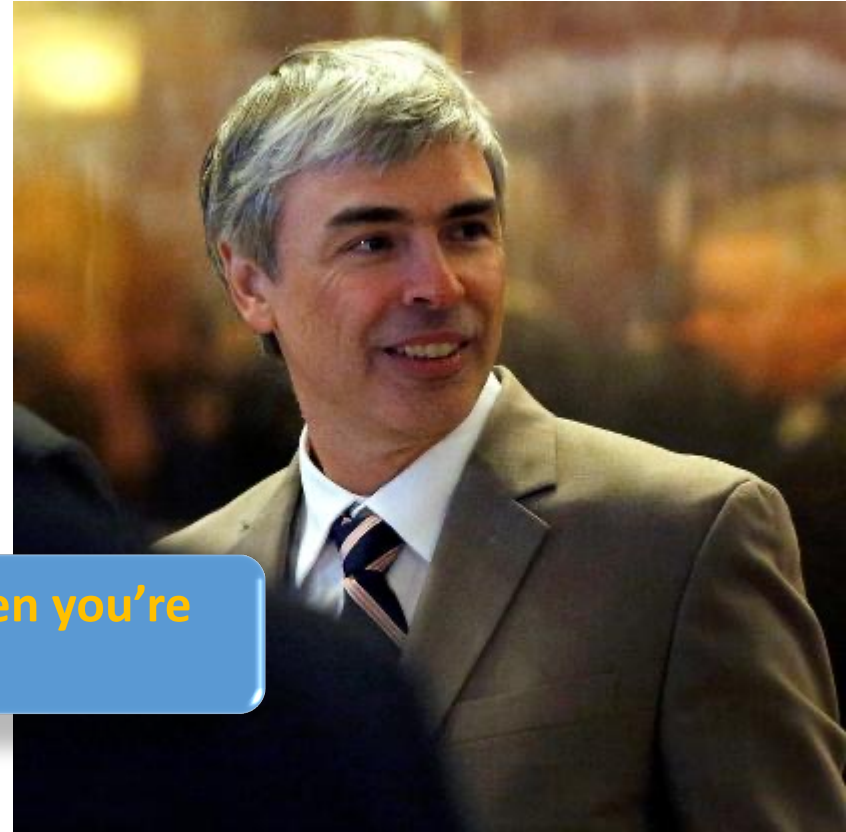
# Risk-taking culture

## Completely out of the box

Larry Page

Co-Founder, Google

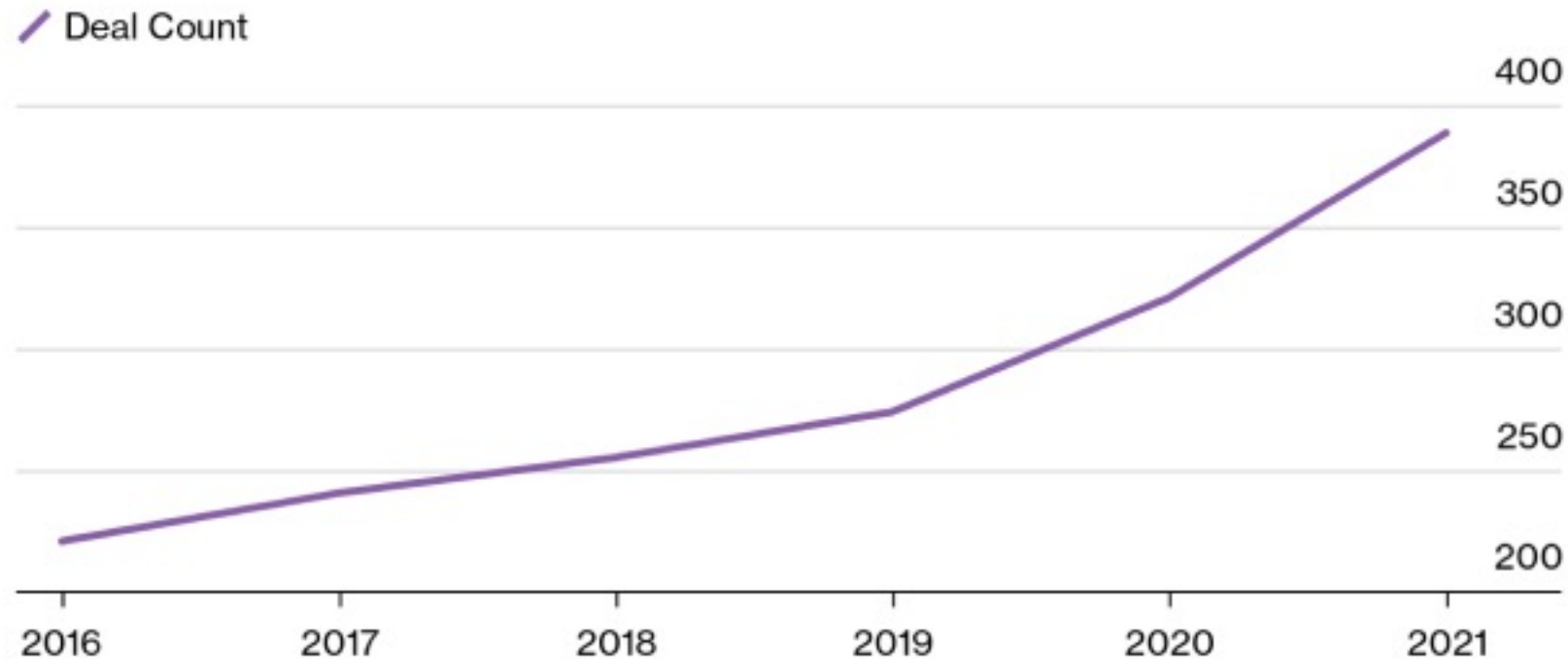
If you're not doing some things that are crazy, then you're doing the wrong things.



# Risk-taking culture

Abundance of M&As فراوانی ادغام و مالکیت

## M&A and Investment Activity of Top 150 Silicon Valley Firms



Source: Bloomberg as of May 16, 2022. The data include all pending and completed M&A and investment deals involving the firms on the 2022 Fenwick - Bloomberg Law SV 150 List announced between Jan. 1, 2016 and Dec. 31, 2021.

# The meaning of 'failure'

Elon Musk

Serial entrepreneur



**Failure is an option here. If things are not failing, you are not innovating enough.**



# Failure and innovation

Age-old, time-tested business philosophy

## Jeff Bezos

Founder, Amazon.com

Failure and invention are inseparable twins. To invent you need to experiment. And if you know in advance it's going to work then its not an experiment.





# The power of imagination

Pushing the boundaries

## Satya Nadella

CEO & Chairman, Microsoft



One of the key things in the tech business, in particular, is that you need to be able to push boundaries.

# The power of imagination

Science fiction comes to life

Jensen Huang

CEO, nVidia



Virtual reality, all the AI work we do, all the robotics work we do – we're as close to realizing science fiction as it gets.

# The power of imagination

A boundless source of imagination

Brian Chesky

Co-founder, Airbnb



Think of the imagination as a giant stone from which we carve out new ideas.

# The power of imagination

An endless source of inspiration

Jack Dorsey

Founder, Twitter



Despite all that we have accomplished, Twitter still has huge unmet potential.

# 70-80 hour work weeks



سحر و جادو نیست.

قدری هوش و ذکاوت + قدری همت + عرق جبین و کد یمین.



