Real Estate Insights, Forecasts & Strategies

Editor: Christopher Lee

Strategic Advantage

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Mandatory Summer Reading For Every Real Estate Leader

In This Issue

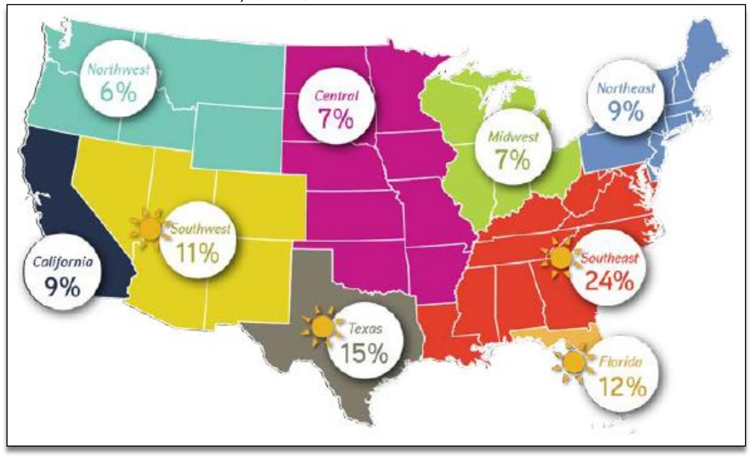
- *Trend # 1 – Technology*
- *Trend # 2 – Demographics*
- *Trend # 3 – Legacy Exits, Succession & Sustainable Governance*
- *Trend # 4 – Talent Flight & Compensation*
- *Trend # 5 – Moral Quotient Expectations*
- *Trend # 6 – Redefinition Of Space*
- *Trend # 7 – Cycle Change*
- *Trend # 8 – The Looming Debt Crisis*
- *Trend # 9 – Many Real Estate Jobs Will Not Exist*
- *Closing Comments*

Friends & Colleagues:

Among the biggest challenges every real estate leader and career professional must overcome are the self-imposed psychological barriers to success. From transference blocking to conceptual projection expectations, from falling into the introjection trap to sublimation, and from transcending into "groupthink" or "what-everyone-is-talking-about" visions of reality…all become distorted by a veil of idealization. **When real estate professionals intellectualize rather than experience excitement or satisfaction for a job well-done, it creates an artificial barrier to what has made real estate a wonderful career choice…the desire to make a difference**. It is a combination of qualitative and quantitative processes and outcomes. For some, the fear of losing an opportunity, fear of responsibility, fear of peer perceptions, fear of failure or fear of inability to replicate success can be paralyzing. However, t**he real estate industry isn't a state of mind, it is an experiential passion to succeed while making a positive societal contribution**. The real estate industry is not for the timid or risk averse. Success in real estate is based on being able to identify and capitalize on opportunities that can be accomplished only through taking action, making decisions, and taking ownership of the outcome, both good and bad. **The real estate industry is not a place for wishful thinking, but a place for envisioning what could be and taking necessary steps to "go get it."**

Over 70% Of New Households Will Be In The Sunbelt

Estimated Share of Household Growth, 2016 - 2025.



Source: Urban Land Institute, John Burns Real Estate Consulting LLC.

Today many extraordinary and impactful trends are reshaping and will continue to reshape the real estate industry. I have selected nine Mega Trends that are or should be on the minds of every real estate professional. **To respond and capitalize on each trend requires that you leave your comfort zone and self-imposed strategic inhibitors to success.** Reaching and exceeding financial, personal, company and performance goals mandates leadership, innovation, flexibility, scalability, entrepreneurship, transparency, systems, collaboration and talent. **One of the inherent attributes and unfortunate flaws within the real estate industry is an inability or unwillingness to look at tomorrow when today is at hand.** We should remember that the primary purpose of real estate is to bring people together, to do great things with even greater outcomes. While there are many more than nine Mega Trends facing the real estate industry today, those highlighted in this edition of *Strategic Advantage* are of critical importance. As author and public speaker John Naisbitt said so eloquently, “We are drowning in information but starved for knowledge,” and “Don't get so far in front of the parade that no one knows you're in the parade.” Yogi Berra is often credited with an old standby, **“The future ain’t what it used to be.”**

The following pages highlight nine “moving-the-needle” Mega Trends you cannot avoid and clearly must exploit. Remember, to quote Yogi, **“You've got to be very careful if you don't know where you're going, because you might not get there.”**

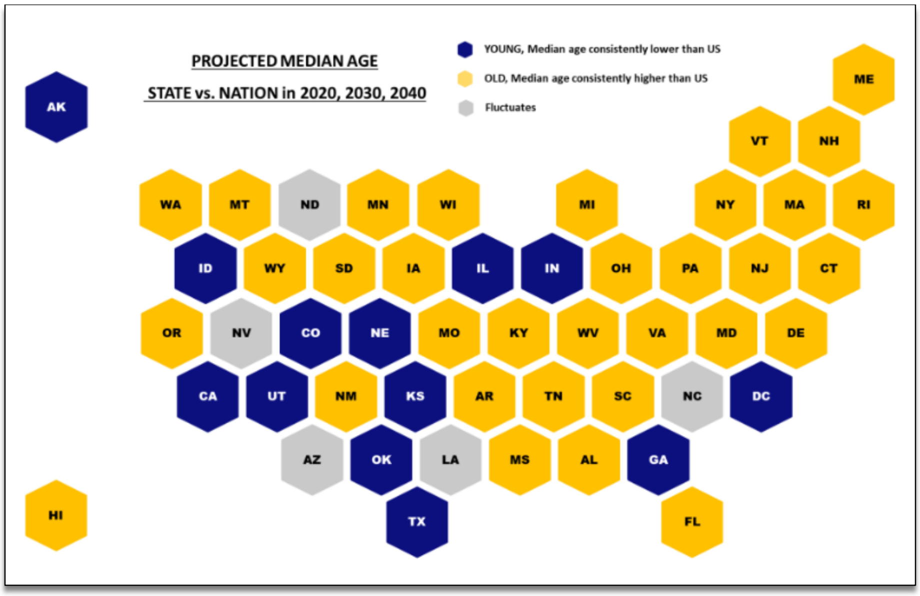
Trend # 1 – Technology

Volumes could be written on the current and future impact of technology and technological advancements have had and will have on the real estate industry. From robotics to automation, from the Internet of Things to the Internet of Everything, from digitization to Big Data, from predictive analytics to artificial intelligence, from 3D printing to VR/AR and from drones to quantum computing, **many in the real estate industry are not prepared for the tsunami of technology change now underway and about to happen**. WeWork, Airbnb, Uber, The Assembly, The Wing, The Riveter and PayPal are dramatically altering the nature and use of space. OpenDoor, Urbandoor, LinkedIn, Open Table, Yelp, Table Agent, Knotel, Breather, Offerpod and VRBO are reshaping living and socializing patterns. The need for 24/7 connectivity, affordability, independence, work/life balance and accessibility has redefined work. Now work follows the worker…the worker no longer follows the work. **Algorithms shape options, preferences and decisions. Buildings are less important than the services, amenities,**

connectivity and options they provide. In a renter-based and highly personalized society, flexibility, optionality and accessibility are key.

