

# RECO7609: Technology and Innovation

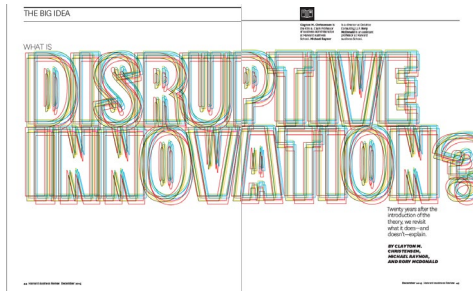
## Presentation 04: Disruptive Innovation

October 2019

# Disruption *versus* Sustaining

Successful companies are pretty good at creating incremental improvements to a product or service to sustain customers in the mainstream market.

Disruptive innovations create their market through the introduction of new business models that compete at the bottom end of an existing market, or create a new market at the boundary of an existing market. They do not take on the incumbents head-on.



Harvard  
Business  
Review



DISRUPTIVE INNOVATION

## Meeting the Challenge of Disruptive Change

by Clayton M. Christensen and Michael Overdorf

FROM THE MARCH-APRIL 2000 ISSUE



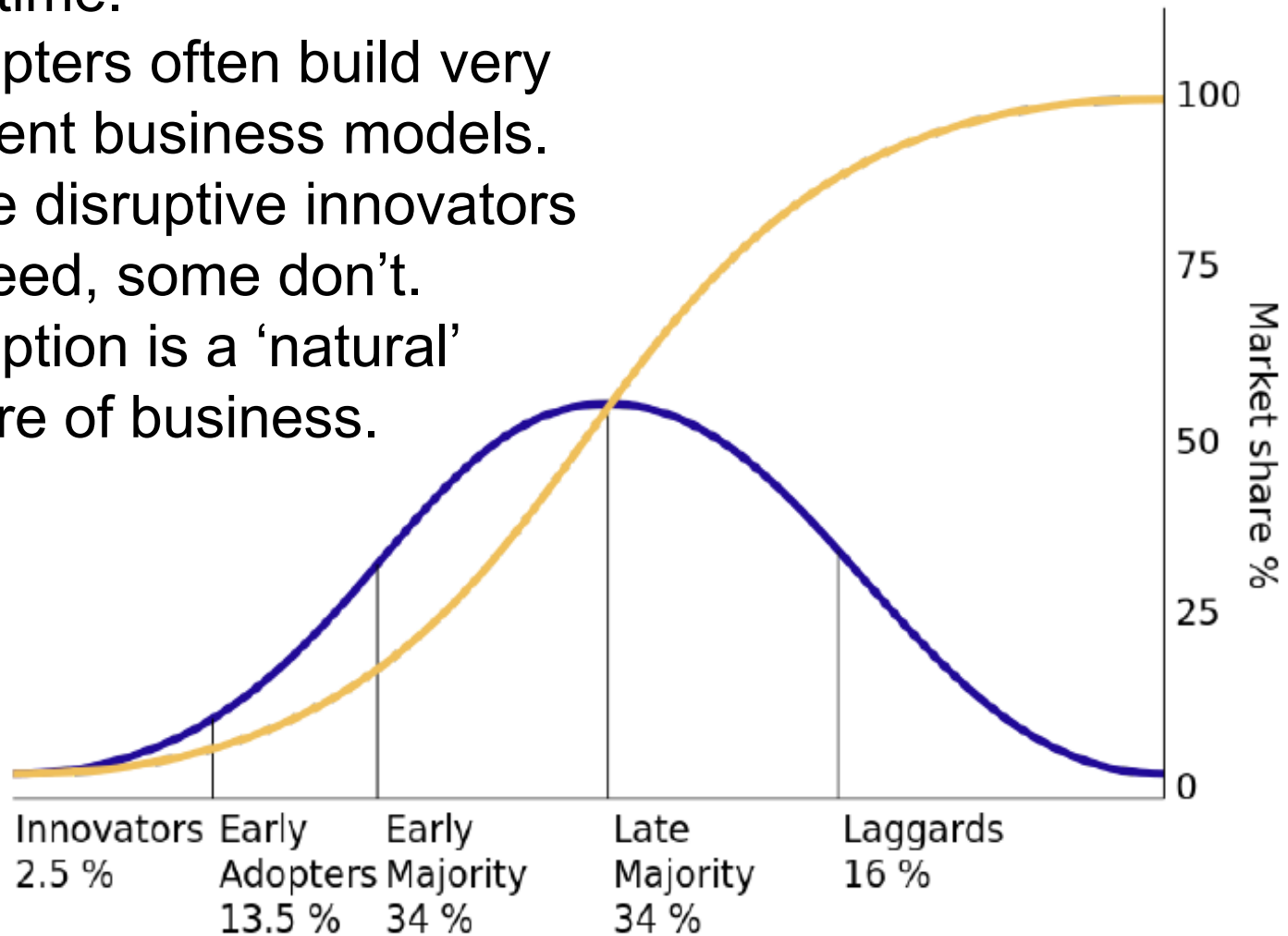
# Disruption Defined

Disruptive technologies are innovations that displace existing technologies, change practices and/or create new industries.

Fast-moving companies worldwide are establishing entirely new product and service hybrids that disrupt their own markets, create new ones, and generate bold and fresh revenue streams.

These are scary times for managers in big companies.

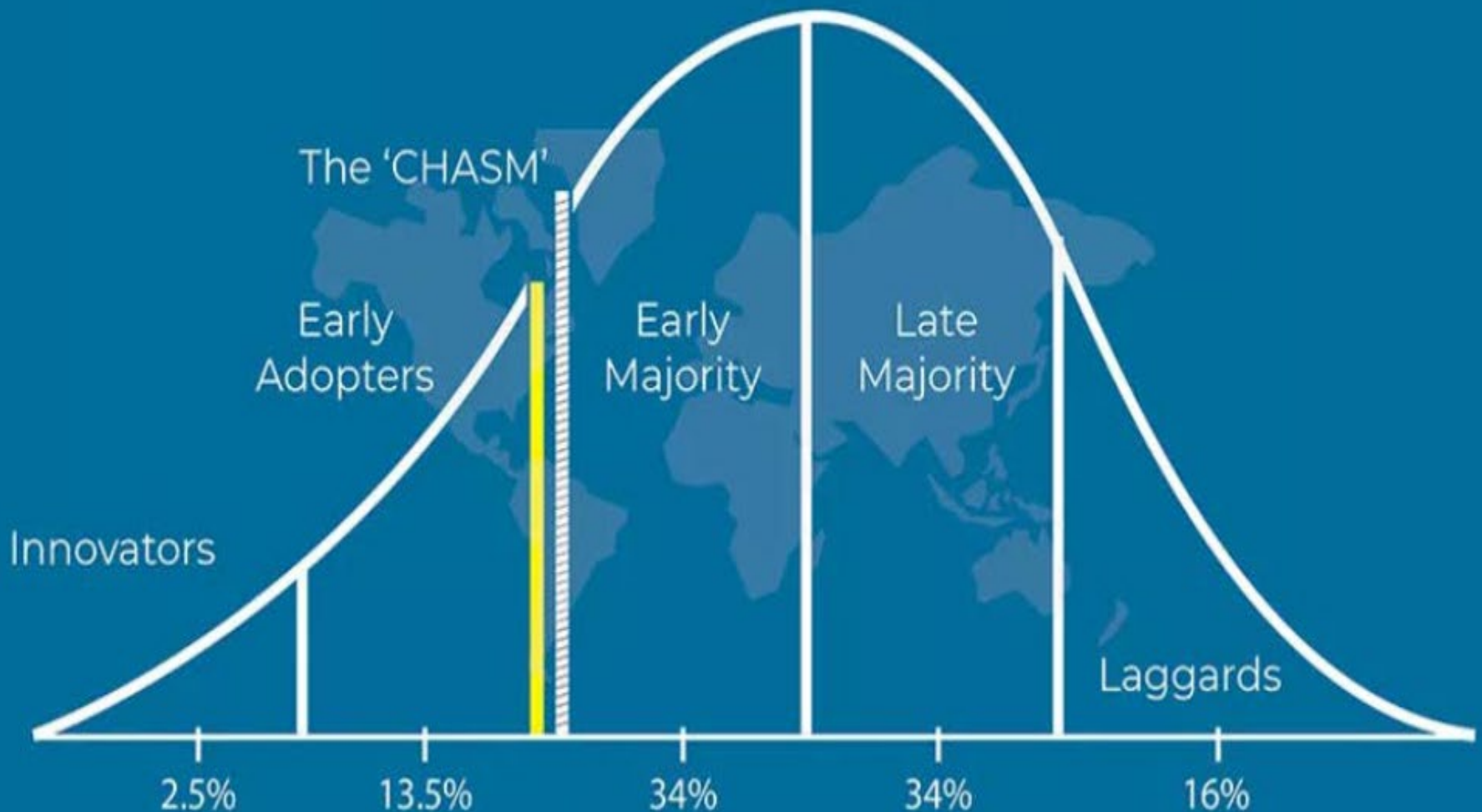
- Disruption is a process over time.
- Disrupters often build very different business models.
- Some disruptive innovators succeed, some don't.
- Disruption is a 'natural' feature of business.



