



# InsurTech: Business Models and Disruptive Potential

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Institute of Insurance Economics  
London, April 2018

# Agenda

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1. InsurTech Introduction (approx. 10 minutes)
2. Business Models and Disruptive Potential (approx. 40 minutes)
3. Selected Startup Profiles (approx. 20 minutes)
4. Open Discussion and Wrap-Up (approx. 5 minutes)

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# Introduction

# The term “digitization” is used very widely

**Definition:** Converting information into a **digital**, i.e. computer-readable, format  
(*Collins Dictionary*)

## 1. Industrial Revolution

### Mechanization



Introduction of mechanical production facilities powered by water and steam  
(mechanical loom: 1784)

## 2. Industrial Revolution

### Mass Production



Division of labor for mass production by means of electrical energy  
(conveyor belt: 1870)

## 3. Industrial Revolution

### Automatization



Utilization of electrical engineering and IT for automatization  
(programmable control: 1969)

## 4. Industrial Revolution

### Digitization



Digitization of interactions and processes as well as employment of intelligent systems  
(**smart devices, big data, AI**)

The change in individual behavior induced by the technology can radically reshape markets.

Source: I.VW

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# Consumer behavior is changing at full speed

## Of “digital natives” and the “sharing economy”



### Born in the age of digital technology:

- 95% own a smartphone
- 75% run a social network profile
- 60% only inform themselves on the Internet



### Access instead of ownership:

90% of 14-29-year olds  
cannot imagine to live without  
smartphones and Internet –  
but very well without their own car

# Insurance companies are digital late bloomers...

## The difference between requirements and reality

### Expectations in the 21st century



### Reality





# The new kids on the block: InsurTech startups on the move

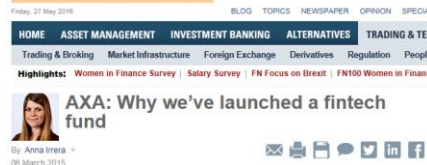
## Is total industry disruption at hand?

MARCH 29, 2016

### Insurers Get Busy In Tech Startup Investing In 2016



### FINANCIAL NEWS



### THE WALL STREET JOURNAL

Home World U.S. Politics Economy Business Tech Markets Opinion Arts Life Real Estate  
Can You Put a Little Palo Alto Into an Insurer in Louisville?

### FINANCIAL TIMES



April 25th, 2016

### Insurance tech start-up investment surges

By Oliver Ralph, Insurance Correspondent

### CRUNCH NETWORK Insurance Is The Next Frontier For Fintech

Posted Aug 5, 2015 by [Brendan Dickinson](#) (@bdickins)

3,733 views



### Forbes

OCT 20, 2016 @ 01:52 PM 22,212 EDITOR'S PICK

### How Insurtech Is Rapidly Changing Insurance

In our recent fintech report "Money of the Future," we've talked about \$3 billion in new investments in 2015 in insurtech. Sounds impressive, doesn't it? Auto insurance companies just in the U.S. spend a total of \$6 billion in advertising each year. It means you are a "customer-oriented" and "tech-advanced" company when you are spending twice on advertising more than on real innovators. But several traditional insurance big players – like Chinese giant Ping An – are showing us great examples of how to change your vision in accordance with demands of the new digital era.

JANUARY 19, 2016

### Insurance Tech Startup Funding Hits \$2.65B In 2015 As Deal Activity Heats Up



JUNE 5, 2015

### Insurance-Tech Startups Are Invading The Multi-Trillion Dollar Insurance Industry

The Diverse Cast of Insurance Tech Players



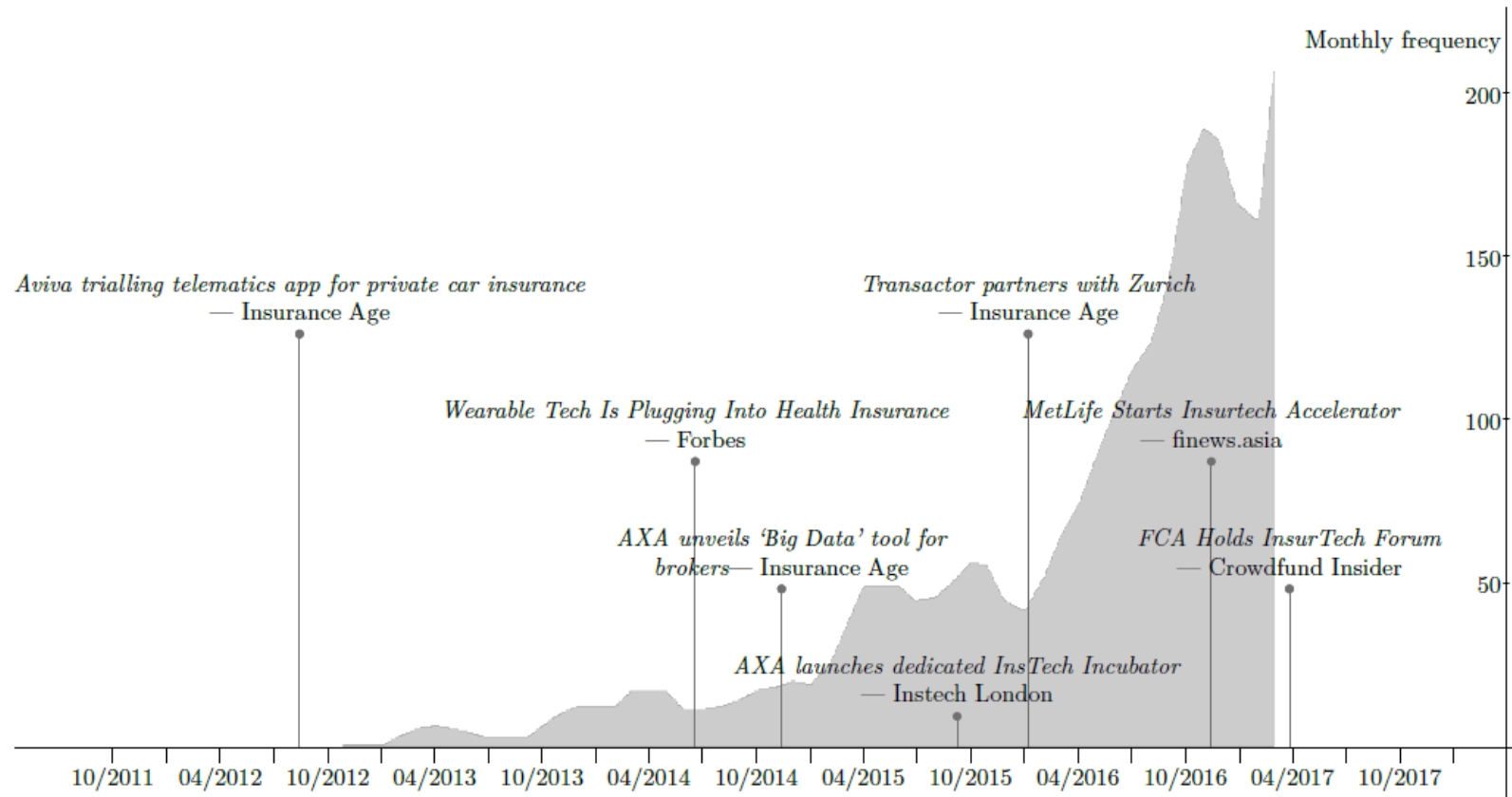
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### Bloomberg Technology Fintech Threatens 250,000 Jobs as Europe Insurers Cut Costs

by [Oliver Suss](#)  
[OliverSuss](#)

# And the hype continues...

## “InsurTech” and “InsuranceTech” in the media



Source: CB Insights

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# InsurTech – What does that mean?

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**Definition:** Portmanteau, composed of Insurance and technology

## Characteristics

- Generally used to describe the growing startup landscape
- InsurTech startups target niche markets or market shares of incumbents
- They employ technology-driven business models
- Disruptive on existing markets

# The startup landscape is growing rapidly and hard to keep track of

## Which business models are hidden behind these logos?

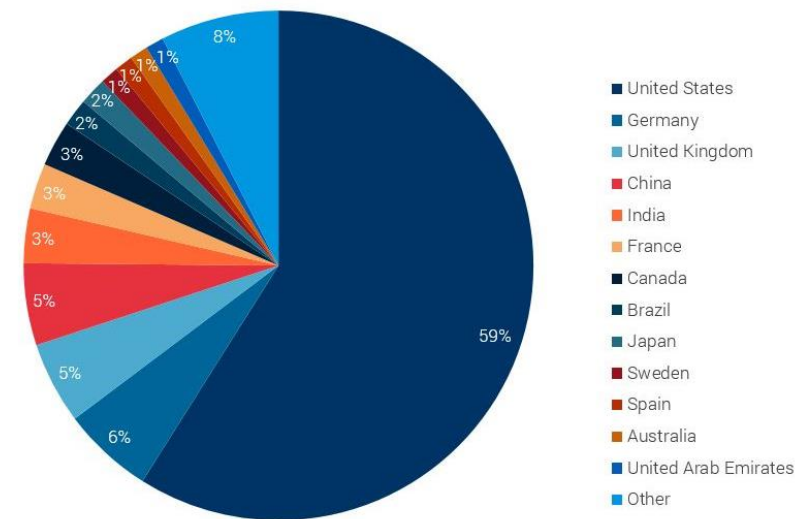
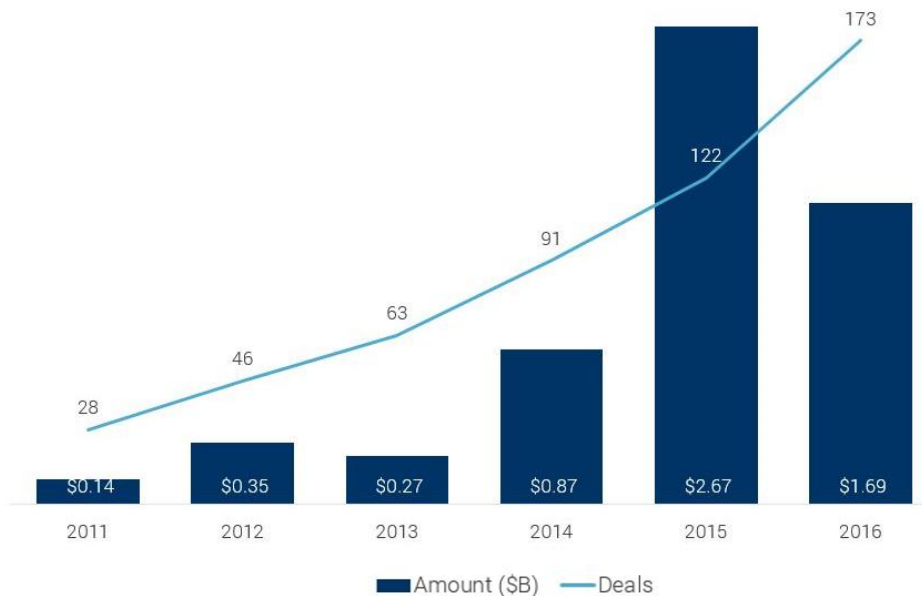


Source: Startupbootcamp Insurance, Venture Scanner

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# VC investors are increasingly focusing on InsurTech startups