Asset- and service-centric real estate companies, which make up about 75% - 80% of firms today, measure success by financial metrics…**customers are seen as projects, engagements or contracts, not valued, long-term relationships.** Rather than drive revenues and performance from rent, transactions or commodity services, **real estate firms must shift to a more customer-centric, enterprise-based model**. In an age of disrupters, a time when knowledge is more important than information and a period where relationships and customization matter, no single solution fits all. **While one can be asset-, capital- or geo-centric, no one can afford not to be customer-centric.**

Projected Median Age – State vs. Nation



Source: Demographics Research Group, University of Virginia.

Over the next decade, the need for and role of Brokers, Property Managers, Accounting and Transaction Specialists will change dramatically. **As many as 20% - 30% of today's Brokers will not be needed, and the remaining 70% - 80% will have to reinvent themselves as Strategic Advisors**. Robotics and AI will significantly redefine the role of and need for Property Managers. In 2019, potentially 10% of U.S. jobs will be eliminated by automation. The role of digital workers will dramatically alter the use of space. Forrester estimates that 10% of future startups will employ more digital workers than humans. Automation centers will flourish. **AI could make up to 75 million job redundant by 2025. Who needs office space in a digital world?** What markets will be best able to accommodate these significant changes? What asset classes will perform the best? What opportunities will be created for tens of million square feet of "old" or "antiquated" space? Will apartments become digital connective hubs? **What will happen to retail space after the transformational apocalypse (remember, according to some analytics, 105 msf of retail space closed in 2017 and another 90 msf closed in 2018).**

Not one aspect within the real estate industry is immune to the effects of technology. From building materials to digital tracking, from Brokers to Developers, from Property Managers to Maintenance personnel, from space as destination to space as connectivity modem and from uniformity to customization, **every real estate company needs a technology plan and a strategy.**

Strategic Questions You Should Be Asking

1. What makes your company unique? 2. What are your company's brand differentiators? 3. Why does your company exist? What does your company stand for? 4. Who is/are your customer[s]? What do they expect? 5. What is your company's vision? Can everyone in the company recite the vision? 6. Is your entire leadership team aligned with your vision? 7. What new customer touchpoints can you offer? 8. Is your organization scalable? 9. Can your company get away from the "stickiness?" 10. What strategic relationships should your company seek to foster? 11. What is your company's value chain? 12. Is your company nimble, flexible and able to move capital, talent and leadership to emerging opportunities?	13. Is your company "tech savvy" and fully embracing the Internet of Everything, Big Data, Predictive Analytics and Automation? 14. Does your company have an innovative ecosystem? 15. Does your company have "announced/formal" succession plans for the CEO and all mission critical positions? 16. Has your company embraced the network effect? 17. Does your company have an adjacencies strategy? 18. Does your profit from recurring operating revenues cover 100% of corporate overhead? 19. Does your company have a robust research and proprietary database for what is necessary to achieve a competitive advantage? 20. Is your compensation plan reflective of today's and tomorrow's reality and competitive environment? 21. What steps have/are you taken/taking to identify and retain High Potentials? 22. Does your company have a secured source of capital for growth? Source: CEL & Associates, Inc.

Reaction is not a plan, and more of the same is not a strategy. Most real estate firms spend less than 5% of their operating budget on technology. Global capital investments in real estate technology firms were $12.6 billion [$6.5 billion in U.S.] in 2017. Global proptech funding has been rising 36% per year. Firms like 500 Startups, MetaProp NYC, Khosla Ventures, Navitas Capital and Thrive Capital lead the real estate tech investing space. Check out www.vts.com for an example of future leasing and asset management software.

In the construction industry, self-heating concrete, modular construction, drones, BIM technology, prefabrication, smart walls, holograms, augmented reality, smart glass, Google Home, Echo and Alexa, bio-concrete, 3D graphene and much more will transform this $15 trillion global industry by 2025. Ekso Bionics is developing wearable robotics for the construction industry. Autonomous mobile robots are now becoming commonplace on construction sites.

As Winston Churchill said, **"We shape our buildings, and afterwards, our buildings shape us."** Technology is driving real estate outcomes, and today's asset-centric or capital-centric business models are not a roadmap for sustainability or success. **You must define the sandbox you want to complete and then create and implement a technology plan to assure success.**

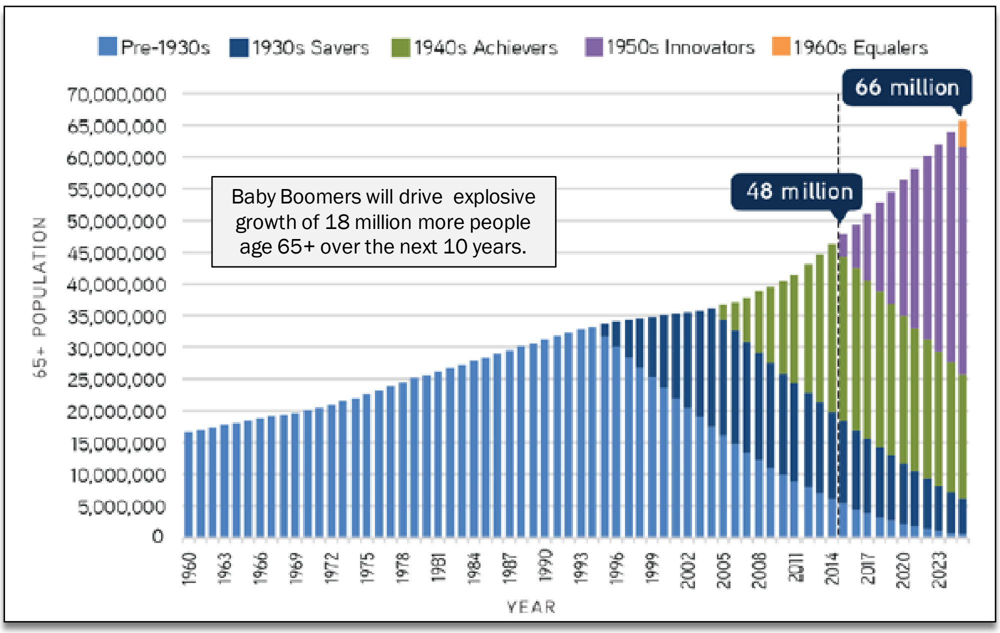
By 2025 most Best-In-Class real estate firms will have a Chief Innovations Officer who will view technology as an opportunity rather than a "convenience software-driven" process.

