



TECHNOLOGY ENTREPRENEURSHIP

Professor Bart Clarysse



Prof. Bart Clarysse

BACKGROUND

- Academic experience: Imperial College London, ETHZ
- Research interests: technology entrepreneurs, social interactions, cognitive factors explaining decisions, corporate venturing
- Non-academic experience: digital start-ups, corporate venturing, hydroponics

Collaborations**belgacom**

European Commission



Learning Objectives for this Session

- Understand the context of technology evolution
- Draw insights into the implications of entering a new industry in a period of creation, anticipation or fast following
- Distinguish between the motivation of entrepreneurs, i.e. Capability-driven (tech push), demand pull or aspiration-driven
- Be able to apply these insights in a real-life context

Reading Materials for this Session

Mandatory

- Clarysse, B. & S. Kiefer (2011), “The Smart Entrepreneur”, Chapters 1 and 2
- Script Technology Entrepreneurship: Chapter 1

Supplementary

- Agarwal, R. and B.L. Bayus (2004), “Creating and Surviving in New Industries”, in *Advances in Strategic Management*, 21 : *Business Strategy Over the Industry Life Cycle*; J. Baum and A. McGahan, eds.
- Ambos, T. C., and Birkinshaw, J. (2010), How do new ventures evolve? An inductive study of archetype changes in science-based ventures. *Organization Science*, 21(6): 1125-1140.
- Navis, C. and Glynn, M.A., (2011). Legitimate distinctiveness and the entrepreneurial identity: Influence on investor judgments of new venture plausibility. *Academy of Management Review*, 36(3), pp.479-499.
- Rindova, V. P., and Kotha, S. (2001). Continuous “morphing”: Competing through dynamic capabilities, form, and function. *Academy of Management Journal*, 44(6): 1263-1280.

OneFineStay

The iPhone app pairs local living & hotel service



iPhone lent to
guests for the
duration of their
stay

Over 19,000 local
tips and reviews
from members

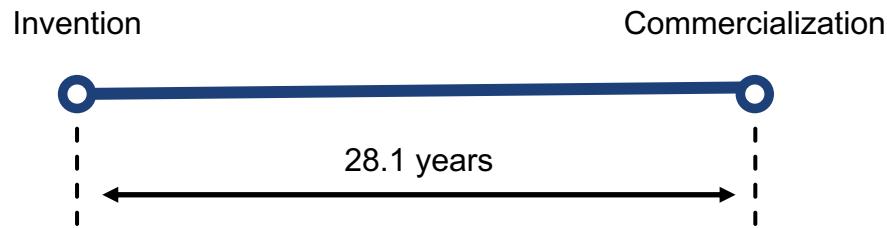
Access to **hotel-**
style service in
stay

Structure

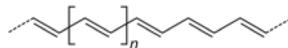
Context of Technology Evolution

1. Technology Incubation Stage (Pre-firm Take-off Stage)
2. Technology Post-firm Take-off Stage
3. Technology Post-sales Take-off Stage

1. Technology Incubation Stage



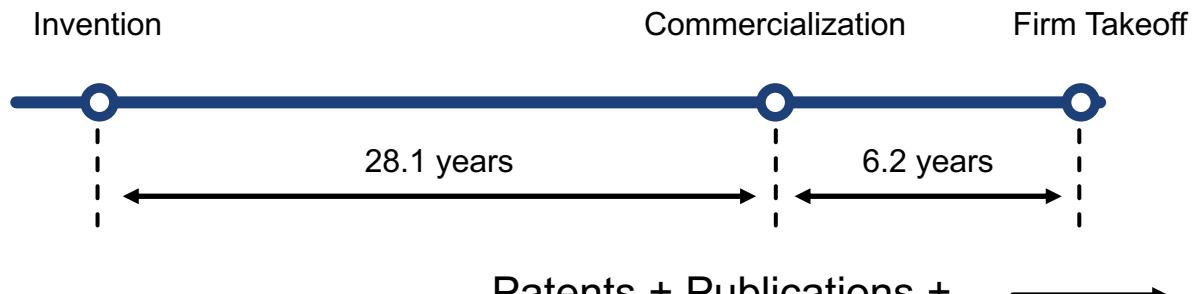
Example: 1977: p-acetylene (Shirakawa) – Nobel prize in 2000
Doped p-acetylene exhibits metal-like conductivity



Source: Agarwal & Bayus, 2002

1. Technology Incubation Stage

First commercialization efforts, pre-firm takeoff



- Technology start-ups that look for applications, Agarwal & Bayus (2004)

Examples: Friendster in social network sites, Mozaic in search engines, QD vision in quantum dots (nano materials), ...

