



# Impacts and Evolution of The Sharing Economy

## TWIGIF

**Kenny Huang, Ph.D.** 黃勝雄博士

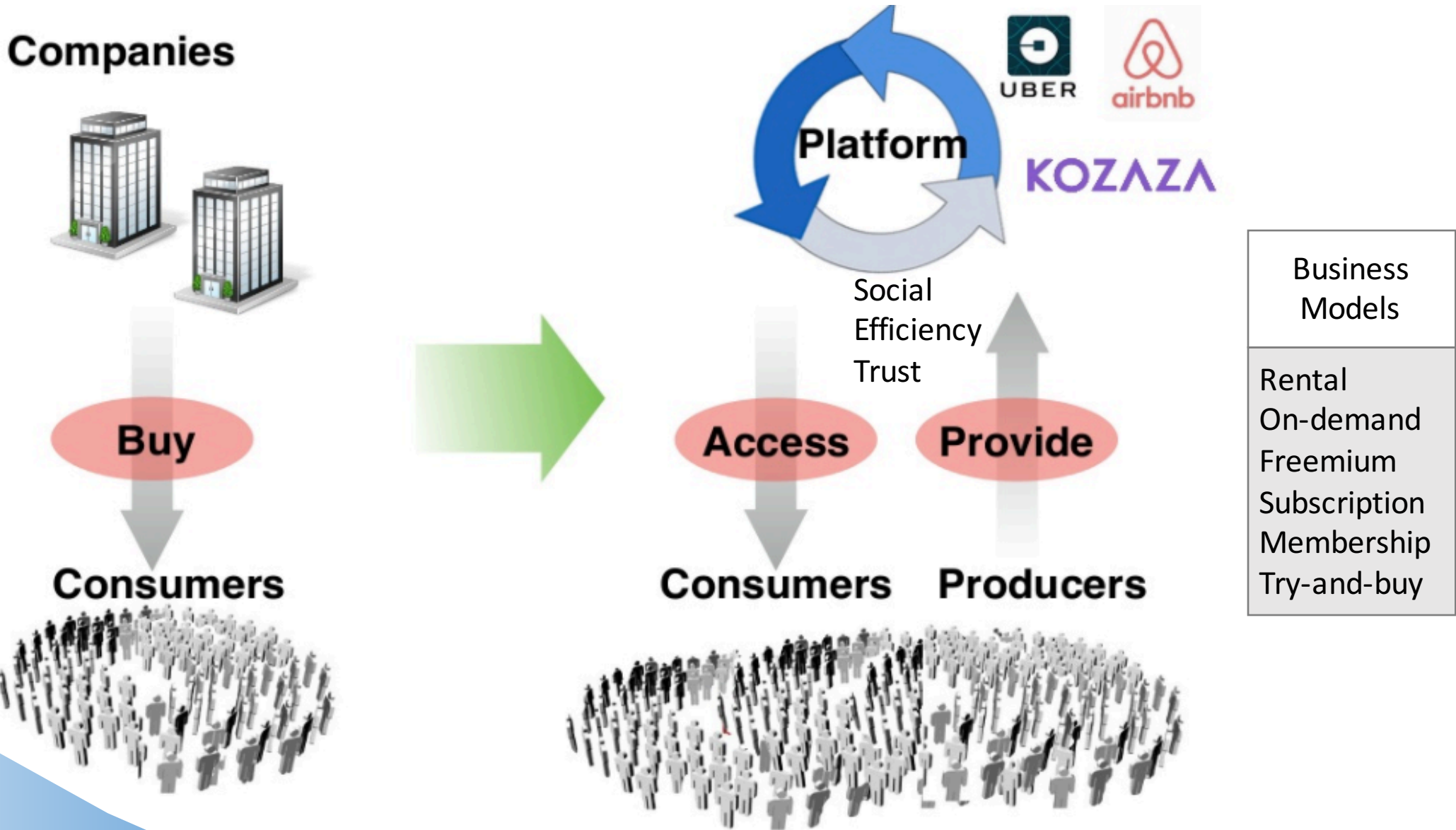
Executive Council, APNIC 亞太網路資訊中心董事

Board, Mind Extension

huangksh@gmail.com

2017.June 17

# Sharing Economy At A Glance

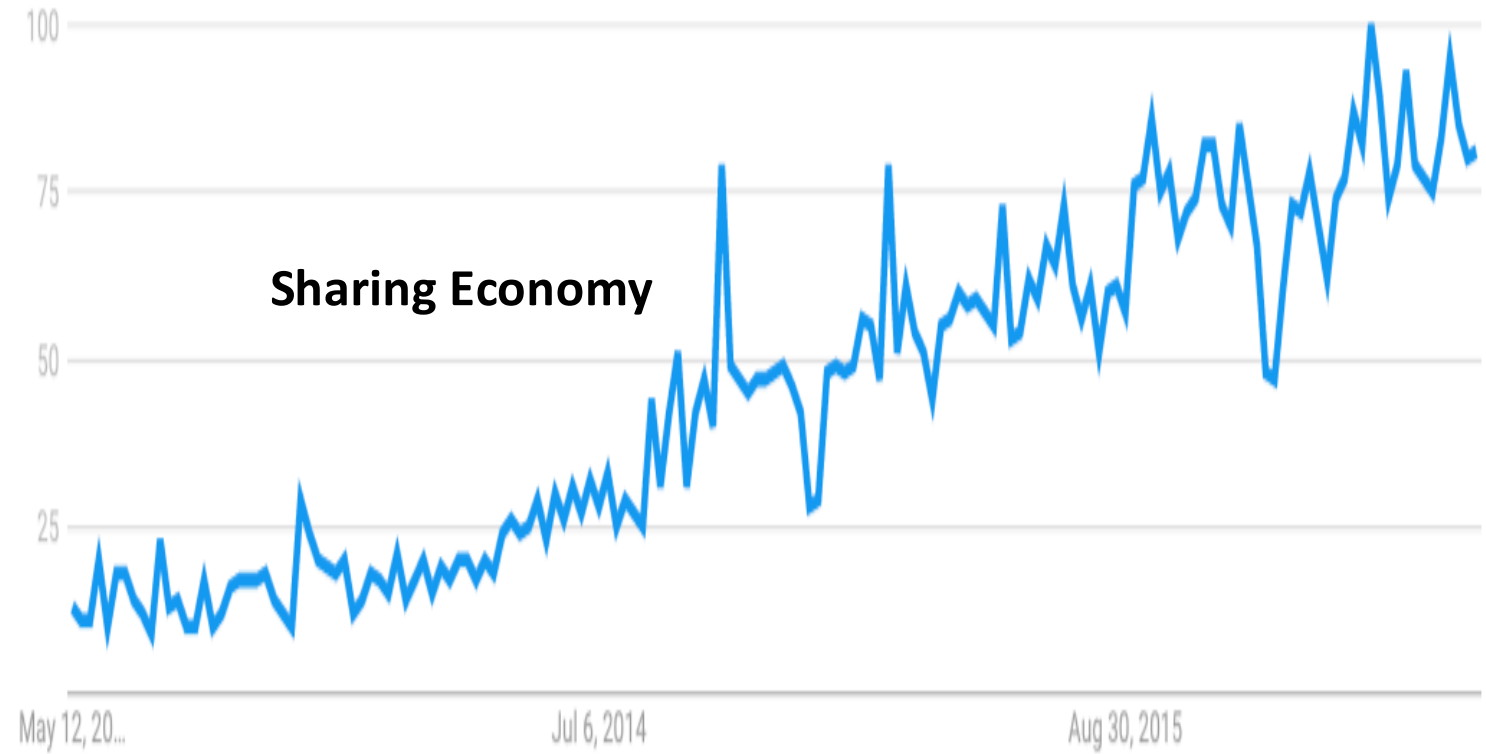


# Old Model Reinvented For The Future

renting, exchanging, sharing

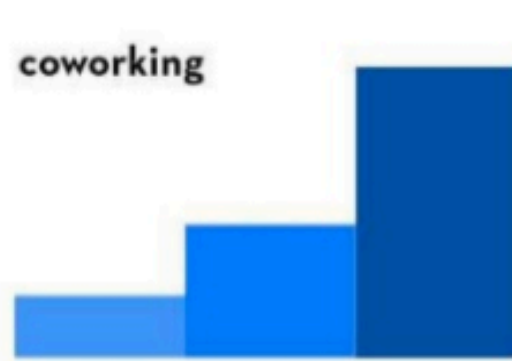