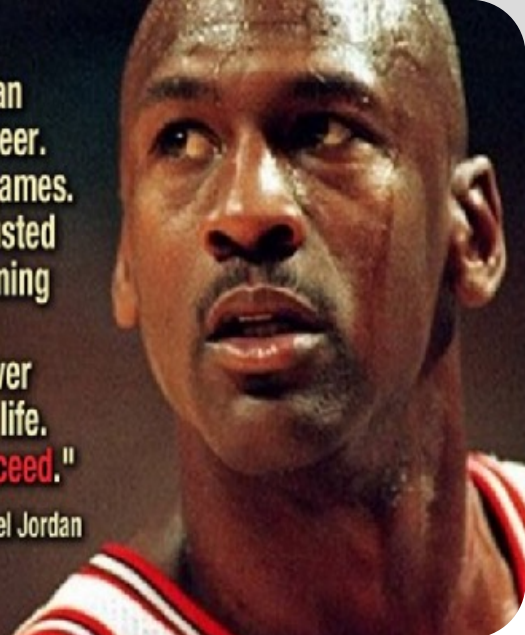
***A few words of  
inspiration***



# The meaning of 'failure'

Michael Jordan

Basketball Legend

A close-up photograph of Michael Jordan looking upwards with a focused expression.

"I've missed more than  
9,000 shots in my career.  
I've lost almost 300 games.  
26 times I've been trusted  
to take the game winning  
shot and missed.  
I've failed over and over  
and over again in my life.  
**And that is why I succeed."**

~ Michael Jordan

"Success is the ability to go from one failure  
to another with no loss of enthusiasm."

- Winston Churchill



# Power of imagination

Be inspired, relentlessly pursue your dream

## Martin Luther King

Civil Rights Leader & Visionary

**The only true failure is failing to  
pursue your dreams.**



# The power of innovation, the magic of imagination

John Lennon

Music Legend



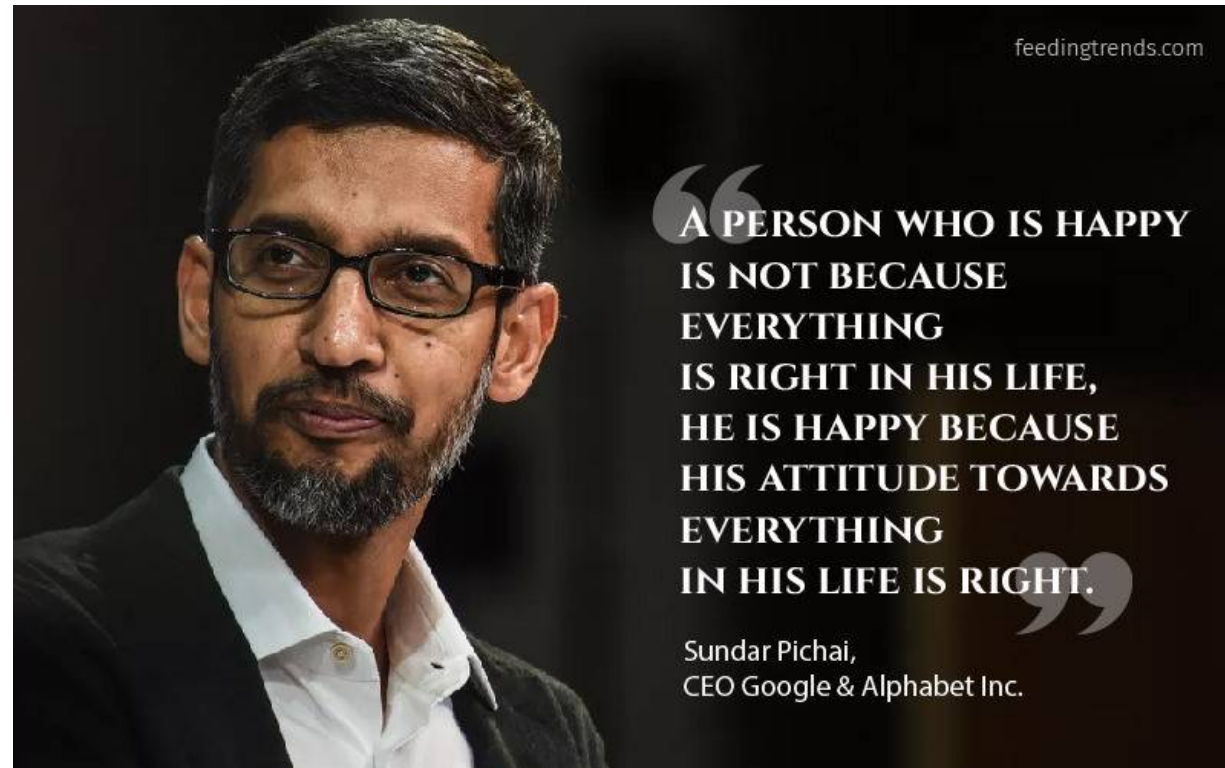
- *"Nothing is, unless first a dream."*  
- Carl Sandberg
- *"Vision without execution is hallucination."*  
- Thomas Edison
- *"The only thing more powerful than knowledge is imagination."*  
- Albert Einstein

