



**University of the Witwatersrand,
Johannesburg**



Real Estate Disruptions: From Bricks and Mortars to Digitization.

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Vice- President - African Real Estate Society.

Vice-Chair - Future Leaders of American Real Estate Society

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Real Estate Disruption: From Bricks and Mortars

❑ Disruption is happening everywhere around us? Music.

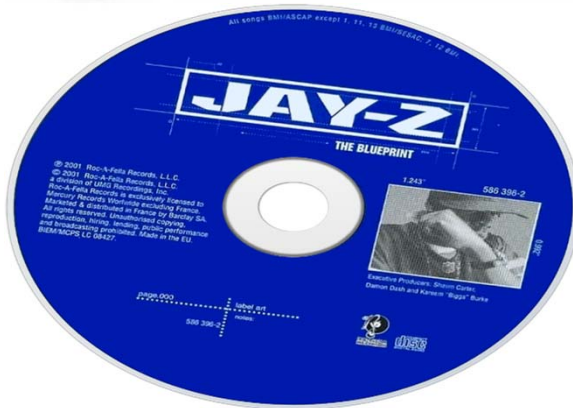
❑ 70s



80s



❑ 90s



2010s

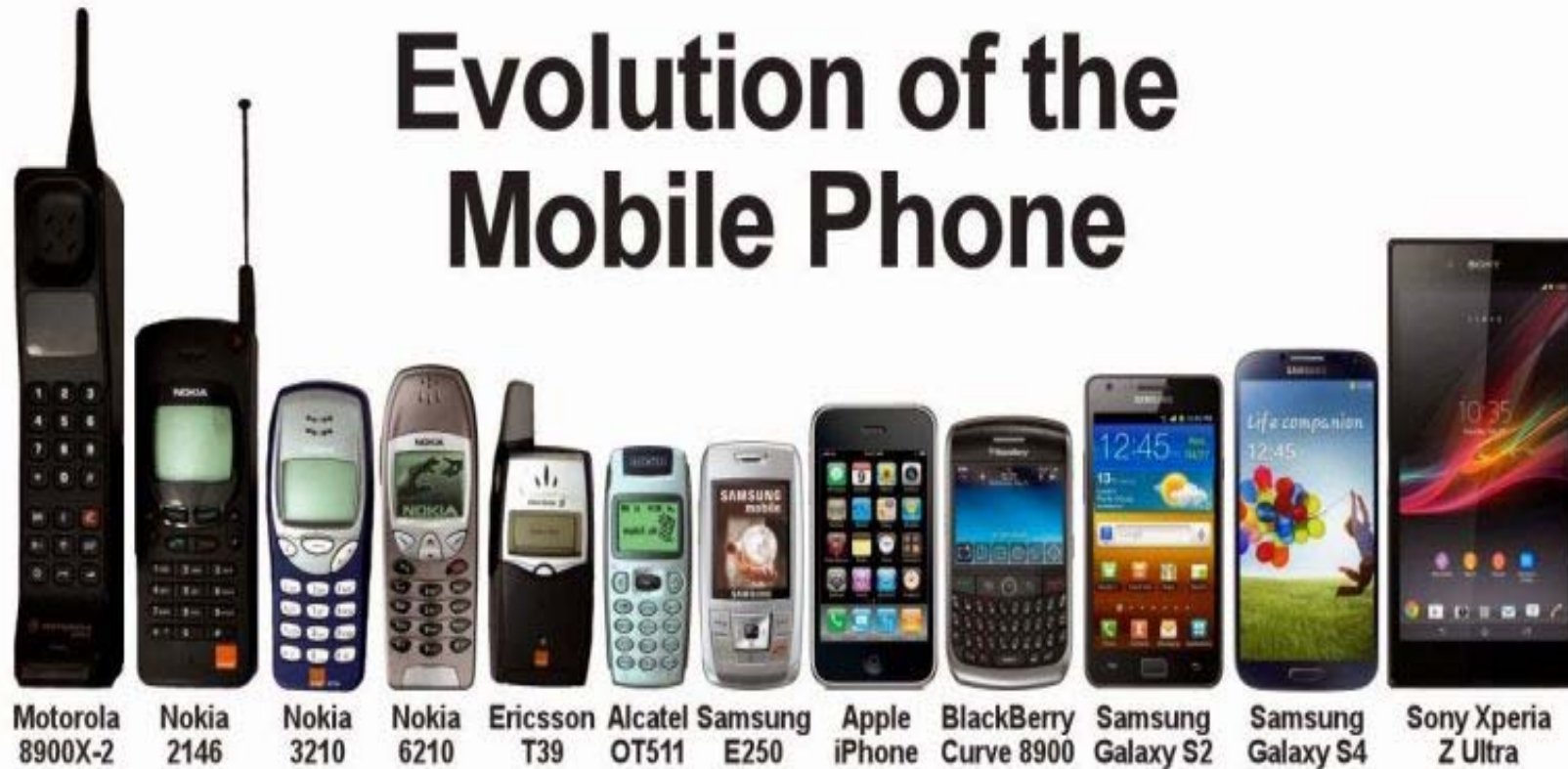




Real Estate Disruption: From Bricks and Mortars

❑ Disruption is happening everywhere around us? Phone.

Evolution of the Mobile Phone





Real Estate Disruption: From Bricks and Mortars

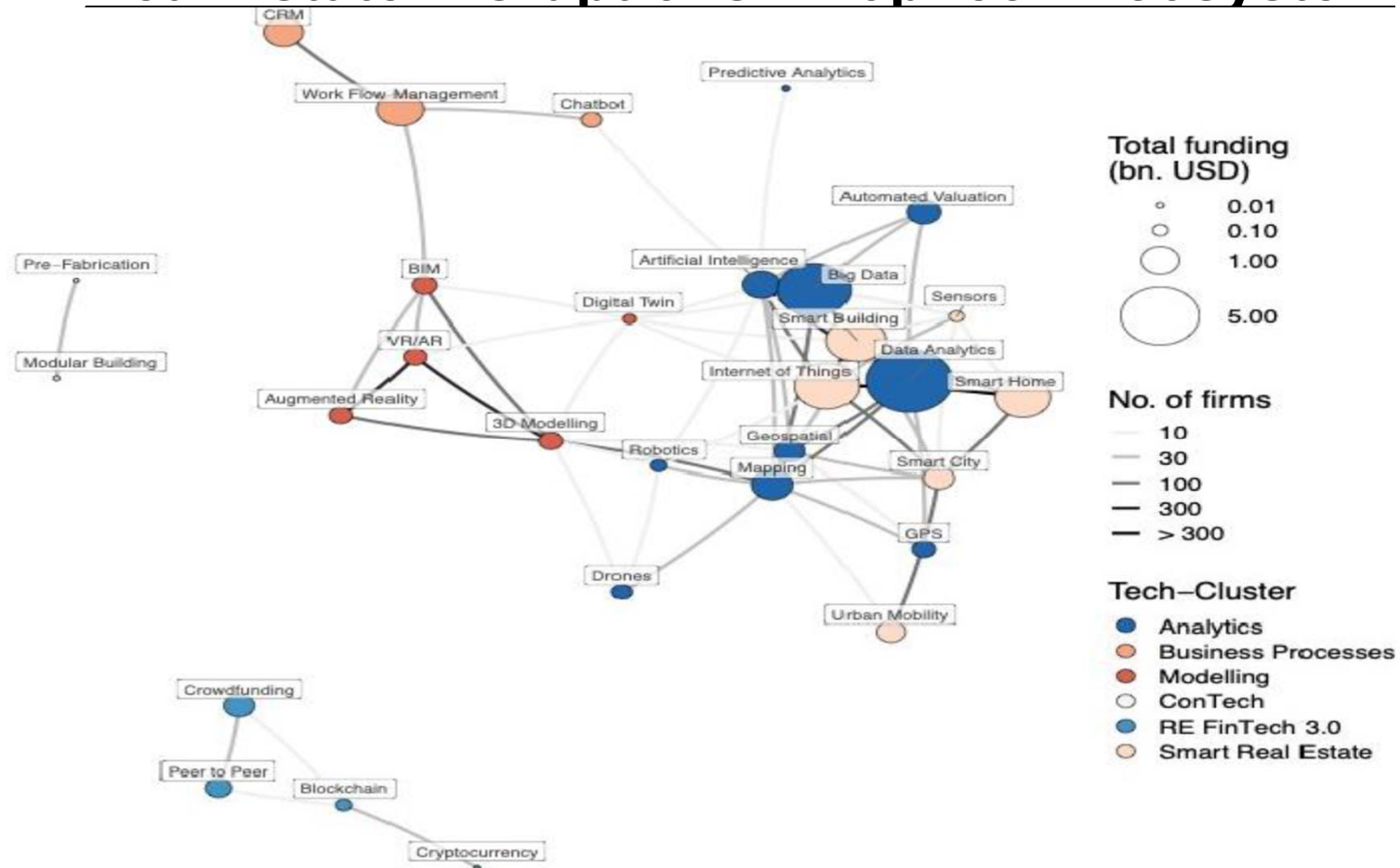
□ What is Real Estate Disruption?