Google Trends



Source : Google Trends

# Hockey Stick Graphs Attractions



# Landscape

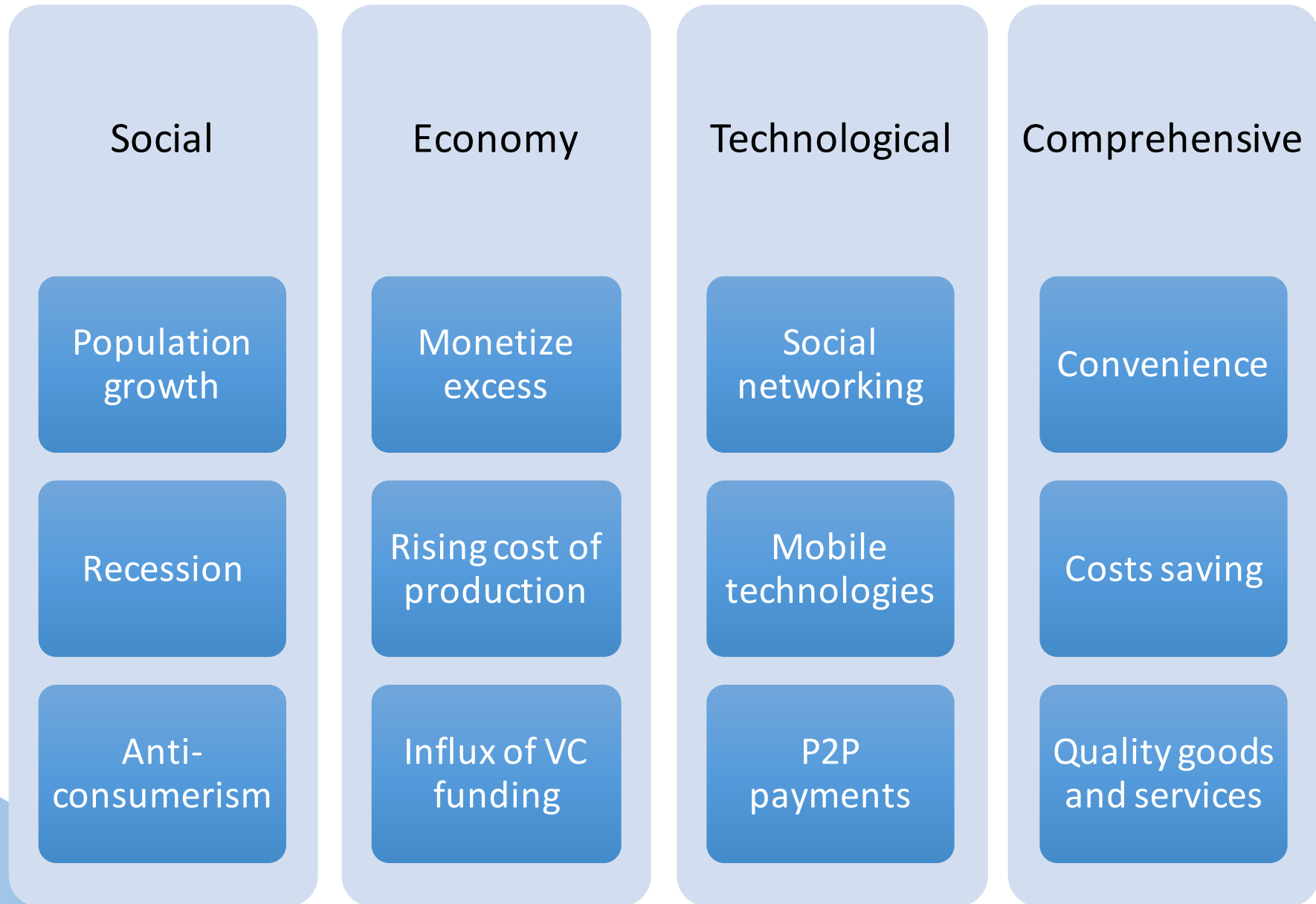


# List of Unicorns

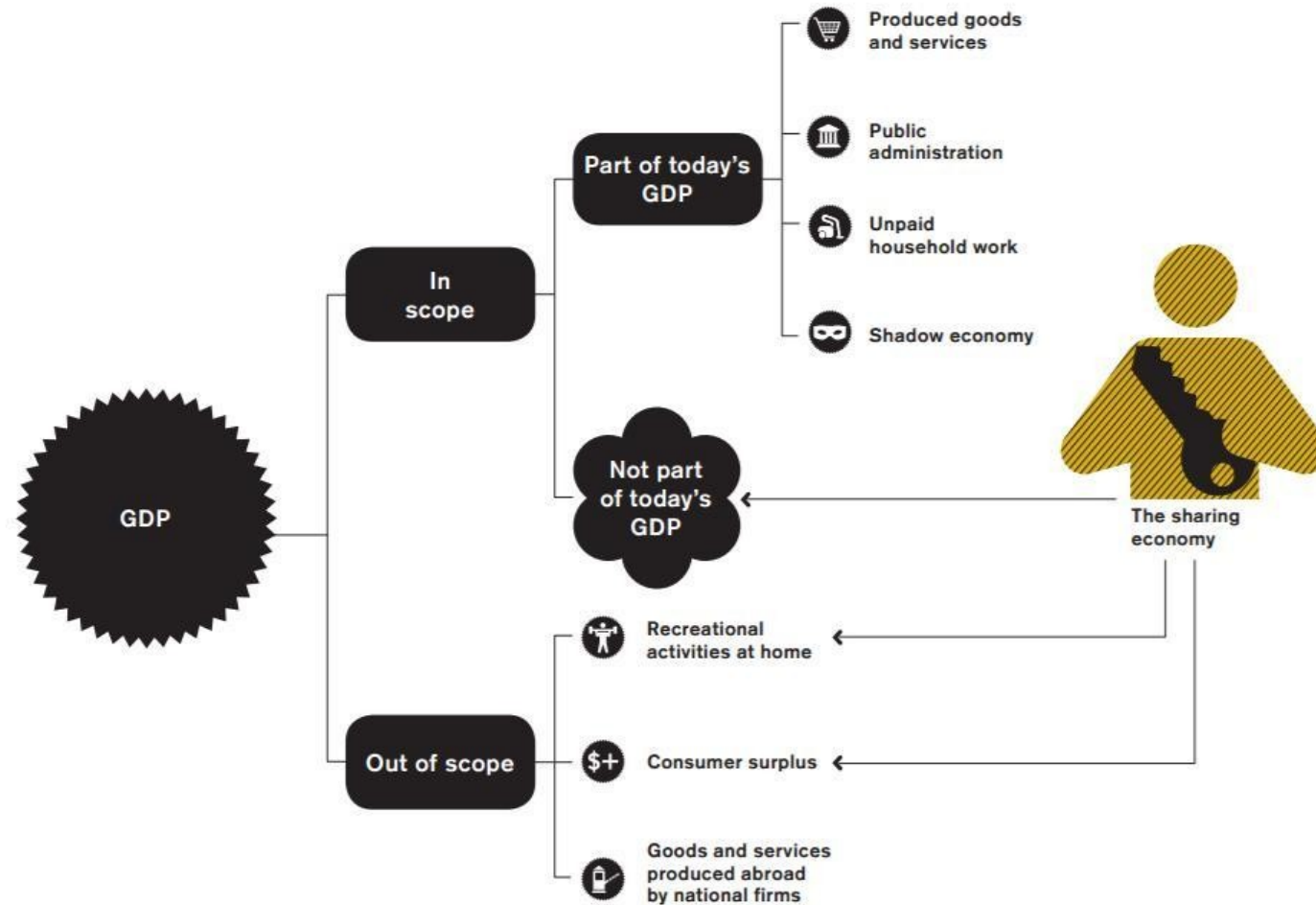


Company	Latest Valuation <input type="checkbox"/>	Total Equity Funding	Last Valuation
Uber	\$68.0 billion	\$12.9 billion	June 2016
Xiaomi	\$46.0 billion	\$1.4 billion	December 2014
Didi Chuxing	\$33.0 billion	\$8.6 billion	September 2016
Airbnb	\$31.0 billion	\$3.3 billion	March 2017
Palantir	\$20.0 billion	\$1.9 billion	October 2015
Lufax	\$18.5 billion	\$1.7 billion	December 2015
Meituan-Dianping	\$18.3 billion	\$3.3 billion	January 2016
WeWork	\$17.2 billion	\$300 million	March 2017
Flipkart	\$15.0 billion	\$3.0 billion	April 2015
SpaceX	\$12.0 billion	\$1.1 billion	January 2015

