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# Data Driven Disruption: A road to Collective Intelligence?



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Imagine starting a Taxi company with no vehicles?

Imagine starting a hotel with no rooms...ever ?

Imagine if you already operated a traditional taxi or hotel service...

# Fight them...



#### ...or Join them?



Hilton 90+ Years 610K Rooms 88 Countries

AirBnB 4+ Years 650K Rooms 192 Countries No Inventory

Why did these "disruptive" services start?

Frustration? Business Opportunity? Technology enablers?

Does technology always do this?

Technology does not add a fixed benefit...

• ...instead, it amplifies underlying human forces

Free speech in USA

product or service

without having to

own it outright.

they need.

Spread misinformation in Russia

Amplification reaffirms human agency to cause meaningful change

Kentaro Toyama, The Guardian 19/6/15

form communities

and empower

each other.

Amplification reaffirms human agency to cause meaningful change

SHARED ACCESS DIRECT SIMPLICITY EMPOWERMENT EFFICIENCY Reimagine the Reinvent ways to Refine products Redesign the Re-evaluate the ways customers enable people to or services to customer ways all kinds can access the connect directly their simplest and experience to of assets can be benefits of a to what or whom most transparent enable people to used more

forms.

efficiently.



# **Rethinking value creation**

Airbnb allows anyone with a spare mattress or room to run their own BnB, by giving them access and tools to market themselves to a potentially global market.

#### **Rethinking value consumption**

It wasn't common for travellers to stay at strangers' apartment in a new city. AirBnB created a new behaviour and changed the very design of the traditional trip.

# **Rethinking quality control**

Hotels are known for their service quality and the reliability of the customer experience. AirBnB, on the other hand relies on a peer curation mechanism to ensure quality and reliability.

#### **Rethinking scale**

Traditional hotels would scale by adding more rooms through new properties. Airbnb doesn't own inventory. Instead, it scales by improving its ability to match users, leveraging better data.

Sangeet Paul Choudary, 2015

# Better Data - Better Matching



Uber's DISCO is able to consider supplies that are currently in-flight and project their route into the future and take that into the matching process, and supports vehicle pooling



Uber breaks up the earth into tiny cells (like in Google Maps) and each is given a unique ID. Using the Google S2 library, you can identify cells that will completely cover a shape you've supplied



210 1 2 2 2 2 2				4	<b>7</b> .		
			\$119 AUD	Per Night			
	Amazing view 1 min	from metro!	37 Reviews ★★★★★				
Luca	Central, Hong Kong Island, Hong	Kong ★★★★ (37)	Summary	Accuracy Communication Cleanliness	★★★★★ Location ★★★★★ Check In ★★★★★ Value	**** **** ****	
About this listing top location in the heart of HKI the location is a uiet and all the facilities are just outside of the building!		e buildino!	Don	Luca's spare room was everything necessary for a short stay in Hong Kong. It is located on a busy street with plenty of food options and a magnificent nighttime view of the HK skyline. Luca was welcoming and friendly (and very strict about his house rula). Recommended for those who don't mind closer quarters and want to be in the heart of the city.			
this is the new Soh walk distance to ce	o area of HK! entral.			August 2015	- f l		
the flat is lovely an Contact Host	d quiet and, last but not least, extremely C	LEAN!		Thanks I	s <b>e from Luca:</b> Don and it was again a pleasure to h		
The Space	Bed type: <b>Real Bed</b> Property type: <b>Apartment</b> Accommodates: <b>1</b>	Bedrooms: 1 Bathrooms: 1 Beds: 1		always o rules tha Anyway	nink i was "very strict" on my house do, when my guest check in I remind at are clearly stated in the listing onl , we had a short good time together lest and very respectful! :)	I them the house ine.	
Amenities	⊎ 0 I Kitchen	Essentials		August 2	2015		
	<ul><li>P Internet</li><li></li></ul>	<ul> <li>Shampoo</li> <li>+ More</li> </ul>		accommodate my	host - responsive, and communicati / last minute request very nicely. As tion is excellently accessible, and th	many reviews	
Prices	Cancellation: Moderate		Shaun	clean and comfor March 2015		e apai (ment 18	
Description	The Space			Warch 2015			
	My place is small and cosy, locate it's a 2 bedrooms apartment with	d in the best area of HK. 1 toilet to share and a lovely little kitchen.			an and close to everything. Walkab ercise! Luca was very helpful to pro		
	the wood floor makes the place w			for me to enjoy th	e short trip. He was away the I got t end tommy helped me with check in	he whole place for	
						nat more can you	

# **AirBNB** Information



#### Reputation

Reputation is the measurement of how much a community trusts you

Reputation is the new currency?