Mobile and Technology platforms and applications that are upending traditional ways of real estate transactions and operations.

The goal is to employ advances in technology to make the real estate market place more efficient for Landlords, Brokers, Tenants, Investors and all real estate stakeholders.



Real Estate Disruptions: PropTech Ecosystem



Baum (2020)

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Real Estate Disruptions

1. Prop-Tech

- i. **Block-Chain**
- ii. **Crowd-Funding**
- iii. **Peer to Peer Lending**
- iv. **Crypto-Currencies**
- v. **Co-Working Space**
- vi. **REITs**
- vii. **Artificial Intelligence**
- viii. **BIG Data**



PROPTech

- ❑ Proptech is the use of information technology to help individuals and companies research, buy, sell and manage real estate.
- ❑ [Andrew Baum](#) describes it as “a movement driving a mentality change within the real estate industry and its consumers regarding technology driven innovation in the data assembly, transacting, and design of buildings and cities”.



PROPTech: Case Study

Zillow (United States)

- ❑ Zillow is a leading real estate and rental market place.
- ❑ 110 Million U.S homes on Database.
- ❑ Zestimate home values (Zillow estimated market value for your home).
- ❑ On February 2019, Zillow annual revenue of **US\$1.3BN**



PROPTech: Case Study

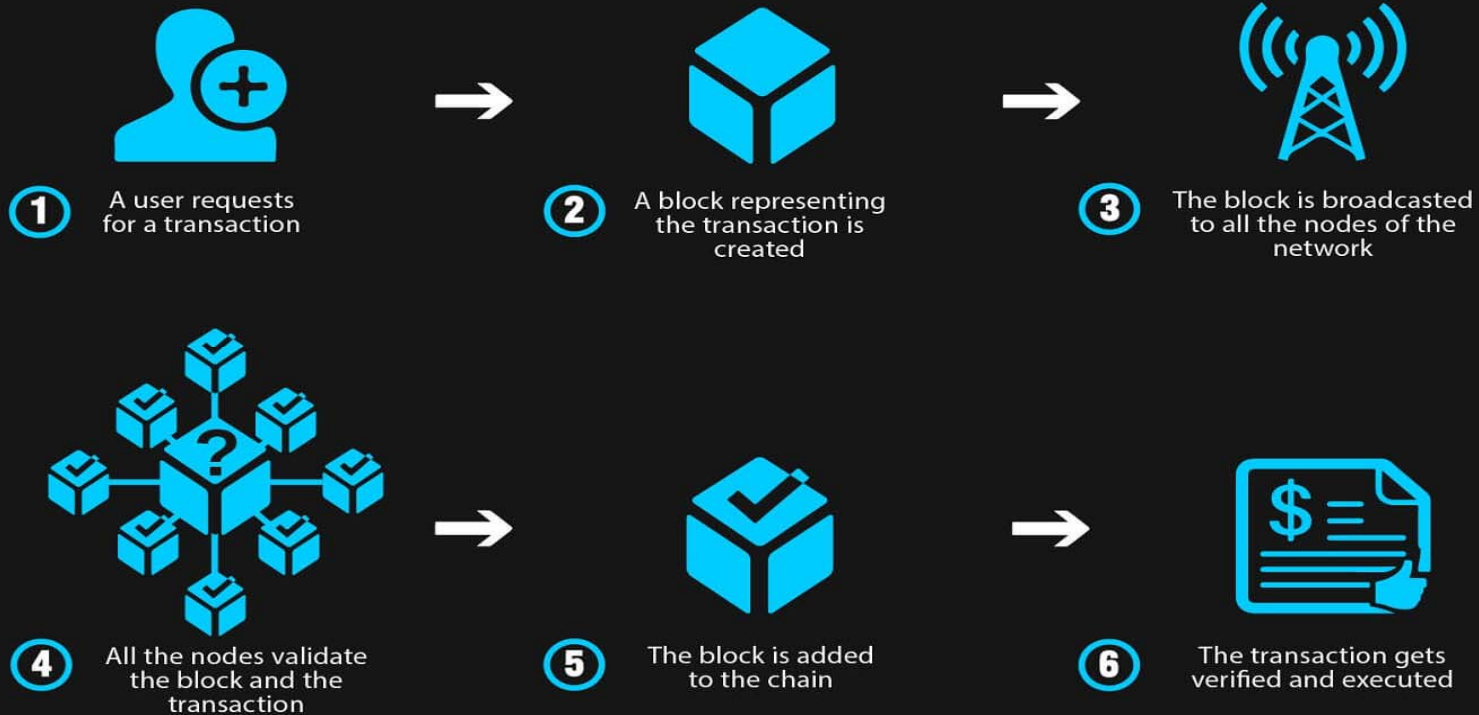
How does Zillow make revenue?

- ❑ Advertising sales to Property Management companies
- ❑ Premier services to real estate agents
- ❑ Advertising sales to mortgage lenders and other real estate service companies (cost per click)