## Overview of InsuranceTech Financings 2011-2016



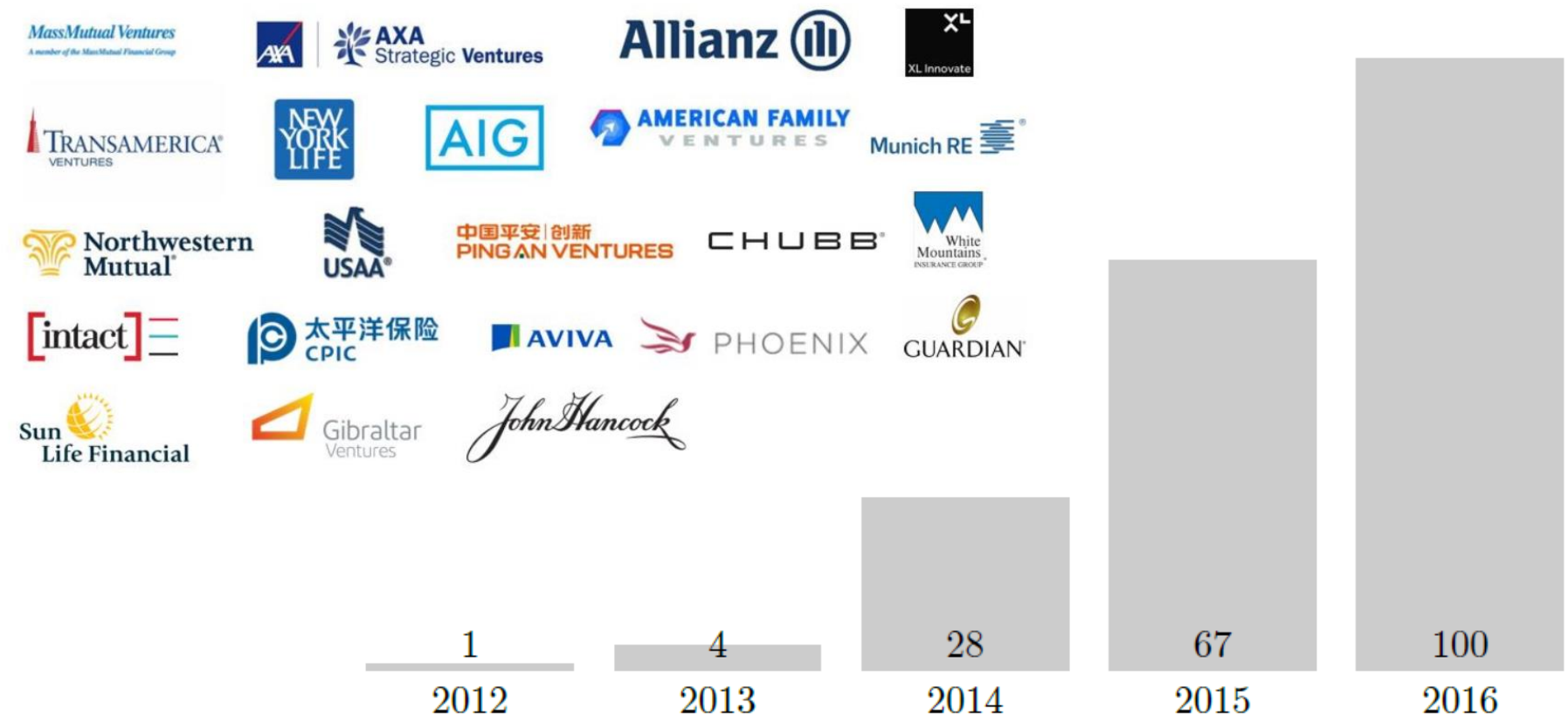
**Focus is still on the US, but promising approaches also exist in Europe and Asia**

Source: CB Insights

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# In addition, more and more insurers are getting involved

## Tech startup investments of insurance companies 2010–2016



Source: CB Insights

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## **Business Models and Disruptive Potential**



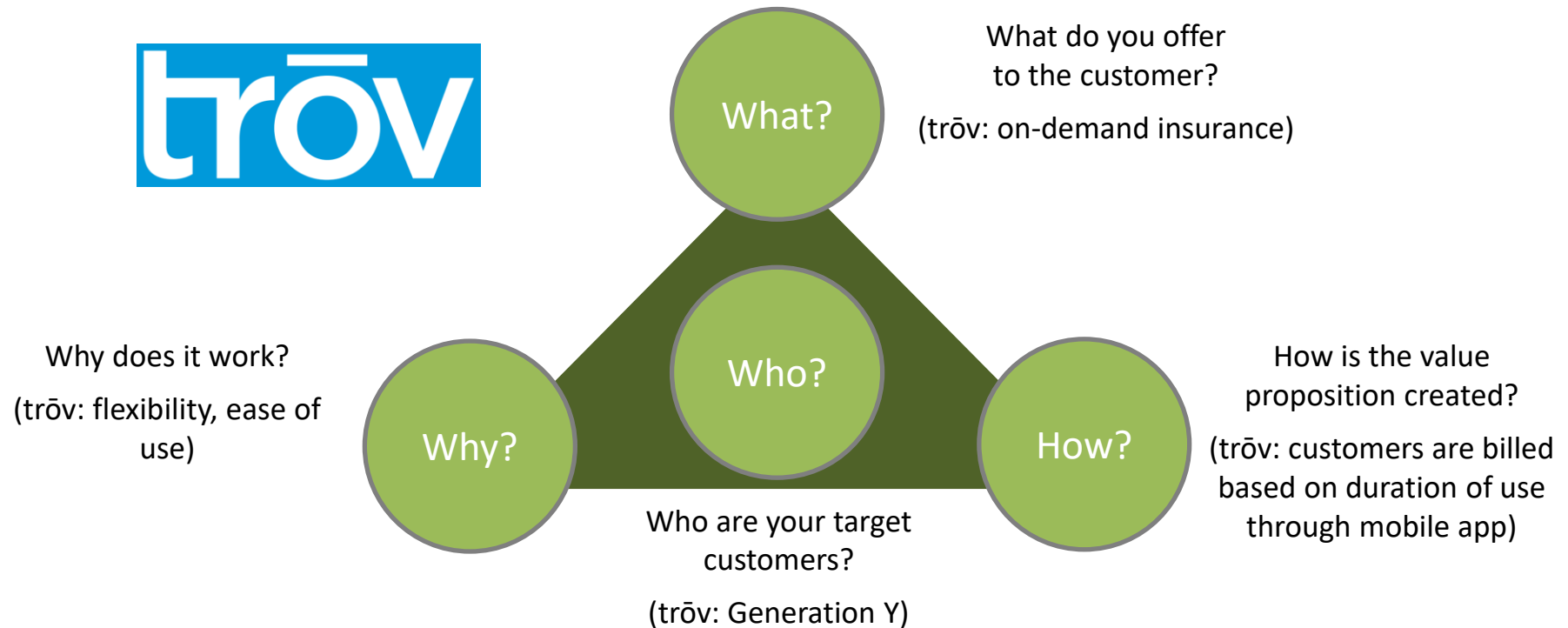
# What is a business model and why should it be innovated?

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# Today, long-term success depends on business model innovation

## The four dimensions of a business model (Example: “pay per use”)



**Business model innovation means modifying at least two of these four dimensions**

Source: Gassmann, Frankenberger, Csik (2014)

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- How does Trov handle fraud?

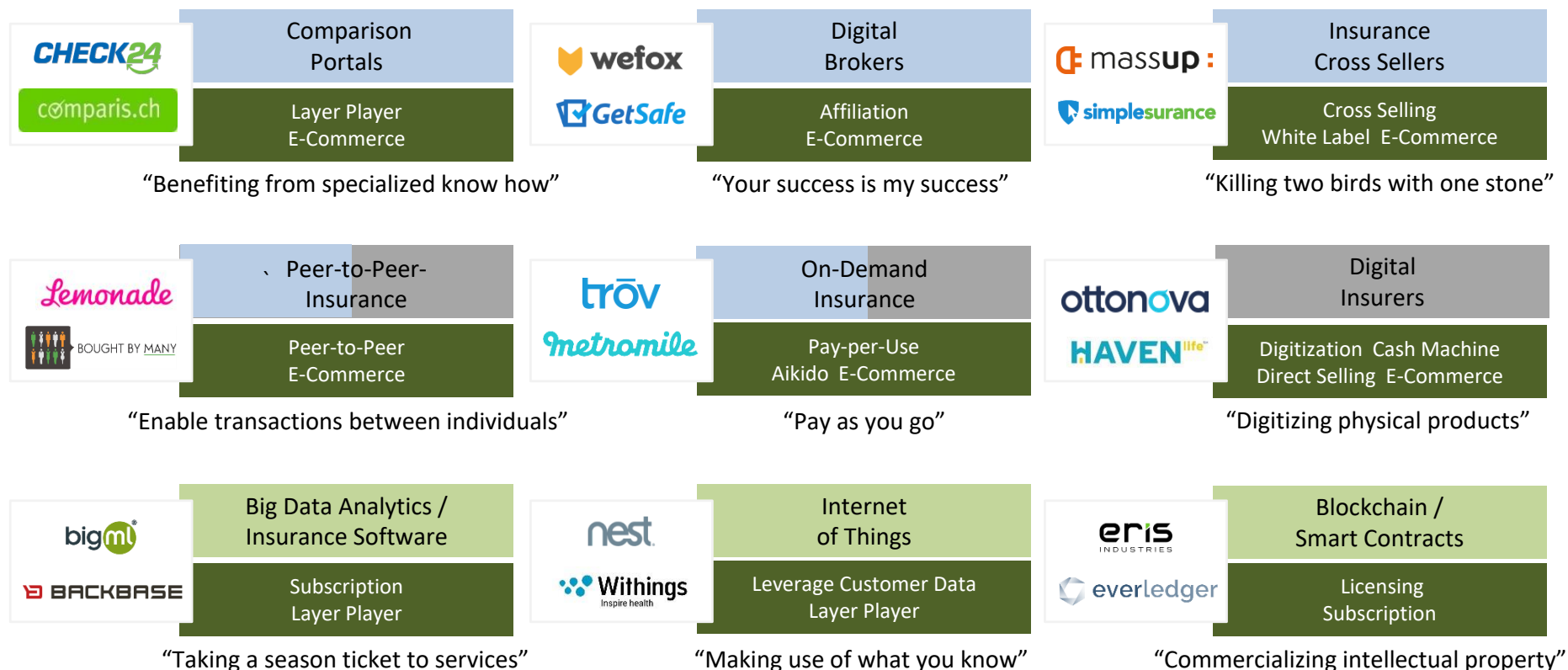
*We [...] have many measures in place to safeguard against fraud. Basically, you can expect all of the anti-fraud measures that you would see from other insurance companies, plus a few extra Trov-specific measures that grow out of our DNA as an innovative tech company.*

- Yunfeng Financial Group (云锋金融) & MassMutual

*This transaction will also enable cross-referrals of existing customers of Yunfeng FG and MassMutual Asia, thereby facilitating a wider customer reach.*

*[T]he US\$1.7 billion acquisition of the Asian unit of Massachusetts Mutual Life Insurance [...] won't complete [...] until the third quarter of 2018 due to the complex approval process involved. [...] Yunfeng will own 60 per cent of MassMutual Asia.*

# InsurTechs combine technology with innovative business models



Source: Braun/Schreiber (2017)

Role in Ecosystem



Distributors



Risk Carriers



Technology Providers

# Descriptions of the identified business model patterns

## Key dimensions and examples

E-Commerce	<b>What?</b> Traditional products, services, and support <b>How?</b> Via electronic systems / computers / online channels <b>Why?</b> Global reach of customers through the internet	<b>Examples:</b> Amazon
Peer-to-Peer	<b>What?</b> Transactions between private individuals <b>How?</b> Trusted platform for safe and efficient handling of transactions <b>Why?</b> Charge transaction fees for organizing the relationships	<b>Examples:</b> Airbnb
Digitization	<b>What?</b> Digital products instead of physical products (the latter may be converted) <b>How?</b> Existing business processes and functions can be reproduced online <b>Why?</b> Reduced overheads, elimination of intermediaries, streamlined distribution	<b>Example:</b> iTunes
Pay-per-Use	<b>What?</b> Customers pay for products and services based on their effective usage <b>How?</b> The specific usage of a product or service is metered and charged <b>Why?</b> Customers are billed based on the number of units or the duration of use	<b>Example:</b> Swisscom
Cross Selling	<b>What?</b> Complementary products and services beyond the company's base offering <b>How?</b> Existing relationships are used to save customers the cost of searching <b>Why?</b> Generates additional revenue with existing resources and competencies	<b>Example:</b> IKEA
Licensing	<b>What?</b> Intellectual property such as software, patents, and copyrights <b>How?</b> The rights are commercialized rather than sold outright (capitalized) <b>Why?</b> Constant revenues can be generated from more than one interested party	<b>Example:</b> IBM
Leverage Customer Data	<b>What?</b> Collection, processing, and analysis of customer data <b>How?</b> Customer data is acquired and its value unlocked with appropriate tools <b>Why?</b> Customer data as a profitable resource that can be marketed	<b>Example:</b> Facebook

Source: Gassmann, Frankenberger, Csik (2014)