# A great attitude



Sundar Pichai

CEO, Alphabet (Google)



Where does all the money go?

- Social responsibility
- The spirit of philanthropy
- The power of giving

# The spirit of philanthropy

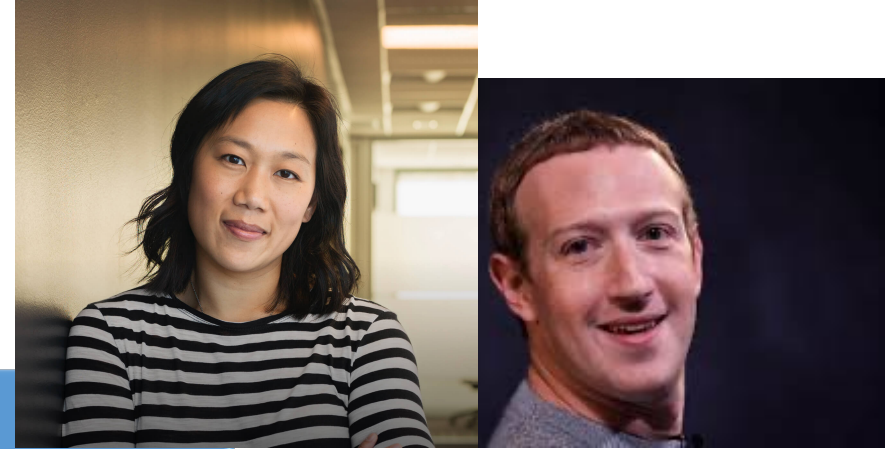
## Bill & Melinda Gates Foundation



Is the rich world aware of how four billion of the seven billion live? If we were aware, we would want to help out, we'd want to get involved.

# The spirit of philanthropy

Chan Zuckerberg Initiative



**A future for everyone.**





# The spirit of philanthropy

Pierre Omidyar Network



**Real change requires reimagining what is possible.**

و در یک کلام ...

**Silicon Valley is a mindset,  
not a location.**

سیلیکان ولی یک ساختار فکری و ذهنیت است،  
نه یک مکان و موقعیت جغرافیایی.

# A look at other global innovation hubs



# What do you want to do?

Dave Hitz

Co-founder, NetApp Corporation



میخواهم دنیا رو متحول کنم.

# Democratization of technology

## Silicon Valley's biggest achievement

- World-wide spread of high speed Internet, smart mobile devices, Cloud computing, and freely available developer tools
- Customers can now be served everywhere from anywhere, and starting a company has never been easier
- Innovation hubs are popping up everywhere
- Silicon Valley continues to keep the #1 spot on all lists

# Top 25 global innovation hubs

## Innovation Geographies 2022 Global Top 25

### Innovation

1 San Jose	9 London	17 Toronto
2 Tokyo	10 Seattle	18 Berlin
3 San Francisco	11 Shanghai	19 Austin
4 Boston	12 Singapore	20 Stockholm
5 New York	13 Shenzhen	21 Munich
6 Seoul	14 Los Angeles	22 Osaka
7 Paris	15 San Diego	23 Chicago
8 Beijing	16 Tel Aviv	24 Helsinki
		25 Raleigh-Durham