- ❑ Zillow makes money by selling advertising to property management companies with vacancies, real estate agents looking for buyers and sellers and mortgage lenders looking for borrowers.



BLOCKCHAIN TECHNOLOGY

How Does a Blockchain Work: A Step-by-Step View





Block-Chain Technology in Real Estate: Case Study

How does it work? Meridio

- ❑ Meridio converts individual properties into digital shares on the blockchain, seamlessly connecting diverse investors and asset owners to invest and trade.
- ❑ For Investors: Low Investment outlay, Reduces Transaction Costs, Increase Portfolio liquidity.
- ❑ For Asset Owners: Unlock additional capital, streamline transaction process, analyse asset specific data



Crowd-Funding (Real Estate)

- ❑ Crowd-funding is a way to finance a new business project employing small amount of capital from a large number of individuals. Social media and crowd-funding websites are used to bring entrepreneurs and investors together.
- ❑ According to Forbes, Real Estate Crowd Funding grew to an estimated \$3.5 Billion. By 2025, it is anticipated to be valued at \$300 Billion.



Crowd-Funding: Case Study

Case Study: Realty Mogul

- ❑ RealtyMogul is an online marketplace for real estate investing.
- ❑ Connect investors who want to invest in real estate with institutional quality real estate investments.
- ❑ Investors can browse investments, review due diligence materials and sign legal documents securely online.
- ❑ To date, investors have invested over \$500 Million through RealtyMogul, financing 400+ properties valued at over \$2 Billion.