Source: Agarwal & Bayus, 2002

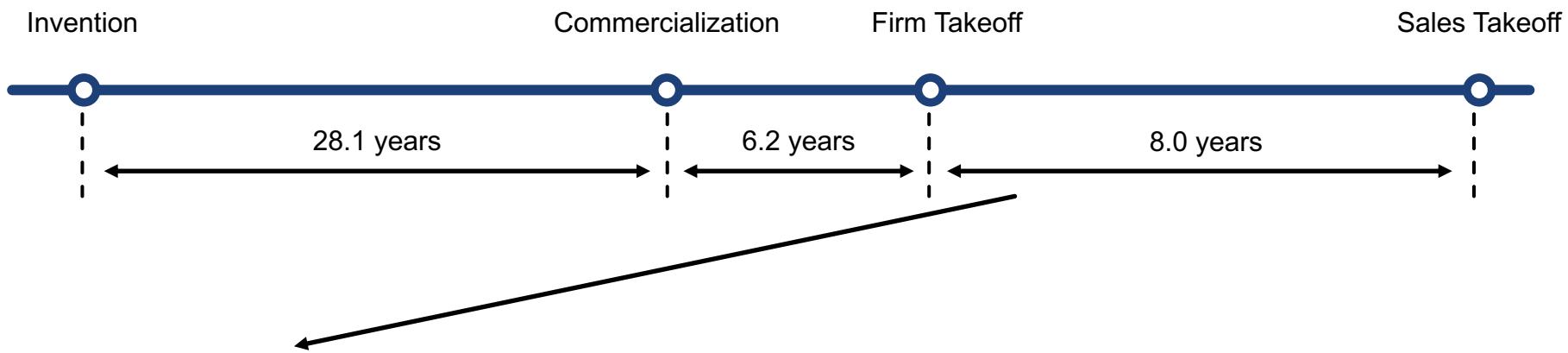
1. Technology Incubation Stage

Entering throughout this stage

- Focus on solving technology uncertainty, usually in combination with finding applications
- Exclusively “technology push” or “capability-driven”, i.e. technology or research capability is the basis of an opportunity space (Ambos & Birkinshaw, 2010)
- Prevalence of “academic spin-offs”, i.e. companies that are started based upon IP developed @ university
- Typical Financing?
 - University-related research grants
 - Technology-specific investors (e.g. CTI backed in Switzerland)

2. Technology Post-firm Take-off Stage

Commercializing technology, pre-sales takeoff



- Technology start-ups that legitimize a category of applications, Agarwal & Bayus (2004) ; Navis & Glynn (2011), Increasing interest by incumbents

Examples: Myspace in social networks, Yahoo! and Excite in search engines

Source: Clarysse, 1996;
Agarwal & Bayus, 2002

2. Technology Post-firm Take-off Stage

Entering throughout this stage

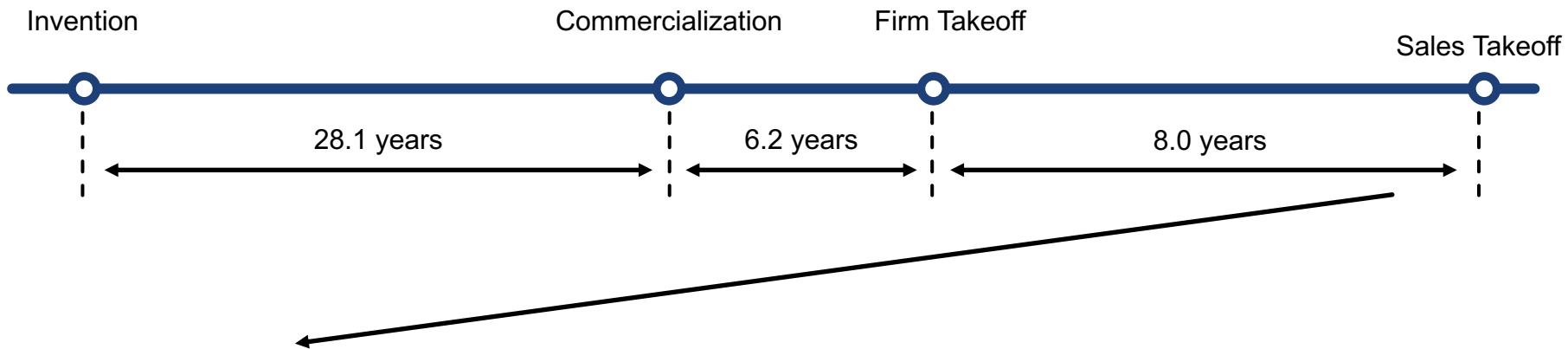
- Focus on legitimizing a new “killer” application (Navis & Glynn, 2011)
 - Through linguistics (e.g. metaphors)
 - Through collaboration with established incumbents
- Can be “capability-driven”, “demand-driven”, sometimes even “aspiration-driven” (Ambos & Birkinshaw, 2010)
 - Demand driven: Opportunity is inspired by a personal frustration of the founder or a perceived inefficiency
- Search for business models to make money in the “killer” application

2. Technology Post-firm Take-off Stage Example



3. Technology Post-sales Take-off Stage

Commercializing technology, sales take-off



Followers: Fast followers that spot an emerging category (a “killer app”) and enter the market with improved business models to scale them (mostly incumbents, occasionally starters)

Examples: Facebook in social networks, Google in search engines, Tesla in electric cars, Space XT in space flights

Source: Clarysse, 1996;
Agarwal & Bayus, 2002

3. Technology Post-sales Take-off Stage “Fast Followers”

- Focus on “scaling” a business model into a mainstream market
 - Through learning from other business model shortcomings
 - Through focusing on a premium customer
- Can be “demand-driven”, mostly even “aspiration-driven” (Ambos & Birkinshaw, 2010)
 - Aspiration-driven: Opportunity is inspired by the ambition to create a “company” and grow
- Search for business models to make money in the “killer” application

3. Technology Post-sales Take-off Stage

Example: OneFineStay

The image shows a video frame of a man, Greg Marsh, speaking. He is wearing a light brown V-neck sweater over a light blue button-down shirt. The background is plain white. In the top left corner of the video frame, there is a logo for Imperial College Business School, featuring a stylized blue 'B' followed by the text 'Imperial College Business School'. At the bottom of the video frame, there is a blue banner with white text that reads 'Business model innovators: Guest speaker (part 1 of 2)'. Below this banner, a grey bar contains the text 'Entrepreneurship' and 'Greg Marsh'. To the right of the video frame, the 'OneFineStay' logo is partially visible, showing the words 'onefinestay' in a lowercase, sans-serif font.