Trend # 2 – Demographics

The primary drivers of real estate are capital, population, consumers and consumption patterns, job growth and demographics. Where people elect to live, work, shop and recreate is often a determinant on the demand and need for real estate. **These assets are merely physical structures which have been shaped and created for today's occupiers and the customers of occupiers**.

Growth Of Seniors

65+ Population by Decade of Birth.

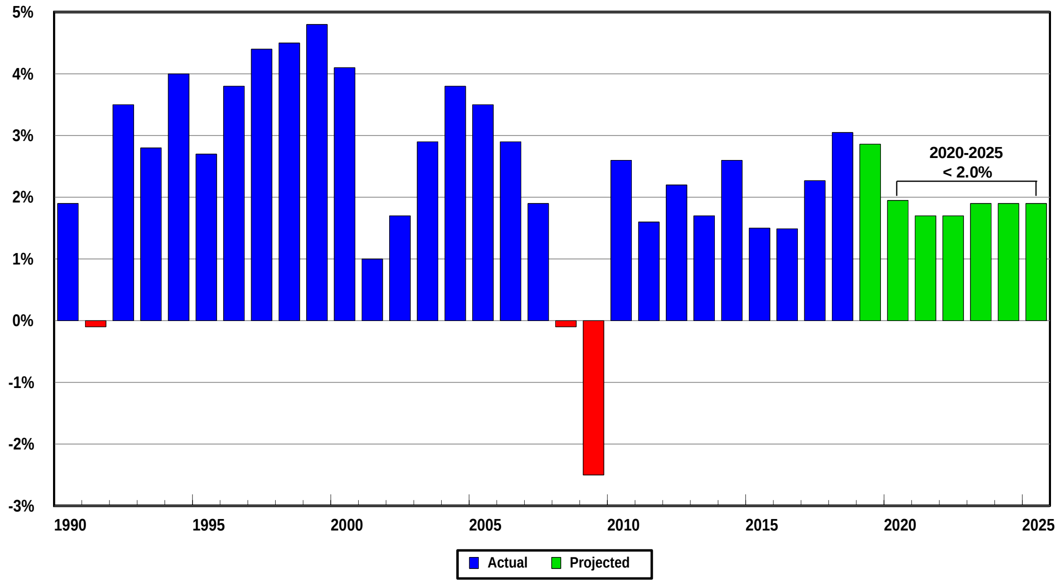


Source: Urban Land Institute, John Burns Real Estate Consulting LLC and U.S. Census Bureau.

Demographics is the study of human population based on such factors as age, ethnicity, gender, income and household characteristics. Typically, governmental agencies, quasi-governmental entities, economic development, public companies and others compile and produce demographic data and analytics. In the real estate industry, multiple private companies assemble and provide data for a subscription or fee, including CoStar, RCG, Axiometrics, VTS, Reonomy, CompStak, Moody's Analytics, and others.

The real estate industry has been very good at compiling and utilizing historical data, somewhat good at making projections, not so good at understanding the intricacies of data analytics, and very poor at collecting and utilizing proprietary and customer/occupier data. Today over 90% of real estate firms use the same data, resulting in a dependency on "feelings" rather than "facts." Daniel Levitin described in his book *The Organized Mind* that information overload causes one to retreat into an "alarm" mode and then make decisions based on a fear of failure. Too many real estate companies rely upon history ("fear of failure") and far less on the true demographic drivers. **In today's marketplace, proprietary knowledge is a competitive advantage**.

U.S. Real GDP Growth



Source: Statista and CBO.

The major demographic shifts occurring now and over the next several years include, among other changes: [1] Millennials are now the largest generation in the U.S. labor force (35%); [2] 10,000 Baby Boomers turn age 65 every day (up to 2030); [3] women, after several years of increasing their percentage in the workforce, will decline; [4] by 2035, the number of older adults will outnumber children for the first time in U.S. history; [5] by 2030, nearly 75 million Hispanics will be in the U.S., or over 21% of the U.S. population; [6] household formation characteristics continue to change dramatically. The growth of 25- to 29-year-olds will decline beginning in 2025 and not recover until 2029. Between 2016 and 2025, 70% of new households will be in the Sunbelt.

It is important to note that 2030 is a demographic turning point for the U.S. By 2030, all Baby Boomers will be older than 65 years. By 2030, net international migration is projected to overtake the natural increase in population. By 2030 over 82 million Americans will be age 65 or older. By 2030, nearly 54 million Americans will be a foreign-born population (43.4% of Hispanics will have been foreign born).

Real estate firms must take steps to gather direct source information to gain a competitive advantage. **Collecting proprietary data on your tenants, residents, occupiers/occupants, customers and/or visitors will increasingly become a critical and integral part of every successful real estate firm**. Concepts such as biometrics, thermal imaging, WiFi tracking, BLE beacons, locational analytics, augmented reality and other technologies are reshaping the way real estate firms track and collect demographic data.

Trend # 3 – Legacy Exits, Succession & Sustainable Governance

Around 55% of today's real estate leaders expect to retire or phase down within a decade. A CEL & Associates, Inc. survey of select multifamily leaders held in spring 2019, found that 46% of those surveyed planned to retire or phase down by 2025. The wave of retiring Founders, Senior Executives and Directors/Managers will accelerate over the next decade. REIT consolidation will accelerate, service companies will continue to consolidate before shifting to look like Google or Microsoft (managing data, products and services), multifamily companies will become attractive acquisitions for hospitality PE firms, and 70% or greater single or dominant Shareholder real estate firms could disappear within 10 years or so. **Consolidation means significant staffing changes are very likely in the years ahead.** The fact that **nearly 60% of real estate firms lack formal declared succession plans for their key leaders is a concern.** Thirty-two percent (32%) of real estate firms lack a succession plan for the CEO, and less than 25% of privately held real estate firms have a formal, independent Board of Directors. **The combination of an absence of clear succession, an aging C-suite profile and an inability and/or unwillingness to (re)invest in the future or to "stay competitive" will result in a decline in 25% - 35% of today's real estate firms by 2030**. It is important to remember that lenders, joint venture partners, large tenants and key leaders want to know that there is a formal process of sustainable governance.