# Startups have several advantages for business model innovation

## Differences between insurers and InsurTech startups

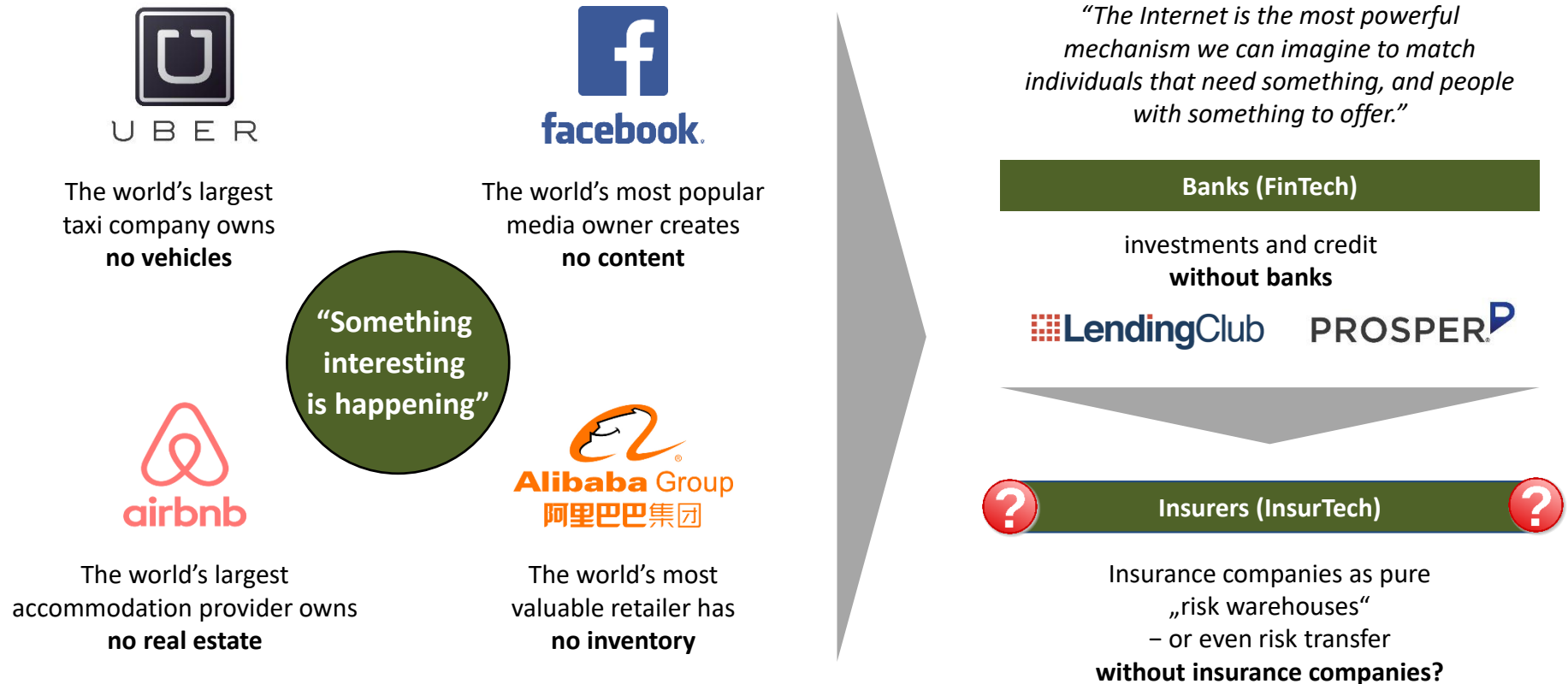
#	Dimension	Insurer	InsurTech Startup
1	Tolerance for Failure	Low	High
2	Average Age of Employee Tenure	20+ Years	18 Months
3	Technology	Legacy	Cutting-Edge
4	Tendency under Stress	Passive-Aggressive	Overtly Aggressive
5	Focus on Value	Long-Term / Shareholders	Short-Term / Backers (Exit)
6	Finish Quality	Perfection	Minimum Viable Product
7	Funding	Via Committee	Via Individual or Small Firm (VC)
8	Decision-Making	Collaborative	Independent, Entrepreneurial
9	Speed of Decision-Making	Glacial	Lightning
10	Decision-Making Bias	Internal Efficiency	Market Impact
11	Time to Market	Slow	Fast
12	Company Culture	Conservative	Progressive

Source: Braun/Schreiber (2017)

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# What is conceivable for the future?

## From organizations to marketplaces

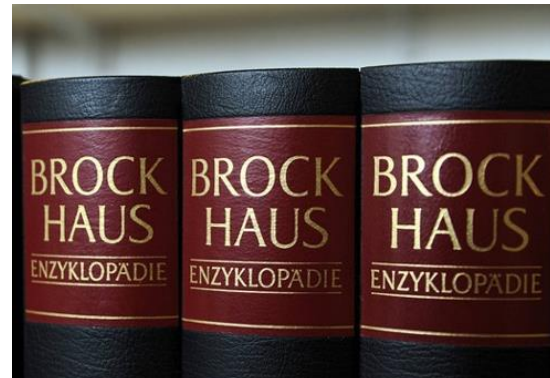


Source: Crunch Network (2015), Tom Goodwin

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# Disruptors and disruptees: some historical examples

Disruption of industries happened time and time again...



# What characterizes a disruptive innovation?

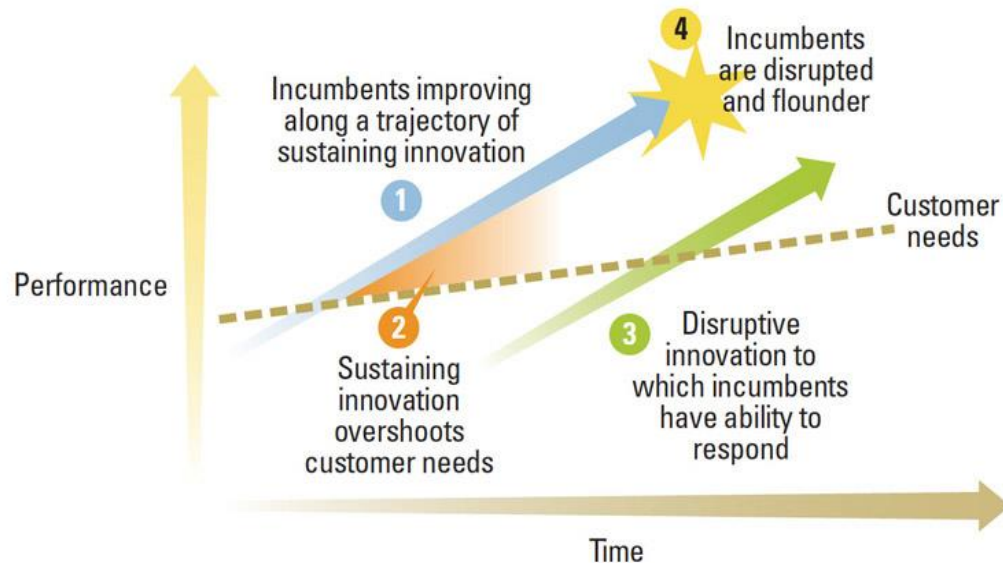
## Disruptive versus sustaining innovations

### Sustaining Innovation:

Improvement of existing products / services for existing customer groups (stepwise / through jumps)

### Disruptive Innovation:

Competitor introduces products / services at the lower end of the market and relentlessly moves upwards



### Typical characteristics of disruptors:

- **Smaller size / fewer resources**  
(incumbents are large / well-funded)
- **Specific target segment / niche**  
(incumbents target “mainstream”)
- **Simpler products / services**  
(suitable functionality at low prices)
- **Smaller margins / scalability**  
(incumbents chase higher profitability)
- **Innovative business model**  
(incumbents may fail to innovate)
- **Anticipation of future customer needs**  
(incumbents focus on current customers)

Source: MIT Sloan Management Review, Clayton Christensen (Harvard)

*Disruption is a process, not an event at a fixed point in time*

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# Being on a disruptive trajectory does not guarantee success

## Key success factors



### Disruptive Trajectory

(threatens replacement or disintermediation of incumbent)



### Unique Business Model

(should be difficult to emulate by competitors)



### Cutting-Edge Technology

(is the number one enabler of disruption)



### Access to Capital

(beyond seed and round A funding)



### Ecosystem Knowledge

(insurance may be a big market but not an easy one)



### Added Value for the Targeted Customers

(satisfaction of key customer needs)



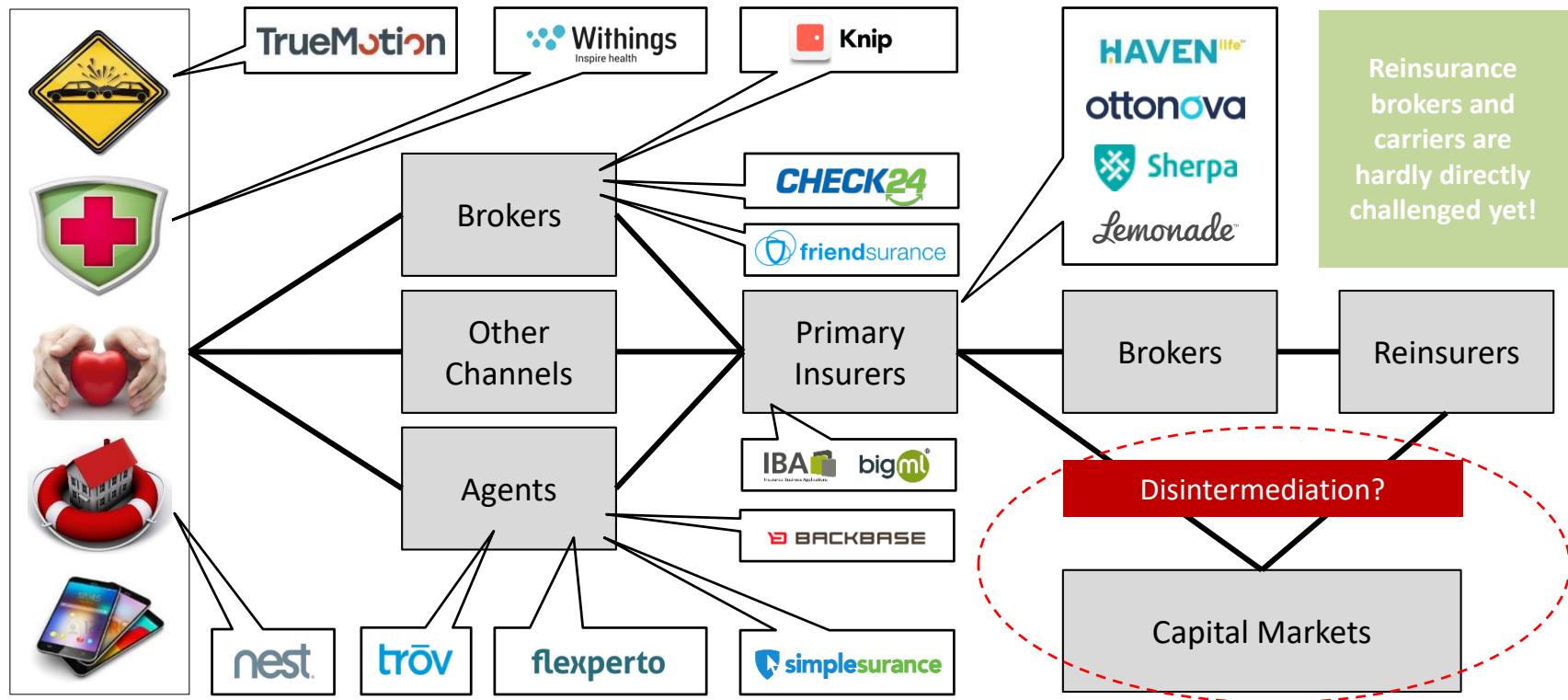
# How can incumbents respond?