Business model innovators: Guest speaker (part 1 of 2)

Entrepreneurship
Greg Marsh

onefinestay

OneFineStay Discussion

hosts

We provide a complete solution for selected **owner-occupiers** in city-centres to earn extra income while they're out of town without hassle or risk

 **onefinestay**
“a curated, service-enabled marketplace for upscale city accommodation”

guests

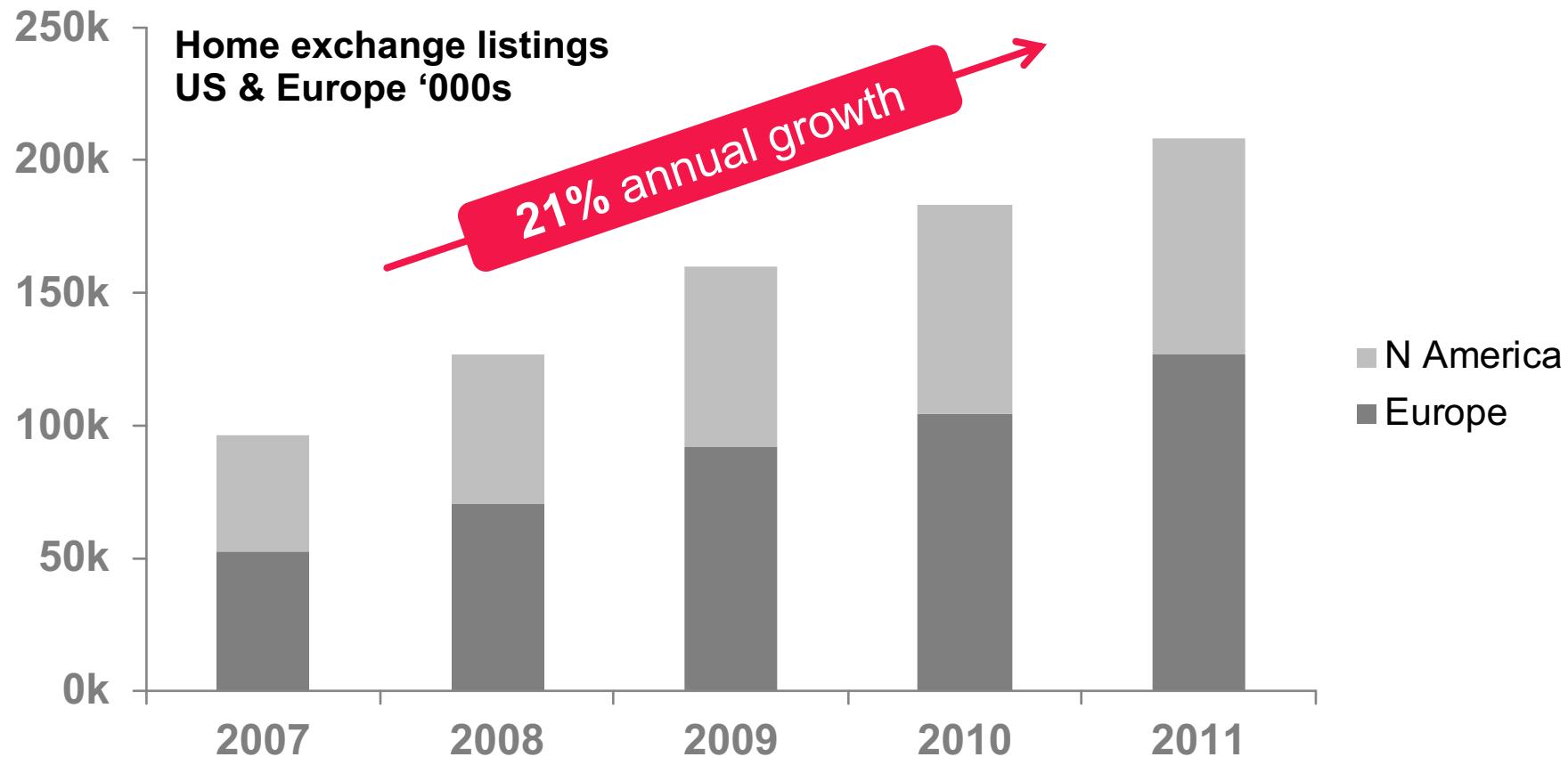
This unlocks a new tier of exclusive short-stay inventory for **discerning travellers** which many significantly prefer to a traditional luxury or boutique hotel

Enabled by a **unique, variabilized service model** that uses **proprietary mobile technology** to coordinate a **distributed low-cost contract labor force**



