Digital Transformation in the Real Estate Industry.

Trends, Benefits & Roadmap

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Executive Summary

Real estate, a $43.5 trillion[1] asset class in the US, is a global economic powerhouse. However, historically, the industry has been lagging in adopting new technologies, no thanks to its disjointed workflows, capital intensity & liquidity, and longevity of assets, among other numerous challenges.

In recognition of the nature of change, it is essential to adapt and evolve. In the last decade, a wave of venture-backed industry players has emerged to help solve the pain points of real estate and bring traditional offerings and processes into the modern age. And as the whole real estate lifecycle is poised to undergo drastic digital transformation in the coming years, big players will do what it takes to stay at the top of the pyramid—going as far as tapping into the word of big data, Internet of Things (IoT), augmented & virtual reality, blockchain, among other technologies.

In this whitepaper, ORIL looks into the present and future market overview of real estate digital transformation to uncover disruptive solutions, benefits, and challenges to expect. We will also take you through a step-by-step process of successfully implementing a digital-first strategy in real estate and share the lessons we learned from our experience and use cases.

Digital-first Strategy in Real Estate

Digital-first strategy is a broader term that encapsulates IT infrastructure modernization and the ongoing optimization of the existing digital landscape of real estate. It should encompass the use of platforms and tech innovations that facilitate instantaneous communication and real-time progress tracking for both buyers and sellers.

This enhances efficiency and better customer experience and unlocks workforce potential to accelerate new and better practices across the organization. By embracing digital transformation, real estate businesses can get actionable insights into customer behavior and expectations, attain better agility and creativity in problem-solving, and invest in new value spheres.

Before embarking on a fruitful journey of overhauling the digital prospects of your real estate organization, it's worth taking a moment to familiarize yourself with the pillars of a digital-first mindset[2]:

- Vision and strategy
- Core business processes
- Customer experiences
- Metrics and iteration
- Collaboration and communication

1. https://www.corelogic.com/intelligence/why-the-uss-largest-asset-class-residential-real-estate-does-not-substantially-contribute-to-the-economic-output
2. https://slack.com/blog/collaboration/five-pillars-of-digital-first-mindset

Digital Transformation in Real Estate: A Market Overview

Although the real estate industry is among the industries that suffered a massive shock during the Covid-19 pandemic, with the market facing a decline of an average of 33%[3] across the US, the sector is now rebounding to its glory days. According to Grand View Research, the global real estate market will grow at a compound annual growth rate (CAGR) of 5.2% and reach $5.85 trillion by 2030, with commercial being the key driver of this expansion.

U.S. Real Estate Market

size, by property, 2020-2030 (USD Billion)

$680.8B $699.9B

● Residential ● Commercial ○ Industrial ● Land ● Others
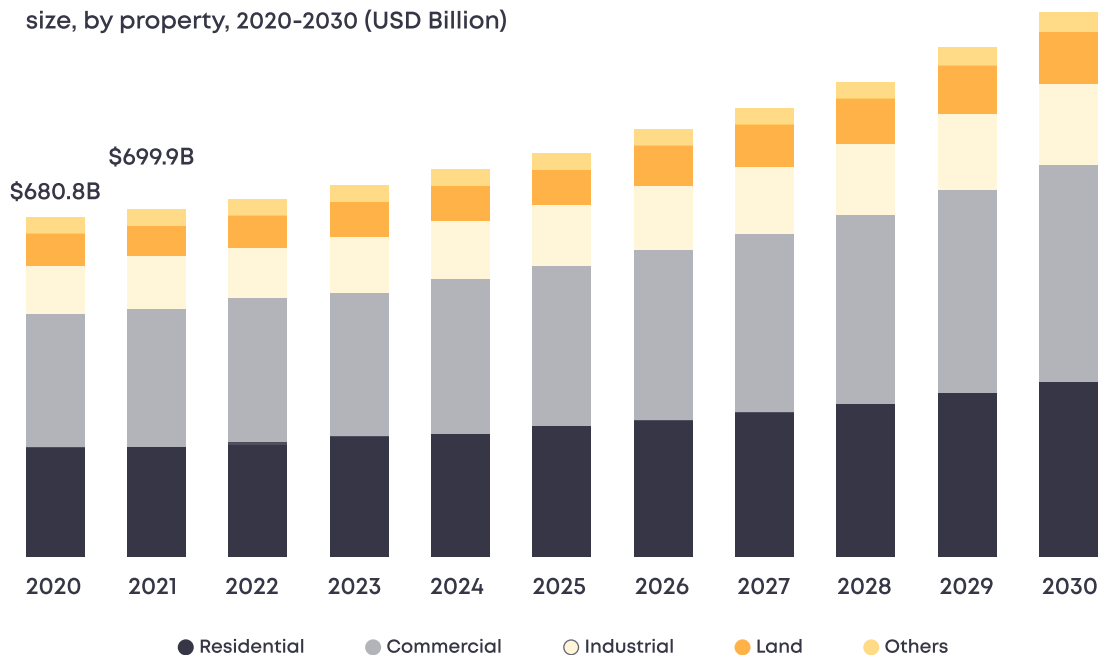
5.2% U.S Market CAGR, 2022-2030

