Urban Sustainability
with
Sharing Economy and Open Data

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Pillars of a Smart City

Governance
Open data and analytics
- City planning , management
- Transparent and participatory

Infrastructure
Green & Sustainable investment
- Building , Energy, Water, Waste, Transportation
- Ensure Safety and Security

Services
People-centered
- Healthcare, Education,
- Social programs

Smart and sustainable cities

- Reduce use of resources
- Improve energy efficiency
- More sustainable consumption
- Reduce GHGs emission and ecological footprint
- Improve social inclusion
- Offer businesses a better return on investment
- Make people a healthier and happier

Sharing economy (I)
- collaborative consumption
- collaborative economy or the peer-to-peer economy

- **New business model built on the sharing of underused resources**
  - Allows customers to access goods without the burden of ownership.
  - Enables providers and consumers to share resources and services, from housing to vehicles and more.
  - Typically take the form of an online or application-based platform

- **Accessibility, not Ownership**
  - Facilitate access to shared cars , shared trips , and bikes

Inside: The Sinking of the Navy's Top Female Skipper

MARCH 22, 2010

TIME

[ANNUAL SPECIAL ISSUE]

10 IDEAS FOR THE NEXT 10 YEARS

The Next American Century
Remapping the World
The Twilight of the Elites
The Dropout Economy
The White Anxiety Crisis
Our Boring Age
Bandwidth Is the New Black Gold
TV Will Save the World
China and the U.S.: The Indispensable Axis
In Defense of Failure

www.time.com

Mar. 22, 2010

10 Ideas That Will Change the World

PAUL AND LINDAMARIE AMBROSE / TAXI / GETTY IMAGES

Our best shots for tackling our worst problems, from war and disease to

SHARING

Today's Smart Choice: Don't Own. Share

By Bryan Walsh | Thursday, Mar. 17, 2011

8 of 10
VIEW ALL

Someday we'll look back on the 20th century and wonder why we owned so much stuff. Not that it wasn't great at first. After thousands of years during which most human beings lived hand to mouth, in the 20th century the industrial economies of the West and eventually much of the rest of the world began churning out consumer goods — refrigerators, cars, TVs, telephones, computers. George W. Bush won re-election as President in 2004 in part by proclaiming an "ownership society": "The more ownership there is in America, the more vitality there is in America."

Even as Bush was announcing its birth though, the ownership society was rotting from the inside out. Its demise began with Napster. The digitalization of music and the ability to share it made owning CDs superfluous. Then Napsterization spread to nearly all other media, and by 2008 the financial architecture that had been built to support all that ownership — the subprime mortgages and the credit-default swaps — had collapsed on top of us. Ownership hadn't made the U.S. vital; it had just about ruined the country.

Illustration by Neil Webb for TIME

The Sharing Economy (II)

- **Current State**
- Thriving
- Disrupting traditional industries, local regulatory environments
- Serving as benchmark for innovation and growth.

- **Application**
- hospitality services : Airbnb and Onefinestay
- car- sharing or ride-sharing businesses : Uber and Lyft
- crowdfunding and sharing physical or human resources.

- **Business potential**
- Growing faster than Facebook, Google and Yahoo combined (Business Insider)
- US$335 billion in 2025 from $15 billion in 2013

Benefits of the Sharing Economy

- Make use of underutilized resources

- Reduce environmental stress

- Create new economic opportunity

- Offers enormous potential to create jobs

- Provide a breeding ground for innovation

- Build trust and a sense of community
  - Peer-to-peer sharing "involves the re-emergence of community"

Korea and the Sharing economy

Current status

•About 1,400 households were registered as "urban lodging business providers" as of the end of 2016.

-Private homes offering like Airbnb are much more than that

-Uber Korea was sentenced to a fine for violating a local law

•Korea will start reflecting the digital sharing economy in its GDP from March, 2019.

Seoul Aims To Be World Capital Of The Sharing Economy

SEOUL — What if the sharing economy could make cities of tomorrow more sober, more human and more sustainable? The idea may seem naive, but one of the largest cities on the planet is experimenting with it: Seoul.

Sharing City Seoul: 4 years' achievements

Car-sharing project
(Since Jan 2013)

- About 1.246 million members
  Daily avg. 6,063 users
- 1,386 zones
- 4,156 vehicles

Seoul Bike Ddareungi
(Since Oct 2015)

- 0.17 million members in total
- 450 stations
- 5600 bicycles
  1.13 million uses

Shared Bookshelf
(Since May 2013)

- Monthly avg. 19k users
- 94 bookshelves in operation

Tool rental centers
(Since May 2013)

- Monthly avg. 1.4k users
- 216 centers

Sharing of kids clothes&toys
(Since Apr 2013)

- More than 0.18 million submissions(95k out of them have been sold)
- Monthly avg. 55k submissions

Parking space sharing
*residential parking (Since Aug 2013)

- About 1,980 parking spaces
- Participated by 11 gu districts e.g. Songpa, Gwangjin, Gangdong, and Eunpyeong Ordinances revised in 9 gu districts

Parking space sharing
*attached parking lots, etc. (Since 2007)

- 363 parking lots in total
  9,140 parking spaces

Sharing of underused public facilities
(Since Dec 2011)

- 0.31 million use cases in total
- 1.2k spaces as of 2016

Mixed-generation house sharing
(Since Oct 2012)

- 428 students participated in total
- 324 houses in total

Open public data
(Since Jan 2011)