Four Succession Planning Phases

Phase I	Phase II	Phase III	Phase IV
Decision & Profiling Phase →	Diagnostic & Identification Phase →	Development & Mentorship Phase →	Designation & Transition Phase
• Determine Long-Term Strategic Vision/Plan • Identify Leadership Skills Needed • Select Optimal Succession Option(s) • Create Position Analysis • Conduct Needs Assessment • Develop Skills Profile • Define Compensation Parameters • Determine "Most Important" Attributes Needed • Form Succession Committee	• Candidate Identification - Internal • Candidate Identification - External • Candidate Recruitment • Candidate Assessment • Candidate Testing • Candidate Interviews • Candidate Determination	• Coaching/Mentorship • Relationship Development • Professional Development • Knowledge Sharing • Action Learning • Monitor Progress	• Selection/Appointment • Determine Timing • Communications • Transition - Internal • Transition - External • Transition - Customers • Transition - Relationships • Transition - Strategic Partners • Fill Successor's Position

Source: CEL & Associates, Inc.

Those who will fill the "Founders' Void" will be a new or next generation of leaders who will shape and reshape the real estate industry over the next decade. **Those real estate firms which create robust succession plans; a dynamic, in-the-game Board of Directors (remember, no retirees on**

the Board); and invest in future leaders will achieve a strategic and competitive advantage. How many 35- to 50-year-old HIPOs are in your organization? Do you have two or three potential candidates to succeed all mission-critical positions? Did you know that only 44% of today's real estate CEOs are "very satisfied" with their entire senior management team? According to a recent CEL & Associates, Inc. survey, **71% of today's CEOs *do not* see themselves as "succession ready" over the next 12 months**. Only 15% of small to mid-size real estate firms have a formal succession plan.

The market today for "legacy" real estate firms [service and developer] is very high. Multiples of EBITDA can range from 4X to 7X and higher, depending on market, size, uniqueness, organization quality and sustainability. There have been recent transactions where acquirers are willing to purchase future promoted interests, as well.

However, **over the next decade 20% - 30% of today's real estate firms will very likely be gone (acquisition, merger, dissolution, etc.). By 2040 the number of real estate firms could be 50% or more below the number that existed in 2010**.

The "succession" or "get out" Mega Trend is not going away and cannot be avoided. If your organization has a well-defined succession plan and actualized sustainable governance structure, you can always move forward profitably. However, **with no succession plan or sustainable governance structure, the likely outcome is a "slow walk to irrelevance and nonexistence."** Aldous Huxley said, "Man approaches the unattainable truth through a succession of errors." To succeed in the future, one must eliminate as many errors as possible and make one's exit and succession uneventful.

Trend # 4 – Talent Flight & Compensation

Today, and over the next decade, there will be a manifestation between past intentions and future results. **Every action, event, task or outcome in the real estate industry involves one or more people**. Getting the right talent in the right positions at the right time is critical to successful outcomes. During the past two decades, overall employee turnover rates have ranged from 27% - 34%. Today there is a shortage of "qualified" or "great" talent…and those who are top performers know it and are increasingly seeking to monetize their status.

Treating employees as replaceable commodities is out-of-touch. Placing events, transactions and contracts above the needs and expectations of employees accelerates talent exits. According to recent surveys, an increasing number of real estate leaders and employees feel "out of the loop," undervalued, underappreciated and "not satisfied with their career development." Often the basis for this dissatisfaction is poor internal communications, lack of professional and career development options, non-solicitation and/or disregard of one's opinion or perspective, lack of clarity on position responsibilities and level of decision-making authority, career advancement opportunities (or lack thereof), compensation, title, and/or "boredom." **In a recent CEL & Associates, Inc. survey,**

employees' decisions to stay or leave are often based on their perception of the employer's ability to enable and support a balance in personal and professional life.

In a knowledge-centric and relationship-based environment, talent at all levels wants to be engaged and feel they have: a "voice" at the table, a clear and defined path for personal and professional growth, a workplace environment that is collaborative and transparent with scheduling flexibility, and have a job "with a purpose." Recognition, rewards, compensation and benefits are equally important, or perhaps slightly more. The key questions for every real estate company are: [1] are we long or short on talent; [2] does our compensation and benefits plan reflect the marketplace and attract, retain and motivate talent; [3] does our staffing plan reflect the changing nature of work, automation, Big Data, current and future company priorities; and [4] do we have the "Best" talent in all positions?

Compensation Trends

Year	Metric	Merit Increases					Other Budget / Planning Trends				
		Top Executives (1)	Senior Management	Exempt Employees	Non-Exempt Employees	Overall Company	General Inflation Rate	Incentive Compensation - Bonus Realization	U.S. GDP Growth	Total Medical $ Growth	Employee Share of Healthcare Costs
2011	Average		3.0%	2.6%	2.7%	2.8%	3.2%	73.5%	1.6%	7.7%	9.3%
	75th Percentile		3.8%	3.4%	3.3%	3.6%					
2012	Average		2.5%	2.8%	2.6%	2.8%	2.1%	78.6%	2.2%	6.9%	7.2%
	75th Percentile		3.0%	3.2%	3.0%	3.2%					
2013	Average		3.2%	3.2%	3.0%	3.1%	1.5%	81.8%	1.8%	6.3%	6.5%
	75th Percentile		3.2%	3.5%	3.0%	3.2%					
2014	Average	3.3%	3.2%	3.2%	3.0%	3.2%	1.6%	84.2%	2.5%	5.4%	6.0%
	75th Percentile	3.6%	3.5%	3.5%	3.0%	3.5%					
2015	Average	3.1%	3.5%	3.5%	3.2%	3.4%	0.1%	82.8%	2.9%	6.3%	8.0%
	75th Percentile	3.0%	4.0%	3.6%	3.0%	3.6%					
2016	Average	3.0%	3.4%	3.4%	3.3%	3.4%	1.3%	86.7%	1.6%	4.7%	5.3%
	75th Percentile	3.5%	4.0%	3.8%	3.3%	3.8%					
2017 (2)	**Average**	**2.9%**	**3.5%**	**3.5%**	**3.4%**	**3.5%**	**2.1%**	**85.5%**	**2.2%**	**4.3%**	**5.3%**
	75th Percentile	**3.8%**	**4.0%**	**4.0%**	**3.6%**	**4.0%**					
2018 (3)	**Average**	**2.9%**	**3.4%**	**3.3%**	**3.2%**	**3.3%**	**2.7%**	**87.0%**	**2.9%**	**4.5%**	**5.9%**
	75th Percentile	**3.2%**	**3.9%**	**3.5%**	**3.4%**	**3.5%**					
2019 (4)	**Average**	**3.3%**	**3.5%**	**3.3%**	**3.3%**	**3.3%**	**2.3%**	**87.4%**	**2.6%**	**4.1%**	**6.0%**
	75th Percentile	**4.2%**	**3.6%**	**3.5%**	**3.4%**	**3.5%**					