Peer to Peer Lending

- ❑ Peer-to-peer real estate lending enables businesses and individuals needing funding for projects, such as a house flipping or ground-up construction, to access it directly from investors rather than going through a traditional lender like a bank.
- ❑ Another benefit of these loans is that they typically close quicker and can offer more flexibility and a lower interest rate.



Peer to Peer Lending: Case Study

Case Study: Patch of land

- ❑ Patch of Land is a crowdfunding platform that originates, underwrites, and services real estate loans, mainly single-family or small multifamily properties, small mixed-use, and small commercial real estate.
- ❑ It offers this debt, backed by first-lien positions and personal guarantees, to accredited, institutional, and international investors
- ❑ Loans terms are 12 to 24 months with rates starting at 7.5%.



Crypto-Currencies (Real Estate)

- ❑ Cryptocurrencies are digital assets that have been assigned an arbitrary value.
- ❑ Cryptocurrency was intended to be used as a digital currency, as a replacement for fiat currencies.
- ❑ Cryptocurrency uses encryption techniques to regulate the generation of currency and verify the transfer of funds over a highly secured block-chain network.
- ❑ First Cryptocurrency was Bitcoin, developed in 2009.



Cryptocurrencies: Case Study

Case Study: Bitcoin

- ❑ One of the first notable transactions using bitcoins was in 2014. A secret buyer had reportedly paid \$1.6 million for a 1.4-acre piece of land. The full payment was for 2,739 bitcoins as the price of one was \$580 back then.
- ❑ A real estate developer managed to sell a \$15.3 million condo in New York for Bitcoin. The transaction was carried out using Bitpay and Starr and, according to the developer, it was “seamless.”
- ❑ **July 2010 (\$0.08), December 2017 (\$19,783), February 2020 (\$9,304.69)**

<https://cryptopotato.com/>



Real Estate Investment trusts (REITs)

❑ What's a REIT?

“REITs, or real estate investment trusts, are companies that own or finance income-producing real estate across a range of property sectors. These real estate companies have to meet a number of requirements to qualify as REITs. Most REITs trade on major stock exchanges, and they offer a number of benefits to investors”.

❑ REITs must pay out at least 90 % of their taxable income to shareholders—and most pay out 100 %. In turn, shareholders pay the income taxes on those dividends.



REITs: Case Study

Case Study: Logistic REITs (ProLogis)

- ❑ Prologis, Inc. is the global leader in logistics real estate with a focus on high-barrier, high-growth markets. Prologis leases modern distribution facilities to a diverse base of approximately 5,200 customers, 964 million square feet, 4,649 buildings across two major categories: business-to-business and retail/online fulfilment.
- ❑ Market Capitalisation of \$68 Billion.
- ❑ Clients: DHL, LG, SAMSUNG, LIDL



Co-Working Space

- ❑ Co-working spaces are essentially shared workspaces. They offer affordable office space for those looking to escape the isolation of a home office or coffee shop.
- ❑ These shared workspaces offer a suite of office-like amenities such as hot-desks, private meeting rooms, kitchens, coffee and more. Often, they also offer a community. Occupants typically are freelancers, entrepreneurs, start-ups and small teams who want to take advantage of a flexible space.



Co-working Space: Case Study

Case Study: Work &Co (SA)

- ❑ Work & Co is the new way to work: an innovative, flexible and ambitious collaborative workspace dedicated to a community of entrepreneurs, small and medium sized enterprises, remote teams and freelancers.
- ❑ It's an accelerator, where the objective is inspiring and connecting the members to one another, to help them achieve their goals.



