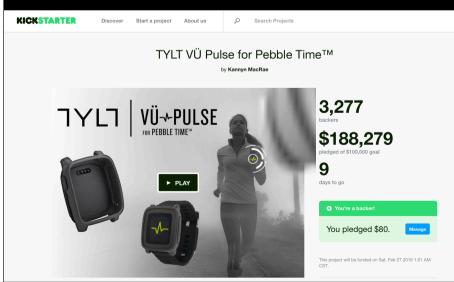
The HKU Entrepreneurship Academy 2016 Innovation and Entrepreneurship Turning Ideas into Reality

Professor Paul Y S Cheung Director of Technology Transfer The University of Hong Kong

18 February 2016

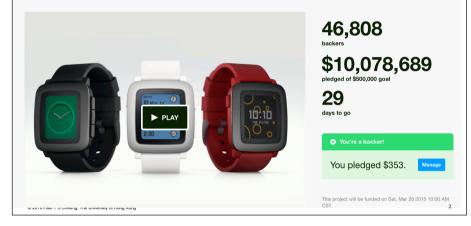






What I did 1 Year Ago

Pebble Time - Awesome Smartwatch, No Compromises



Policy Address 2016



\$2 billion to support applied mid-stream research

> \$2 billion for Technology Venture Fund

Policy Address 2016



\$500 million for Innovation and Technology Fund for Better Living

\$200 million to support ITC start-ups at Cyberport

Elon Musk @ StartMeUpHK



Policy Address 2016

Increase floor space at Science Park Double free wi-fi hotspots to 34,000 in 3 years



Agenda

- Innovation, Entrepreneurship & technopreneurship
- Examples of entrepreneurship that changed the World
- Is technology innovation really important in the new knowledge economy?
- Entrepreneurship Academy : Your first step in learning how to build a business with your innovation and invention

Imagine ...



LET'S SAY YOU'RE IN YOUR 20S

and you start your first Internet company. Let's say 21 months later you sell it for \$1.65 billion (USD).

Would you like that? Is this possible?

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Disruptive Innovations that result in "Paradigm Shift"

- Electricity and light
- Steam engine and automobile
- Telephone and telecommunication
- Airplanes and flying
- Computers and personal computers
- Vacuum tube, transistors, electronics, radio and TV
- Microelectronics and VLSI
- Mobile phone, Internet and WWW
- Biotechnology and modern medicine
- Nanotechnology
-

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Knock-on Effect - A New Age of Marketing



Psy – Gangnam Style



PSY - GANGNAM STYLE(강남스타일) M/V



2,490,392,953

10,326,975 🏓 1,420,755

- Unknown before 15 July 2012
- One single MV on Youtube and Internet
- #1 on Youtube in its entire history (double view compared with #2)
- 2,490 M views as of 5 Jan 2016 ~ 2M views/ day for 1,269 days

Taobao and Tmall – Nov 11, 2015



8 Innovative Industries China Does Better (Forbes Asia – Ana Swanson 30/11/2014)

- 1. Micropayments (Tencent, Alipay)
- 2. E-Commerce (Alibaba, Apple 13 stores, \$9.3B)
- 3. Delivery Services (SF Express!)
- Online Investment Products (Yu'e Bao, \$65B in 8 month, 5% interest)
- 5. Cheap Smartphones (Xiaomi 7.2M, 18.7M, 60M!)
- 6. High-speed Rail (7,000 miles @ 124 mph)
- 7. Hydro-electric Power (11/25 largest plant)
- 8. DNA Sequencing (BGI 50% global capacity)

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Tencent (0700.HK)

Tencent Shares Gallop, Making Pony Ma China's Richest Man

By Bloomberg News | Jan 16, 2014 5:47 PM GMT+0800 | 0 Comments 🛎 Email 🙃 Print

Ma Huateng, chairman of **Tencent** (700) Holdings Ltd., became China's richest man after shares in the Internet messaging company he co-founded leaped to a record.

The 42-year-old Ma, whose English name is Pony, has a net worth of \$13 billion, according to the Bloomberg Billionaires Index. The title for China's wealthiest person changed hands twice in 2013. Beverage billionaire Zong Oinghou was colpeed in August by Dalian Wanda Group property and entertainment mogul Wang Jianin.

