



Everything You Wanted To Know About AI...And More!

- ◆ *Going From Zero To Sixty In Seconds*
- ◆ *AI Will Impact Every Function*
- ◆ *Where AI Will Create Value*
- ◆ *It Is All About Talent Transformation*
- ◆ *Recent AI Survey Tells The Story*
- ◆ *AI Will Not Replace The Human Element...Unless We Let It*
- ◆ *The Tale Of Three Journeys*
- ◆ *The Risks Of AI*
- ◆ *Will AI Make The Real Estate Industry More Or Less Relevant?*
- ◆ *AI And Real Estate In 2040 And Beyond*
- ◆ *Closing Remarks*

Share with friends
and colleagues.

Friends & Colleagues:

Real estate has always been the unfinished business of society. The industry has built/created great cities and buildings...and then rebuilt and reinvented those great cities and interactive environments over hundreds of years. It has capitalized on emerging developments such as the transcontinental railroad in 1869, the Sears Roebuck catalog in 1888, introduction of the intermodal shipping container in 1956, Baby Boomers coming of age from the 1960s through 1980s, the surge in Internet usage, personal computers, cell phones, and data centers, plus countless other transformative events. **Real estate as physical space has defined the industry for centuries**, but that is changing rapidly as **the relevance and purpose of space is being redefined.**

Today's AI revolution is not an improvement, an answer to a problem, nor an option to relegate to a later time. **No facet within the real estate industry...not one...will escape changes by AI and Generative AI.** AI is here, so the real estate industry must face it, deal with it, and shape it, or it will control the destiny of each real estate professional, company, and industry.

In a 2016 speech at Cambridge University, Stephen Hawking stated, **"...the rise of powerful AI will be either the best, or the worst thing, ever to happen to humanity."** AI is exciting, transformative, and accelerating its deployment at exponential speed. Bill Gates has frequently stated that artificial intelligence is the most revolutionary and significant technological advancement of our lifetime. Philosopher Nick Bostrom famously asserted that **artificial intelligence will be "the last invention that humanity will ever need to make."**



Are we living in a new Age of Enlightenment or an Age of Reason when thinking for yourself and making choices based on critical thinking is the norm? Or are we destined to an era of lost human creativity, innovation, and willingness to accept the “inevitable” AI-guided process of having machines think for us...the Age of AI? **Intelligence, emotions, and intuition are the cornerstones of what it means to be human.**

Great American thinkers such as Thomas Paine and Ben Franklin, and other historical innovators such as Francis Bacon, Galileo Galilei, René Descartes, Isaac Newton, John Locke and Jean-Jacques Rousseau [yesteryear's Influencers] provided the foundation and were catalysts for where we are today. According to a recent [Copleaks report](#), 90% of students have used AI academically. **The imperative for colleges, universities, corporate America, and, yes, real estate firms, is to build AI fluency that uses AI responsibly, efficiently, and critically.** For the real estate industry to re-establish its leadership role in creating great environments, places, and destinations, **AI must be a “tool of” not a “tool governing” individual thought and creativity.** I view today's AI era as the “Age of Possibilities,” a time when opportunities abound for those who use AI as a resource partner to perfect original thought. René Descartes said it best, “*Cogito, ergo sum,*” or “*I think, therefore I am.*”

AI Will Have Greater Impact Than . . .

- The safety elevator invented by Elisha Otis in 1852.
- Steel framing first used in 1885 constructing the Home Insurance building in Chicago.
- Mass production of cars in 1913 by Henry Ford.
- Deployment of air conditioning in buildings pioneered by Willis Carrier in 1902.
- Invention of the telephone in 1876 and the cell phone in 1973.
- Impact of the Internet in the late 1980s.
- Introduction of CAD Sketchpad [1959] and BIM commercial platform [2002].
- Emergence of MRI [1971], Yardi [1984], and CoStar [1987].

Whatever your opinion or perspective on the use of AI, the net result for and the **transformative impact of AI on the real estate industry will be far greater than any other event in recent history.** AI will alter the real estate industry because it involves all stakeholders simultaneously [real estate companies, service providers, buyers/sellers, tenants/residents, lenders, architects, contractors, lawyers, accountants, brokers, etc.].

If regulated responsibly, AI can be a very positive force in society. Adapted from the 1970 book of the same name by Alvin Toffler, the 1972 short documentary *Future Shock*, narrated by Orson Welles, reflects the uncertainty ahead.

“Future shock is a sickness which comes from too much change in too short a time. It's the feeling that nothing is permanent anymore.” Narrator Orson Welles

Each day, real estate owners, Boards of Directors, C-suite Executives, investors, and those who lead the real estate industry ask questions such as: “What about AI...how do we address AI in

our organization...what changes will result from the use of AI...what will it cost...who will lead this transformative change...can we afford to defer AI decisions/investment...what needs to change so we



can achieve a strategic advantage using AI...and who sets the guardrails to assure efficacy, ethical use, and accuracy?”

Since the launch of ChatGPT in November 2022, the “off the charts” acceleration of AI within the real estate industry has created anxiety, uncertainty, apprehension, confusion, and adaptive breakdown. Torn between “leading” or “following” others, real estate Boards of Directors and C-suite leaders are grappling with the Generative AI revolution... with many reacting like a deer in the headlights. **AI is both a challenge and an opportunity, a benefit and a curse, and an affront to many characteristics that have defined the real estate industry in the past** [intuition, creativity, perpetual optimism, gut feeling, and the belief one can overcome many challenges or barriers to success]. Legacy leaders in the industry were visionaries who put their time, money, and effort “on the line” to achieve success. **With AI, entrepreneurship has had to shift from hands-on to hands-off use of technology as a techno-humanism framework for success.** AI can become a partner...not an as-needed tool that one can turn on and turn off. The various functions within a real estate organization are being redefined and reshaped. **How we work is changing faster than the workforce’s ability to adapt.**

In this edition of *Strategic Advantage* we will explore the role, impact, and likely outcome of the AI revolution within and upon the real estate industry. This edition will not be the definitive peek behind the curtain, but rather we will present a current overview and highlight the many unanswered questions [highlighted on page 4] yet to shape the outcome. However, one thing is clear, the skills needed for Next Gen employees in real estate firms are very different, as highlighted below.