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# The first startup generation focuses on risks and the client interface

## Locating the entrants in the ecosystem of the insurance industry

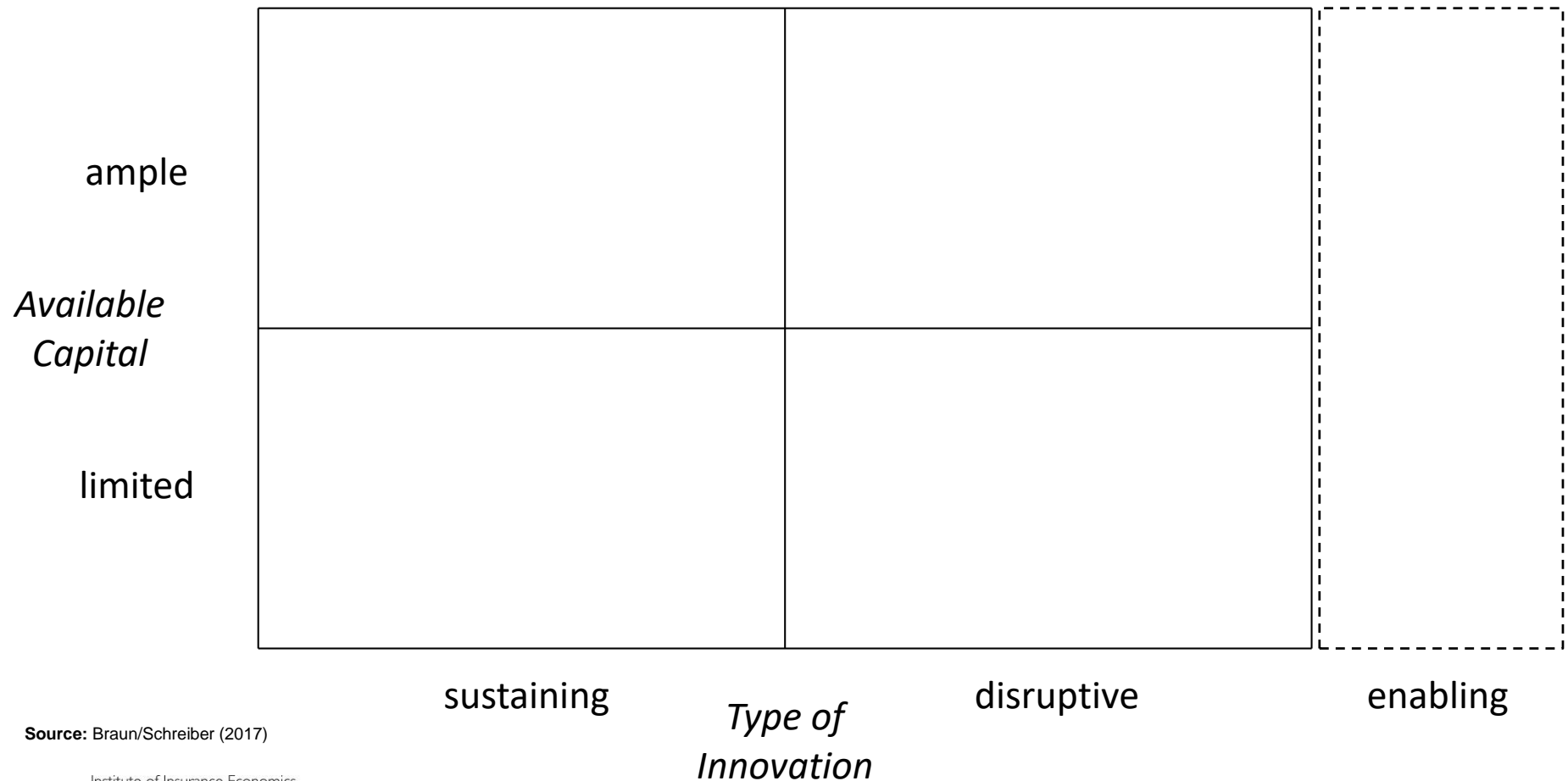


Source: Braun/Schreiber (2017)

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# Different contenders require different reactions

## The I.VW-Strategy-Matrix for InsuranceTech

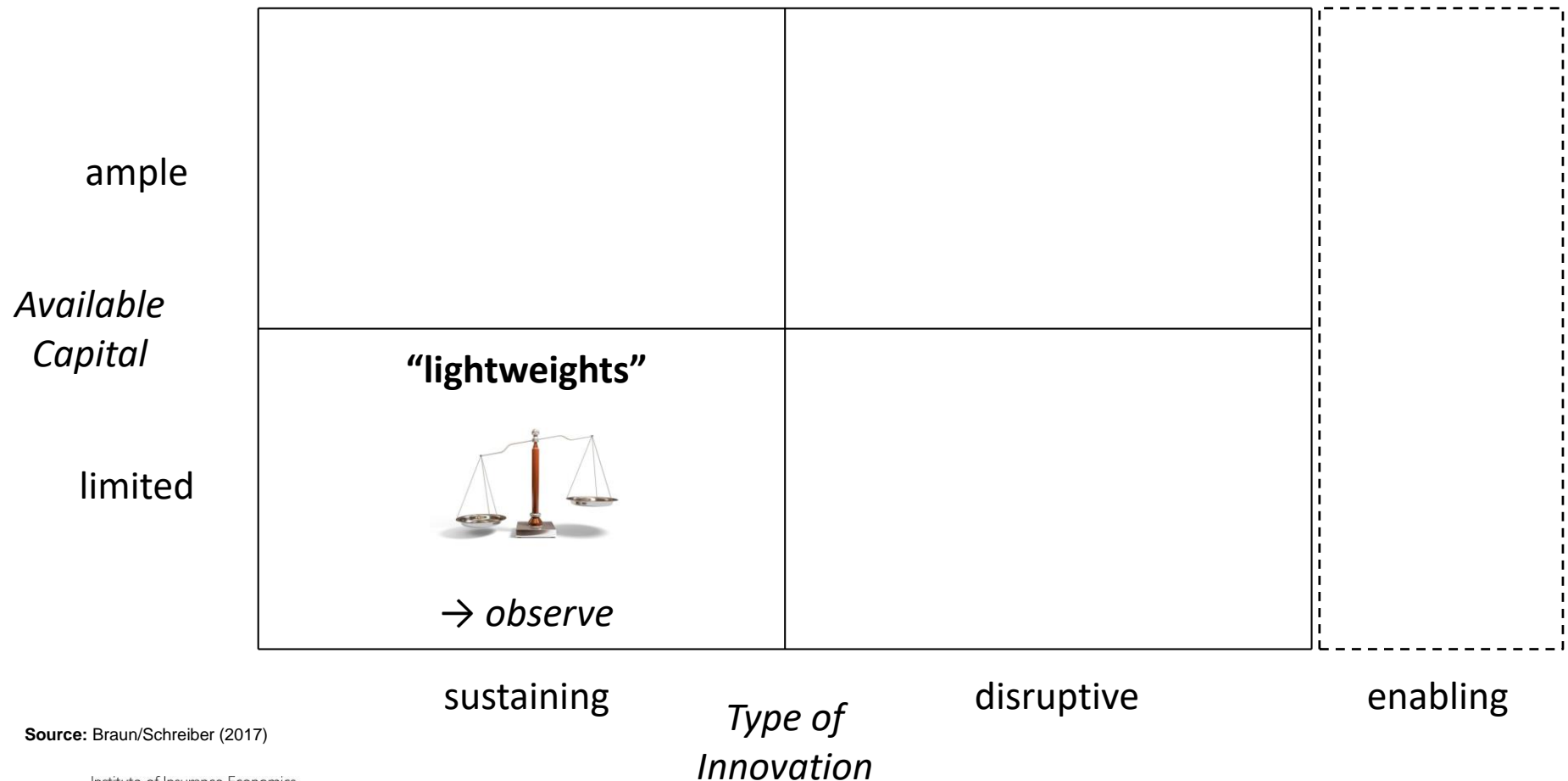


Source: Braun/Schreiber (2017)

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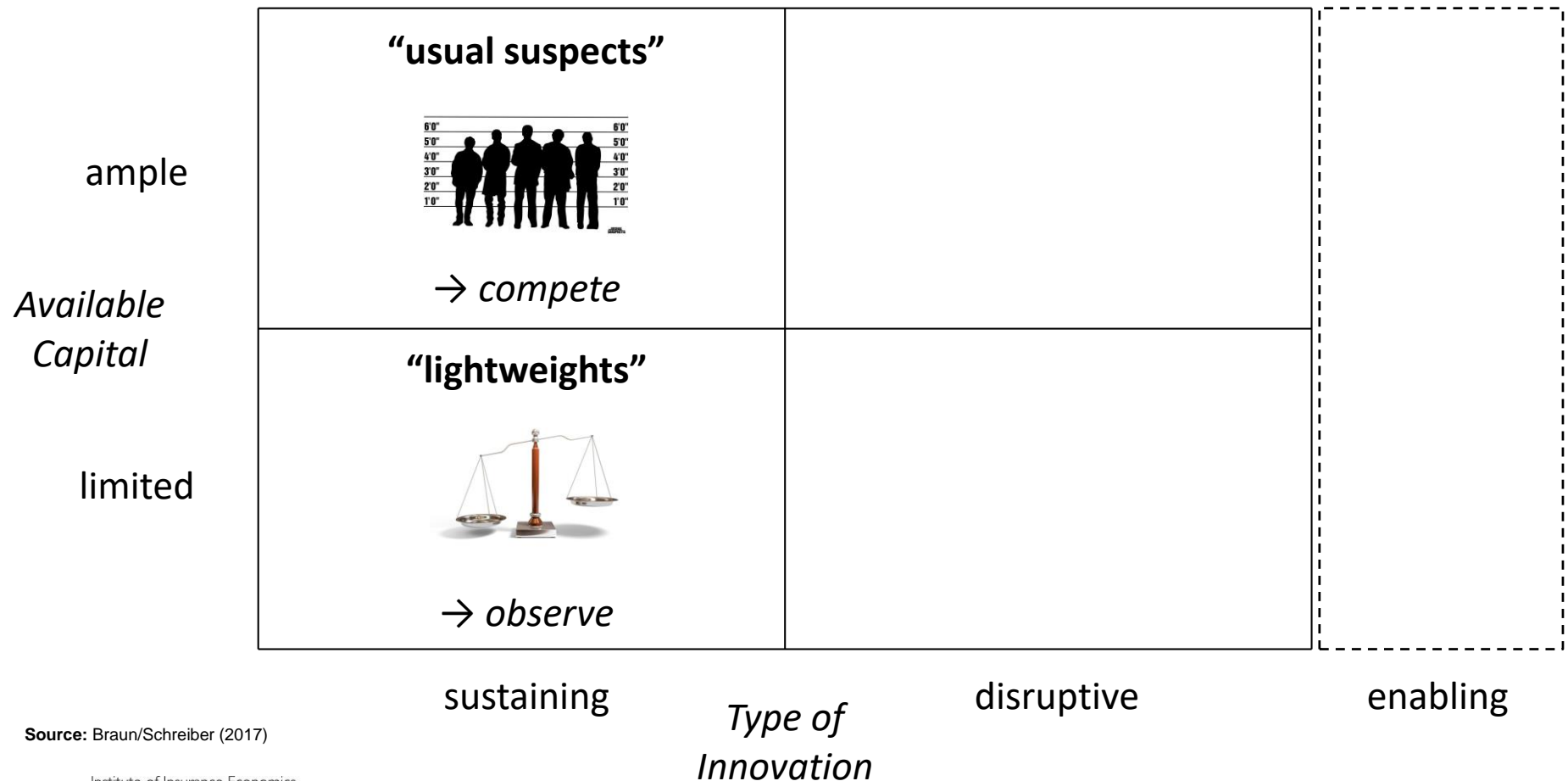


