

# What to Expect from Drones in Operations Management

Omid Maghazei

Lecturer

Information, Decisions, and Operations Division  
School of Management

# “That’s interesting!” (2016)



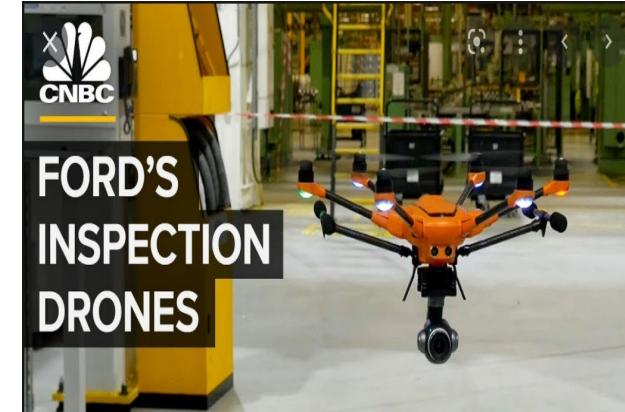
Credit: Airbus



Credit: ABB



Credit: Audi



Credit: Ford/CNBC

**Amazon makes first drone delivery**

© 14 December 2016



Credit: BBC.com/Amazon

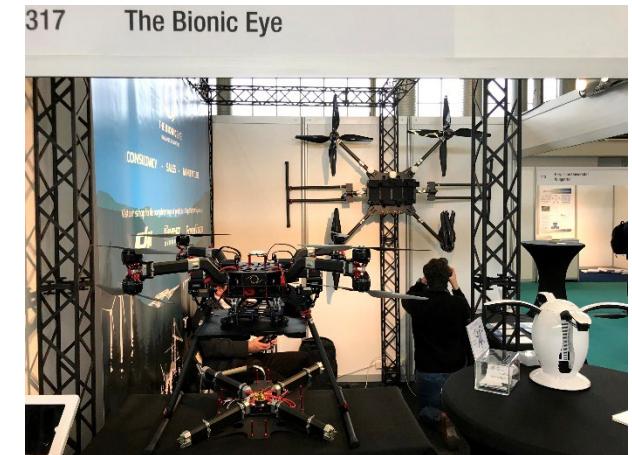
Plenty of reported **use cases** but very few scaled implementations: Why?

Research approach: Going to the field, but...

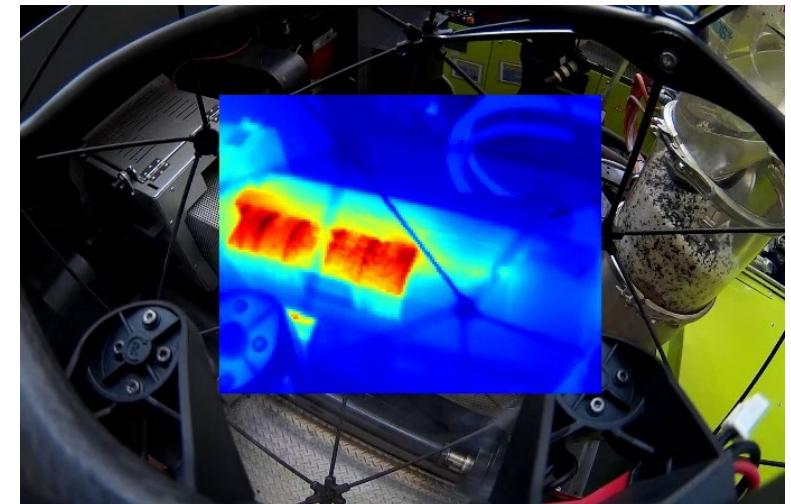
**Problem: How to study emerging technologies that are:  
(1) barely used, (2) subject to hype, and (3) fast-evolving?**

# Phase 1: Expert interviews and observations (2016-2018)

- 66 interviews
- 7 UAV shows and exhibition
  - Belgium
  - Switzerland
  - The Netherlands
  - United Kingdom



## Phase 2: Field tests of Flyability drones at Geberit (2018-2019)



Use case: Thermal inspection of injection molding machines

[Video Link](#)