Skills Needed For Next Gen Employees In An AI World	
➤ Interpersonal skills	➤ Relationship and innovation skills
➤ Communication skills	➤ Ability to see beyond the data
➤ Empathy and emotion intelligence	➤ AI literacy and proficiency skills
➤ Subject or domain knowledge	➤ Workflow design expertise
➤ Critical thinking	➤ Ability to extract actionable insights
➤ Judgment and strategic skills	➤ Creativity in leadership skills
➤ Risk mitigation skills	➤ Creativity in problem-solving skills
➤ Coding	➤ Fact-checking skills
Source: CEL & Associates, Inc.	

The chart on the following page highlights some of the critical AI questions yet to be answered.

AI's Urgent Questions

- ☐ Will AI become everyone's in-house counsel?
- ☐ Will AI-generated market intelligence include psychographics?
- ☐ Will Generative AI and robotics create a self-actualizing economy?
- ☐ Will AI shift education after the 12th grade to a customized, lifelong learning ecosystem?
- ☐ Can water supplies and the power grid handle mass electrification now underway to support data centers and ultimately AI...or should we shift to microgrids?
- ☐ Will AI cause real estate shifts from bricks and mortar to total personalized, emersion experiences?
- ☐ What will be the currency of human value and purpose if AI takes over many work functions?
- ☐ What will happen to Socratic ignorance, intuition, doubt, and instinct with increasing reliance on AI?
- ☐ Will humans be vulnerable to digital manipulation by letting virtual assistants take control of their lives?
- ☐ Will application of AI in a personal setting require a "social driver's license" to validate the accuracy of AI?
- ☐ Will AI cause us to (re)define what it means to be human, resulting in the creation of virtual "Town Squares" that become neutral gathering places (AI-free zones) enabling and encouraging human interactions, emotional relevance, and spontaneity?
- ☐ Will synthetic media, personalized biotechnology and space logistics dominate building design and engagement?
- ☐ Will the "sense of self" redefine real estate's 2040 workforce as feelings, individuality, personalized priorities, and the "quality" of the experience are significantly impacted by AI?
- ☐ Will AI facilitate or inhibit the generational fault line over purpose, context, and authenticity to create a better or more conflicted real estate workforce?
- ☐ Will AI reduce or eliminate readiness and the ability to make quick judgmental pivots?
- ☐ Will AI become a source of friction, opportunity, or uncertainty?
- ☐ Will AI render critical thinking obsolete and accelerate a decline in human cognitive infrastructure the real estate industry relies on?
- ☐ Will AI and machines have a mind, conscious and mental state like humans?
- ☐ Will AI ever be free of bias?
- ☐ Will data (personal, company, investor, financial, operational, user) collected by AI really be protected?
- ☐ Will real estate firms truly understand the difference between explainability and interpretability?
- ☐ Will AI be congruent with social values?
- ☐ Will technology's singularity lead to rapid and unintended changes?
- ☐ Who will regulate AI?



Going From Zero To Sixty In Seconds

Computer scientist John McCarthy coined the term “artificial intelligence” in 1955, but in the 1960s and 1970s, promises of AI breakthroughs never materialized. This period was called the “First AI Winter.” In the 1980s, the “Expert Systems Era” emerged, but the cost to maintain and update AI was very expensive. The “Second AI Winter” experienced major funding cuts and loss of interest in AI research from 1987-1993. During the 1990s through 2010, machine learning and big data emerged. In 1997, IBM’s chess supercomputer Deep Blue defeated world chess champion Garry Kasparov [in a rematch from 1996].

In 2020, there was a turning point referred to as the AI Explosion in public awareness and adoption. Large Language Models [“LLMs”] were integrated enabling AI to generate original text and code. In November 2022, OpenAI released ChatGPT, and by March 2023, Claude was introduced and the race for AI relevance was on.

In 2026, worldwide spending on AI is forecast to reach \$2.5 trillion [Forbes, 2/1/26]. By 2040, AI software and services market could reach between \$4.6 trillion and \$15.5 trillion. AI is growing at a compounded annual growth rate of 25%...some analysts project a CAGR of around 36%. **More than 212,000 AI-related companies are active worldwide**, about 30,000 of them U.S.-based. Firms like NVIDIA, Microsoft, Google, OpenAI, Anthropic, Meta, Scale AI, Perplexity AI, and Cursor are now the global leaders in AI. PropTech platforms such as Cherre, Prophie, Dealpath, Local Logic, and Valcre are leveraging AI to provide immediate and valued results. The chart below highlights a few examples of AI’s primary application in today’s real estate industry.

Scaling of AI In Real Estate Organizations

☐ Most firms are in the exploratory and experimental phase.	
☐ Most firms are familiar with and rudimentarily utilize AI platforms such as:	
▪ Claude ▪ Bloomia ▪ Reonomy ▪ Placer.ai ▪ HelloData ▪ Azure ▪ Copilot	▪ LeaseLens ▪ Prophie ▪ Docsumo ▪ EliseAI ▪ ChatGPT ▪ Cherre ▪ Foundry
☐ Primary AI applications today:	
▪ Deal Screening/Underwriting ▪ Property Management ▪ Workflow Design & Modeling ▪ Market Research, HR ▪ Maintenance, Design	▪ Predictive/Competitive Analytics ▪ Data Gathering/Tracking/Compliance ▪ Leasing, Contract Review, Legal ▪ Basic Financial Reporting, Accounting ▪ Historical Comparisons

Source: CEL & Associates, Inc.