# Momentum Drivers



# GDP vs. Sharing Economy



## GDP components

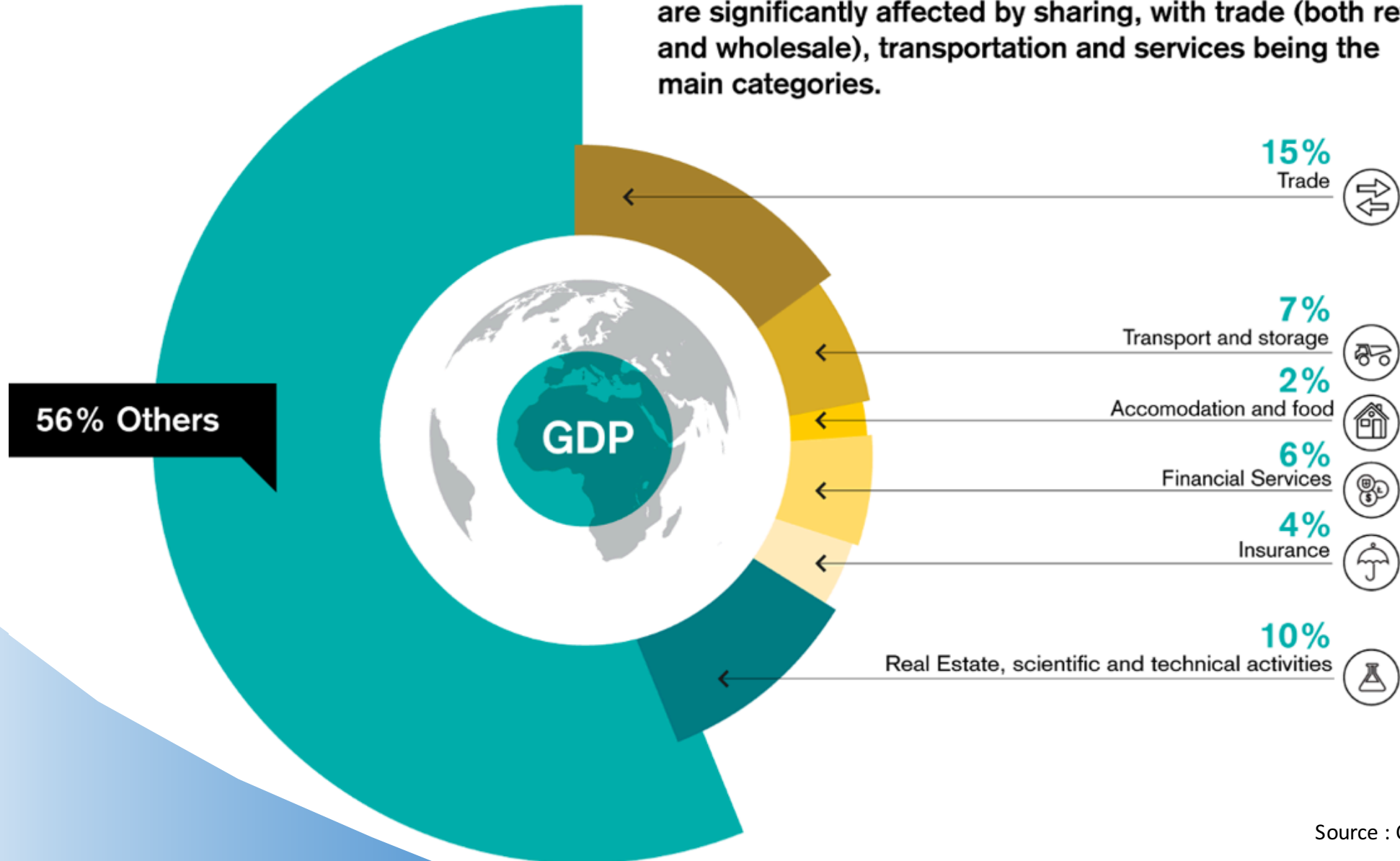
GDP measurement now considers the value-added share of domestically produced goods and services, public administration, unpaid household work and parts of the shadow economy. Sharing activities that replace or add to existing economic activities should be included as sharing spreads. Source: Credit Suisse

Source : Credit Suisse



# GDP Relevant Sharing Activities

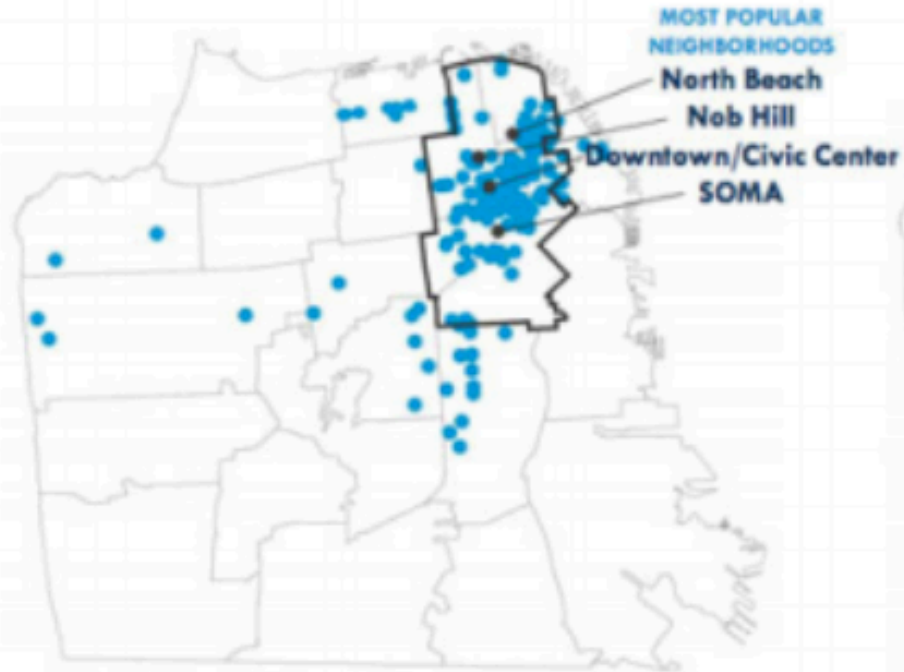
About half of total **GDP** is composed of sectors which are significantly affected by sharing, with trade (both retail and wholesale), transportation and services being the main categories.