### Talent concentration

1 San Jose	9 Seattle	17 Sydney
2 Boston	10 Berlin	18 Toronto
3 San Francisco	11 Stockholm	19 New York
4 London	12 Zurich	20 Raleigh-Durham
5 Tokyo	13 Copenhagen	21 Seoul
6 Beijing	14 Brussels	22 Denver
7 Washington DC	15 Paris	23 Calgary
8 Austin	16 Dublin	24 Hong Kong
		25 Amsterdam

● Americas ● EMEA ● Asia Pacific

Source: JLL, 2022

San Jose, or Silicon Valley, tops the ranks for both innovation and talent concentration. Image: JLL 2022

## Multi-horned hubs

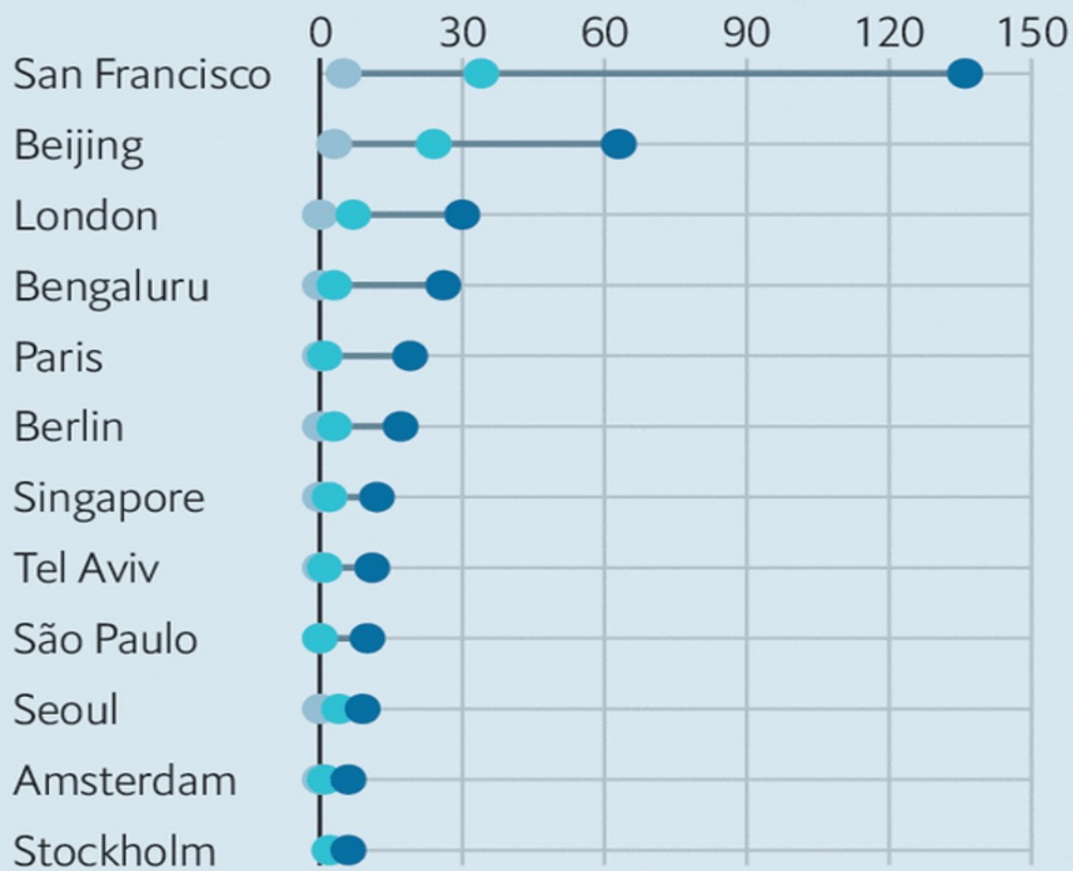
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Top 12 cities\* by number of unicorns†