In 2024, global data center demand for electricity was approximately 415 terawatt hours. That demand could double to 945 TWH by 2030, and to 1,200 by 2035. By 2035, [Citigroup](#) projects that the number of AI-driven robots will top 1.3 billion. According to the [Boston Casualty Group](#), over the next two to three years, 50% to 55% of jobs in the U.S. will be reshaped by AI.

By the end of 2026, Microsoft, Google, Amazon, and Meta are on track to spend \$700 billion on AI infrastructure...quadruple the amount spent in 2024. By 2027, the AI infrastructure by these four firms could top \$1 trillion.

AI Will Impact Every Function

Every current task, function, service, communication department or individual in the real estate industry will be impacted and transformed by AI. Functions such as deal sourcing, underwriting and transactions, leasing, asset and property management, development and construction, legal and accounting, talent management, compliance and reporting, brand management, and finance and capital formation will be impacted significantly. **Tasks that took days or weeks to do can now be done in minutes.** Hours of filtering data and options can be done instantly. The #1 challenge, however, is not the technology...it is the restructuring of the organization, workforce, operating systems, culture, and accountability.

The table below highlights an example of how AI can and will likely shape the leasing function. As one can see, the role of the traditional Broker must change dramatically. A Broker must become a Strategic Advisor who can use AI to achieve optimal results rather than using AI “to make my job easier.”

**Transition From Human Control To AI Control
In Leasing**

Stage	Human Control	AI Control
I	Tenant sets leasing parameters with Representative	Tenant receives recommended leasing parameters generated by AI
	↓	↓
II	Leasing Representative provides advice on options	AI provides ranked comparative data set and options
	↓	↓
III	Leasing Rep arranges site tours/visits	AI arranges virtual and onsite tours
	↓	↓
IV	Tenant requests lease agreement	AI prepares lease agreement
	↓	↓
V	Tenant negotiates/modifies lease agreement	AI modifies lease agreement within pre-established parameters
	↓	↓
VI	Tenant signs lease	AI generates lease to execute via sign alternative
	↓	↓
VII	PM orders/oversees tenant improvements	AI orders and sequences improvements
	↓	↓
VIII	PM welcomes tenant to new space	AI welcomes tenant to new space

Source: McKinsey and CEL & Associates, Inc.

The table below, however, highlights 50 psychological, philosophical, structural, ethical, legal, leadership and organizational impacts that could result as AI is deployed.

Enterprise Impacts Of AI On A Real Estate Company

Psychological

- Higher rates of depression
- Anxiety
- Irritability
- Cognitive atrophy
- Parasocial dependency
- Pocket therapist apps
- Addictive behaviors
- Dulling critical thinking
- Reinforcing confirmation bias
- Reducing psychological flexibility
- Worker burnout

Structural

- Blended roles
- Altered hierarchies
- Skill polarization
- Wealth inequality
- Reduced human errors
- Fast results
- Misinformation and deep fakes
- Algorithm bias
- Loss of privacy
- Social isolation
- Environmental degradation

Leadership

- Who “owns” AI within a Company
- Do KPIs change because of AI
- Who defines/shapes AI’s priorities
- How does AI interact with ERP
- Who determines the level of AI scaling

Philosophical

- Review of what it is to be human
- Blurred line between human discovery and machine augmented probabilities
- Who assumes moral responsibility
- Implications of conscience AI [setting own goals/actions]
- Reduced human interaction
- Will AI have a role in organizational values and culture
- Inability to form meaningful relationships
- Acceleration of unknown surveillance systems

Ethical

- Bias and fairness in doubt
- Lack of transparency
- Potential loss of human control
- Potential use for malicious purposes
- Economic inequality
- Perpetuation of existing biases

Legal

- Data security...who is liable
- What constitutes attorney-client privilege
- Who is responsible for output accuracy
- Who defines “intellectual property”
- What is copyright/proprietary work

Organizational

- Organizational restructuring
- Talent reduction and realignment/measure individual performance
- Governing AI use and application
- What is the ROI on AI



Where AI Will Create Value

As the real estate industry grapples with adoption and integration of AI and Generative AI, the initial results are in the 5% - 15% improvement to the bottomline. **However, the real value of AI is not what it saves but in what it creates.** As new business and operating models emerge, the impact of AI will be in scaling, improved overall productivity, and performance while “creating space” to explore new opportunities to drive TSR. **As real estate companies adopt and integrate AI, the benefits will be the creation of new ways to conduct business, leveraging proprietary data, creating greater customer value and services, and accelerating workflow.** The adoption of AI is the first step in a multifaceted process that enables the flywheel of change to occur. For the real estate industry in the next decade, AI will reshape the competitive landscape, generate competitive advantages, and grow enterprise value.

Yes, there will be disruptions and setbacks along the way, **but the future will be defined by what you do, rather than what you don't do.** As AI reconfigures operating systems, customer/client/investor interactions, and business practices, it will create a pathway for a strategic advantage. AI is not an efficiency exercise, but a pivot and reset of one's operating platform to create an advantage and pathway to sustainable success. **In this AI revolution, human capital will be valued not on how you do things but what things you do to create the most value.**

It Is All About Talent Transformation

Real estate companies in the years ahead will feel like Amazon, act like Marriott, and create **recurring experiences like Google.** While AI and Generative AI will create cost and time savings in operations and day-to-day repetitive tasks, it is the top line [revenue] which will grow quickly as instant data analytics drive platform pivots. The adoption of AI in any real estate organization is essentially the rewiring of systems, processes, decision-making matrices, and resource allocation. AI is not all about technology transformation, but all about leadership and talent transformation. **Getting people to work in partnership with AI, to do different things, not do things differently, and to collaboratively prioritize actions quickly must be top priority within all organizations.**

The core questions to ask are: [1] what is the strategic blending goal of AI with culture, values, and talent; [2] how does AI improve and enhance our relationship with all our Stakeholders; and [3] how are we structured for recurring transformation, changes and business improvements? To answer these questions requires leadership, qualified talent, and an enterprise platform that embraces and leverages AI...knowing that it won't be perfect...but it will continue to be refined.