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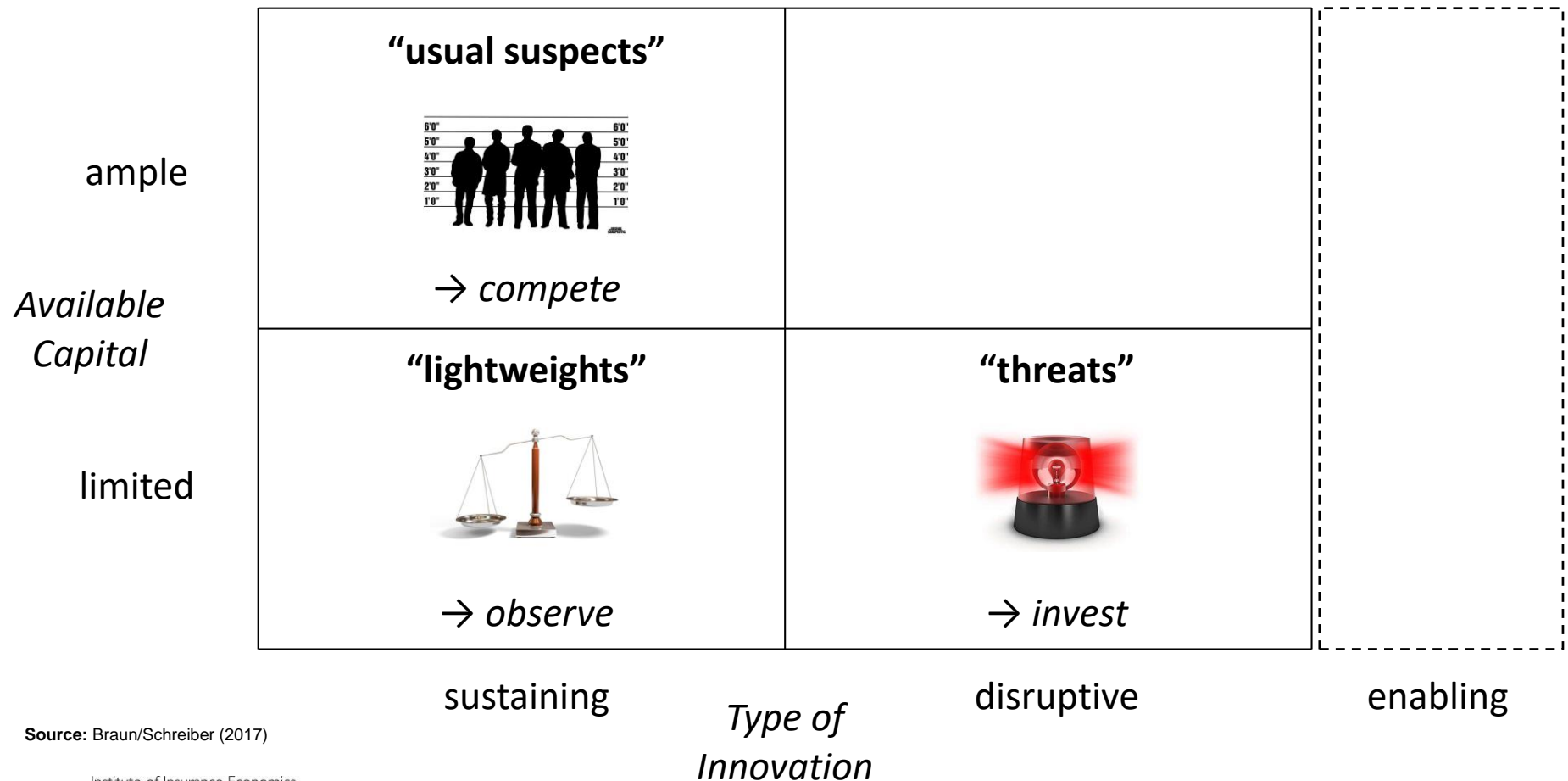
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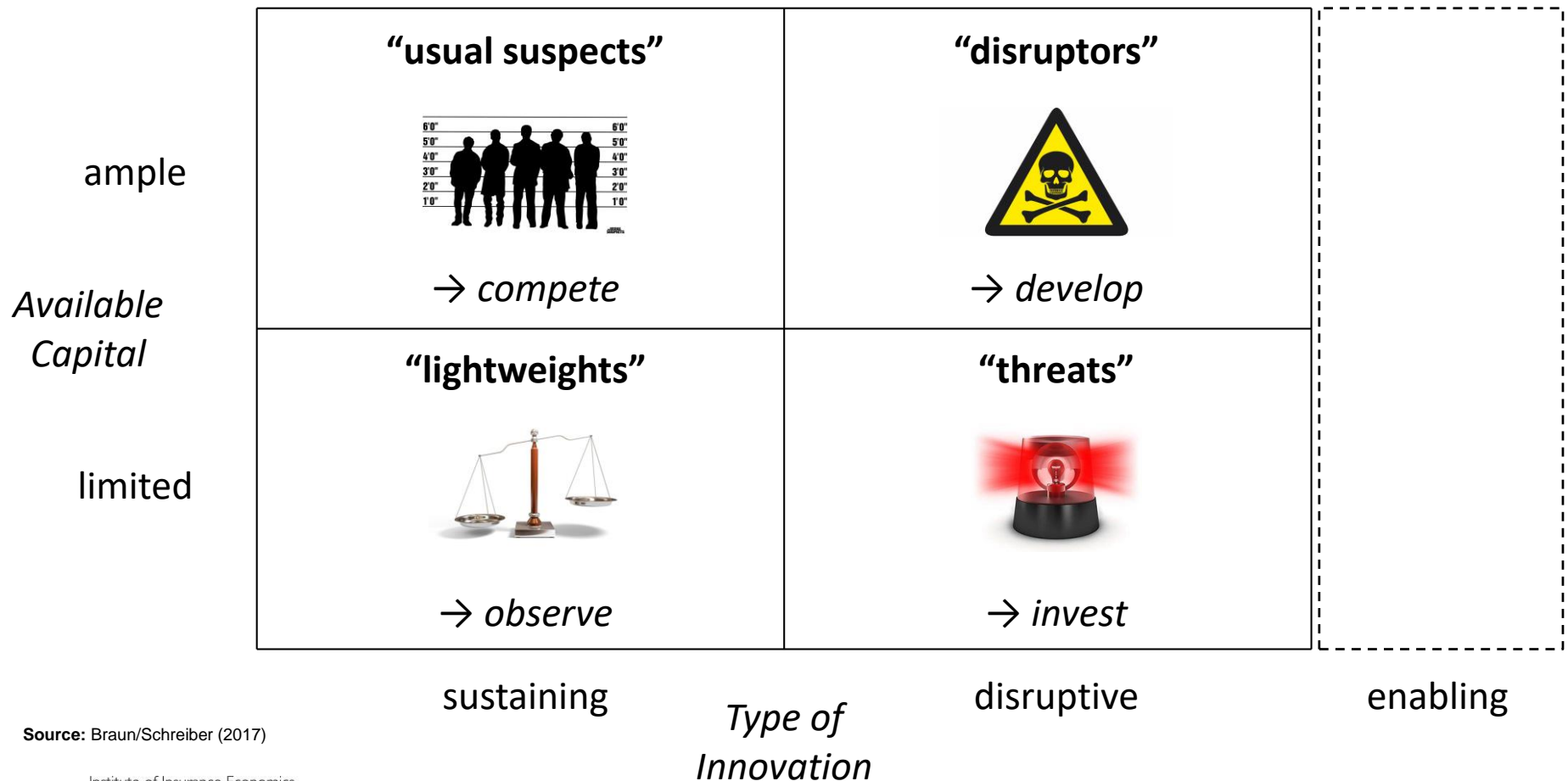


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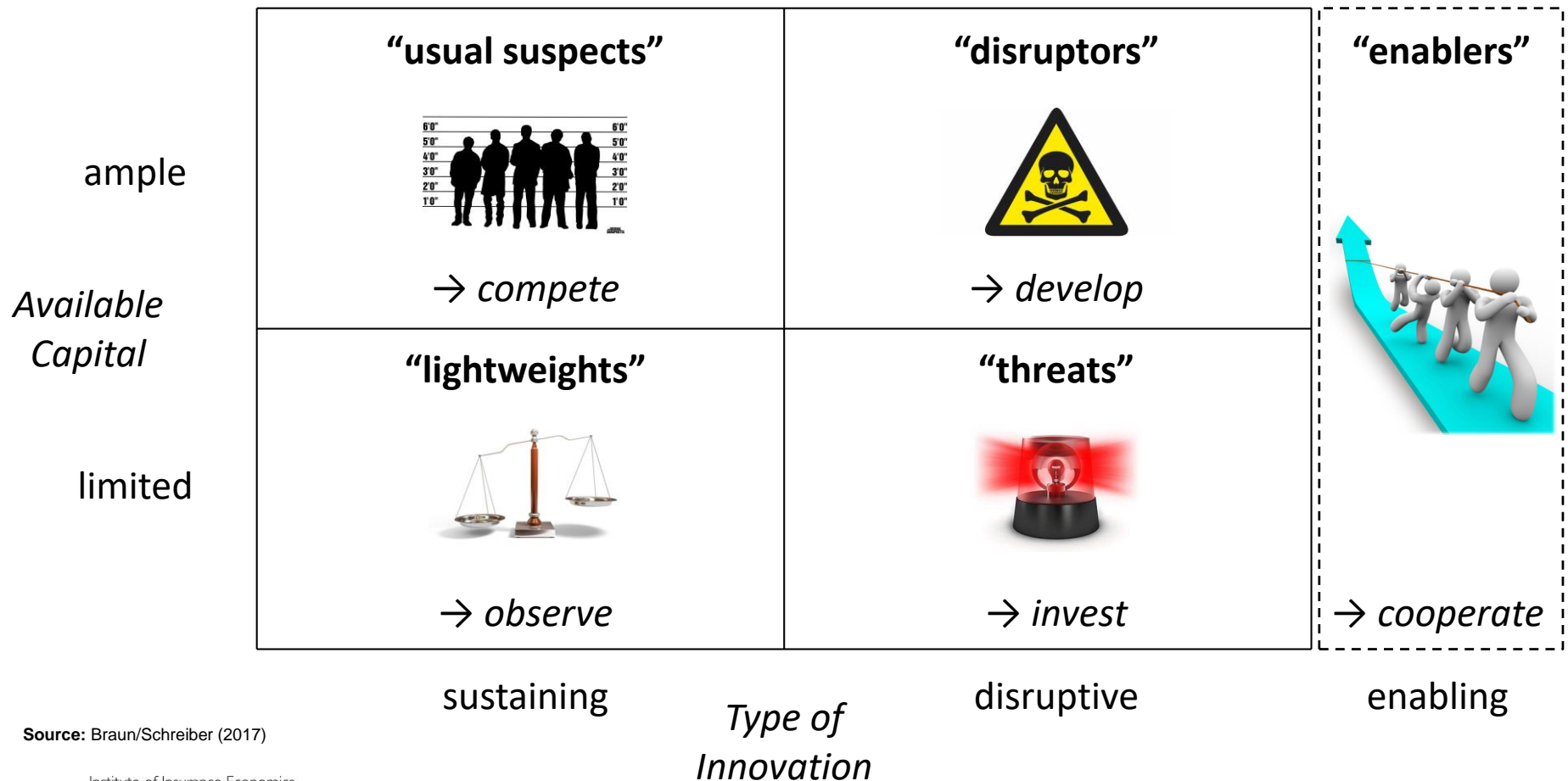