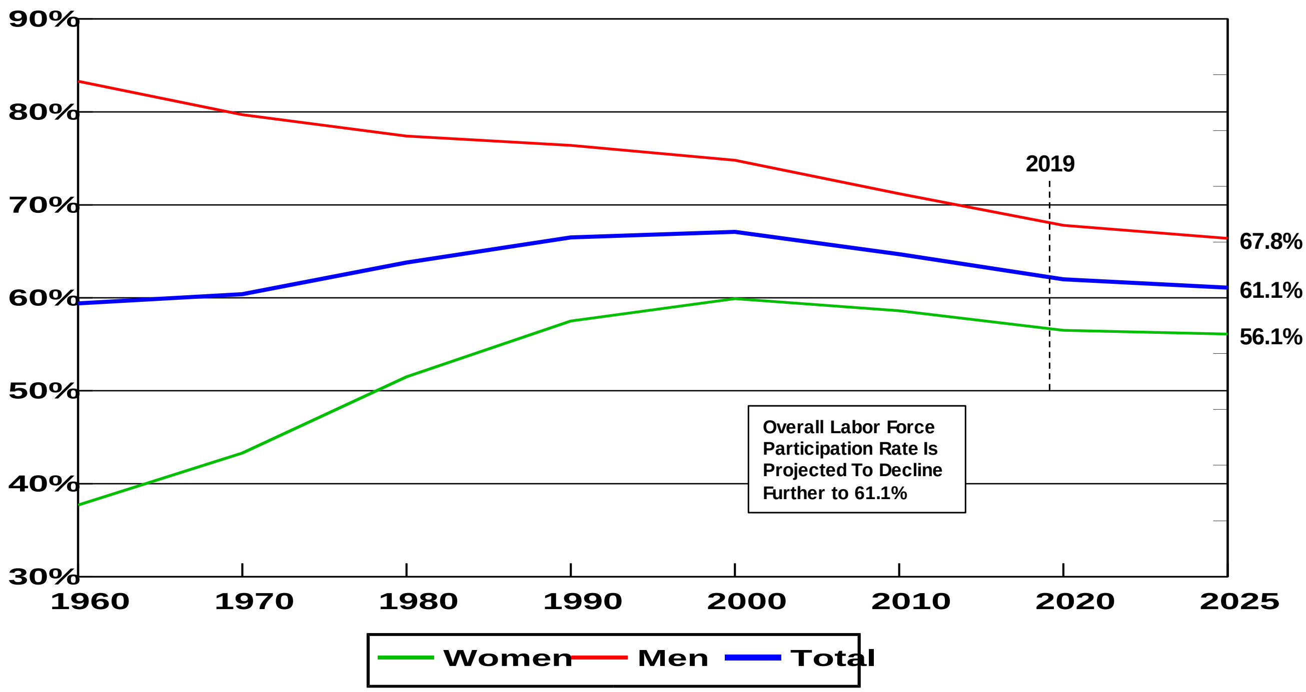
(1) New Merit Increase category in the 2014 CEL National Compensation Survey - defined as positions reporting to the CEO, generally "C" Suite positions and/or Senior officers.
(2) Final (Actual) 2017 Merit Awards as reported in CEL 2018 National Compensation Survey.
(3) 2018 figures based on CEL 2018 National Compensation Survey (2Q/3Q 2018).
(4) Forecast for 2019 incorporates early feedback on assumptions for budgeting.

Source: CEL & Associates, Inc./CEL Compensation Advisors, LLC.

Today and tomorrow, real estate firms must be aspirational, visionary and transformative. The role of Human Resources, now increasingly called Talent Management, is fostering a culture/values-based, talent-centric workplace environment critical in the financial and operating performance of an organization. Real estate companies must provide regular movement of talent among strategic projects and priorities and create a positive employee life cycle experience. **Real estate firms who treat human capital on an equal basis to financial capital will outperform those who don't.**

Compensation is a never-ending Mega Trend which, too often, determines success or failure, relevance or irrelevance, a competitive advantage or be-like-everyone-else, and long-term viability versus short-term gain. For nearly three decades, CEL & Associates, Inc. has conducted and tracked compensation benefits throughout the real estate industry. The survey is the largest of its kind. Over the past 10 years, there has been a dramatic increase in "Benefits." For example, of surveyed real estate firms today: 88.5% provide a vision plan; 42.9% have a PTO Bank; 94% provide basic life insurance; 86.7% provide AD&D insurance; 26.1% provide business travel insurance; 49.4% offer "Flex Time;" 66.4% provide tuition reimbursement; and 55.1% offer a "Wellness" program. Real estate firms are extending LTI plans farther down in the organization.

Labor Force Participation By Gender



Source: Bureau Of Labor Statistics.

Building a "Workplace For Me" will inspire and unleash your talent. Addressing this Mega Trend sooner rather than later could make the difference between winning and losing in an increasingly competitive marketplace.

Trend # 5 – Moral Quotient Expectations

The real estate industry has been portrayed as the catalyst and reason behind everything that is wrong with our cities. Traffic congestion, urban sprawl homelessness, affordability, lack of civic involvement, environmental pollution, and the list goes on. Movies and television shows often portray real estate developers as greedy entrepreneurs who are ruining our cities. **If there is a problem, there is a very high probability that the real estate industry or developers will be cast as the "reason for."** We now have the "Green Deal" proposal which could render most buildings noncompliant. New York Mayor Bill de Blasio recently announced new building and energy guidelines which would ban "inefficient glass and steel" skyscrapers. Real estate developers are to blame for greenhouse emissions. From the movie "The Big Short" to Thomas Pynchon's novel, *Inherent Vice*, the real estate industry is often portrayed as the reason for many of today's ills. Even the 1989 movie "Field of Dreams" is labeled a cause, "build it and they will come." While there are some just plain "horrible" real estate projects, we should remember the 90-plus percent of great real estate projects that have and continue to revitalize and energize our cities. The cities below are considered long-term "safe bet" MSAs for real estate.

Knowledge Cities

Knowledge Cities		Emerging Knowledge Cities	
Atlanta, GA	Nashville, TN	Ann Arbor, MI	Madison County, AL
Austin, TX	New York City, NY	Bethesda, MD	Madison, WI
Baltimore, MD*	Northern Virginia	Boulder, CO	Milwaukee, WI
Bellevue, WA	Philadelphia, PA	Charleston, SC	Norfolk, VA
Boston, MA	Portland, OR	Cincinnati, OH	Oakland, CA
Chapel Hill, NC	Raleigh-Durham, NC	Colorado Springs, CO	Oklahoma City, OK
Charlotte, NC	Redmond, WA	Ft. Collins, CO	Provo, UT
Chicago, IL*	Salt Lake City, UT	Hartford, CT	Pittsburgh, PA
Dallas-Ft. Worth, TX	San Diego, CA	Huntsville, AL	Richmond, VA
Denver, CO	San Francisco, CA	Indianapolis, IN	Tampa, FL
Houston, TX	Seattle, WA	**Potential Knowledge Cities**	
Los Angeles, CA	Silicon Valley, CA	Birmingham, AL	Virginia Beach, VA
Miami, FL	Tulsa, OK	Detroit, MI*	Warren, MI
Minneapolis, MN	Washington, D.C.	Trenton, NJ*	Wilmington, DE

Source: CEL & Associates, Inc.