Today, according to recent assessments, **the adoption of AI is most difficult or those over 55 years of age, near retirement, and/or comfortable “doing it the way we have always done it.”** Accordingly, one cannot assume or enact broad AI initiatives without considering the personal,



psychological, and structural feelings, beliefs, and self-imposed barriers of those expected to use and are most impacted by AI. While AI obviously will not replace everything, the chart below illustrates what AI can and cannot replace.

Impact of AI

What AI <u>Can't</u> Replace	What AI <u>Can</u> Replace
- Judgment - Complex Negotiations - Critical Thinking - Intuition - Empathy - Trust - On-The-Ground Insights - Emergency Repairs - Valued Relationships - Work-Arounds - Common Sense - Strategic Planning - Ability to Pivot	- Repetitive Tasks - Administrative Tasks - Predictive Analytics - Leasing & Communications - Resident/Tenancy Services - Routine Maintenance - Compliance - Rent Pricing - Asset Management - Deal Screening/Underwriting - Annual Budgets - Routine Financial Planning - Modeling

Source: CEL & Associates, Inc.

These AI quotes reveal what may be ahead.

AI Quotes To Consider	
<i>"AI won't replace humans. But humans using AI will replace those who don't."</i>	Sam Altman CEO, OpenAI
<i>"AI is about amplifying human potential, not replacing it."</i>	Fei-Fei Li Stanford University
<i>"Artificial intelligence will be the most transformative technology of the 21st century."</i>	Jensen Huang CEO, NVIDIA
<i>"If you don't have an AI strategy, you're going to die in the world that's coming."</i>	Devin Wenig Former CEO, eBay
<i>"AI is not just a tool for automation; it's an enabler for augmentation."</i>	Satya Nadella Chairman & CEO Microsoft

Recent AI Survey Tells The Story

The two tables below highlight the sentiments of multifamily leaders from a recent CEL & Associates, Inc. Sentiment Survey. While the results may not be indicative of the overall real estate industry, the results are one indication of “where we are today.”

Spring 2026 Sentiment Survey

Regarding AI, does your organization:			
	Yes	No	No Opinion
Have a fully embraced/integrated AI platform?	56%	43%	2%
Have a written AI policy?	68%	30%	2%
Have a long-term, written AI strategy?	46%	48%	6%
Have a designated AI Specialist/Leader?	67%	33%	0%
Numbers may not total due to rounding.			
Source: CEL & Associates, Inc., ULI Multifamily Council			

With regard to the impact of AI in your organization:			
	Yes	No	No Opinion
Do you expect some downsizing because of AI?	38%	57%	5%
Do you expect push back from some in the organization when implementing AI?	42%	55%	4%
Do you expect that your role will change dramatically because of AI?	27%	71%	2%
Do you think AI will take away from intuition, experience, and knowledge?	33%	62%	5%
Numbers may not total due to rounding.			
Source: CEL & Associates, Inc., ULI Multifamily Council			

AI Will Not Replace The Human Element...Unless We Let It

AI and Generative AI will not replace the human element. Real estate remains a valued relationship business that relies on critical thinking, instinct, intuition, passion, and a strong sense of entrepreneurship. **Yes, AI will dramatically change how we operate but not how we conduct business. AI is not the end-all answer.** However, as an industry we need to watch for the: **Thinking Trap** [assuming AI has done all the thinking for you]; **Efficiency Trap** [AI volume may not equate to quality or service]; **Innovation Trap** [chasing the next AI shining object]; and the **Automation Trap** [implementing AI on a broken workflow process].

AI and, frankly, one's overall technology strategy must be carefully considered, not rushed into. Don't get caught up in the AI frenzy...be careful, methodical, and deliberate. Maintain control over timing, integration, processes and business practices, cost, and most importantly, be sensitive to the human element. Remember that Generative AI creates the *most probable* answer/solution...not the



best answer. **AI retains consensus bias, recency weighting of unproven trends,** and most importantly AI can influence humans to adjust their thinking without questioning the validity of the results.

Real estate firms must hire critical thinkers, support those who embrace Socratic ignorance, and create an enterprise operating

system that that is committed to the never-ending pursuit of truth...that must be the goal. You cannot always believe AI to be right or non-biased. Therefore, having the right leadership, a team of talented professionals and qualified Advisors will negate AI's "takeover" of your company. **Real estate companies must control their destiny and not allow AI to shape their destiny.** Remember...Jim Rouse, Trammell Crow, Don Bren, Sam Zell, Gerald Hines, William Zeckendorf, Albert Reichmann, Barry Sternlicht, Hamid Moghadam, Doug Abbey, Claude Ballard, Mack Pogue, John Portman, Tom Cousins, Mel Simon, and many more iconic real estate leaders created foundational elements of today's industry...**without AI.**

The Tale of Three Journeys

Over the next decade or so, real estate firms will feel/experience the impact of AI on profitability, growth, scale, and sustainability. Technology will accelerate information gathering, analytics, and decision-making. The increased use and reliance upon AI will be far more beneficial to larger firms who can make requisite investments in platform, technology, and talent. **The 2021 – 2030 decade is evolving into a tale of three journeys.** Large firms will focus on enterprise growth, medium-sized firms will seek regional or specialized market share, while smaller firms will spend a disproportionate amount of time scaling to survive. **AI has accelerated the transition from generalists to specialists, from Founders to Enterprise structure, and from experiential to machine-driven knowledge.** While this transition can be exciting and very rewarding, those who remain anchored in the past are receiving daily wakeup calls on the need for rapid change.

Readers of *Strategic Advantage* are encouraged to ask and answer these six questions: [1] how does your company stay relevant and profitable; [2] how do you define success in 2030; [3] do you have the leadership team, bench strength and technology needed to successfully compete over the next decade; [4] what role[s] will AI have in creating a sustainable enterprise; [5] does your organization embrace sustainable governance, the creation of a strong balance sheet, and recurring income; and [6] is your organization Future Proofed for tomorrow's challenges? The chart on the following page highlights the current and likely the next 10 years the journey of real estate firms based on size/scale.