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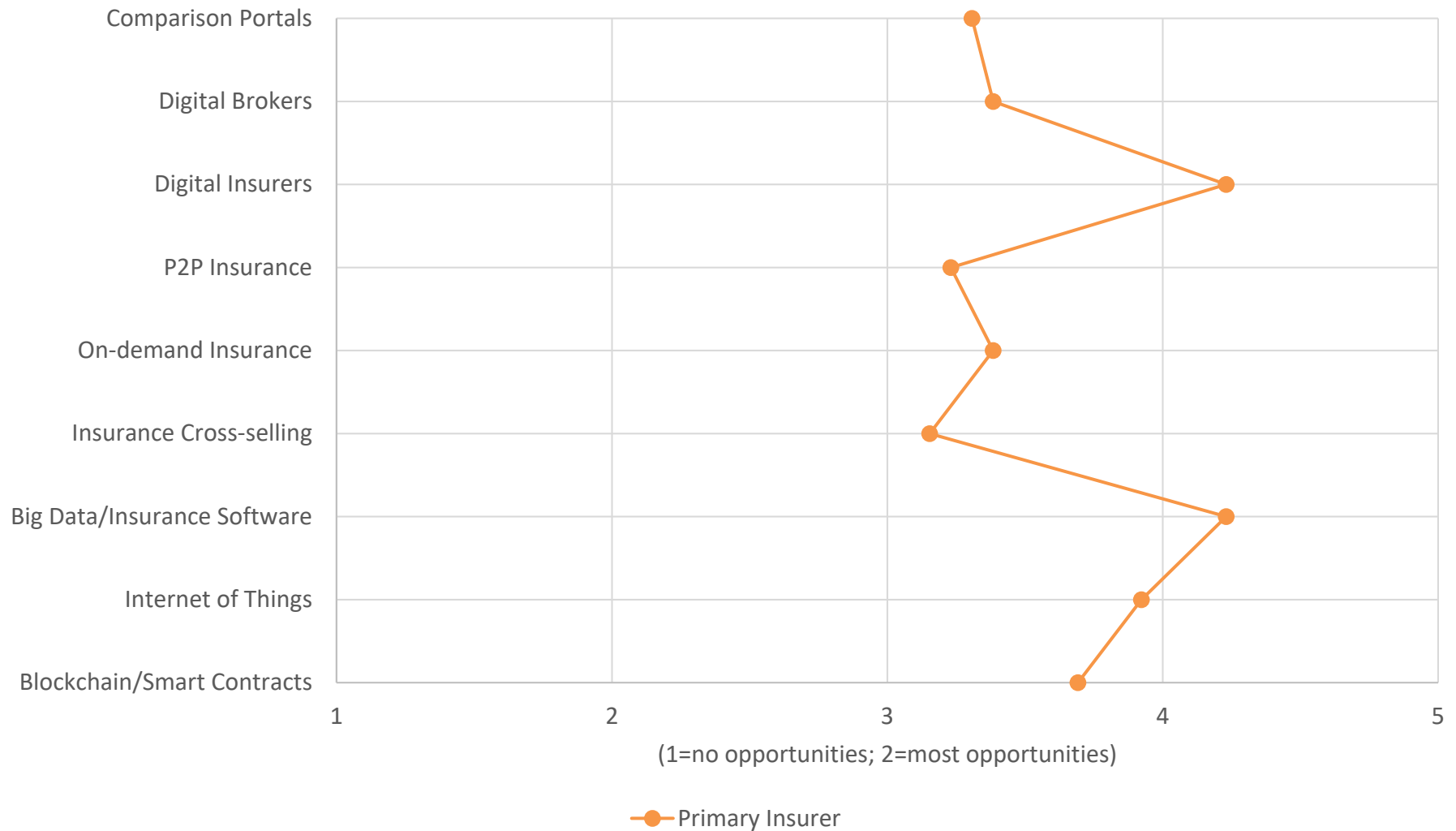
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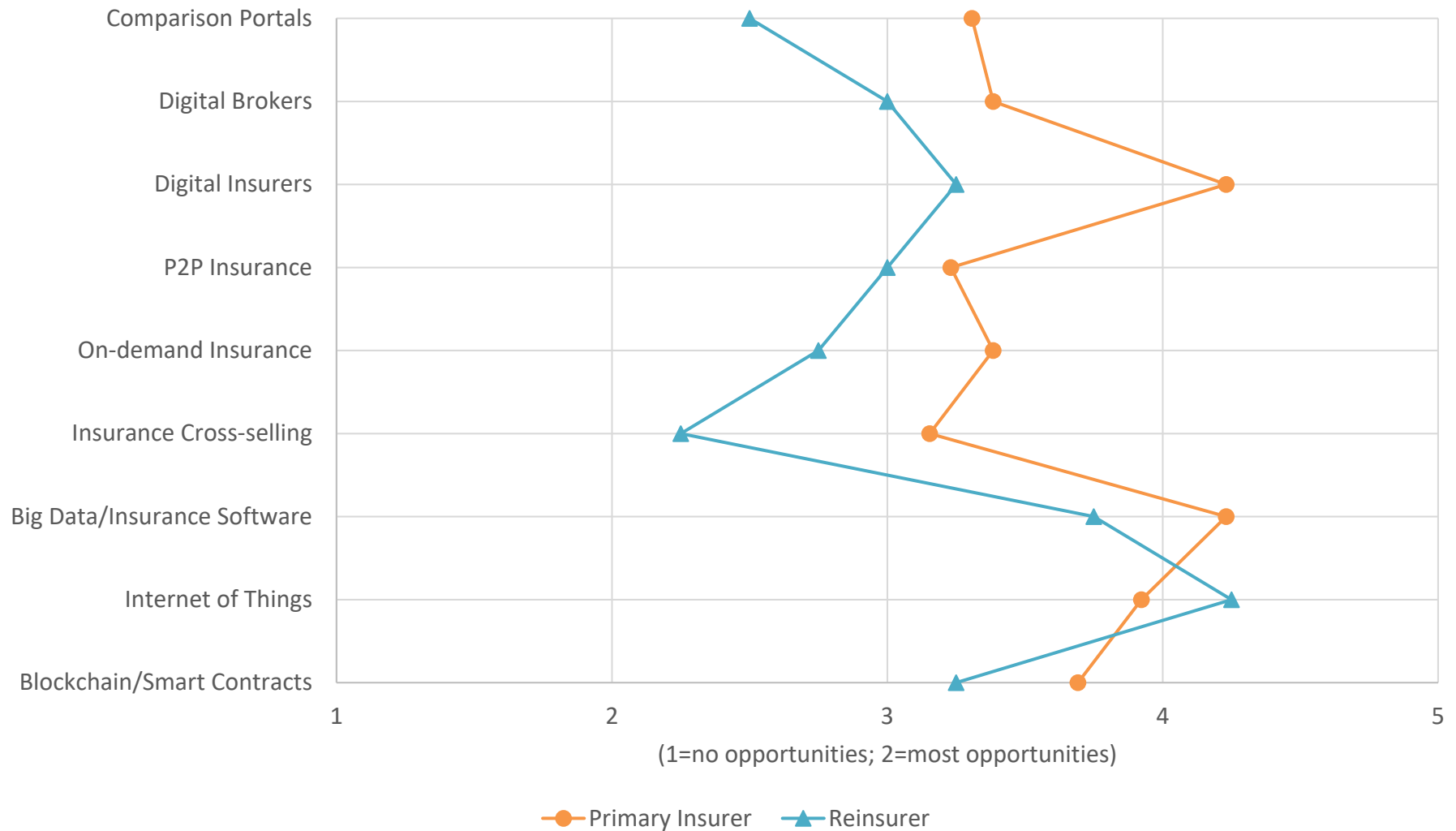
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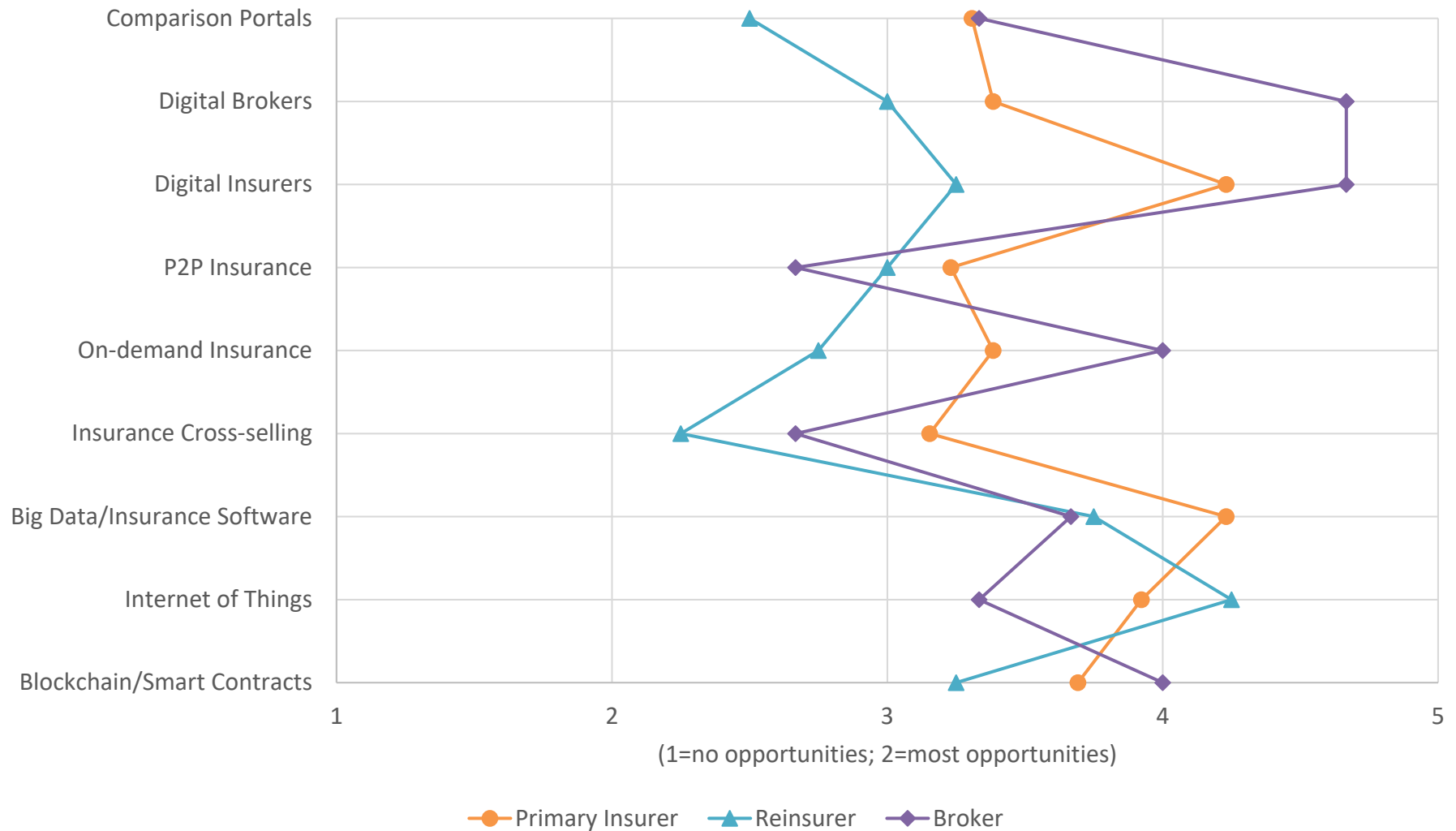
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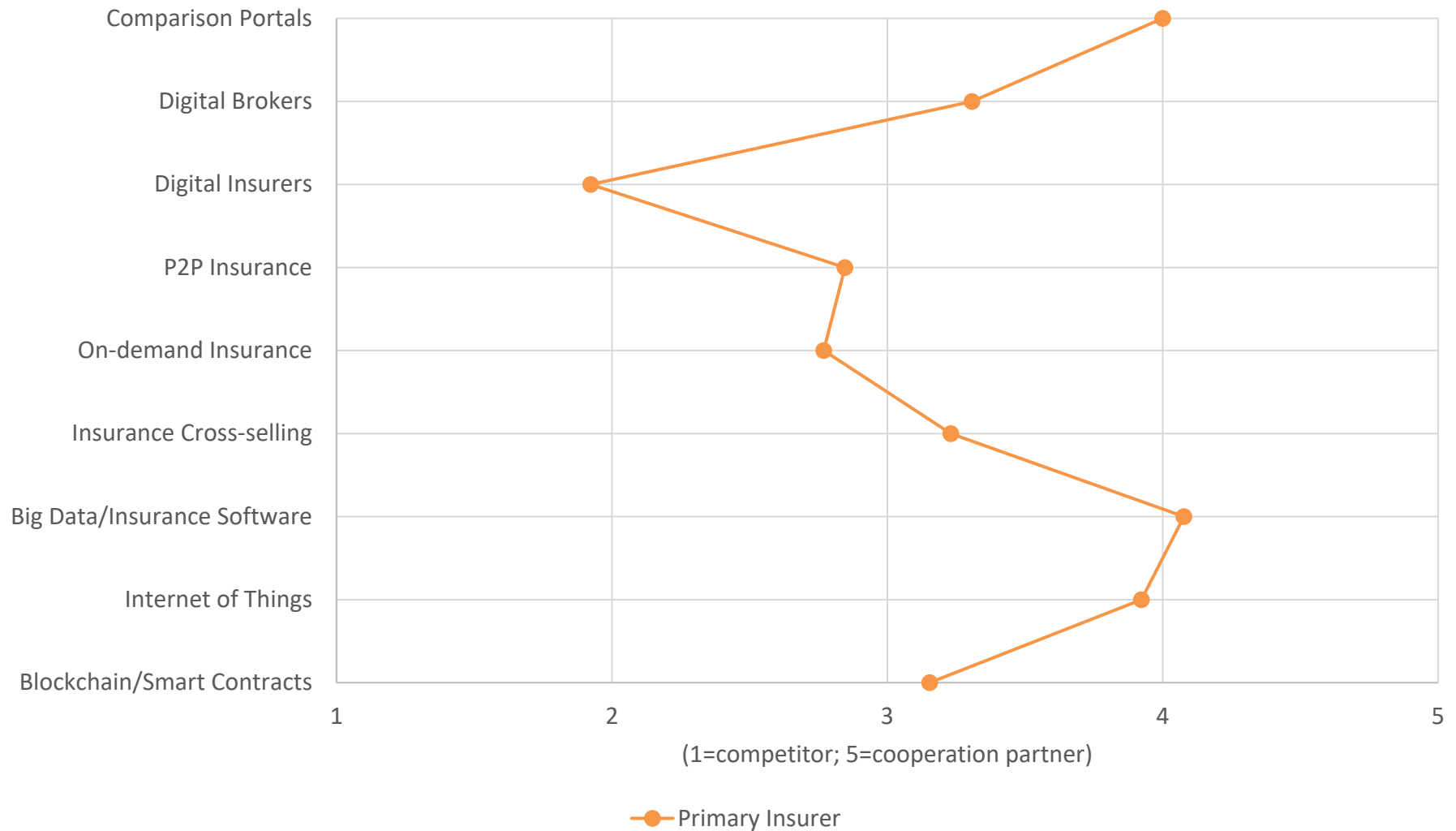


