Technology, innovation & the future of real estate

Steve Weikal
MiT REILab
MiT Center for Real Estate
ABOUT THE CENTER

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RECENT TRENDS
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- Startup Tsunami
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- Real Estate Fracking
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- The UI / UX of Real Estate
RECENT TRENDS

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- The UI / UX of Real Estate
- Real Estate is Getting Smarter
Startup Tsunami

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Startup Tsunami

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A Perfect Storm

- Unprecedented breakthroughs in technology – cloud computing, leaner/faster coding, mobile devices, small/cheap sensors, Ai/ML
- Ubiquitous connectivity – broadband, Wi-fi, 4G, 5G, 6G?
- Increasingly tech savvy, mobile CRE workforce demands new apps
- Continued impact of on-demand and sharing economy
- LOTS of funding
Startup Tsunami

- Fifth Wall – Hines, Equity Resi, CBRE, Prologis, Lennar, Macerich
- Navitas – JLL, Equity Residential, Divco West Real Estate
- Camber Creek, Corigin Ventures, Tamarisc, Zigg Capital
- RETV, Simon Ventures, Westfield Inno Lab, Brick & Mortar
- Brookfield Ventures, PLD Ventures, CEMEX Ventures, JLL Spark
- MetaProp, Colliers Tech Stars, Plug + Play
“VCs are funding the R&D for the real estate industry.”

– Brad Greiwe, Fifth Wall
Real Estate Fracking
“Using technology to break real estate use apart and put it back together into something more productive . . . unlocking overlooked asset value.”

– Prof. Dennis Frenchman, MIT
Real Estate Fracking

wework  airbnb
How co-working demographics have changed (2010 to 2017)

- Freelancer/Independent worker
- Employee at small firm with fewer than 100 employees
- Employee at large firm with more than 100 employees

Source: Emergent Research
“Flexible working will be the defining characteristic of the future workplace.”

– Google, Workplace 2020
Real Estate Fracking

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Under 5% of current U.S. office inventory is controlled by flexible space providers. [It’s] projected to be 30% of the office market by 2030.

– JLL
Category specific
Co-convergence
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Real Estate Fracking
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“Commercial real estate is no longer a fixed asset – it’s fluid.”

– Mark Grinis, Global Head of Real Estate, EY
The UI / UX of Real Estate
Technology is causing “a huge shift in value from physical assets to user experience.”

– Chase Garbarino, Co-founder, HqO
The UI / UX of Real Estate

- Active engagement

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The UI / UX of Real Estate

- Active engagement
- Passive

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The UI / UX of Real Estate

- Active engagement
- Passive
“What talent wants, landlords need, developers must build.”

– Chris Kelley, Co-founder, Convene
Real Estate is Getting Smarter
90% of the data in the world today has been created in the last two years alone. – IBM
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[The digital universe] is doubling in size every two years. – EMC/IDC
Global Smartphone Traffic to Increase 8x by 2020
Forecast of global smartphone subscriptions and monthly smartphone data traffic

- **Smartphone subscriptions**
  - 2014: 2.7B
  - 2020: 6.1B

- **Monthly traffic per active subscription***
  - 2014: 900MB
  - 2020: 3.5GB

- **Total monthly smartphone traffic**
  - 2014: 2.1EB
  - 2020: 17EB

*Active subscriptions do not include multiple sims or inactive devices
Source: Ericsson
3G: Total time: 26 hours

4G: Total time: 6 minutes

5G: Total time: 3.6 seconds
Getting Smarter

- Location analysis

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Getting Smarter

- Location analysis
- Dev analysis
Getting Smarter

- Location analysis
- Dev analysis
- Deal analysis
Getting Smarter

- Location analysis
- Dev analysis
- Deal analysis
- Underwriting/appraisal
Getting Smarter

- Location analysis
- Dev analysis
- Deal analysis
- Underwriting/appraisal
- Virtual assistants
KEY TAKEAWAYS

- VC = industry R&D
- Fracking optimizes + unlocks value
- Convergence = neo-mixed use
- Human interface of real estate / stickiness
- Real Estate is getting smarter
FINAL THOUGHTS
“We always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next ten.”

– Bill Gates
“I would like to die on Mars… just not on impact.”

– Elon Musk, SpaceX
RE LIVE

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Steve Weikal
MiT REI Lab
MiT Center for Real Estate
sweikal@MiT.edu