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- Market Cap: HK\$1.31T (HK\$1T for HSBC!)
- Pure Internet-play company
- Ride on the paradigm shift
 QQ.com: WeChat: QQ
- QQ.com; WeChat; QQ Game; e-Commerce
- Moving into logistics (to support e-Commerce and banking)

Robin Li, founder of the search engine Ma Huateng, chairman and chief exe Baidu Inc. edged Wang in December. English... Read More

Entrepreneur - Definition

Oxford Dictionary: Comes from French word 'entreprendre' - Individuals who undertake the **risk** of **new ventures**

"Entrepreneurs are economic agents who transform resources into goods and services, thereby creating an environment conducive to industrial growth" *Principles of Economics*, Carl Menger, 1871

"Entrepreneurship is a creative destruction force that sees the destruction of usual ways of doing things by the introduction of new improved ways" Joseph Schumpeter, 1934

"The ability to **foresee potential** through changes in the economy, and to **act** on the **demand** thereby created" *Wealth of Nations*, **Adam Smith 1977**

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Entrepreneurship & Technopreneurship

Entrepreneurship is a mindset and a process, and the entrepreneur is an innovator who uses processes to challenge existing norms through combinations of new resources and methods in business.

"Entrepreneurship is a **discipline**, and like any discipline, it can be **learned**." **Peter Drucker**

Technopreneurs are entrepreneurs who use **technology** as their **driving force** in **transforming resources into goods and services**, thereby creating an environment conducive to economic growth.

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From Audio Oscillator to \$17.4Billion

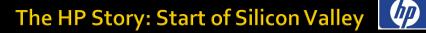
- Started in Dave Packard's Garage
- First Product HP200A Audio Oscillator, sold 8 to Walt Disney for testing their sound system
- 1961 listed on NYSE
- 1972 First HP pocket calculator
- 1976 Steve Wozniak left to form Apple
- 1984 Laser and inkjet printers
- 1980s Entered computer market
- 1997 2nd largest computer company
- 2016 –\$17.4B in Market Cap (~HK\$135B)



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 1939 Bill Hewlett and Dave Packard formed the company, Hewlett-Packard with \$538 capital



Genentech: Birth of Biotech Industry

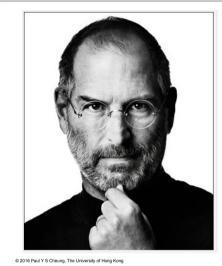




- Early 1970s, Boyer (Stanford) and Cohen (UCSF) pioneered recombinant DNA technique
- 1976, VC Robert Swanson and Boyer formed Genentech birth of the biotech industry
- Make medicines by splicing genes into fast-growing bacteria (E.coli) that produced therapeutic proteins e.g. human insulin, growth hormones
- 1980, raised \$35M from public offering
- 1990, \$2.1B merger with Roche
- 1999, \$5B public offering on NYSE
- 2009, sold remaining stocks to Roche for \$46.8B

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A Person who Changed the World with Technology



- Technology innovation
- Business innovation
- Marketing innovation
 - The person who stays hungry and stays foolish

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Apple Computer – Icon of Innovation

Innovation can turn a company round



Entrepreneur vs Manager

- Entrepreneurs are Hunters
 - Have broad vision cover a 'wide' territories
 - Usually creative and innovative, high energy level
 - Willing to take calculated risks
 - Can cope with failures and with self confidence
 - Possess exceptional perseverance to achieve
- Managers are Farmers
 - Willing to run (usually others) businesses
 - Very discipline and often conservative
 - Good judgment of when to make changes
 - Manage routines and market cycles (seasons)
 - Ability to change when necessary

US Entrepreneurship Statistics

- About 1 million start-up businesses each year
- 70 80% failed in first year
- 10 20% last through 5 years
- Venture success rate about 10%
- Venture capitalists expect 5X 10X
- Less than 20% funded start-up go public
- 60% VC funded high tech companies go bankrupt

WeLab – HK first significant Fintech Startup



Nature of Innovation

- Can be very broad in scope
 - Technology and tangible products
 - Services and processes
 - Social impact endeavour, arts and culture
- Sufficiently disruptive
 - "Me too" is not innovation
 - Incremental improvement has little competitive edge
- Solves real problems
 - Solutions begging problems are often useless
 - Innovation the addresses compelling needs is key to

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Innovation and Entrepreneurship

- Entrepreneurship and innovation are inseparable
 - Technology, business, social, cultural innovations are key to coping with changes and competitions
 - Needs the right mindset and corporate culture on innovation
 - Needs the right environment and eco-system for entrepreneurship & innovation
 - Business innovation provides competitive advantage to excel
 - Technology innovation provides longevity to sustain competitive advantage
 - Social and cultural innovation provides the 'meaning' for it all

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Attributes of Innovative People

- ambition, curiosity, perseverance, selfconfidence, passion about work, and the desire to be creative!
- early exposure to people who are comfortable in taking risks; peers who also take risks

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The Entrepreneurship Academy