# Urbanization

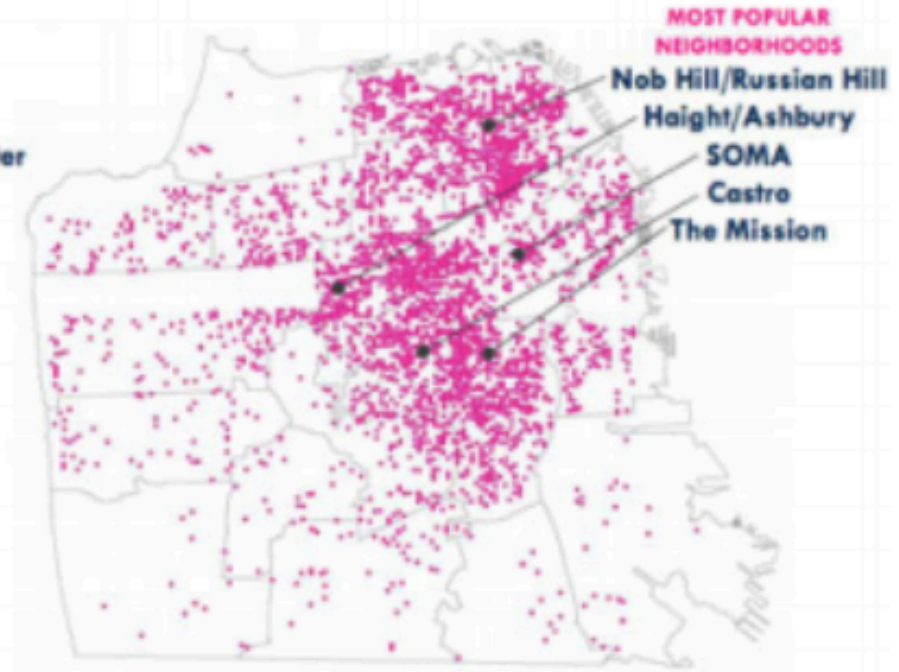
**26%**

**OF HOTELS ARE LOCATED OUTSIDE OF  
6 CENTRAL ZIP CODES**



**72%**

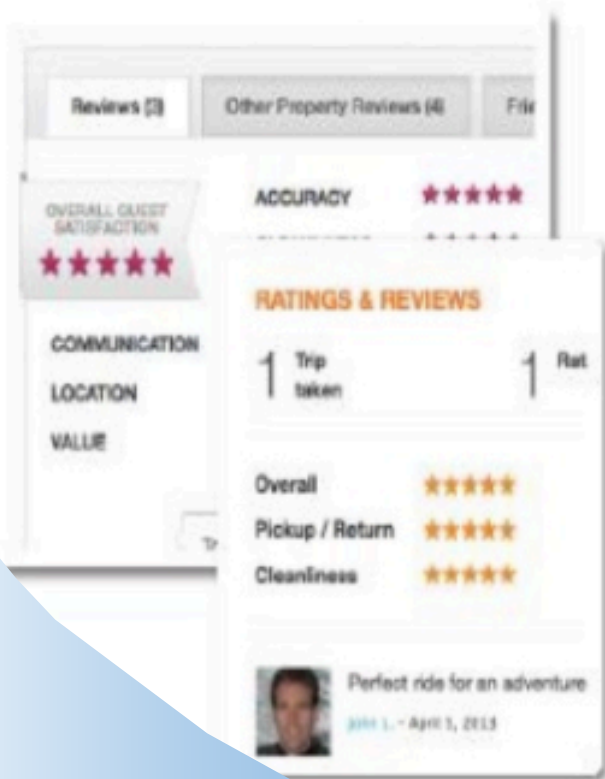
**OF AIRBNB PROPERTIES ARE OUTSIDE OF THESE  
6 HOTEL ZIP CODES**



Source : Airbnb

# Trust : How It Is Built

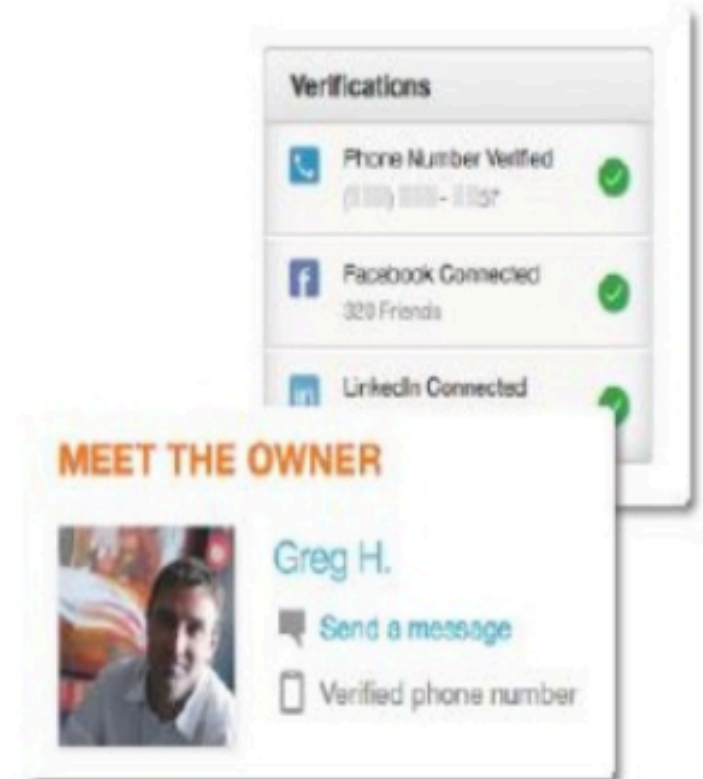
## Trust in the value exchanged



## Trust in the platform



## Trust in other network participants



Source : Aldo De Jon

# How To Participate

## Purpose-Driven Business Models



### Sharing Space

- ✓ Reduces overhead
- ✓ Increases collaboration



### Sharing Departments

- ✓ Reduces costs
- ✓ Improves performance



### Sharing Purchasing

- ✓ Reduces price per unit
- ✓ Facilitates access



### Sharing Services

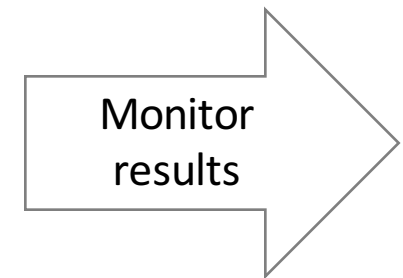
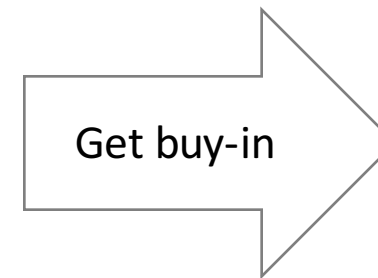
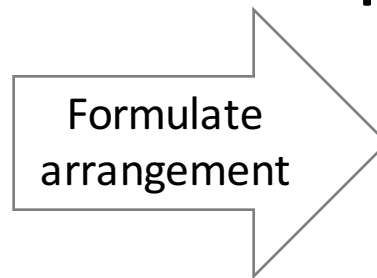
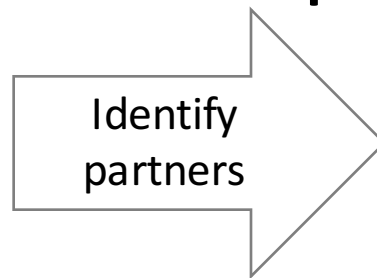
- ✓ Reduces overhead
- ✓ Improves performance