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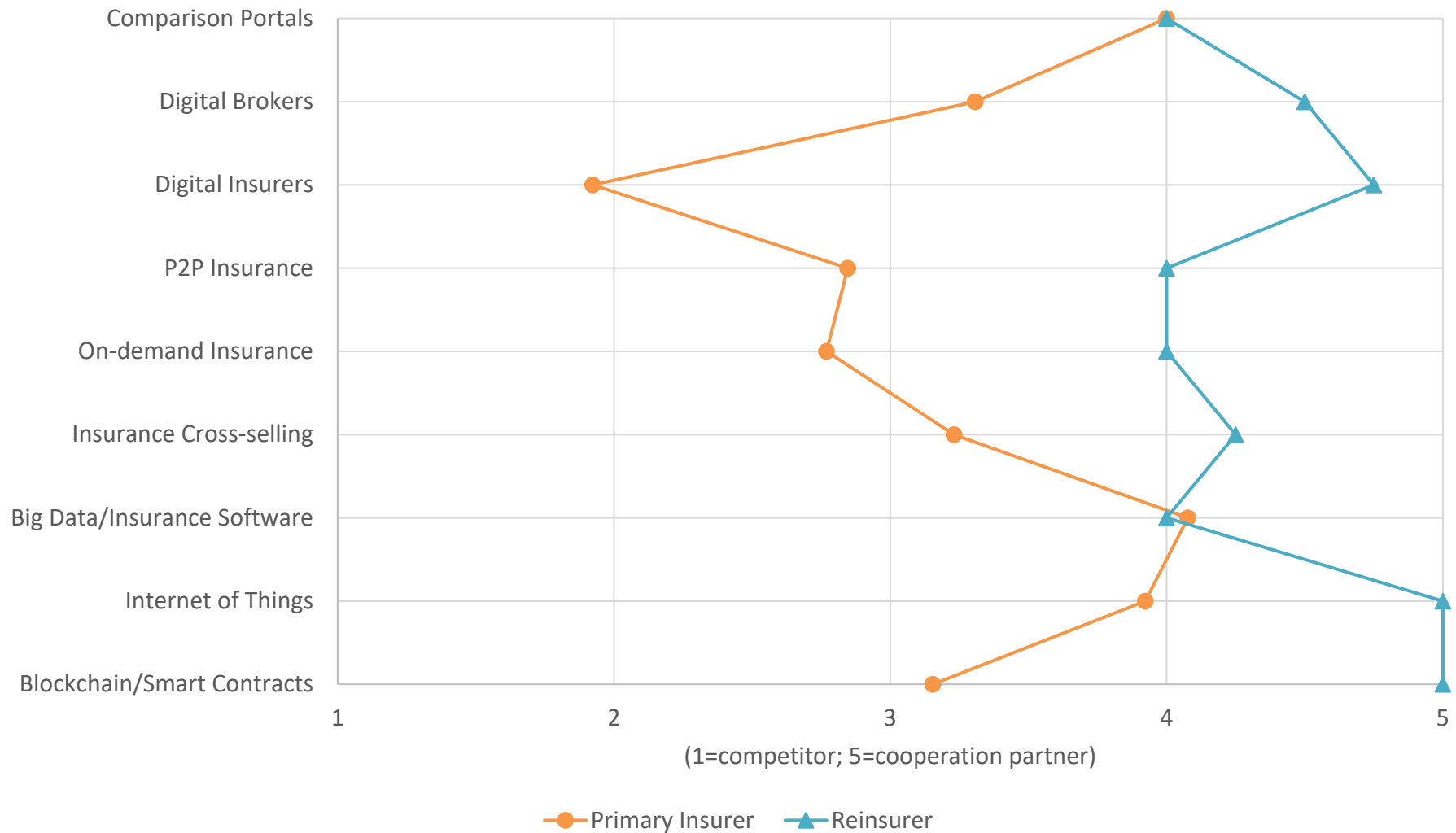




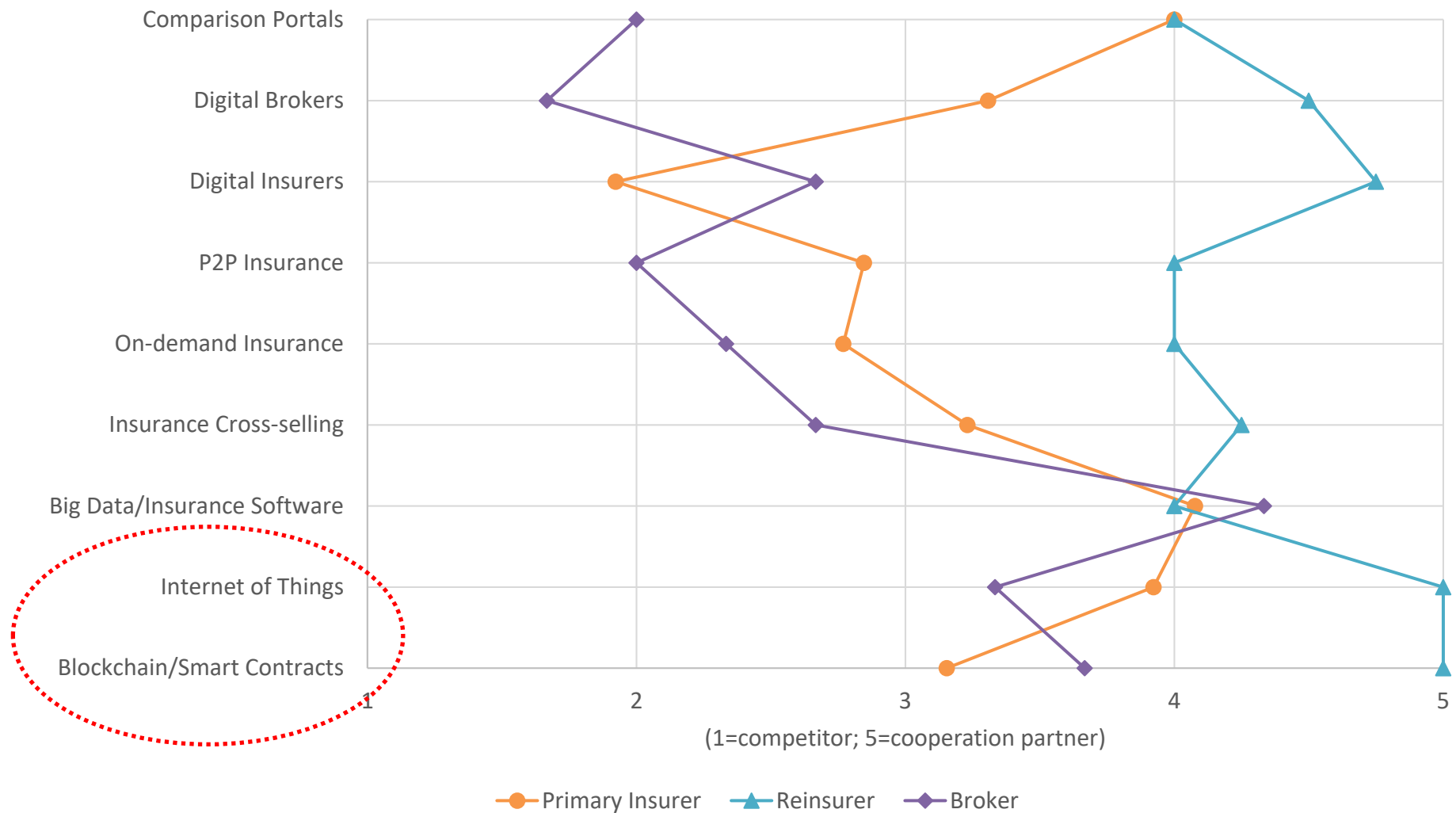
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**3**

## **Selected Startup Profiles**

# The peer-to-peer insurance platform

## Example: friendsurance

So funktioniert Friendsurance:

### 1 Versicherung abschließen



Finde eine günstige Versicherung, die deinen individuellen Bedürfnissen entspricht.

### 2 Mit anderen verbinden



Schließe dich online mit anderen Versicherten zusammen. Ein Teil eurer Versicherungsbeiträge fließt in einen gemeinsamen Topf.



Insurance value chain:

Peer-to-Peer Insurance

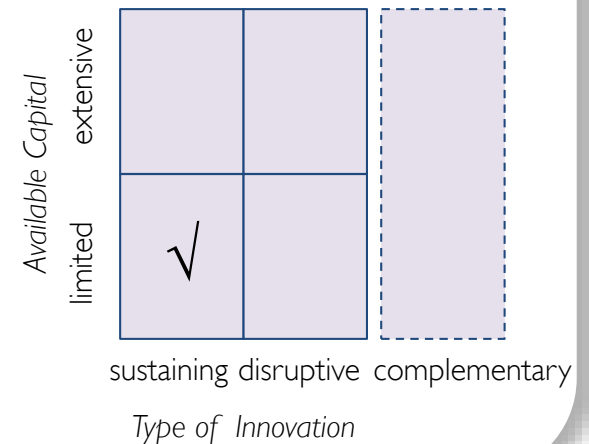
Business Model Patterns:

Peer-to-Peer and E-Commerce

Role in Ecosystem:

Distribution

I.VW Matrix

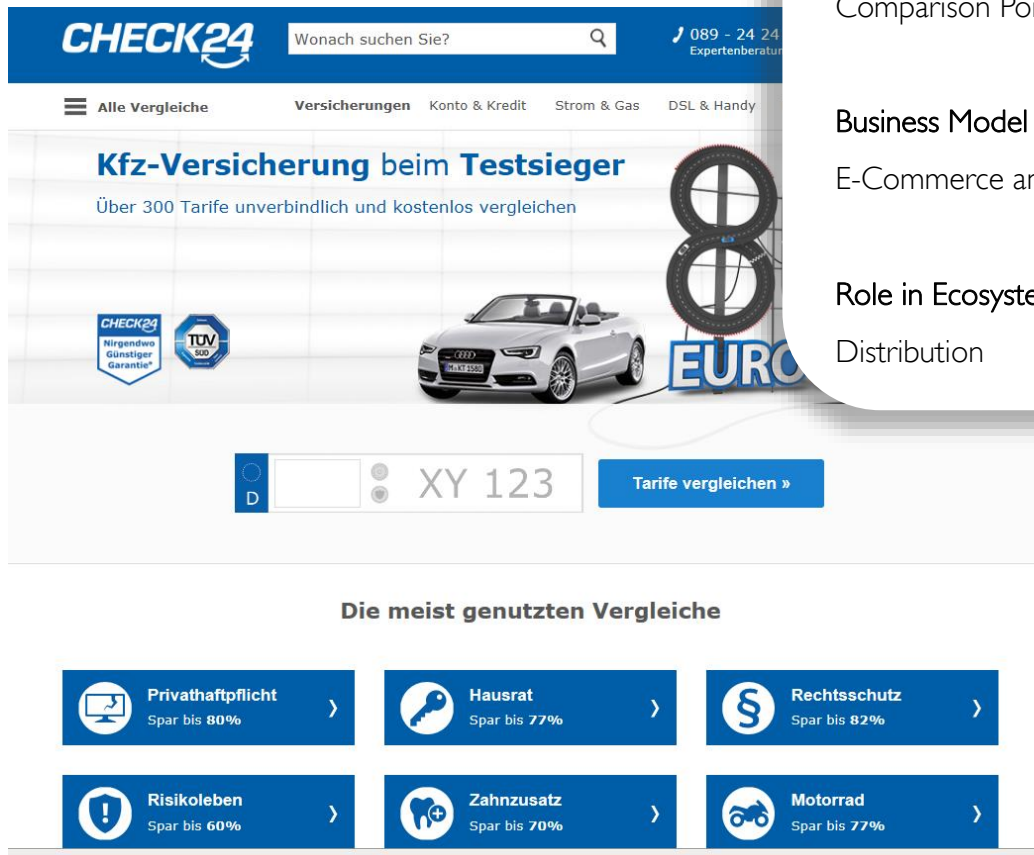


Bei Schadensfreiheit erhältst du bis zu 50% deiner jährlichen Beiträge zurück.