- 4,527 datasets

Seoul Photo Bank
(Since Oct 2012)

3,784 submissions in total

- 3,563 photos
- 92 videos
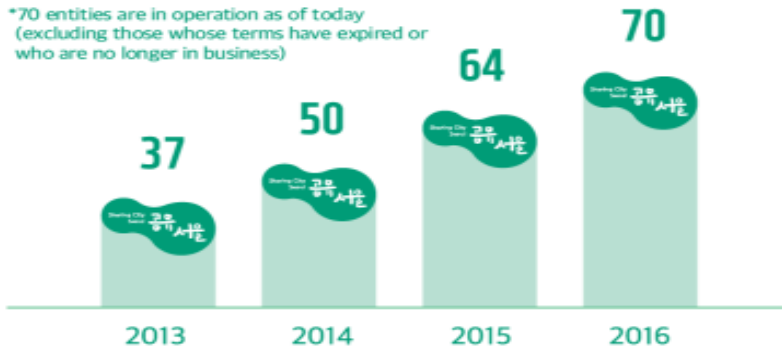- 129 web-toons

Supporting sharing organizations/companies
(Since May 2013)

- 82 Sharing Companies/ Organizations designated by SMG
- 75 projects supported by Sharing Promotion Fund 1016 million won offered

"The number of SMG-designated Sharing Companies/Organizations has more than doubled since 2013"

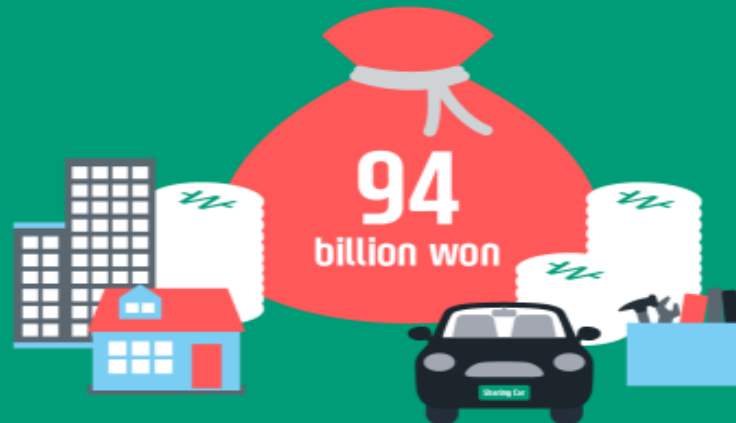## Number of SMG-designated Sharing Companies/Organizations

*70 entities are in operation as of today
(excluding those whose terms have expired or
who are no longer in business)

2013	2014	2015	2016
37	50	64	70

Number of Sharing Companies/Organizations in 2016 by field

Space sharing	Talent sharing	Goods sharing	Information sharing
31	23	15	1

"Sharing companies including Socar, Korea Carsharing, and Nspace have attracted 94 billion won in investment"

94 billion won

Assessment

- **Proper regulatory frameworks are needed**
  - Existing laws and social system to regulate traditional business are not able to keep up with the emerging sharing economy

- **Foreign startups wage uphill battles**
  - Seoul City defended the regulatory measures against Airbnb was for safety's sake.

- **Korea has not produced startup role model with global reach**
  - Over-dependence on government funds, and regulations

Role of Cities

- **Accommodation of new services**

  - Accept some level of uncertainty (Sharing is all about trust)

  - Let the market decide

- **Creating a level playing field for sharing economy businesses and traditional ones**

- **Finding a right balance between benefits and regulation for public safety and responsibility**

  - Engage key stakeholders throughout the process

Open data and Korea

Potential of Open Data
Open data can help USD 3-5trillion in economic value annually (Mckinsey)

1. Empower citizens and benefit consumers

  - decrease information asymmetry

2. Change how government works

  - Make cities open to innovation

  - Help organizations replace traditional decision-making

    approaches with data-driven ones

3. Improve the delivery of public services

4. Generate economic value

  - Create new business opportunities

  - Propel innovation of the society

Key Strategies of Korea

- Data big bang : provide high volume data that citizens want

  - *Act on Provision and Active Use of Public Data* was enacted (2013)

  - Open Data Portal of Koran Government was set up for single

    integrated window for opening and holistic management of public data

- Service innovation : restructure government data services which dee m ineffective compared to equivocal services by private sector

- Support startups : Full Life Cycle support from idea to business devel opment

  - Goal : generate 150,000 new jobs from open data by 2017.

Current state of play of Korea's open data

- **Open data is flourishing**
- Korea stands out that not only makes data available, but also helps the private sector use data to create businesses

- Korea was rated by OECD as the **top country for open government data** (availability, accessibility, and government support)

- **Data privacy regulation in Korea is considered very strict.**
- Korea prioritizes data security on the private side, and data openness on the part of government.

Challenge

- **Korea has not produced globally successful startups**
    - Fin-Tech, drones, transportation
    - Conservative regulatory systems and cultures are cited as problems

- **The Success of Open Data depends on Open   Standards**
    - Making cities "smart" depends on the use of open standards

Conclusion

- The sharing economy will continue to grow and evolve
- It improves the urban sustainability
- Cities serve as laboratories for these ever changing technologies and business models
- Putting the right regulatory framework in place is very important
- Keep an open mind about how the new, and disruptive economy might be beneficial
- More cooperation is needed to utilize the massive data collected by the sharing business

Thank you!