● 2011

● 2016

● 2021

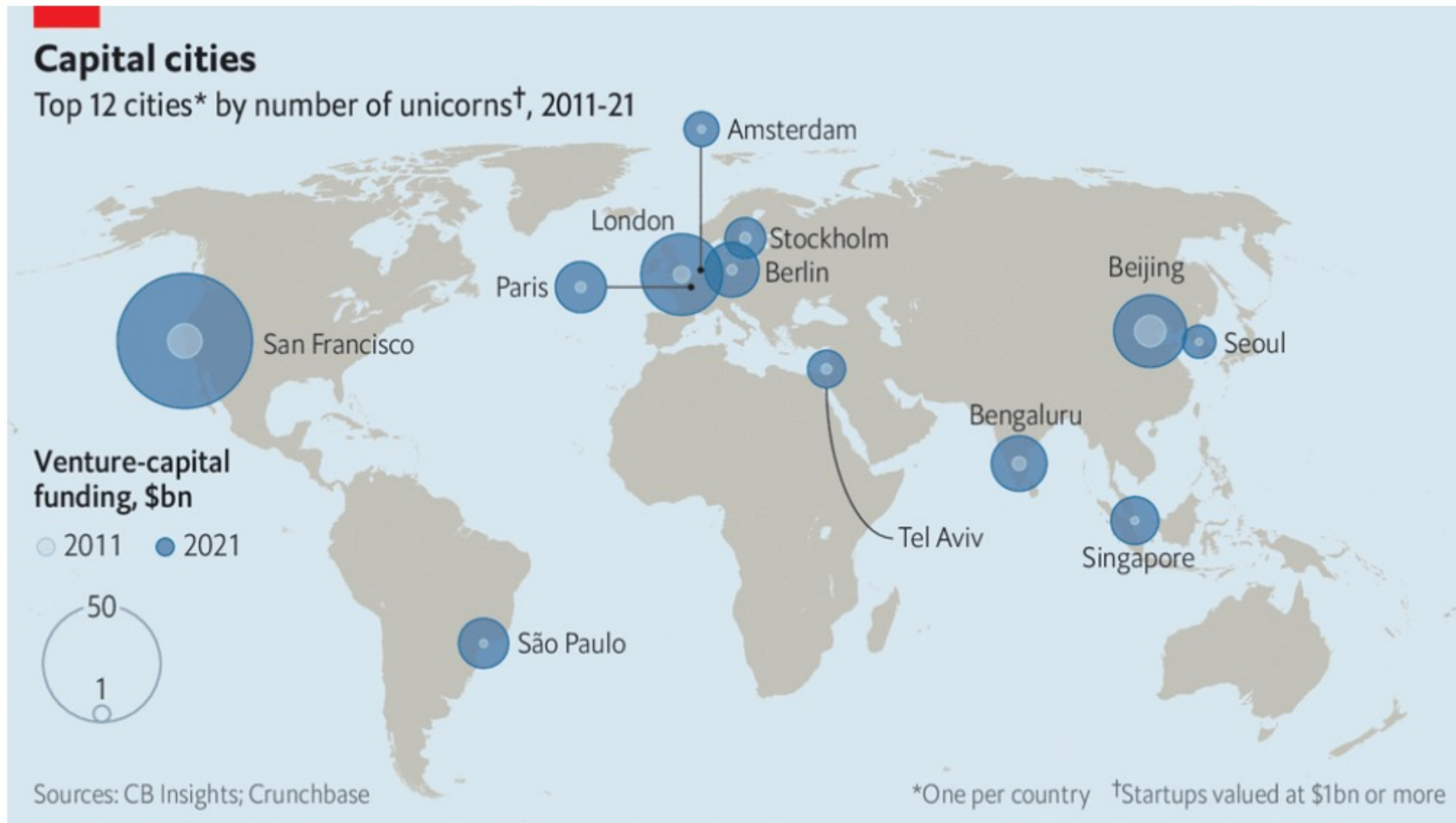


\*One per country

†Startups valued at \$1bn or more

Source: CB Insights

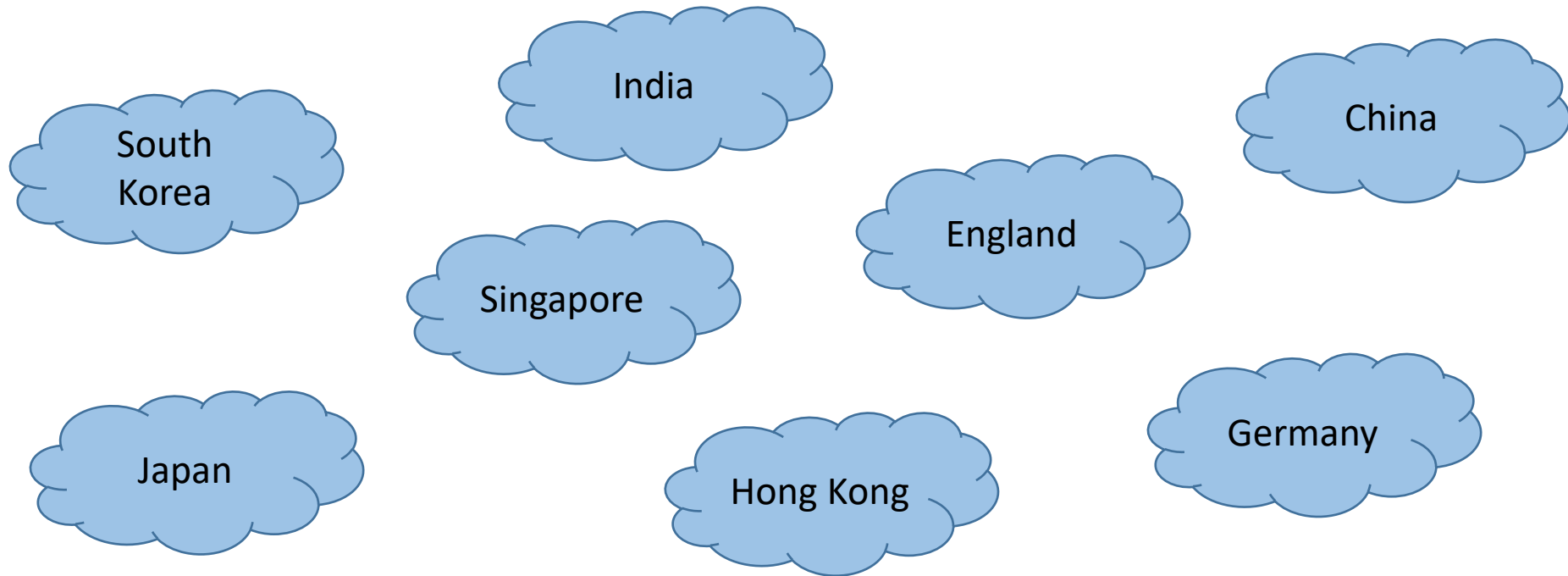




The Economist

# What next?

Where will the next Apple, Google, Facebook emerge from?



## Last word and some food for thought ...

- پرسش فلسفی/اخلاقی: آیا همه نوآوری ها لزوما منجر به بهبود کیفیت زندگی می شوند؟ اگر می شوند به چه بهایی؟ و اگر نمی شوند چه هزینه ها و آسیب ها و خطراتی را به بار می آورند؟

- آیا فقط کاشفان و مخترعان نوآور محسوب می شوند؟ آیا نهایتا تنها کسانی که جایزه نوبل یا افتخارات مشابه دریافت می کنند نوآوران واقعی هستند؟

Last word and some food for thought ...