### Sharing Employees

- ✓ Reduces expertise
- ✓ Improves access to talent

## Five Steps to Successful Implementation



# Business Evolution



**1**  
shared car

Car is not used for more than 90%

**9\***  
owned cars

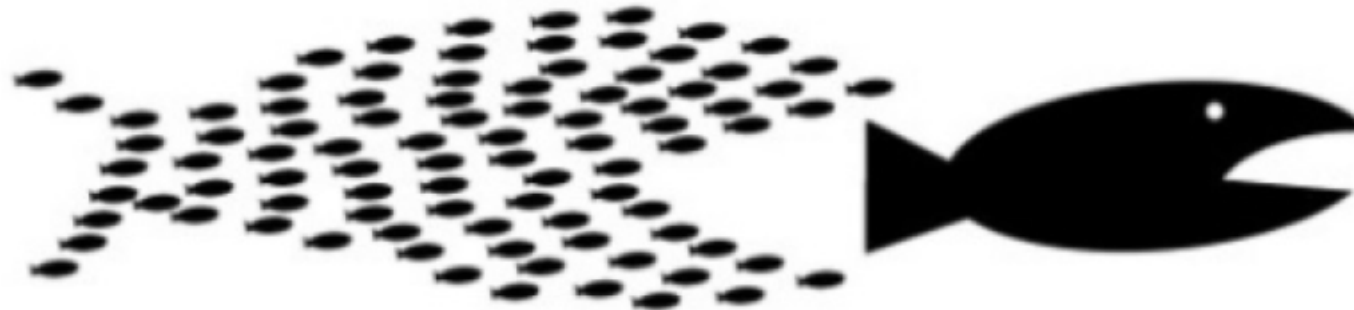


=