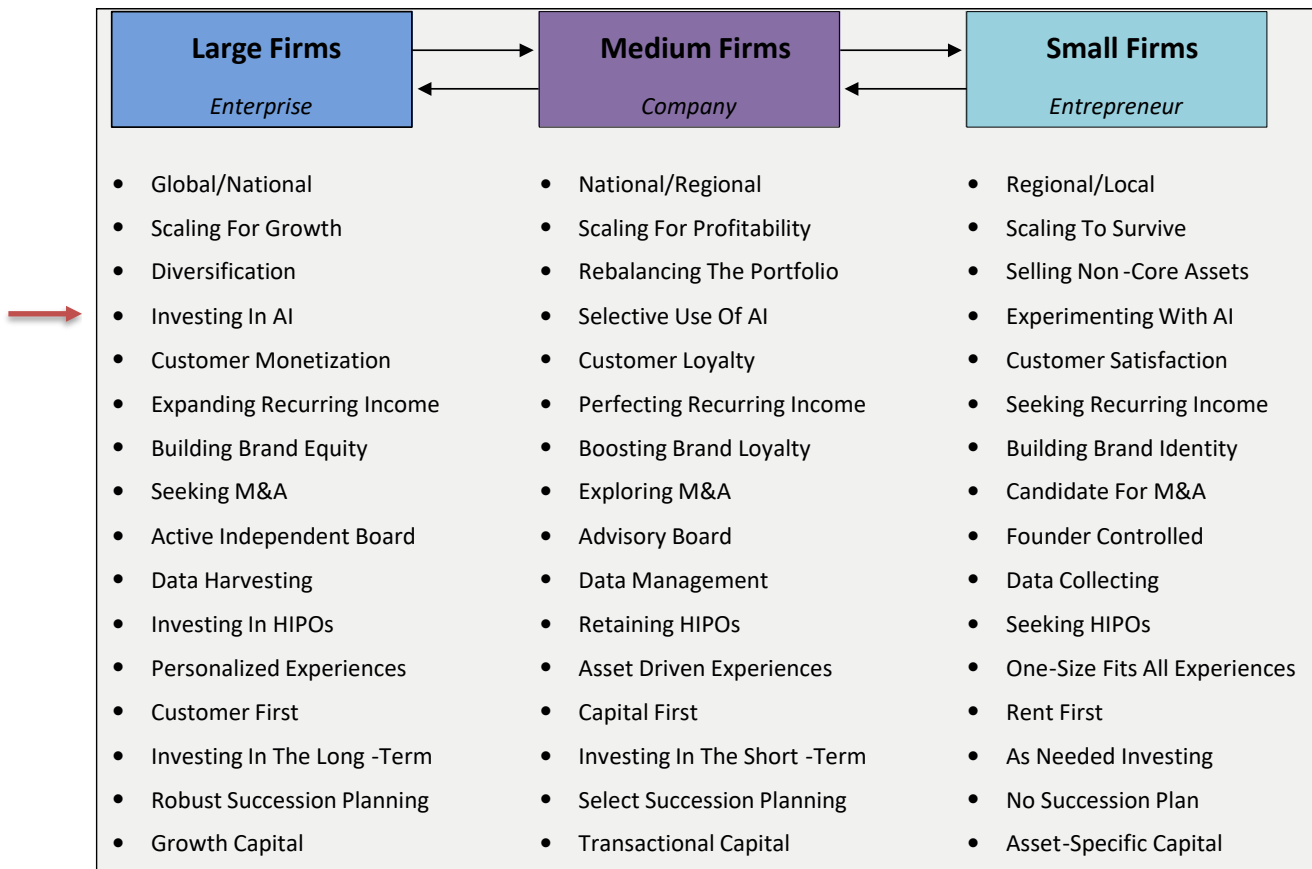
Staggering Statistic

"75% of roles need fundamental reshaping right now. That includes people leading teams and those who report to them."

*Alexis Krivkovich
Senior Partner
McKinsey & Company*



A Tale Of Three Journeys



Source: CEL & Associates, Inc.

The Risks Of AI

As AI systems develop metacognitive capabilities [the ability to reason about their own reasoning], the real estate industry will be faced with a need for moral truths or ethics that bind all applications. AI must have a rational foundation of truth rather than a formulaic aversion to risk. Bottomline, the real estate industry is entering a period of transformational unknowns. Without proper guideposts, AI could inhibit rational self-interest rather than lead to mutually aligned outcomes. Best-in-class real estate firms have always relied on human interaction and judgment to make great decisions. AI systems, unfortunately, operate under “unverifiable authority” and this creates the potential for less desirable outcomes, misalignment, and a wavering on “what is the right...not the best decision.” An old Danish proverb advises, **“Don’t sail out farther than you can row back.”** So true with AI, its risks, and applications.

AI can do incredible things, but it cannot believe...repeat...it cannot believe. Beliefs are those sensors that scan and filter what our senses tell us how we feel, what we believe to be true...good and bad.



The two charts below highlight reasons to embrace AI and reasons to be cautious of AI.

Reasons To Embrace AI

1. Increase productivity by utilizing smart data extraction.
2. Accelerate research and discovery.
3. Automate repetitive tasks.
4. Immediately test assumptions and detect patterns.
5. Level the playing field.
6. Improve customer engagement.
7. Enable quick response in a highly competitive marketplace.
8. Support and embrace decision-making.
9. Rapid information synthesis.
10. Automate document, presentation, and report drafting.
11. Streamline data analysis and analytics.
12. Build a cutting-edge culture of innovation.
13. Identify performance drivers beyond intuition.

Source: CEL & Associates, Inc.