OneFineStay

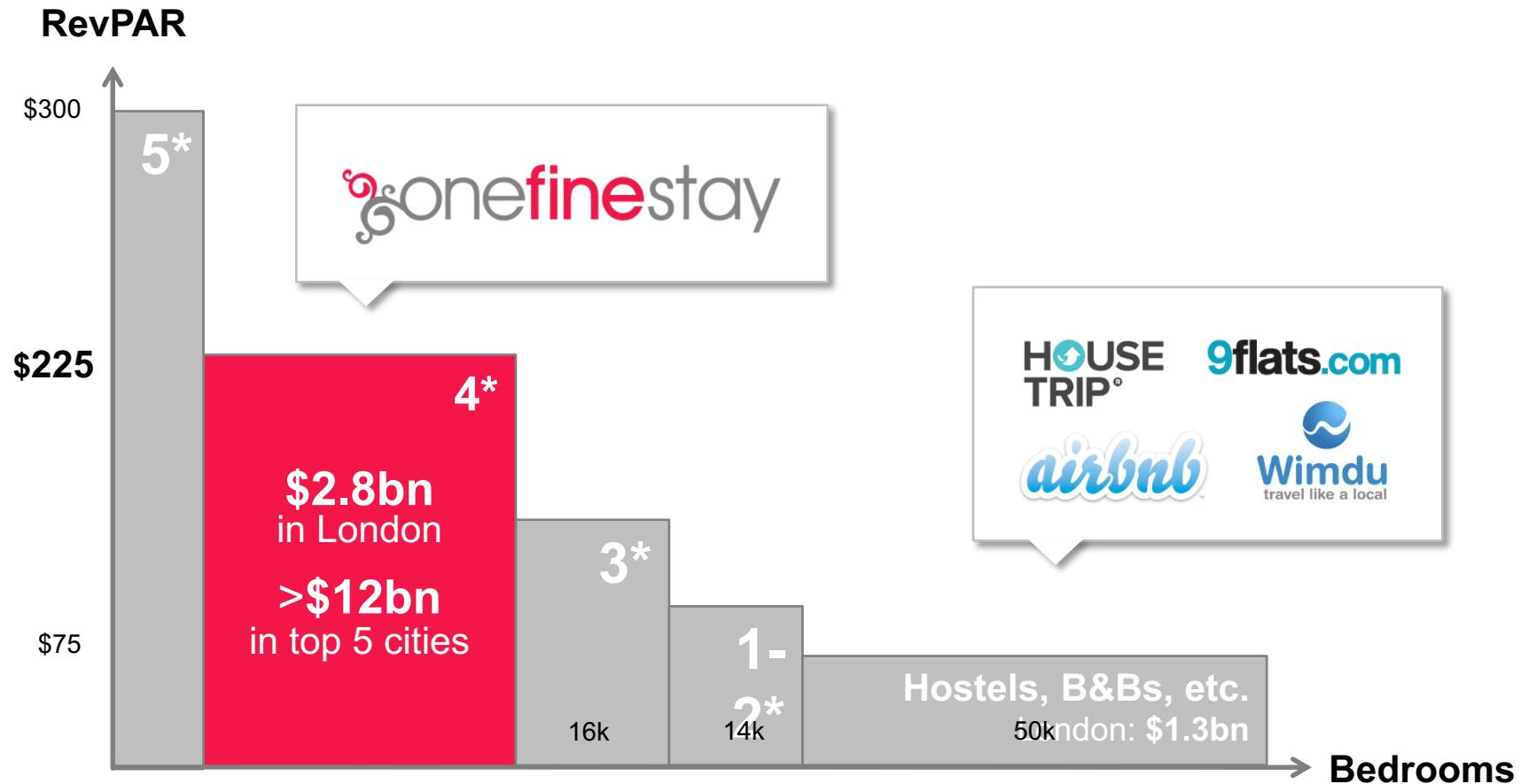
A fast-growing trend for authentic experiences



Source: knowyourtrade, onefinestay analysis

OneFineStay

Urban upscale is a huge, unexploited opportunity



Source: Mintel, onefinestay analysis

OneFineStay

Founding team had hybrid mix of backgrounds

Greg Marsh*

co-founder & ceo

IT investment team @ Index Ventures

Operations, bus dev, product manager @ GF-X (logistics software / b2b marketplace)

Cambridge / HBS (Ford Scholar, Fulbright Scholar)

Evan Frank

co-founder & vp americas

Co-founder @ iwantBOX.com

Director @ Kennet

Analyst @ Jeffries Broadview, New York

Michigan Business School

Demetrios Zoppos *

co-founder & coo

Founding CEO @ GradFutures

Co-founder & COO, then MD @ GF-X (raised \$85m, acquired by Descartes)

McKinsey & Co

Cambridge / Harvard KSG (Fulbright Scholar)

Tim Davey

co-founder
& head of product

Co-founder & CTO @ SnapTalent (SV-based, funded by YC & Index)

Imperial College

Capital markets

Logistics

Technology

Entrepreneurial

OneFineStay

Built around a compelling service experience

Curation

we accept only 10% of homes

+

Control

and standardize the guest experience (linens, towels, meet & greet)