* Long-term status: Fiscal and/or political challenges may alter a Knowledge City's status in the future.

However, **today every real estate leader is faced with a higher standard of excellence and expectation…a moral quotient…where character, purpose, morality, values and "doing the right thing," have become the guideposts**. From making our cities and communities better, fostering diversity, protecting the environment, the real estate industry's Moral Quotient is becoming as important as one's Emotional Quotient or Intellectual Quotient. The real estate industry's opportunity is to combine natural and physical elements that positively impact lives.

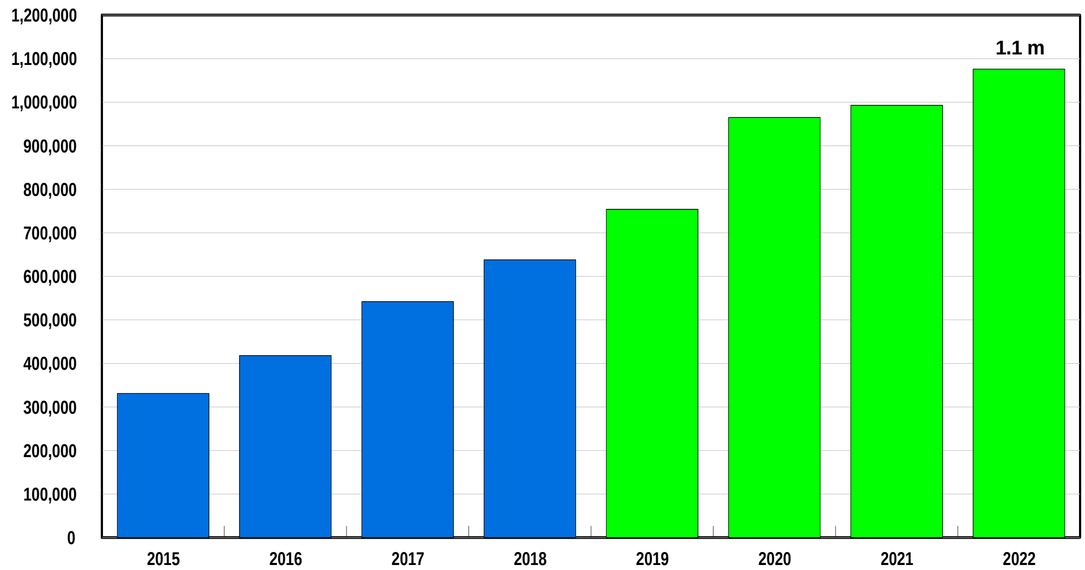
Over the next several years, balancing the Moral Quotient with the reality of pricing and operating/investment expectations will be a significant challenge. Antiquated zoning laws, rent control, outdated municipal building departments, lengthy entitlement and permitting processes, increasing fees, taxes and overall costs to "conduct business" can be a difficult challenge in a Moral Quotient world. Some progressive cities have watched as Amazon elected not to occupy its 722,000 sf tower under construction in Seattle (the City Council had passed a per-employee tax, since been rescinded) or Amazon's withdrawal from the Queens HQ_2 project due to the opposition of a few elected officials. New rent control initiatives versus pro-growth initiatives in states like California and Oregon make "doing the right thing" prohibitive.

The Moral Quotient is real and becoming a prominent strategy and expectation. The U.S. Green Building Council now has 12,000 member organizations, over 201,000 LEED professionals and has certified and registered over 94,000 LEED projects. The International Well Being Institute has certified around 350 million square feet in 50 countries. Fannie Mae now offers preferential pricing on loans that have a Fannie Mae green building certificate. Green Business Certification, Inc. (GBCI) is now a certification provider for EDGE in over 120 countries. The ISO has a new standard on determining the carbon footprint of commercial buildings. **Having a brand that "stands for something" is becoming as important as the services or products provided**.

Trend # 6 – Redefinition Of Space

The combination of technology, redefinition of work, 24/7 accessibility, automation/robotics, 3D manufacturing, the Internet of Everything and shifting demographics has **created a necessity to redefine the need for and utilization of space**. Work is increasingly being done at home or on mobile devices. The home is now a place to connect. Retail centers are now places to engage, be entertained and interact. Rapidly disappearing are conversations surrounding efficiency, cost-reduction and utilization percentages. With space, there is a growing debate on what is (or should be) the creation of value and how meaning relates to value. However, in all cases today, the meaning of value from the owner/operator/occupier perspective is all about making a difference that matters.

Number Of Co-Working Members In The U.S.



Source: Statista.

The amount of office feet per employee has nearly been cut in half over the past 20 years as the role and impact of the Independent Worker has made space less important. **Buildings do not create relationships, people do. Value creation is not static. There is always more value which can be created for customers.** If future office buildings will look and feel like a shopping mall…if apartment buildings will feel more like a luxury hotel…if industrial buildings will feel like an air traffic control tower…then the real estate industry as we know it today is woefully outdated. **Space now follows the person**. Space is a launch pad, docking station, networking and connectivity hub. Space is a place to learn, implement, engage, interact and be inspired.

Did you know that literally every major personal decision is made in a home (where to go to college, get married or divorced, select or change jobs, relocate, have children, make investments, plan vacations and entertain)? Yet, for example, far too many apartment owners want to impose the "same" interior colors for everyone. One size does not fit all. Enable customization and choice and you will outperform the market.

Space should be viewed holistically**. Space is an integral part of process, not practice-oriented; space is inclusive versus exclusive, anticipatory not responsive and space is a creator of value**. Space is personal, and if real estate owners/operators fail to recognize these emerging Mega Trends, they will become confounded observers of vacancy growth.

There is a reason why the number of coworking spaces in the U.S. has risen from less than 3,000 in 2015, to over 5,000 in 2019. Environmental psychology, which emerged around 1970, has studied the influence of physical surroundings on how we think, feel and act. **Our mental space stands in direct proportion to our perception of physical space**. Open office or view space can generate new, original and useful ideas (it is called construal level theory). If so, then why do so many real estate firms have closed offices, cubes and hallways? **The redefinition of space is and should be of concern to every real estate firm as both a user and a provider of space**.