The Dark Side Of AI

1. Inherent bias leading to discrimination.
2. Manipulation of human behavior.
3. Lack of transparency.
4. Strain on local power grids and water supplies.
5. Weaponized deep fakes.
6. Consolidation of technology by a few tech firms.
7. GPT jailbreaking [bypassing internal safety rules].
8. Presentation of fabricated information as fact.
9. Identity theft and fraud.
10. Disempowerment of human thoughts and expertise.
11. Lower levels of human interaction.
12. Lack of governing guardrails in the Age of Machines.
13. Loss of human control [autonomy].

Source: CEL & Associates, Inc.



Will AI Make The Real Estate Industry More Or Less Relevant?

Within the next decade or two, will anyone read Ernest Hemingway, John Steinbeck, Mark Twain, or Harper Lee? Will anyone want to experience in person the paintings of Monet, van Gogh, Picasso or Frida Kahlo? Will we still desire to see the iconic sculptures of Michelangelo, Rodin, Bernini or Antonio Canova? Will we listen in rapture to Vivaldi, Bach, Mozart or Beethoven? Will we savor the tantalizing aromas of freshly cooked food and just-out-of-the-oven bakery delights? **Will we think...or let machines think for us?**

One of if not the greatest attribute and contribution of the real estate industry for thousands of years, is the industry's ability to create "real" environments where people want to live, work, shop, and play. These sensory-based environments create great communities, strengthen the social fabric, and provide foundations upon which cultures and society are bound together. **AI could dramatically alter that role by creating artificial places where the definition of what it means to be human comes into play.** Which will be more relevant, the real estate industry or real estate assets? If AI lacks a conscience, does that which AI produces have meaning *without* the insights, critical thinking, intuition, knowledge, and experience of a real estate professional?

One thing is very clear...the real estate industry will need to shift from an asset-centric to a user-centric platform...fully integrated with AI and technology. The abundance of personalization in every aspect of one's life...turbo-charged by AI...mandates a more customized, interactive, authentic, and valued real estate offering. Assets will be: [1] a place of connectivity; [2] a launching pad for ideas and innovation; [3] a safe harbor for residents; [4] an interactive omnichannel; [5] a sensory place for retailers, and [6] a 24/7 hub for distribution centers meeting the needs of an instant gratification consumer.

Successful real estate firms during the next 10 – 20 years will recognize the need to pivot, integrate seamless technology and digitization with a "human touch," and seek ways to monetize the user base. Can you think of one aspect in your life that does not have an attachment to real estate? You can't because there are none! However, the real estate industry's capital, asset-centric focus primarily generates revenue from rent, fees, transactions, [re]financings, and/or promotes. This is rapidly changing, and every real estate firm today, regardless of size, location, or focus should get on the train before it leaves the station. CEL & Associates, Inc.'s work with many of the largest, best-in-class real estate firms regionally and nationally in the U.S. and globally, has given us an inside look on what the future is likely to be, and that is exciting, at times daunting, challenging, and very rewarding. Based on Plato's account, Socrates said, "I know that I know nothing." It is Plato who is credited with a quote reflecting where we are today, **"Human behavior flows from three main sources: desire, emotion, and knowledge."** **What direction will you, your firm, and our industry take?**



The table below highlights the major 2040 shifts underway today...driven by AI scaling and integration.

2040 Megashifts Now Underway

Shift From . . .	Shift To . . .
Cash	→ Digital Currency
Consumers Buying From 3 rd Parties	→ Consumer Buying Direct...Online
Physical Assets	→ Purpose Driven Environments
Centralized Institutions	→ Decentralized, Autonomous Institutions
Geo-Centric Communities	→ Virtual Communities & Personal Networks
AI & Data Services	→ Quantum Computing
Work At A Place	→ Work Follows The Worker
Systems & Processes	→ AI & Automation
Generative AI	→ Agentic AI
Own A Car	→ Autonomous Vehicles
Fixed Space	→ Flexible/Customized Space
Real World	→ Virtual Worlds
Product Manufacturing	→ Molecular Manufacturing
Destination Leisure	→ "Real Feelings" Virtual Leisure Experiences
Farms & Farming	→ Urban Indoor Farms
Individual	→ Digital Twins
Technology & Automation Eliminates Jobs	→ Universal Basic Income
Apartment Units	→ Personalized Lifestyle Environments

Source: CEL & Associates, Inc.

AI And Real Estate In 2040 And Beyond

While 15 years may seem like a long time from now, in AI terms, it is right around the corner. **By 2040, AI will be fully integrated into our personal, business, family, social, and professional lives.** From digital assistants who "manage your life," to robots who handle your "physical task life," **AI will be a hyper-personalized ecosystem that will be invisible and immersive infrastructure.** Welcome to autonomous everything where adjunct intelligence will define individuals' behaviors and perceptions. AI will literally be omnipresent. **AI and humans will have a shared brain.**

By 2040, AI will be embedded throughout the economic, political, cultural, employment, household, and social fabric of society. Advanced personal assistants will be fully integrated into our everyday lives. While we expect great advancements because of AI, we must, however, remain diligent and not let AI control, monitor or determine our lives and choices. I expect an increase in levels of anxiety, mistrust, depression, doubt, and self worth. There will be economic and "privileged" disparities unless handled carefully.

Where we once went to Plato, Socrates, Galileo or other thought leaders for insights and wisdom, by 2040 we will be active participants in learning from AI [albeit with significant bias risk], a partnership between humans and machines. What used to be intuitive in real estate, foresight, and



legacy wisdom, will give way to instant knowledge, simulations, and interpretation generated by AI. The rules of the game will be dramatically changed as AI-generated data and analytics move rapidly toward neural network rules where the cognitive associations will be resolved through AI-based solutions. **AI will provide solutions to problems that we as humans have been unable to solve. But as an industry, we cannot confuse AI answers with wisdom.**

While the direction of AI is rapidly unfolding, the traditional definitions, processes, and structural elements that the real estate industry has relied on are no longer valid, nor reliable. An asset's success will be "scripted" by AI, relied upon by investors and leaders, and will set the "marching orders" to boots-on-the-ground real estate professionals. Knowledge will shift from historical experience to AI-based predictive analytics that involve hundreds of touchpoints/experiences to create the desired outcome.