Week	Торіс	Speaker
1 Feb 18, 2016 (Thurs) 5:15 - 6:30 pm RHT	Innovation and Entrepreneurship – Turning Ideas into Reality This session introduces the idea of Entrepreneurship, in particular, technology based entrepreneurship and the means for researchers to turn their inventions and innovations into commercial successes.	Prof Paul Cheung Director of TTO , HKU
2 Feb 25, 2016 (Thurs) 5:15 - 6:30 pm CPD-LG.08	The Making of a Business - A Network Perspective This session covers the basic concept of forming a business and its related issues such as company type and structure, business model and value proposition, operation and social network as a social capital for entrepreneur.	Dr Gilbert Y Y Wong School of Business, HKU
3 Mar 3, 2016 (Thurs) 5:15 - 6:30 pm CPD-LG.08	The 5 Dynamics of Entrepreneurship This session studies the 5 Dynamics of Entrepreneurship which include the personal operating system of the entrepreneur, the product and/or service being offered, the garage team that drives the opportunity forward, the culture of the startup company and the set of indispensable management tools which are commonly overlooked.	Dr Saimond Ip CEO, OnePort Limited

The Entrepreneurship Academy

4 Mar 17, 2016 (Thurs) 5:15 - 6:30 pm CPD-LG.08	Learning about intellectual property for startups Intellectual property rights (IPRs) allow innovative entrepreneurs to commercialise, manage and trade their creative, inventive and innovative intellectual output. It is extremely important for startups to understand the different types of IPRs and how they fit into their business model.	Dr Frank Wan Venture Capitalist in Biology; Director of Versitech Ltd, HKU
5 Mar 24, 2016 (Thurs) 5:15 - 6:30 pm CPD-LG.08	Sharing economy This session covers the concept and principles of sharing economy, its related issues such as value creation and zero sum game. Case studies on Uber, Airbnb and Carshare will be discussed.	Dr Dominic Chan, Founder and Partner, Dark Horse Investment
6 Mar 31, 2016 (Thurs) 5:15 - 6:30 pm 3/F, Citicorp Centre, 18 Whitfield Road, Tin Hau	Outing to CoCoon - Introduction by CoCoon - Sharing by HKU Alumni Entrepreneurs Club - Sharing by TSSSU@HKU Awardees	Representative from CoCoon Representative from HKUAEC Dr. Miles Wen, Accosys Limited Mr. Leon Kong, Comma Technology Limited Dr. Data Ng, Printact Limited

The Entrepreneurship Academy

7 Apr 7, 2015 (Thurs) 5:15 - 6:30 pm CPD-LG.08	Creating Startup Success - Business Model Design and Entrepreneurial Leadership Do you have what it takes to become an entrepreneur? This session explores the traits that will help you.	Prof Simon Lam School of Business, HKU
8 Apr 14, 2016 (Thurs) 5:15 - 6:30 pm CPD-LG.08	Transforming Technologists into Entrepreneurs This session explains the importance of protecting your unique innovations and inventions which can ensure your competitive advantage in the marketplace	Mr K.O. Chia President, HK Venture Capital & Private Equity Association; Director of Versitech Ltd, HKU
9 Apr 21, 2016 (Thurs) 5:15 - 6:30 pm CPD-LG.08	Know How to Count – A Crash Course in Accounting Basics This session covers the means to measure and report the financial aspect of a business, such as how to understand various kinds of financial statements, in addition to the important subject of cash flow management.	Dr Sammy Fung School of Business, HKU
10 Apr 28, 2016 (Thurs) 5:15 - 6:30 pm CPD-LG.08	Financing and Fund Raising – Experience of WeLab This session covers the journey of the corporate growth at WeLab and their fund raising process from seed to series B financing.	Mr Simon Loong CEO and Co-Founder, WeLab Limited

Other Programmes

- TSSSU@HKU 2016
- DreamCatchers 100K Competition : Info Session 1 & 7 March
- Innovation and Entrepreneurship Commons : to come soon
- Startup Salad : 4 6 March, HKU College Hall (III)
- Singularity University 2-day Conference : 15-16 Apr, HKU College Hall HKU (quota: 60)
- HKUAEC Alumni Entrepreneurs Club
- HKU CoCoon Connectors (free for EA members)
- CoCoon STEP Internship Programme
- More
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In Closing

"Some look at things that are and ask why. I dream of things that never were and ask why not?"

George Bernard Shaw

"Entrepreneurship mentality is NOT for startup only, it is for EVERYONE – it is a state of mind and being, an attitude, a spirit."

Paul Cheung

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Thank you! Discussions

Final Words



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