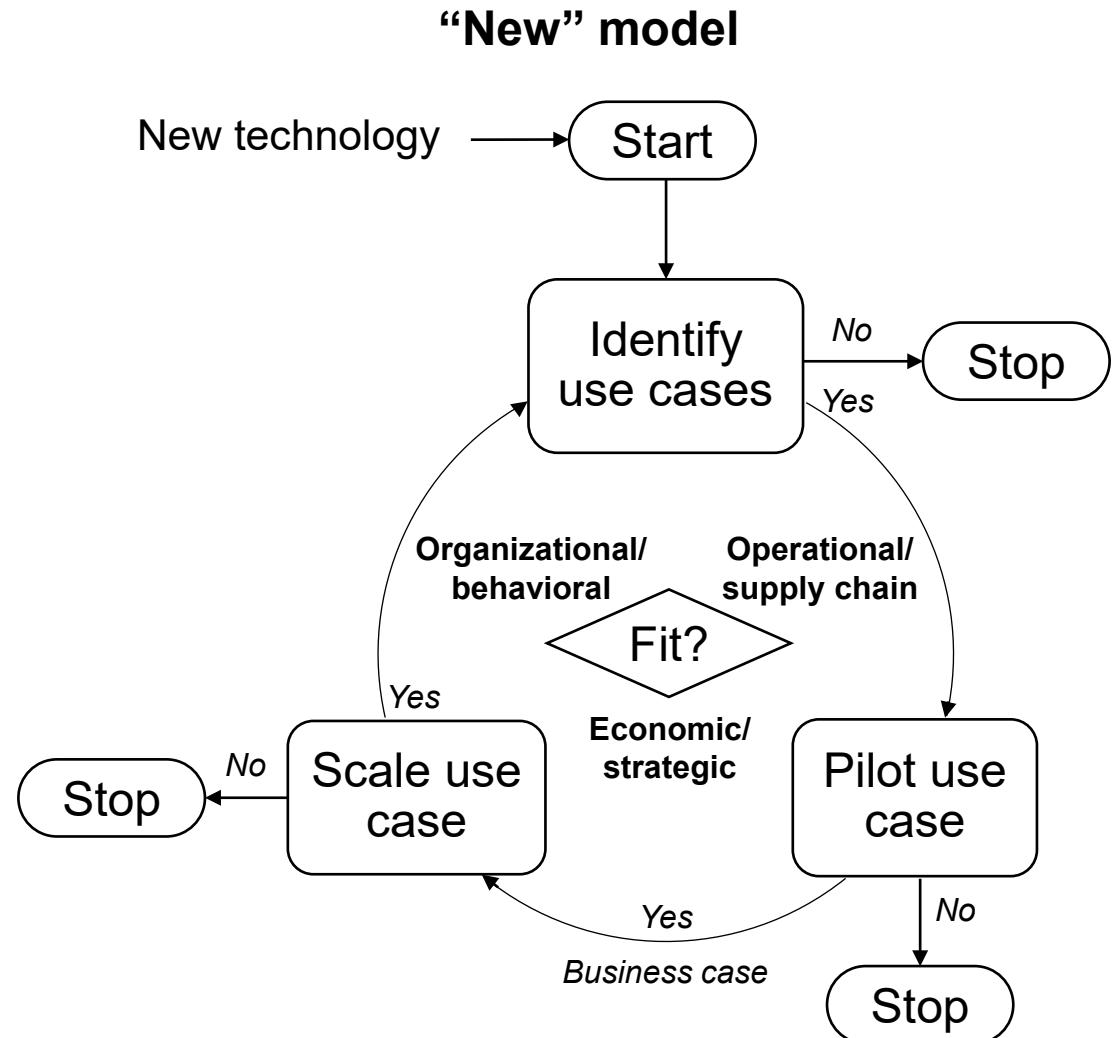
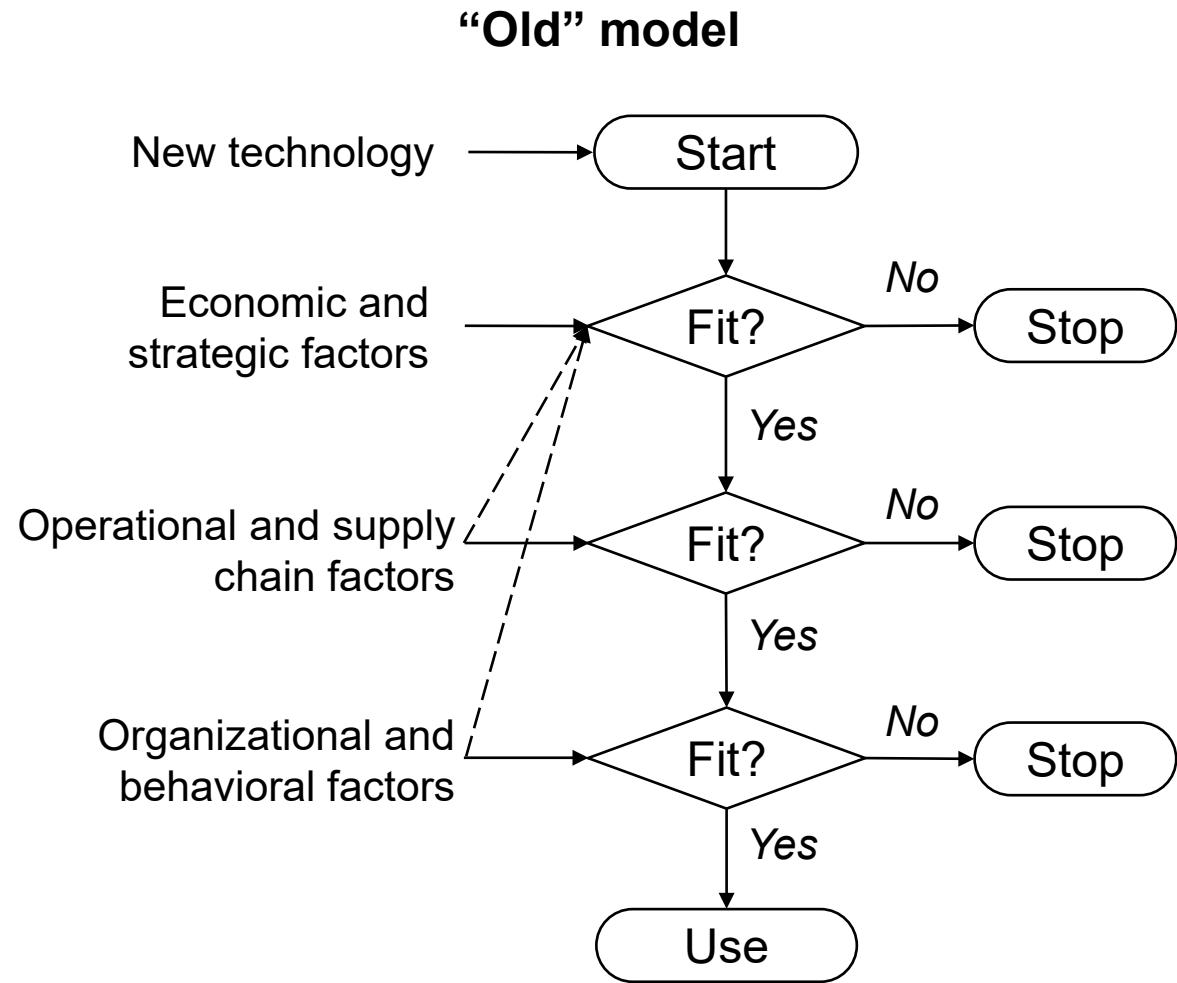
## Phase 3: Case study of Verity drones in IKEA (2019-2021)



Photo credit: IKEA/Verity

Use case: Continuous inventory control/cycle counting

# New technology adoption model for emerging technologies



# Five key lessons

1. Create a **governance structure** for the exploration of emerging technologies.
2. Start with the **use case**, but keep a close eye on the **business case**.
3. Select **partners** strategically.
4. **Iterate** the use case until the business case evolves.
5. Take a **phased** approach to scaling.



Photo credit: MIT Sloan Management Review

# More information (Publications in Financial Times 50 Journals)



RESEARCH ARTICLE |  [Open Access](#) |  

## Emerging technologies and the use case: A multi-year study of drone adoption

Omid Maghazei , Michael A. Lewis, Torbjørn H. Netland

[Link](#)



## A Better Way to Pilot Emerging Technologies

IKEA didn't give up on drones for inventory management after pilots fizzled — it came up with a better approach for testing new technologies.

[Link](#)

# Thank you!



Omid Maghazei

Lecturer and Assistant Professor  
School of Management  
University of Bath

# THINK AMBITIOUS.

10 East, 4.25  
Claverton Down,  
BA2 7AY  
Bath, UK  
 @OMaghazei  
 om469@bath.ac.uk