However, through all of this dramatic change, the real estate industry must remember the unfinished business of society...and every real estate leader today and tomorrow must continuously ask the following five questions to every AI-generated output.

- Is the data used for this recommendation accurate, reliable, free of bias, and comprehensive?
- What is missing? Whose voice or opinion is not being heard?
- Is this the right or the most expeditious answer/recommendation?
- Is the AI generated answer strategic or a moment in time solution?
- "Who" instructed AI and "what" did they ask?

AI in 2040 will be: a part of what we wear, machines/devices we regularly rely upon; integrated into our highly personalized lifestyle; and [good or bad] our "second brain" [thinking, anticipating, reacting to and resolving all that we face in our daily lives].

Paraphrasing Stephen Hawking, **AI is potentially the best or the worst event in the history of our civilization.** I would amend that by saying, "Humans have the opportunity to positively and ethically shape AI for future generations. Will they embrace that role or relegate that responsibility to today's tech giants?"

Interestingly, AI experts believe it will have a very to somewhat positive impact over the next 20 years [56% in a recent Pew Research Center survey]. Conversely, 40% of U.S. adults believe AI will have a negative impact on the country. Men are more optimistic [22%] regarding AI's impact than women [12%]. From education to healthcare, entertainment to the environment, and from personal relationships to the criminal justice system, AI experts are generally 2x to 3x more positive than non-AI experts. While nearly 100% of real estate firms have or intend to invest in AI, the path forward is unclear due to a flood of daily "new" announcements regarding AI.

It is clear that those firms that have dedicated AI experts on staff or on call, have found the proper balance between team members and technology, and are able to pivot quickly as AI capabilities



evolve, are likely to emerge on top. One of the keys to a successful embrace of AI is having AI enable a strategic and competitive advantage.

By 2040, the concept of a shared brain [“adjunct intelligence”] and an acceptance that AI will be embedded in literally everything we do is a very likely reality. AI will funnel our desires, emotions, expectations, and needs. AI will be a hybrid partnership with humans. **Space will be less relevant...the experience, personalization, and anticipatory speed of “thinking ahead” will be the structural framework from which the real estate industry will exist.** Knowledge [AI] with judgment, intuition, experience, and critical thinking [the real estate professional] will play a key role in a future of programmed existence. Great real estate companies will understand and manage how reality is interpreted.

And by 2050 the table below highlights what we may expect.

2050...What Is Ahead With AI?

AI Will . . .
➤ Master the art of being human.
➤ Not be controllable [singularity].
➤ Closely monitor nanotechnology implants.
➤ Eliminate the need for education as learning will be continuous using immersion simulations.
➤ Enable autonomous transportation.
➤ Become a trusted companion and digital twin.
➤ Accelerate bio-printed organs for transplants.
➤ Facilitate an algorithmic economy.
➤ Manage colonies on distant planets.

Source: CEL & Associates, Inc.

Closing Remarks

Society, because of AI, is shifting from “experience-based rules to technology-based network rules.” AI by 2040 will enable us to watch ourselves in real time and very likely isolate or destroy many cognitive commitments of our past. However, over the next 10 – 15 years, society and the real estate industry will need a clear vision of AI...balancing entrepreneurship with risk mitigation, creativity with practicality, and having the vision to capture/create. Will we continue to create and add value or let machines do our thinking for us?

It is very, very clear that the AI train has left the station and is gaining speed with every mile down the tracks. The real estate industry does not have the luxury of “waiting this one out.” It must pivot, adopt and embrace AI today in a measured, thoughtful, and strategic way. Please let me know what you think.

Regards,



Christopher Lee, Editor

100+ Predictions Now Available

We are pleased to make available to readers of *Strategic Advantage* a list of over 100 Transformational 2040 Predictions.

To receive your complimentary copy, please email your request to chris@celassociates.com

Note: This report has been prepared by CEL & Associates, Inc., who retains all rights to its content. This report may not be reproduced, distributed, and/or used in presentations or offering/fund raising prospectus/memorandums, and/or used in communications, speeches and/or presentations in its entirety or in parts without the prior written consent of CEL & Associates, Inc. You may reproduce/distribute and/or share this article with friends, colleagues and associates. Opinions and forecasts contained in this, prior and future articles may change without notice. The author encourages readers to offer comments, feedback and recommendations for further enhancement to newsletter@celassociates.com

SPREAD THE WORD

If you enjoy reading *Strategic Advantage* and *Leadership Conversation*, and have benefited or received value from our insights and recommendations over the past 25 years, perhaps your friends, business associates, other members of your team or industry peers will also enjoy it.

You can provide them with an individual subscription by several options:

- Click here: <http://newsletter.celassociates.com> and fill in their contact info or forward this link to them
- If for multiple people, send us an email with a list of their individual contact info and email address

Today there are over 12,000 readers of *Strategic Advantage*...spread the word.

Give Us Your Opinion: We want to hear from you and to have future issues reflect your needs and questions. Please email your comments, ideas, suggestions and insights to newsletter@celassociates.com.

For More Information: For more information regarding our services (Strategic Planning, Merger/Acquisition, Opinion Surveys, Benchmarking, Performance Improvement, Succession Planning and Governance/Management), please email us at newsletter@celassociates.com or call 310.571.3113.

To Subscribe: To subscribe to CEL & Associates, Inc. and Christopher Lee's *Strategic Advantage* newsletter with ongoing insights, opinions and forecasts regarding issues, trends and opportunities within the real estate industry, please email us at newsletter@celassociates.com with "Subscribe" in the Subject line and provide your full contact information.