Artificial Intelligence (Retail)

- ❑ Artificial Intelligence (AI) has become a key element in the digitalization of in-store retail by personalizing the customer experience and creating a more engaged business-to-consumer interaction.
- ❑ When customer and sales data is processed through these algorithms, the AI model discovers actionable information about a business and its customers and inventory.
- ❑ AI-equipped technology will soon be popping up everywhere in the retail environment, and many in-store experiences will be shaped by data crunching and AI Source:<https://www.thestorefront.com/> RQA



Artificial Intelligence (Retail)

Benefits

- ❑ Effective Supply Chain Planning using Intelligent Automation (IA)
- ❑ Accurate Demand Forecasting to Drive Higher Margins
- ❑ **Real-time Customer Intelligence and Customer Experience***
- ❑ New Face and Voice for your Marketing, Sales and Promotion Campaigns
- ❑ Zero Queues and Waiting Period: Arrival of Smart Checkout Technologies
- ❑ According to Capgemini, retailers can save as much as \$300 billion in the future by scaling AI deployments across the entire value chain.

Source: martechseries.com



Real Estate Disruption in Africa

- ❑ Prop-Tech (SA Proptech and Proptech Africa)- 2018
- ❑ Block-Chain (Seso Global with CAHF and 71point4- 2019)
- ❑ Crowd-Funding (Propnology SA- 2017)- Over £100m
- ❑ Crypto-Currencies
- ❑ Co-Working Space (Regus, WeWork, Work & Co, Workstation, Seedspace)
- ❑ BIG Data Providers (MSCI/IPD, Estate Intel)
- ❑ REITs (SA REITs)- Market Cap over R450 billion
- ❑ Artificial Intelligence – Super-Regional Malls (Sandton City Mall)



Block-Chain (Seso Global/CAHF/71 Point 74)

- **First Pilot Study in SA**
- **1,000 Properties in Khayelitsha, Cape Town**
- **Immaculate Recording of transactions and transfer**
- **No loss of historic data**
- **Very costly-collection of data**





REITs (SA REITs)

- SA REITs (-25% in 2018 and 1.93% in 2019)
- Worst Performer in JSE (2019)
- What drives REIT returns?
- Offshore vs Onshore REITs?
- Sector vs Diversified REITs?
- Rising Expenses, High Vacancies?
- Economic/Political Stability





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BIG DATA

**“IF DATA IS THE NEW GOLD,
DATA ANALYTICS IS THE NEW OIL”.**

A/Prof.Dr.Kola Akinsomi



BIG-DATA (Real Estate)