Availability

6 weeks+ / year

Location

Desirable city center

Quality

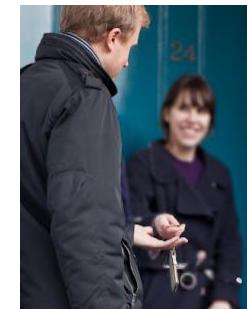
Nicely appointed

Style

Characterful & unique

Specification

Modern amenities



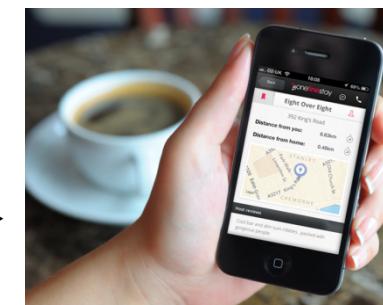
contract teams
prepare the
home for
guests

provision of the
home with **hotel
quality amenities**
and linens

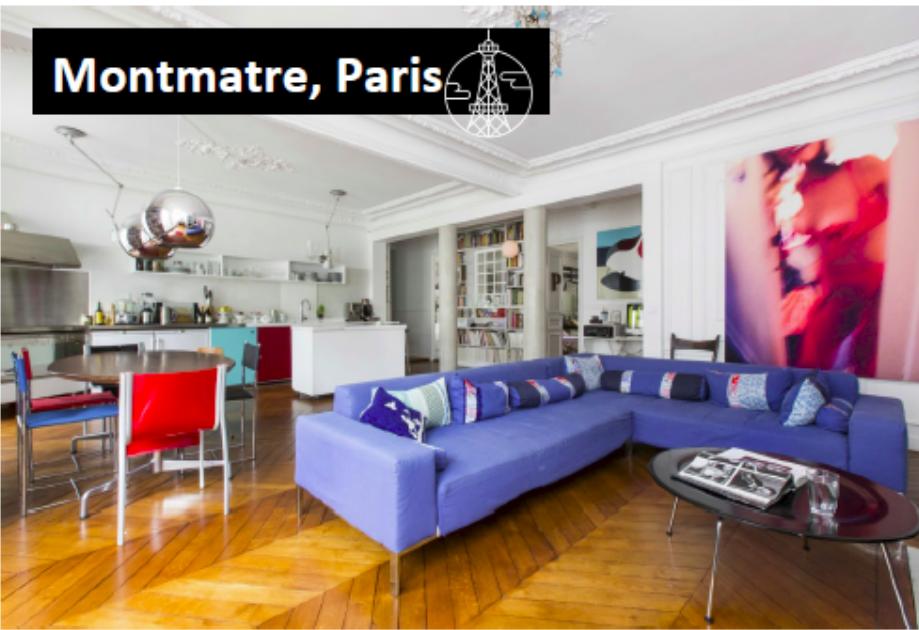


meet and greet
guests at the home

and give an
iPhone with our
app & info about
the local area



Montmatre, Paris



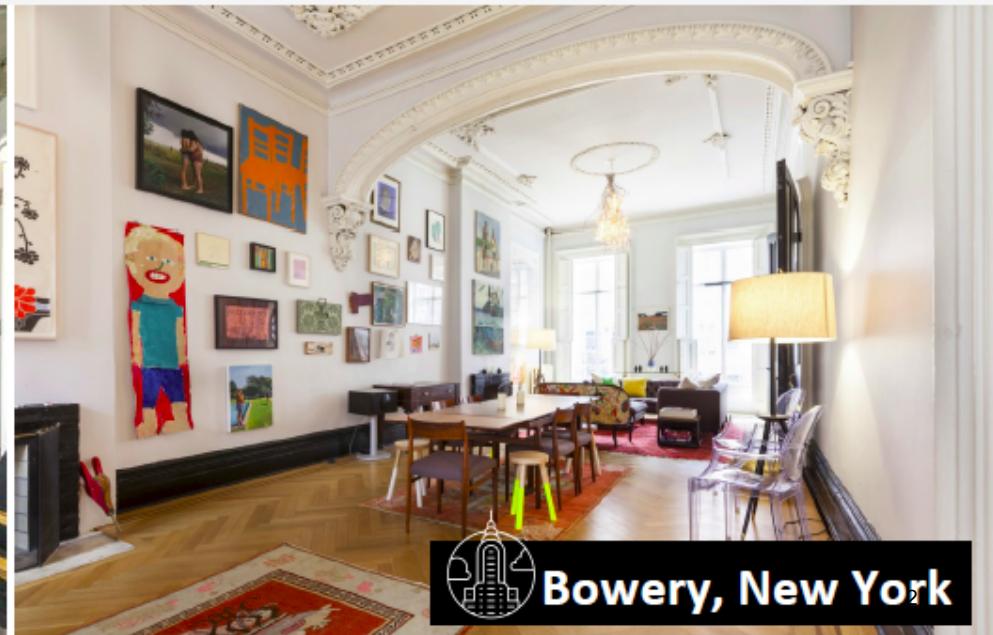
Mayfair, London



in stunning homes



Palisades, Los Angeles



Bowery, New York



OneFineStay

Contract labour + technology underpin our operation

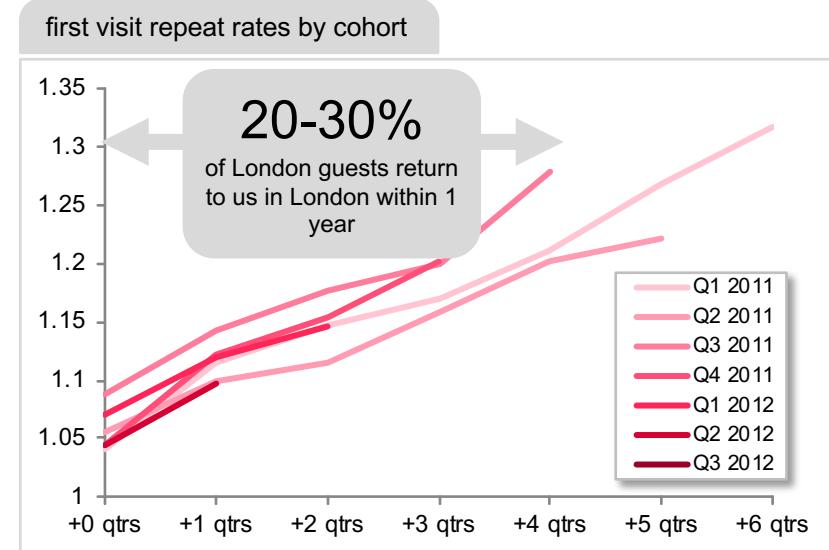


OneFineStay Reception

"This is simply one of the best travel experiences we have ever had as a family... It is a credit to you as a company to deliver all you claim, and in our case the level of accommodation and customer care exceeded all of our expectations."

— Stephen, Nov 2012

"There are not enough words nor space to let you ALL know how pleased I was... You may be a young company, just starting out, but **EVERYONE I emailed, at any time, were so friendly, courteous, helpful and knowledgeable.**" — Eileen, Apr 2013