#### Can your reputation be recognised across services?



### Smart Amalgamation?

# Higher Education Disruption?



Rethinking value creation Rethinking value consumption Rethinking quality control Rethinking scale

#### The Knowledge Economy

"We define the knowledge economy as production and services based on knowledge-intensive activities that contribute to an accelerated pace of technical and scientific advance, as well as rapid obsolescence. The key component of a knowledge economy is a greater reliance on intellectual capabilities than on physical inputs or natural resources"

#### Powell & Snellman, 2004

	Which of the following areas of activity offer the greatest potential for productivity gains over the next 15 years? Select up to three activities.
Foresight	(% respondents)
	Knowledge management
	Customer service and support
	Operations and production processes
	29 Strategy and business development
Economic, industry and	29 Marketing and sales activities
corporate trends	28 Human resource management and training
	23
Which of the following types of role will be most valuable to	Corporate performance management 22
your organisation as a source of competitive advantage in 2020? % respondents)	Product development 19
	Financial management and reporting
Complex knowledge-based roles that are	17
primarily outward-facing and require	17 Supply-chain management 17
nimarily outward-facing and require leveloped communication and judgement kills 62	Supply-chain management 17 Risk management and compliance
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rimarily outward-facing and require eveloped communication and judgement kills 62 iomplex knowledge-based roles that are rimarily inward-looking and require leveloped communication and judgement kills 28 imple knowledge-based roles that are ules-based, outward-facing and do not equire developed communication and	Supply-chain management 17 Risk management and compliance 14 Procurement

#### Asia Uniquely Positioned to Lead Global Knowledge Economy - ADB

News Release | 12 September 2014

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MANILA, PHILIPPINES (12 September 2014) – Asian countries have a unique opportunity to transform themselves and leapfrog older technologies to lead the global knowledge-based economy of the future, says a new report from the Asian Development Bank (ADB).

ia has a youthful population and large middle-class market. Its strong position in information
nnology-enabled services and creative goods should allow it to quickly build its knowledge-based
nomy, benefitting both rich and poor," said Bindu N. Lohani, Vice-President for Knowledge
nagement and Sustainable Development at ADB.

# Finland as a Knowledge Economy 2.0

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For the past few years, Nokia's phone business had been declining rapidly due to the growing importance of the smartphone segment, where competitors like Apple and Samsung caught Nokia by surprise. In summer 2013 Nokia sold its mobile phone business to Microsoft at a significantly lower price than its value only a few years prior. At this point, many questions were raised about what would happen to Finland's knowledge economy and whether Finnish policies had been too focused on a few leading industrial sectors.

World Bank Report, 2014, http://dx.doi.org/10.1596/978-1-4648-0194-5

#### **Knowledge Continuum**

#### **Knowledge Management**

focuses on multiplying the impact of people, their tacit and explicit knowledge, and the shared knowledge available inside and outside the enterprise

#### **Enterprise Information Architecture**

focuses on eliminating silos of information, increasing transparency, and on leveraging the value of stored digital information

#### Knowledge Economy

focuses on treating knowledge and education as a business product ("knowledge worker"), as innovative intellectual products and services, that can be exported for a high value



#### The meaning of data?

SCHOOL OF PUBLIC HEALTH THE UNIVERSITY OF HONG KONG 會 港 大 學 公 共 衛 生 學 院

#### HONG KONG PUBLIC HEALTH FORUM 2015

# **Extracting Meaning from Data : Cohorts and Deep Analytics**

24 October 2015 | 1400 - 1820 Cheung Kung Hai Conference Centre, Li Ka Shing Faculty of Medicine Building, 21 Sassoon Road, Pokfulam, Hong Kong



#### **Collective Intelligence**

Collective intelligence is shared or group intelligence that emerges from the collaboration, collective efforts, and competition of many individuals and appears in consensus decision making

Collective intelligence strongly contributes to the shift of knowledge and power from the individual to the collective

#### Wikipedia

Reputation on AirBnB is Collective Intelligence

"How well does Shaun run a BnB"

# **CI to improve Business**

#### "You can't manage what you can't measure"

#### **Knowledge Metrics**

#### **Core Competencies**

what are the strategic organisational competencies track exploit detect gaps

# Social Collaboration

value

#### **CI to improve Business Process**

FOR ENTERPRISE ARCHITECTURE PROFESSIONALS

NOVEMBER 6, 2014

#### Predictions 2015: The Age Of The Customer Is Set To Disrupt The BPM Market

Predictions: The Business Process Management Playbook

#### Knowledge Workforce

formal and informal processes capturing patterns of informal business processes (deviations) change the formal (efficiencies)



#### **Data-Driven Disruption**

#### **Builds and adds Value**

Knowledge Management Enterprise Information Architecture Knowledge Economy

# Collective Intelligence will build value across the complete ecosystem

content+people+process+social

improved consumption of services collective quality

**Capability Improvement** 

# Thank You

DATA is BLACK