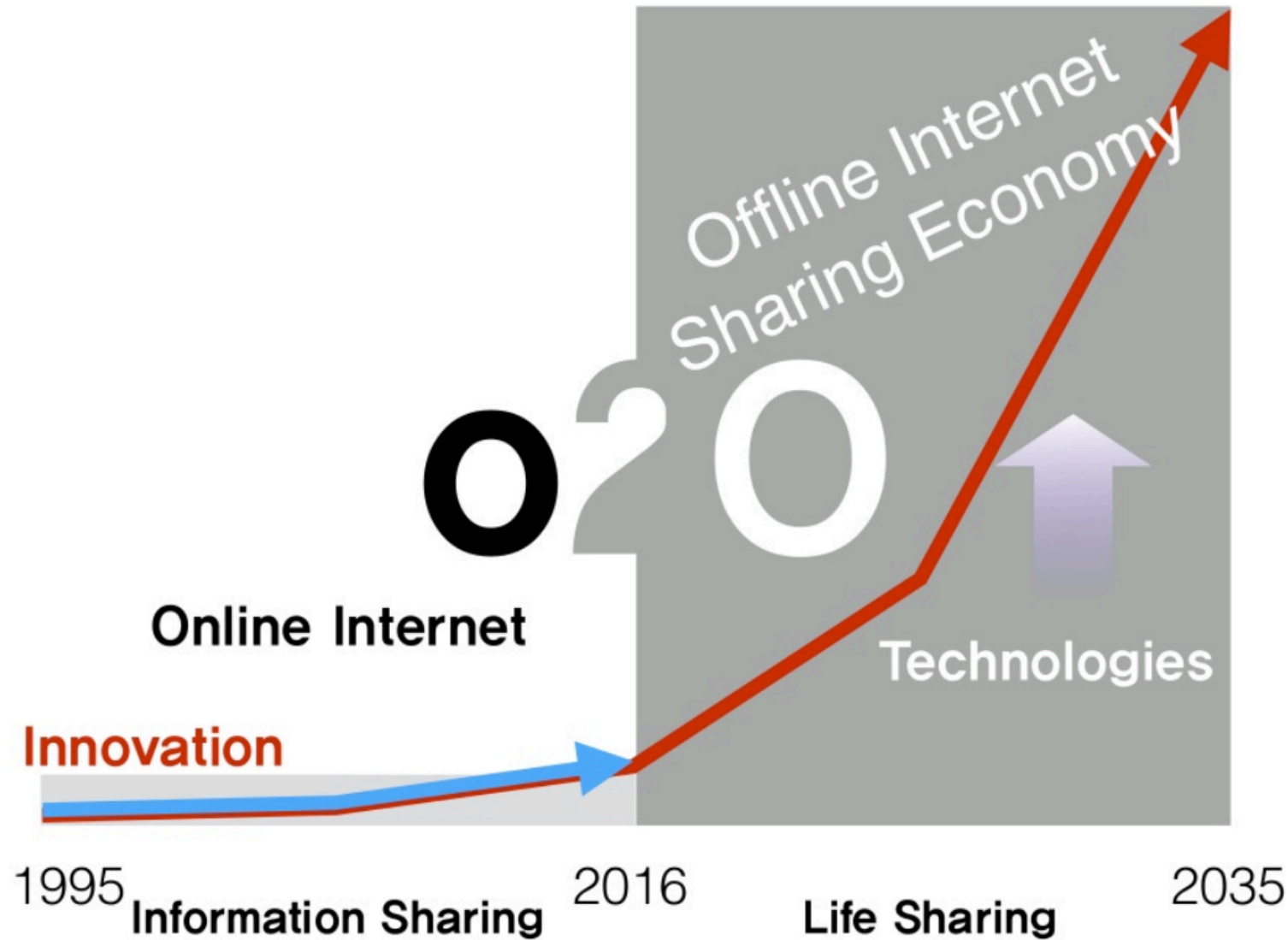
**\$270,000 of missing revenues**

Source : The Future of Business is The Mesh, Lisa Gansky



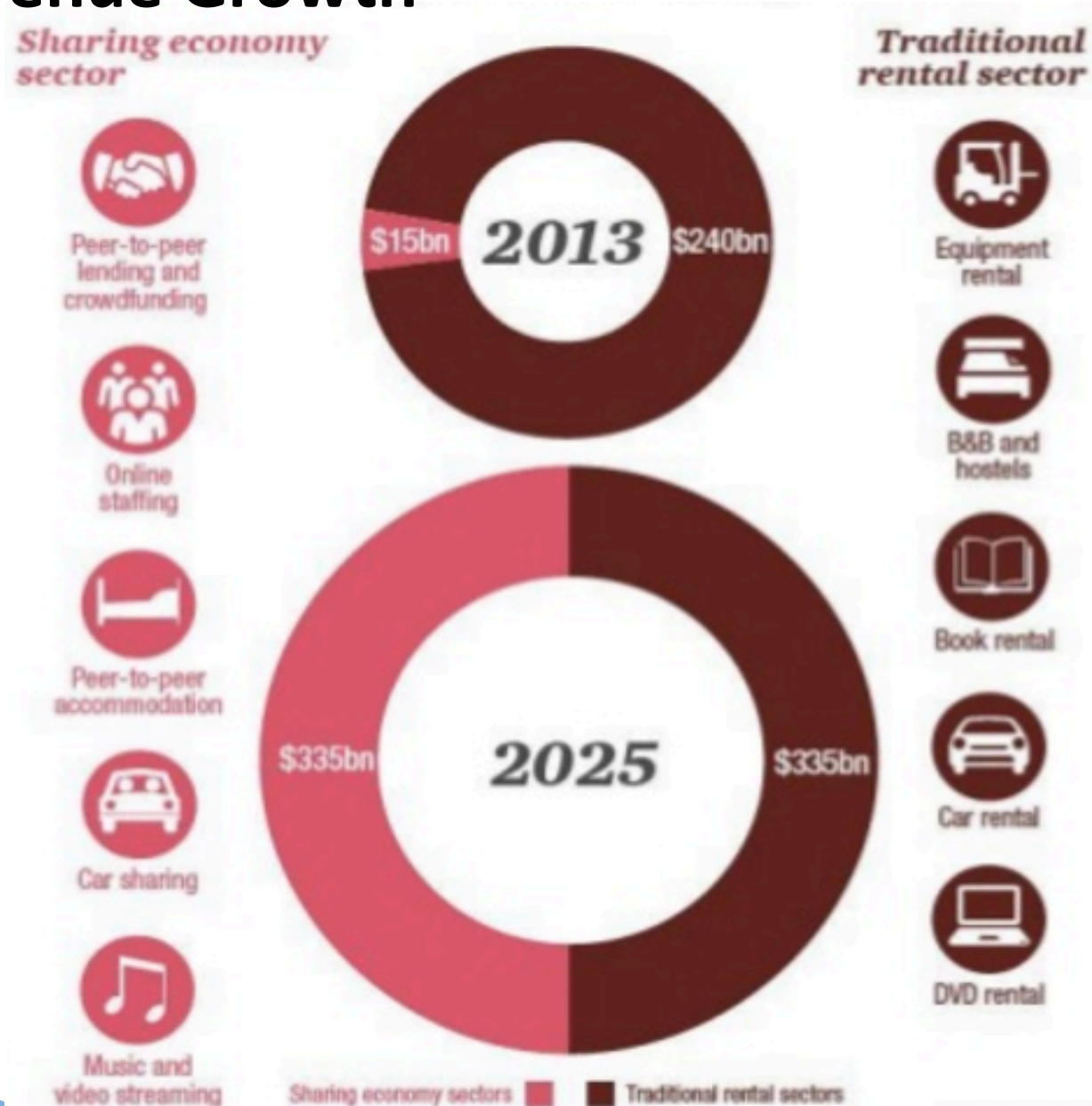
**Companies** must **Evolve** business models to avoid becoming **Disintermediated** by **Customers** who connect with each other