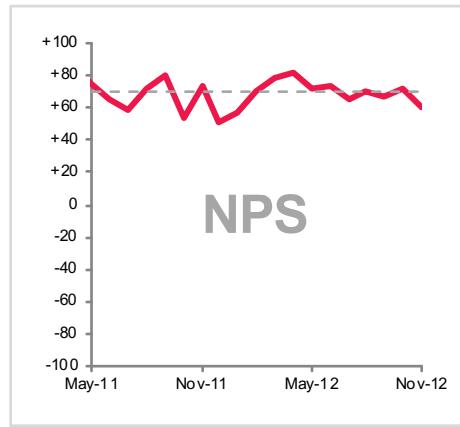


OneFineStay

Growth has been strong

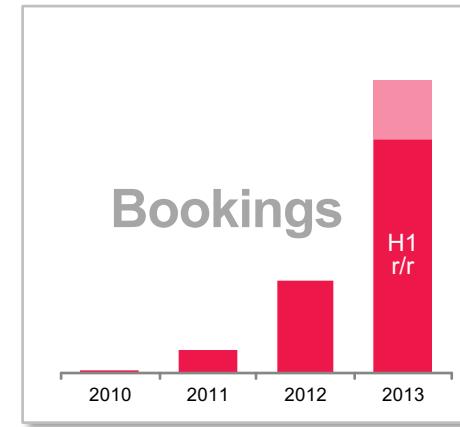
popular

Consistent +70 NPS scores and 25-30% repeat rates within 12 months



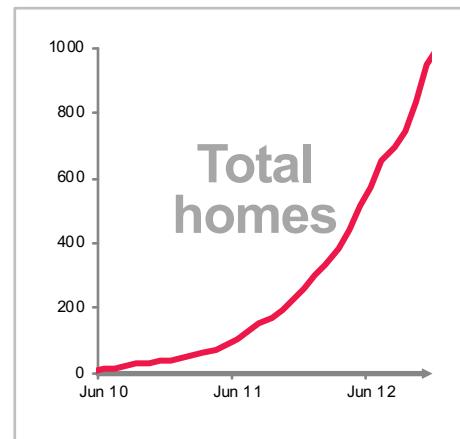
scalable

YoY growth of 3.2x year to date, on a significant top line bookings run rate



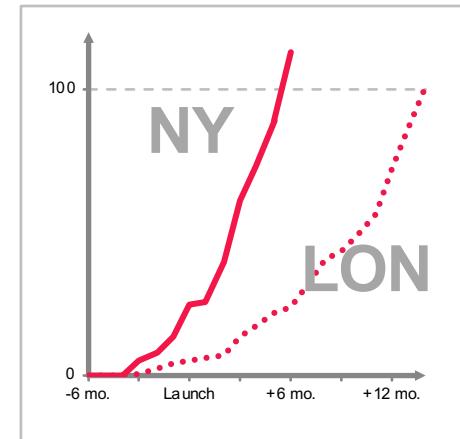
viral

>60% of member growth is referrals, with annualised churn rates <15%