Technology Life Cycle Adoption Curve [Adapted from Geoffrey Moore, in his 1992 book Crossing the Chasm]

# INNOVATION ADOPTION CURVE

after Everett Rogers 1962-2003



# THE AUSTRALIAN CONSTRUCTIONTECH ECOSYSTEM

## PROJECT MANAGEMENT

Logos for Click Home, Companion Systems, Envision, wise working, UniPhi, and JobFile.

## MINING

Logo for MIPLAN.

## PDF MARKUP

Logo for REDEYE.

DRAWBOARD

## PAYMENTS

Logo for timelio.

## DESIGN COMPARISON

Logo for iBuildNew.

## PROGRESS CLAIMS

Logo for PROGRESSCLAIM.COM.

## SUBCONTRACTORS

Logo for ASSIGNAR Trade UP AUSTRALIA.

## COLLABORATION

Logos for asdeqdocs, RedHub, and TENDEREDGE Online.

## ESTIMATING AND TAKE OFF

Logos for Estim8, exactal, and pronamics.

## SITE TOOLS

Logos for ape MOBILE, SiteBook, raneltime, Loc8, HAMMER TECHNOLOGIES, GeoMoby, CONSTRUCTION VIEW, 30MHz, and Docketbook.

## FIND WORK

Logos for EstimateOne, WORKYARD, BUILDING INDUSTRY ONLINE, plantminer.com.au, ConX, and TENDERLINK.

## UAV

Logos for SWARM UAV and propeller.

## ASSET MANAGEMENT

Logos for assetic, iseekplant.com.au, and Track'em.

## COMPLIANCE

Logos for CodeSafe Solutions, CoverCard, done safe, iComplii, iCURO, and systems on a shoestring.

## INSPECTIONS

Logos for DefectsMobile, SafetyCulture, safesite, SignOnSite, and Onsite Rental Group.

## JOB MANAGEMENT

Logos for BuildTools, CONSTRUCTIONCLOUD, fewzion, and simPRO.

## AR

Logos for snobal, bimar, and SCANN3D.



The construction industry has traditionally been slow in adopting new technologies. This may in part be due to the involvement of many independent parties in each project thereby increasing the challenges involved in coordinating technology solutions. Another major inhibitor to technology adoption in the construction industry is the traditional procurement methodology of tendering under a “cheapest price wins” environment - technology investment is squeezed out in order to win projects. For this reason, alternative forms of tender evaluation as well as partnering approaches such as Public-Private Partnerships (PPP) tend to increase technology adoption.

Despite this, as technology advances, early adopters and digital leaders are emerging, enabling them to deliver value throughout the building lifecycle. All stakeholders need to upgrade their competencies, invest, as well as adopt new processes and behaviors, or risk losing out.

When disruption upends incumbent business models, it challenges many of the most basic assumptions underpinning those models. The first, and most important, step in self-disruption therefore involves challenging long-held assumptions about matters as fundamental as what your business is and who your customers and competitors are.

2017\_AUS\_ConTech\_Report

2019\_AEC\_TechGamechangers

# DIGITAL FOUNDATIONS

HOW TECHNOLOGY IS TRANSFORMING AUSTRALIA'S CONSTRUCTION SECTOR

#StartupAUS



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# 2018\_FrostReport\_IT\_Trends



FROST & SULLIVAN



## Global Homes and Buildings (H&B) Industry Outlook, 2018 Virtual Voice Assistants, Artificial Intelligence, and Blockchain will Take the Industry to the Next Phase of Evolution

Global Energy & Environment Research Team at Frost & Sullivan

# 2017\_Arup\_EmergingTechnologyTimeline

ARUP

MDDD-19

April 2018

## emerging technology timeline

20 emergent technologies  
likely to disrupt our sector