# The B2C online comparison portal

Example: **CHECK24**



Insurance value chain:

Comparison Portal

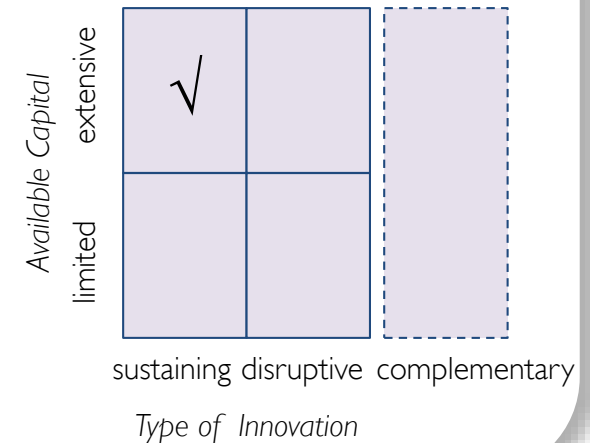
Business Model Patterns:

E-Commerce and Layer Player

Role in Ecosystem:

Distribution

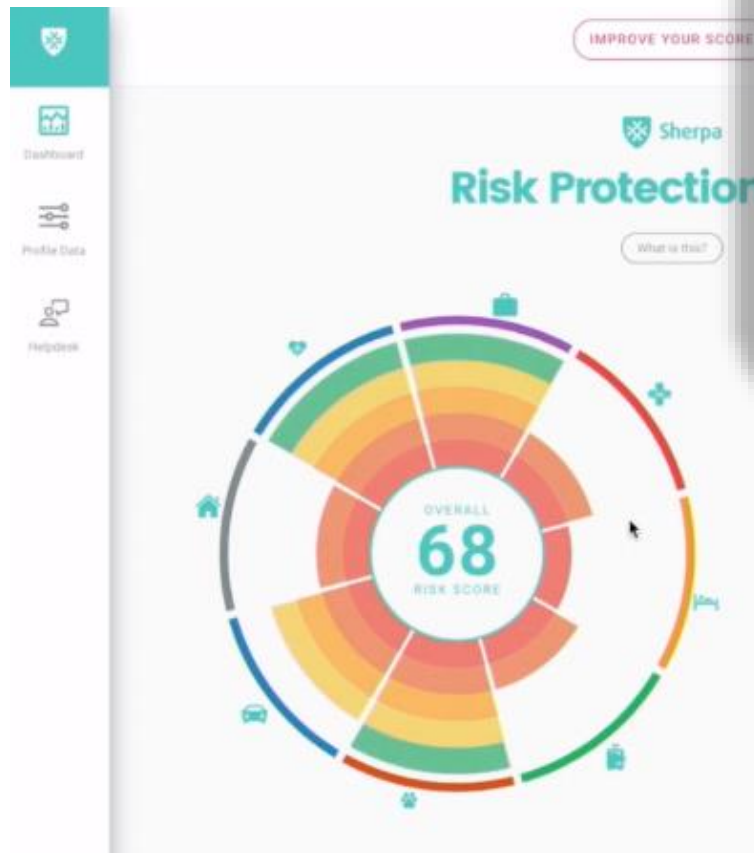
I.VW Matrix





# Personalized und integrated Risk management

Example:  **Sherpa**



Insurance value chain:

Digital Insurer

Business Model Patterns:

Digitization, E-Commerce, Cash

Machine and Direct Selling

Role in Ecosystem:

Risk Carriers

I.VW Matrix

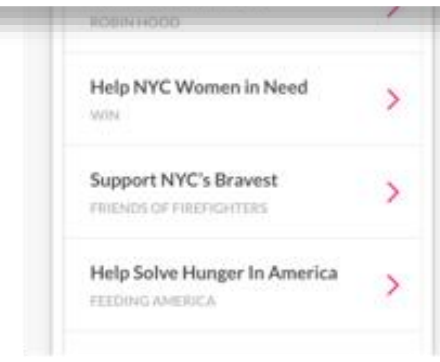
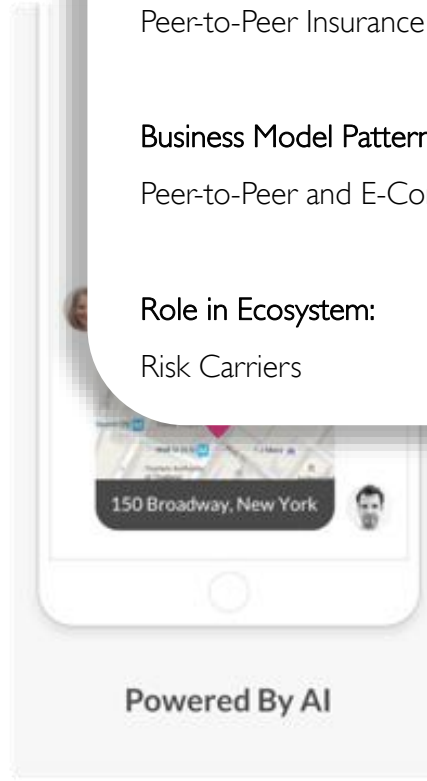
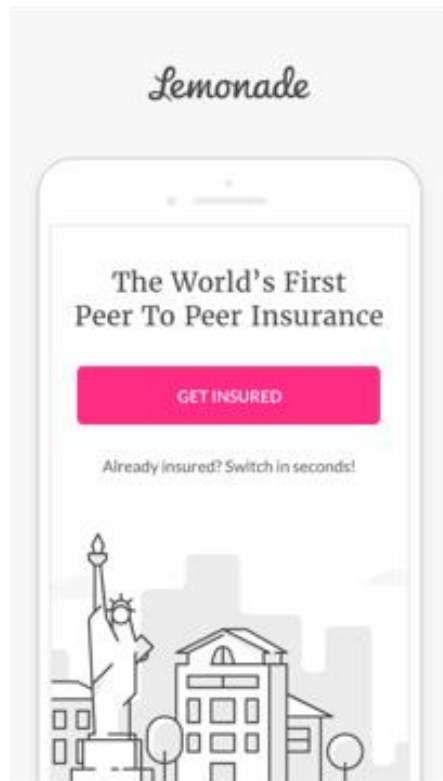
Available Capital	extensive			
	limited		✓	
		sustaining	disruptive	complementary
		Type of Innovation		

«Underwriting» of the whole customer

- 1) Individual risk profile
- 2) In-depth analysis of existing coverage
- 3) Optimization of the insurance portfolio
- 4) Adjustment to changing conditions

# The digital nonlife insurer

## Example: *Lemonade*



Insurance value chain:

Peer-to-Peer Insurance

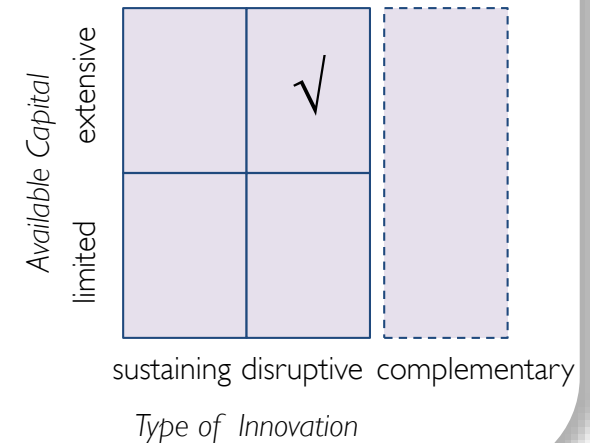
Business Model Patterns:

Peer-to-Peer and E-Commerce

Role in Ecosystem:

Risk Carriers

I.V.W Matrix



P2P-insurance with a charity aspect

# The telematics technology provider

## Example: TrueMotion

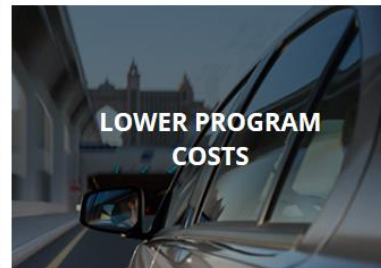
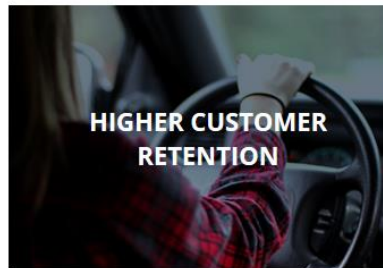
**PROGRESSIVE®**

Learn why Progressive chose TrueMotion above all others to power their Snapshot mobile platform.

## TrueMotion in A

It's clear. We drive results.

The move towards behavior based insurance impacts your bottom line.



Insurance value chain:

Internet of Things

Business Model Patterns:

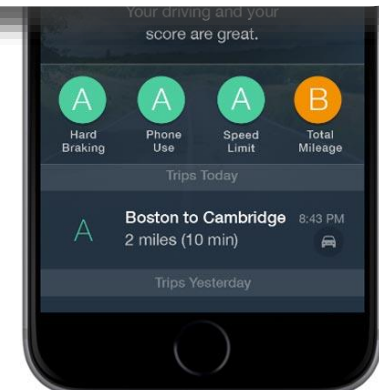
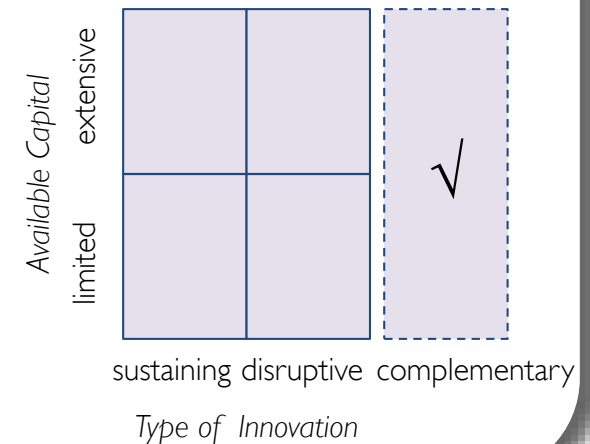
Leverage Customer Data and

Layer Player

Role in Ecosystem:

Technology

I.V.W Matrix



# The internet-of-things specialist

Example: **nest**

Insurance value chain:

Internet of Things

Business Model Patterns:

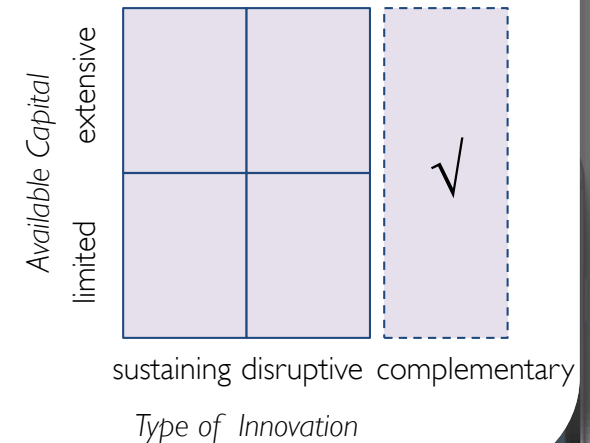
Leverage Customer Data and

Layer Player

Role in Ecosystem:

Technology

I.VW Matrix



# What other InsurTech start-ups do you know?

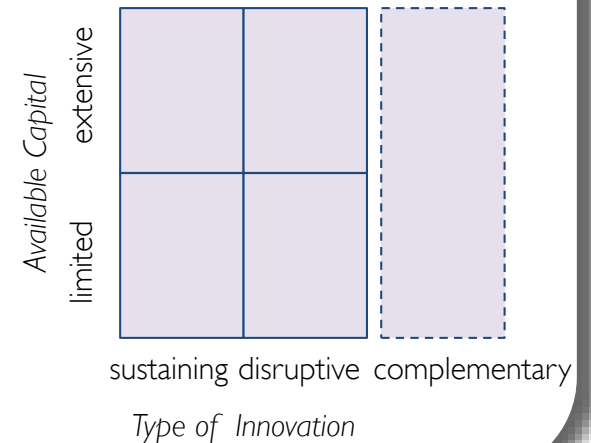
Where do they fit?

Insurance value chain:

Business Model Patterns:

Role in Ecosystem:

I.VW Matrix



**4**

## **Open Discussion and Wrap-Up**



# Wrap-Up

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## Main takeaways of the workshop

- Introduction to the current InsuranceTech landscape  
...to understand the impact of digitization on the insurance sector
- Categorization of InsuranceTech startups and their business models  
...to reveal blank spaces in the current landscape
- Disruptive potential of and success criteria for InsuranceTech startups  
...to assess the threat and the likelihood of business success

# Contact details

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