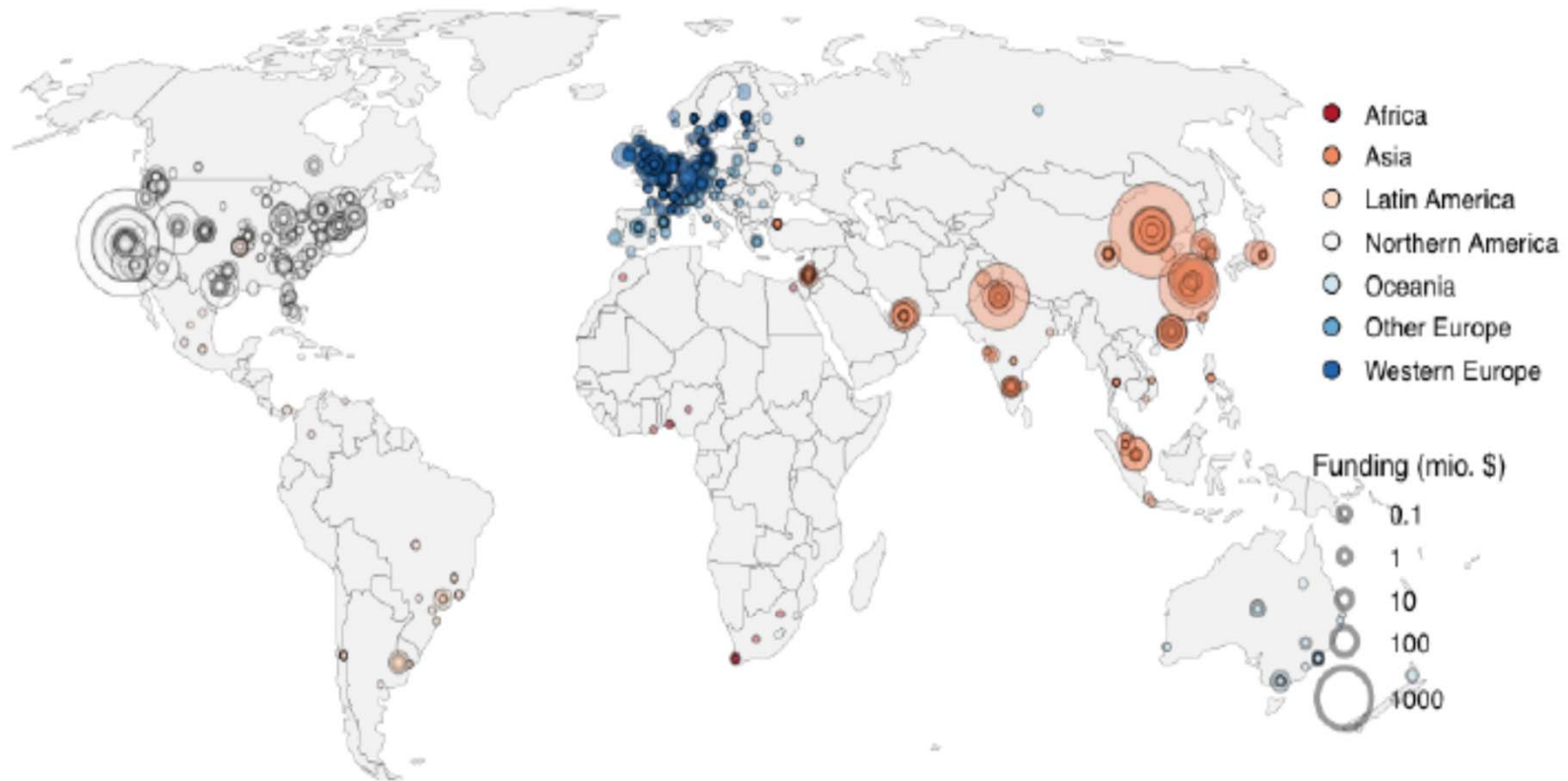
- ❑ “In Boston, the price of homes within a quarter of a mile of a Starbucks jumped by more than 171 percent between 1997 and 2014, 45 percentage points more than all homes in the city, according to a February 2015 report by the brokerage and information website Zillow”.

- ❑ “Over the past decade, Seattle apartment buildings within a mile of specialty grocery stores like Whole Foods and Trader Joe’s appreciated in value faster than others”.

- ❑ A successful data-driven approach can yield powerful insights



Global Distribution of PropTech firms



Map based on locations of 6,428 PropTech firms

Source: Crunchbase, Unissu, FoRE



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Real Estate Disruption in Ikate Elegushi Lekki?



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Landlord now have more options

Real Estate Disruption

	Traditional Bricks and Mortars	Real Estate Disruption
Listing	List with an Agent	Listed with AirBnB
Rent	N3 million per annum	N21,000 per day/low season (Conservative)
Occupancy	90%	60% (Conservative)
Annual Revenue	N2.7 million per annum	N4.54 million per annum
Big Data Analytics	Limited	Comprehensive



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Is Nigeria ready for this Paradigm shift? Interactive Session

- ❑ Over 62% below 25 years old.
- ❑ 50 million mobile internet users in Nigeria
- ❑ 92.3 million internet users

Source: Statista

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Block-Chain Technology in Real Estate: Case Study

How does it work? Meridio

VIDEO PRESENTATION



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The 21st Century belongs to Africa.



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ADDITIONAL READINGS

- ❑ Baum, A., 2017. PropTech 3.0: the future of real estate.
- ❑ Baum, A, 2020. Tokenization: Future of real estate
- ❑ Proptech 2020. The future of real estate initiative.
- ❑ Aihie, V.U., 2019. The PropTech Revolution: The Imperatives for Nigeria's Estate Surveying and Valuation Professionals to Catch Up or Get Left Behind. *Journal of African Real Estate Research*, 4(2), pp.56-75.