# Sharing Economy Boosted By Technologies



Source :Jo San Ku

# Projected Revenue Growth



Revenue growth and impact to the traditional rental sector

# Evolution of Trust Model



institutional  
trust

AUTHORITY

centralized



interpersonal  
trust

SOCIAL CONTROL

decentralized



UBER



airbnb



blockchain-based  
trust

AUTONOMOUS SYSTEM

distributed

Source : Willi Schroll



# Potential Unutilized Assets



Medical Equipment

**58% Idling**

time over entire operational cycle

**33% Surgeries**

canceled due to unavailability of  
right beds or equipment

Source: Horbbluk, Ruslan, Healthcare Financial Management Case Study

# Major Concerns of The Sharing Economy

Trust and inconsistent customer experience are two major concerns of the sharing economy offerings



**72%** agree they feel that the sharing economy experience is not consistent



**69%** agree they will not trust sharing economy companies until they are recommended by someone they trust

Source : PwC

# Social Rating Is Not Easily Applicable

## Digital World



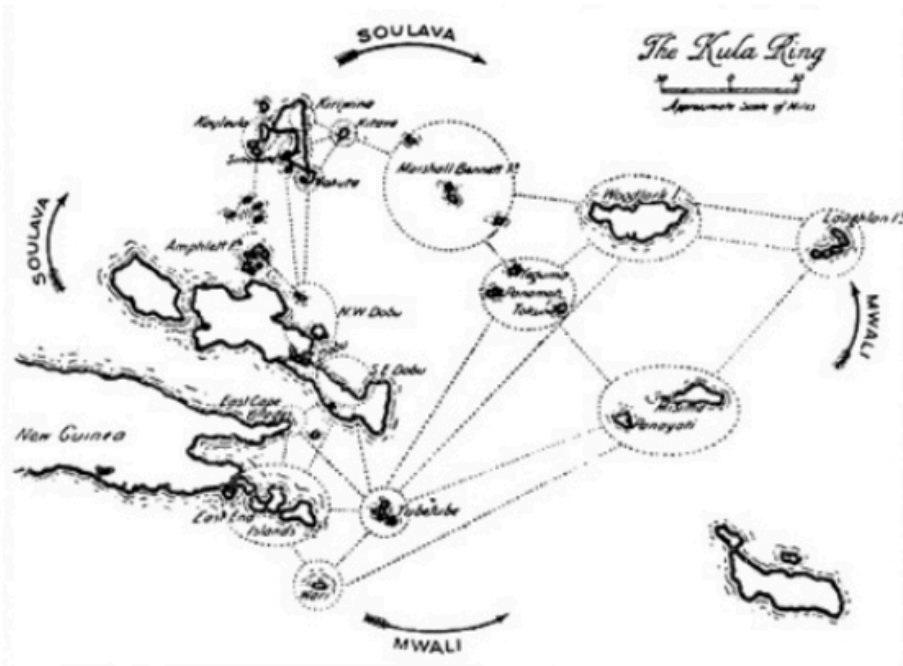
## Products



Statistics are sufficient.  
The quality of a book  
is easy to measure  
with people reviews.

Not easily applicable to humans

# Social Exchange is Vital to Social Interaction



關係  
guānxi

## The norm of reciprocity

“reciprocity can increase solidarity between exchange partners through communicative value over and above the instrumental value of the benefits provided”

(Molm et. al. 2007)

## Sense of Indebtedness

“a state of tension having motivational properties such that the greater its magnitude, the greater will be the efforts to reduce it”

(Greenberg and Shapiro, 1971)

## Aversion to indebtedness and Perceptions of Fairness

- ✓ Common descriptions of uncomfortable feeling of indebtedness when receiving something without giving anything in return
- ✓ It was generally considered better to give too much than to feel indebted to others

# Way Forwards

- Many of the early sharing economy based business (2009-now) have failed for various reasons
- Trust, social (customer experience), platform and social technologies are the key factors
- Like the dot com cycle, many of first wave sharing economy based business have failed, but there are massive opportunities waiting for those to get it right.
- Fear of indebtedness can hinder participation
- Legal challenges
- Discrimination can stem from tendency to socialize with those similar to us



Thank You  
Question?