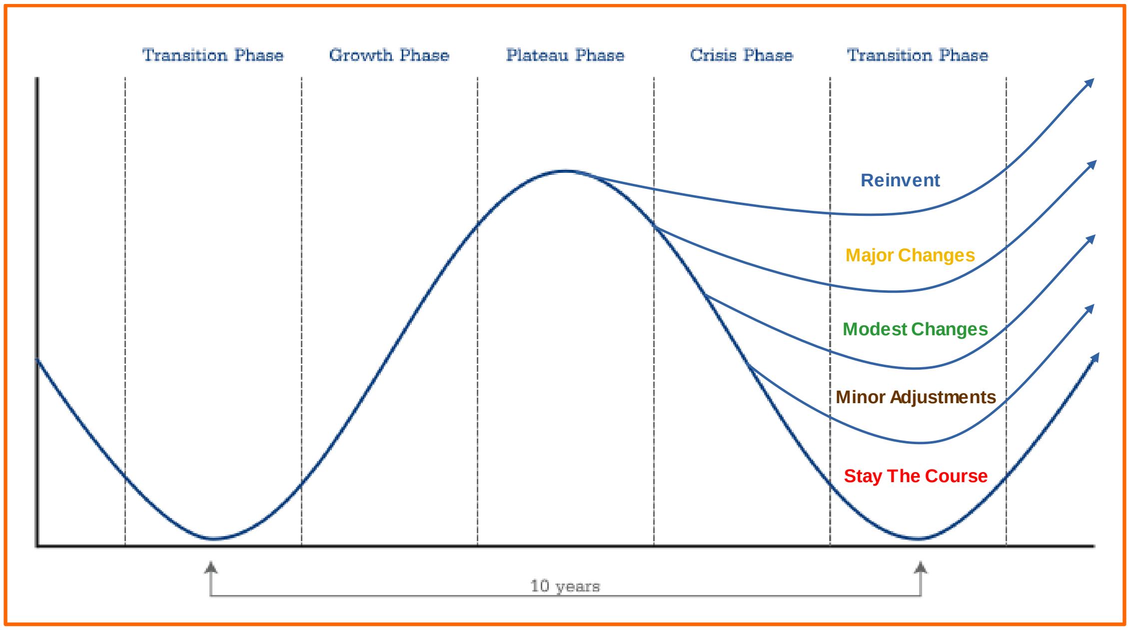
Trend # 7 – Cycle Change

According to many surveys, real estate CEOs are very concerned on what to do, how to prepare and what resources to commit toward the eventual cycle change. **Unfortunately, the real estate industry has three cycles: the Mega Cycle, the Super Cycle and the Recurring Cycle**. Each has its own set of opportunities and challenges. In this Mega Trend, understanding and timing are critical. Typically, the real estate industry has been a reactor but not a creator of events.

The current **Mega Cycle (2000 – 2040),** which generally last around 40 years, is called the Digital Age. The three preceding Mega Cycles were: Industrial Era (1880 – 1920); Nation Building (1920 – 1960); and Boomer Awakening (1960 – 2000). In each of America's transformative moments, every generation shaped its life cycle based on secular events and historic opportunities. In this Digital Age, the Baby Boomers will give way to the Xers and Millennials, whose views and use of real estate are very different. Real estate to Millennials, for example, is a necessity but not an end game. Real estate in the Digital Age will boom as society, businesses and communities significantly change their priorities and expectations of real estate's role in shaping culture. Many Millennials will mirror the progressive agenda of their Boomer parents and could bond around "helping save the planet." **The role of real estate will actually increase as the "makeover" of American cities becomes a priority to "save the world." Real estate firms who have "Rock Star" 20- to 40-year-olds today will flourish during this cyclical handoff.** Mixed use, campus-like communities and business centers, development around transit centers, and light rail corridors will dominate the real estate opportunity landscape.

As the real estate industry navigates through the Mega Cycle, it still struggles to find normality in the **2020 – 2040 Generational & Demographic Super Cycle.** While the demographic trends were discussed earlier, the next 20 years will be a time of reluctant transition as Baby Boomers seek to hold onto what they have and Millennials resist those perceived as antithetical to community solidarity, cultural alignment and social benefit. **Dedicated to a more civic or social mission, real estate will become a gathering place, a societal demonstration of what "can be," and a connective link to live, work, shop and play.** Real estate firms may have a Philanthropic Navigator to align community, sponsor capital and occupier/user needs, expectations and outcomes. It will not be effortless, but it will be far easier for firms who start now by forming a Foundation for community donations, perfecting next-generation leaders and creating a brand that stands for more than just a product or service.

<u>**Real Estate Cycle Phases**</u>



Source: CEL & Associates, Inc.

In the upcoming **Recurring Cycle (2023 – 2028), the Age of Accelerators, Technology Disrupters & Innovation**, real estate firms should invest in the future, embrace technology, do different things (not do things differently) and accept the reality of transformation not transition. The last cycle, the soon-ending Age of Capital, Asset & Entity Rebalancing, will give way to those who understand and have actualized a long-term Strategic Plan based on disruptors, the network effect, the Internet of Everything, digitization, innovations, and a tsunami of structural changes to the way real estate is acquired, designed, developed, leased, managed, financed and sold.

Real estate investing before, after and during a cycle change is a maze of possibilities, challenges, dead-ends and surprises. Every day, every turn gives encouragement and hope to the discoveries ahead. The biggest barriers to success are the self-imposed restrictions placed on each decision and turn along the road of possibilities. As one gets closer to exiting the maze of everyday challenges, goal attainment becomes a greater possibility (a feeling of "I can do this") and opens the door to future maze adventures. **Cycles mean little to those who are unwilling and/or unable to change and envision beyond today.**

Successful real estate leaders and professionals were not chosen, ordained or selected; they were those who could see possibilities, envision beyond the barriers and disappointments, and continuously adapt, evolve, change and transform their aspirations into success. Real estate companies are merely a modern-day version of past hunter-gatherer societies. **Cycle change is one of the most pivotal times in a real estate firm's history**. Failure to prepare for and respond to the exciting, challenging and unexpected surprises, which are and will continue to occur during the Cycle change, is not a recommended strategy.