To Change Your Contact Information: Please email us at newsletter@celassociates.com with "Change Contact Information" in the Subject line and include your new contact information.

Disclaimer: The opinions, forecasts, information and insights presented in this article are of a general nature and do not constitute the provision of investment, management or economic advice to any person, organization or governing board, and this article does not contain any recommendation(s) to buy, sell and/or invest in any security, real estate asset, fund or adopt as an element of any investment strategy. Opinions and forecasts expressed herein are subject to change without notice. Relevant information was obtained from sources deemed reliable. Such information is not guaranteed as to its accuracy.



CEL & Associates, Inc.

Prior Newsletters: If you would like to download prior newsletters, please go to the following links.

Sustainable Governance Future-Proof Your Organization

<https://www.celassociates.com/onlinenewsletter/sustainable-governance-future-proof-your-organization-sa-k052726.pdf>

The Real Estate Industry In 2040...Cycles, Psychology & Key Questions To Ask Today

<https://www.celassociates.com/onlinenewsletter/the-real-estate-industry-in-2040-sa-k110725.pdf>

So, What Does It All Mean. . . And Where Do We Go From Here?

<http://www.celassociates.com/onlinenewsletter/so-what-does-it-all-mean-sa-k080525.pdf>

When Will the Good Old Days Return? [Hint...Never...Only New Good Old Days] Part 3

<https://www.celassociates.com/onlinenewsletter/good-old-days-sa-k050422-part3.pdf>

When Will the Good Old Days Return? [Hint...Never...Only New Good Old Days] Part 2

<https://www.celassociates.com/onlinenewsletter/good-old-days-sa-k032222-part2.pdf>

When Will the Good Old Days Return? [Hint...Never...Only New Good Old Days] Part 1

<https://www.celassociates.com/onlinenewsletter/good-old-days-sa-k021622.pdf>

Don't Be A Spectator As The Parade of Opportunities Pass By

<https://www.celassociates.com/onlinenewsletter/dont-be-a-spectator-sa-k012822.pdf>

A Mandate To Lead. Now Who Will Step Forward?

<https://www.celassociates.com/onlinenewsletter/mandate-to-lead-sa-k011021.pdf>

Retrench, Recover, Reset & Retool Real Estate Strategy Imperatives...Post-COVID-19

<https://www.celassociates.com/onlinenewsletter/retrench-recover-reset-retool-post-covid19-sa-k120120.pdf>

What Will The Real Estate Industry Look Like In The New Normal?

<https://www.celassociates.com/onlinenewsletter/re-industry-new-normal-sa-k061820.pdf>

2020...The Year That Changed Everything!

<https://www.celassociates.com/onlinenewsletter/2020-year-that-changed-everything-sa-k040320.pdf>

2020 Leadership Imperatives

<https://www.celassociates.com/onlinenewsletter/2020-leadership-imperatives-sa-k011020.pdf>

Future Proofing Your Company

<https://www.celassociates.com/onlinenewsletter/future-proofing-your-company-sa-k101719.pdf>

Mandatory Summer Reading For Every Real Estate Leader

<https://www.celassociates.com/onlinenewsletter/mandatory-reading-for-real-estate-leaders-sa-k072319.pdf>

A 2025 Day In The Life

<https://www.celassociates.com/onlinenewsletter/a-day-in-the-life-sa-k102118.pdf>

Seven Strategies That Will Definitely Move The Needle

<https://www.celassociates.com/onlinenewsletter/strategies-to-move-the-needle-sa-k061018.pdf>

What Is Going On?

<https://www.celassociates.com/onlinenewsletter/what-is-going-on-sa-k041118.pdf>

Work Is Being Redefined & The Impact On The Real Estate Industry Will Be Transformative

<https://www.celassociates.com/onlinenewsletter/work-is-being-redefined-sa-k011718.pdf>

Are Today's Real Estate Business Valuation Models Outdated?

<https://www.celassociates.com/onlinenewsletter/re-business-valuation-models-sa-k092417.pdf>

What Keeps You Up At Night?

<https://www.celassociates.com/onlinenewsletter/what-keeps-you-up-sa-k073017.pdf>

Get Ready For Transformative Change!

<https://www.celassociates.com/onlinenewsletter/transformative-change-sa-k050117.pdf>



The Six Disruptors Transforming The Real Estate Industry

<https://www.celassociates.com/onlinenewsletter/DisruptorsTransformingREIndustry-SA-K012917.pdf>

The Real Estate Industry In 2025 100 Bankable Predictions You Need To Know Part III

<https://www.celassociates.com/onlinenewsletter/BankablePredictions-PartIII-SA-K031416.pdf>

The Real Estate Industry In 2025 100 Bankable Predictions You Need To Know Part II

<https://www.celassociates.com/onlinenewsletter/BankablePredictions-PartII-SA-K022916.pdf>

The Real Estate Industry In 2025 100 Bankable Predictions You Need To Know Part I

<https://www.celassociates.com/onlinenewsletter/BankablePredictions-PartI-SA-K021416.pdf>

Millennials Will Have A Dramatic Impact On Real Estate!

<https://www.celassociates.com/onlinenewsletter/MillennialsImpactOnRealEstate-SA-K091215.pdf>

The 6 Ps For Success

<https://www.celassociates.com/onlinenewsletter/The6PsForSuccess-SA-K042615.pdf>

It's All About Jobs

<https://www.celassociates.com/onlinenewsletter/ItsAllAboutJobs-SA-K111214.pdf>

The Future Of Retail Real Estate...A Tsunami Of Change Is Underway

<https://www.celassociates.com/onlinenewsletter/FutureOfRetail-SA-K051914.pdf>

Succession Planning Must Begin...Now!

<https://www.celassociates.com/onlinenewsletter/SuccessionPlanning-SA-K041114.pdf>

The Future Of The Office Sector

<https://www.celassociates.com/onlinenewsletter/TheFutureOfTheOfficeSector-SA-K062013.pdf>