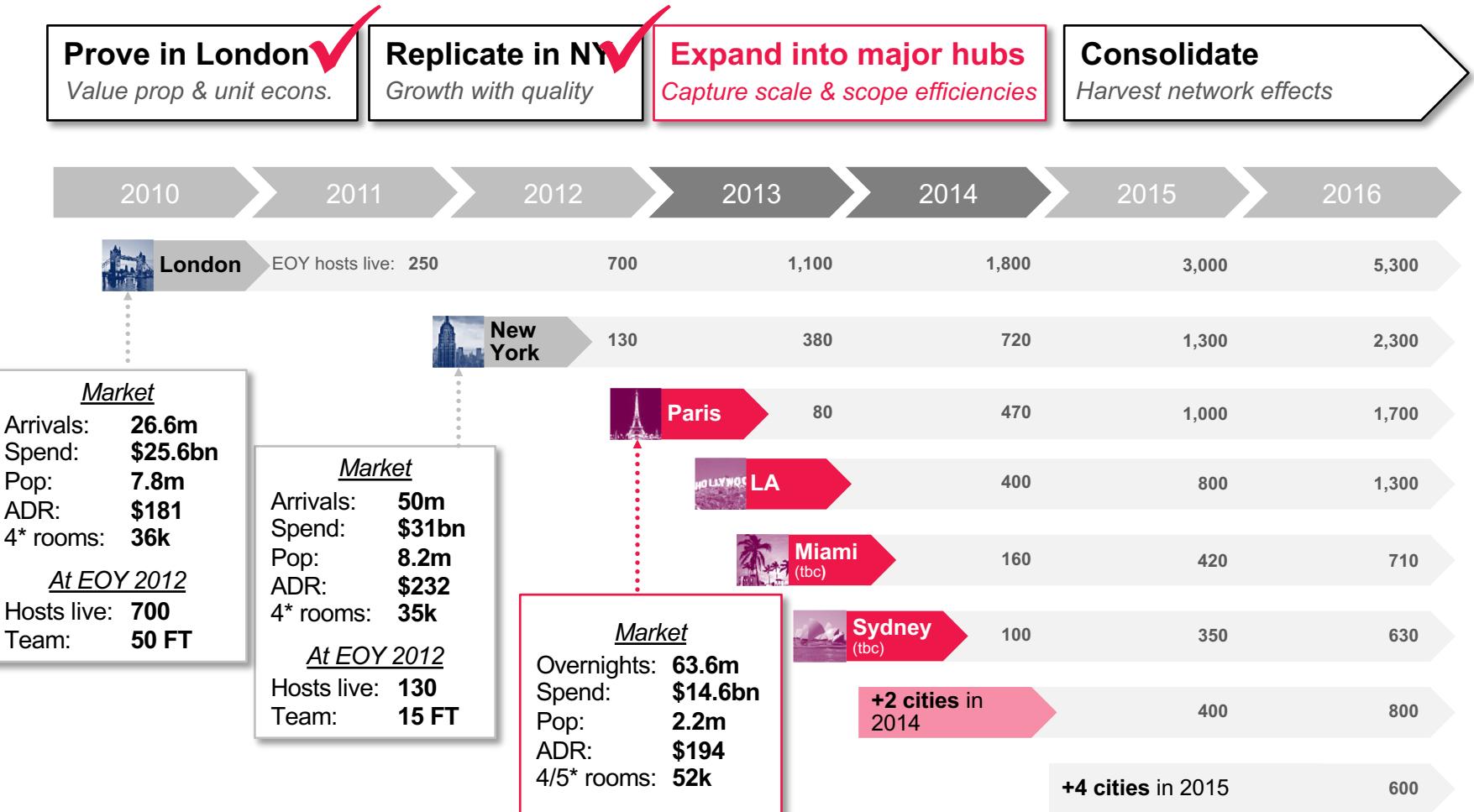
replicable

NY launched on time, under budget, and is growing 2.5x faster than London



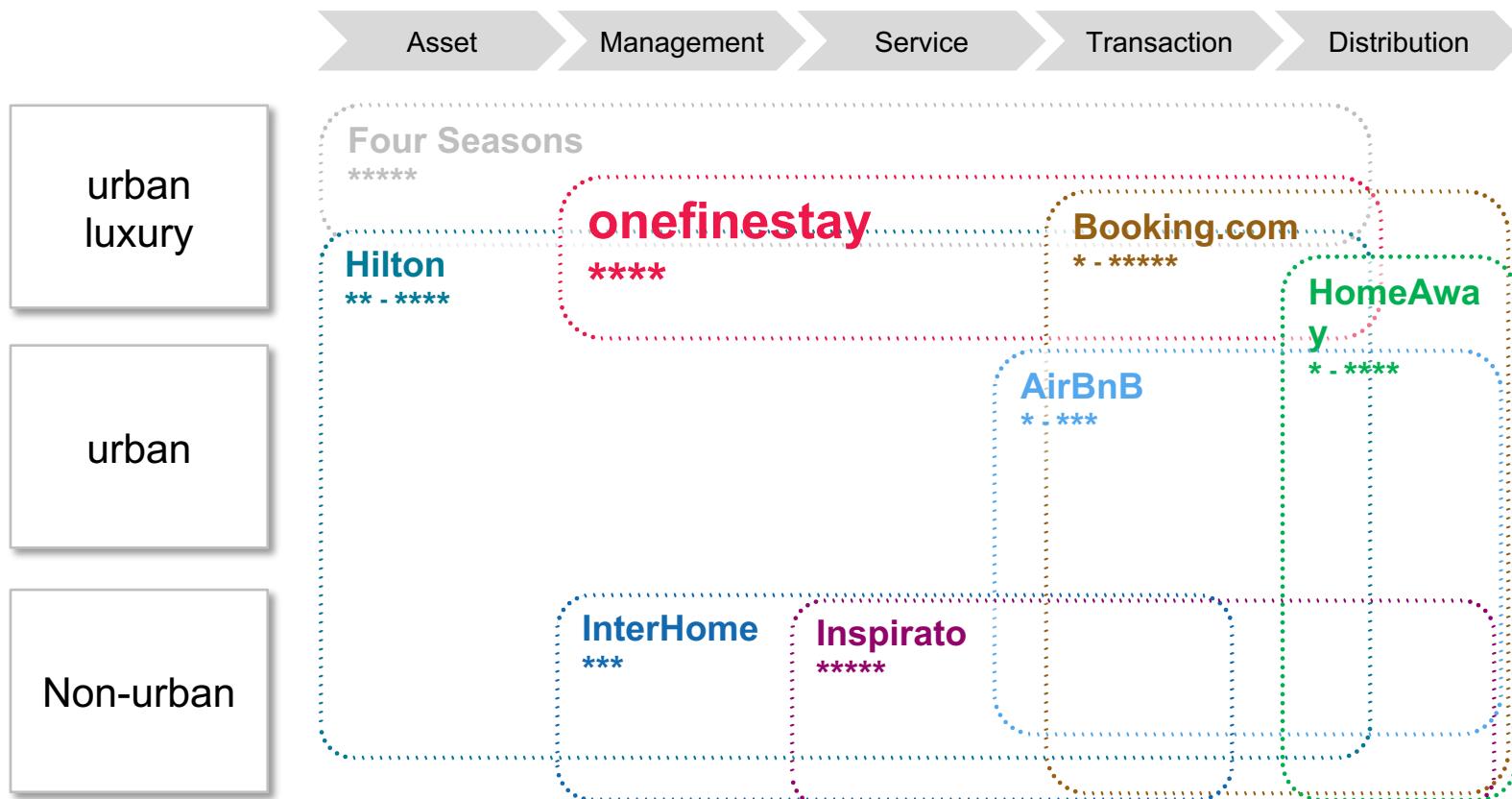
OneFineStay

Next phase is about roll-out



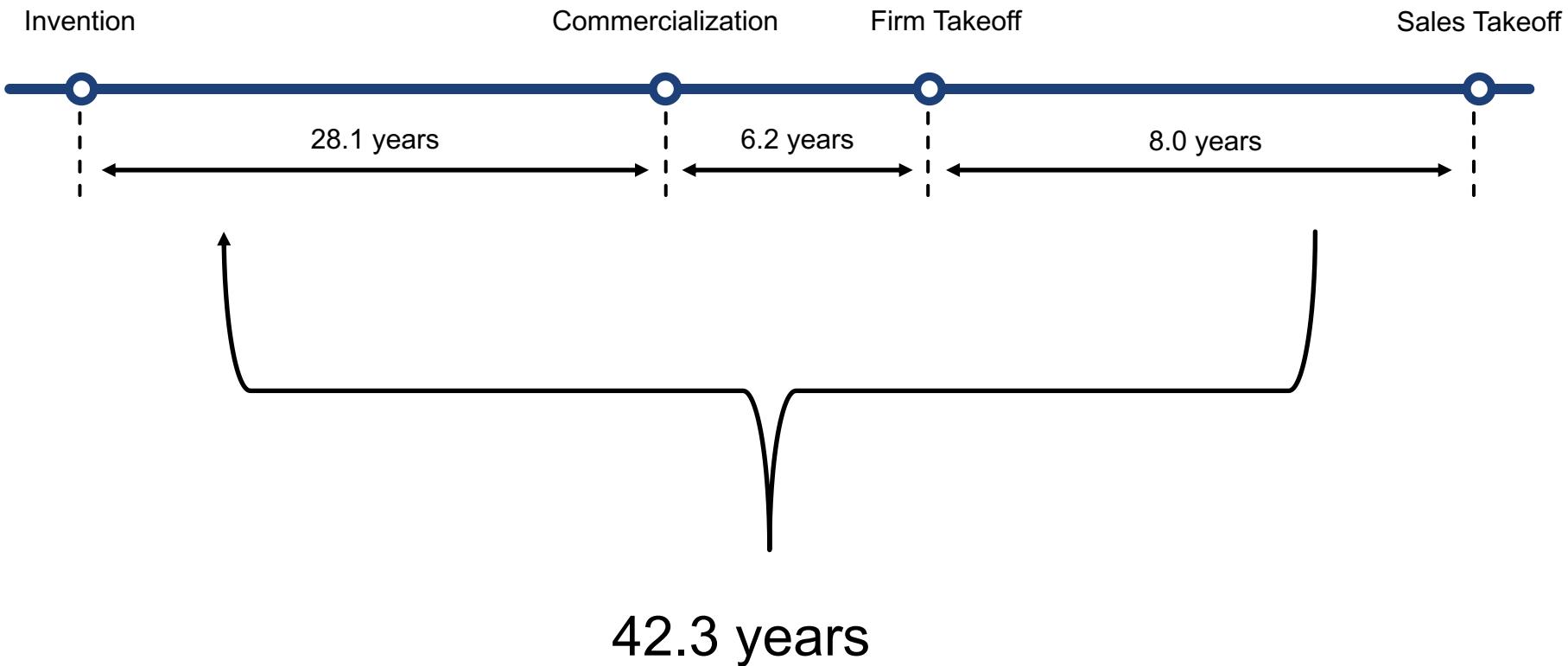
OneFineStay

There are still no direct competitors



Context of Technology Evolution

Commercializing technology: duration and survival



Source: Clarysse, 1996;
Agarwal & Bayus, 2002

Context of Technology Evolution

Commercializing technology: duration and survival

Cohort Group	5-year Survival Rates (σ)	Percent of Cohort that Exits			Percent of Cohort that Did Not Exit by End of Sample Period
		Before Firm Takeoff	Between Firm and Sales Takeoff	After Sales Takeoff	
Creators	72 % (0.02)	27%	29%	33%	11%
Anticipators	67 % (0.03)	----	37%	49%	13%
Followers	60 % (0.01)	----	---	70%	30%

Thank you!

Questions? Comments?