Trend # 8 – The Looming Debt Crisis

Want to get gray hair? Here is a fact that should concern each of us. According to the Institute of International Finance reported by Bloomberg, **the world's cumulative debt is now $244 trillion or more than three times the size of the global economy. The current global debt-to-GDP ratio of 318% is nearing its all-time high. In the U.S., the U.S. National debt is over $22.2 trillion**. By 2030 the U.S. National Debt could be in the $40 trillion range. The average debt per taxpayer is over $181,000. In 1980, the U.S. Federal Budget deficit/surplus to GDP ratio was 1.836%...today it is 4.475%. The U.S. gross debt to GDP ratio is now over 105%. The total U.S. debt per household is now around $172,000. If you have not visited the U.S. Debt Clock website, you should…it will be alarming and humbling.

Government debt has grown faster than household, corporate or financial debt. **The CBO projects that within 18 years, entitlement spending will consume all U.S. Federal tax revenues** (and the CBO has assumed in their projections a compounded 3% growth rate and no recessions…very unlikely). The Wall Street Journal reported on April 23, 2019, that Social Security costs are expected to exceed its income by 2020…the first time since 1982. In 2018, 52.7 million people received retirement and survivor benefits, 10.2 million received disability benefits and 59.9 million were covered under Medicare. In 2018, Social Security and Medicare costs together account for 45% of federal spending. The Medicare hospital insurance fund is expected to be depleted by 2026. Medicare spending is expected to grow 7% per year beginning in 2019 and increase to $1.2 trillion by 2028, according to the CBO. If the Fed responds to the next recession with massive quantitative easing, the U.S. is destined to have slow, nominal GDP growth, low inflation, higher taxes and cuts in benefits.

The average U.S. state pension fund is funded only up to 33% - 35%, and consequently unfunded liabilities of state-administered pension plans are now around $6 trillion. To highlight the contrasts, California's pension fund liabilities per capita are now around $29,137, Tennessee's unfunded liabilities per capita are only $8,466. Many public pension funds assume a 7% - 8% return, which is unrealistic today!

Corporate debt is now around 72% of GDP, government debt is 100% of GDP and household debt is around 77% of GDP. When one adds financial sector debt (81% of GDP) the combined debt-to-GDP ratio is around 330%. Oh…37% of U.S. non-financial corporate debt ($2.4 trillion) is rated "below investment grade."

The U.S. consumer is also an active contributor to the growing debt crisis. U.S. auto loan debt is now $1.2 trillion, student loan debt tops $1.6 trillion, revolving consumer debt is $1.1 trillion, and overall household debt in the U.S. is $13.5 trillion. Perhaps more alarming is that the median American household has only $11,700 in savings, while 29 percent of households have less than $1,000 in savings. In January 2019, the personal savings rate was 7.5%, far below the 12% level in December 2012 or 17.3% level in May 1975. According to Pew Research, after adjusting for inflation, the average hourly wage has the same purchasing power it did in 1978. Today the wealth of the top 1% of the population is more than that of the bottom 90% combined! **Those in the top 40% now have an average more than 10X as much wealth as those in the bottom 60%...** up 6X in 1980. GDP has been growing faster than median household income. Compensation has not kept up with rising productivity.

What does all this mean for the real estate industry? It means: [1] probably higher taxes, fees and operating expenses; [2] higher construction costs (unless automation kicks in earlier than expected); [3] higher compensation expectations; [4] slower leasing activity; [5] emergence of geographic winners and losers; [6] increase in government intervention, regulation and mandates (e.g., rent control, inclusion zoning, "Green" taxes, etc.); [7] talent moves to the highest bidder; [8] clear product and geographic winners and losers; [9] capital shifts to internationally undervalued markets; [10] an overall slowdown in activity for those who are undercapitalized; [11] likely lower rents as taxes rise faster than real income.

While there are clear ways to avoid or weather this debt crisis, it will take transformational/visionary leadership in government and the private sector, a new strategic plan and business model for real estate firms, greater reliance on technology and technology solutions, and having a best-in-class talent base.

Trend # 9 – Many Real Estate Jobs Will Not Exist

Alarming as that statement seems, the fact is that **many real estate jobs will not exist *in their current form* by 2030. According to several sources, automation will eliminate as many as 73 to 75 million jobs in the U.S. by 2030. In about 60% of current occupations, at least 33% of the constituent activities could be automated.** The impact of automation on employment within the real estate industry will be significant. Automation and robotics could result in dramatic reductions in "process" jobs (accounting, clerical, administrative, purchasing, etc.); "deal" jobs (acquisitions/dispositions); "information" jobs (brokerage, financial analysts, research, lease administration, finance, IT, marketing, etc.); "hands on" jobs (construction, maintenance, etc.); and, depending on scale, "oversight" jobs (property management and asset management). While CEL & Associates, Inc. estimates that up to 50% of the "eliminated" jobs will disappear forever, the remaining 50% will be redesigned and restructured to fit the New Normal.

Online software tools such as RealData's Investment Analysis, RealNex, Core Systems, ProAPOD, Property Metrics, ProspectNow and BLDUP are "systemizing" various real estate functions. Yardi, Avail, Rentec Direct, Buildium, TenantCloud, Rent Manager, RealPage, AppFolio and

Rentalution, among others, are automating functions formerly done by individuals. Construction laborers will be replaced by robots and cobots. Electronic plans, inspection drones and automated inventory management will eliminate many administration positions. A bricklaying robot (Semi-Automated Mason) can lay 3,000 bricks per day. Houses can be built by robots and 3D printers.

Retooling for the next decade will mean: [1] Brokers will become Strategic Advisors; [2] HR Directors will become Talent & Culture Officers; [3] Property Managers will be Enterprise Directors; and [4] Capital Market leaders will become Relationship Partners. In today's gig economy, work will be shaped or orchestrated through technology that cannot be seen, touched, or in many cases, attended to by a worker. **There will be, however, a rise in jobs requiring cognitive capabilities.** While work performed by knowledge workers is likely to remain untouched over the next decade, interactive work should thrive, and the rise of the independent workforce will be transformative. **Space or where work is performed (location) becomes less important than the intersection of collaborative relationships, interactive technologies and economic and geographic mobility.** Loyalty to one employer (take note) will become far less important than building one's brand, unique expertise and valued relationships.

When did you last complete a critical assessment on your staffing model? What jobs, functions and/or processes can or should be automated? What steps are you taking to integrate AI, robotics and outsource resources into your "staffing" mix? How will your compensation model change in the New Age of automation, robotics and artificial intelligence?

Closing Comments

Too often we get caught up in our "day jobs" and do not make time to look ahead. Dealing with the *crisis du jour* is important but neglecting to see the tsunami on the horizon can only result in a tumultuous future. Unlike John Steinbeck's quote in *Of Mice and Men*, "Guys like us got nothing to look forward to," **real estate leaders and professionals have *everything* to look forward to**. These Mega Trends are not going away…they cannot be avoided or pushed aside for another day. How you and your organization respond will likely determine your relevance and success for years to come.

Regards,

Christopher Lee

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