بنی آدم اعضای یک پیکرند ...

# Innovation and your future

***“The future is a canvas of your imagination.”***

آینده، بوم نانگاشته نیروی خیال شماست.



Silicon Valley Experiences (Copyright Hossein Raassi)

# The Secret Sauce



**Dare to risk**  
جسارت ریسک

**The power of  
imagination**  
نیروی خیال

**Failure is OK**  
تحمّل ناکامی



بیا تا گل برافشانیم و می در ساغر اندازیم

فلک را سقف بگشاییم و طرحی نو در اندازیم

سیاسگزارم



# Dare to risk

- Michael Bloomberg
- Being an entrepreneur isn't really about starting of looking at the world: seeing opportunity where obstacles, taking risks when others take refuge. way

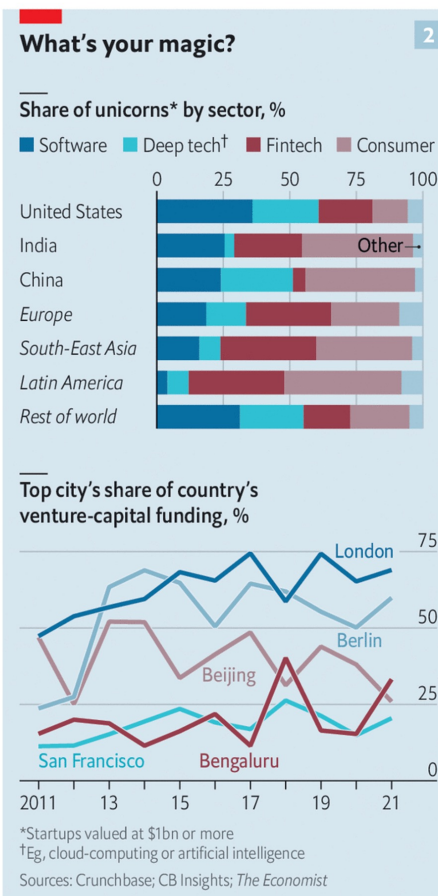


# No nonsense teamwork: A win-win situation

Peter Thiel, Entrepreneur



Silicon Valley, at its best, creates a situation where everybody can be a winner.



- Japan will change. Let's create a country where innovation is constantly happening, giving birth to new industries to lead the world, when I visit Silicon Valley I want to think about how we can take Silicon Valley's ways and make them work in Japan.
- — [Shinzo Abe](#)
- The Internet is the great equalizer. The technology which emanated from the Silicon Valley of California has more potential to ameliorate social inequality than any development in the history of the world, including the industrial revolution.
- — [Benazir Bhutto](#)
- **Distribution may not matter in fictional worlds, but it matters in most.**

- Talent alone is not enough. Japan has the brains to produce global tech giants – Sony, and more recently Rakuten. But not enough capital to nurture a vibrant startup scene, and only around 8% of Japanese are fluent in English.
- The second critical factor is ‘openness to people and ideas’. Around 60% of America’s most valuable tech companies have been started by immigrants or their children.
- Benglarulu illustrates how talent and openness combine to create startup magic.
- The third critical factor: the presence of local risk capital.



- نگاهی به بیرون از حوزه فناوری: دوچرخه سوار، آن نوجوان روستایی که در یکی از محروم ترین روستاهای بنگلادش تلمبه ای میسازه که ۲۵٪ در مصرف آب صرفه جویی میکند، یا آن دو جوان هندی که یک روستای دورافتاده کارگاه تبدیل فضولات به کود و حتی صادرات آن را، یا آن پژوهشگری که واکسن، دارو یا تراپی و یا متدهای جدیدی برای مقابله با پاندمی ها و یا درمان سرطان و افسردگی و آلزایمر و بازسازی نخاع و عصب های از بین رفته ....