Source: www.grandviewresearch.com

As the market grows, the average realtor or real estate company is making less profit than before. Typically, a sale involving a single-family home or condo nets a profit of about $98,350[4], down from $104,000 in the last three months of 2022 and $124,000 in the middle of the same year. *"Nine months of varying price declines around the country have carved away almost a quarter of the profit margin sellers were enjoying in early 2022,"* says Rob Barber, the CEO of ATTOM, a real estate data provider.
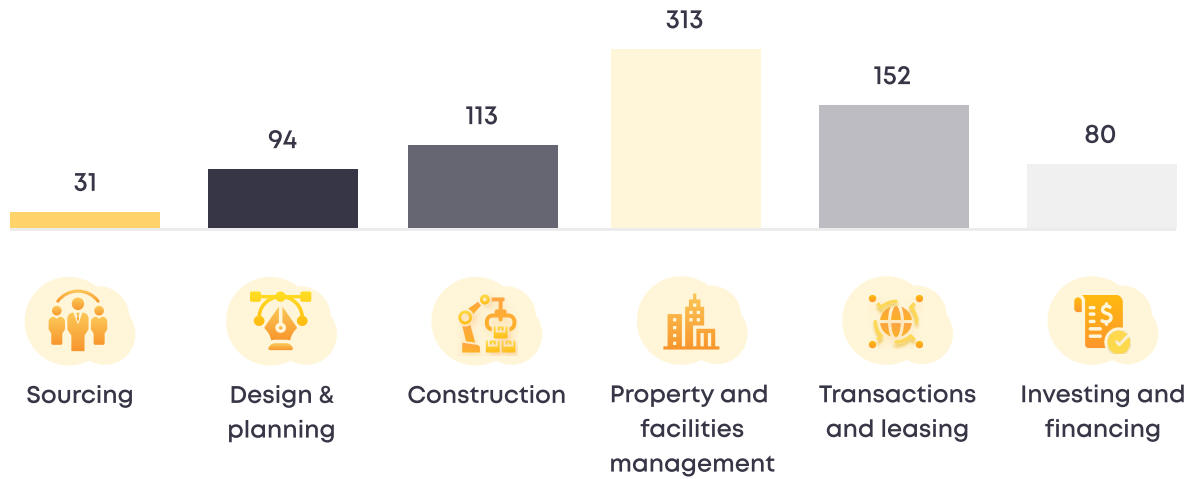
But hope is still possible, especially with digital transformation in the sector in top gear. Over 85% of leaders in corporate property management companies believe that better insights into property performance will steer them toward growth and a future of improved profits. In addition, 85% of residential companies encourage the use of multiple tools for managing listings to streamline online payments, tenant applications & screenings, as well as advertising & marketing.

3. https://www.stlouisfed.org/en/publications/regional-economist/fourth-quarter-2020/impact-covid-residential-real-estate-market

4. https://www.cbsnews.com/news/average-profit-selling-home-2023-data/

Also worth mentioning, most players in the real estate industry are implementing digital transformation iteratively. According to KPMG[5], the real estate areas witnessing digitization's disruptive and transformative power include construction, transactions & leasing, and property & facility management.

Distribution of the implemented innovations in real estate per value chain

Sourcing	Design & planning	Construction	Property and facilities management	Transactions and leasing	Investing and financing
31	94	113	313	152	80

Source: https://assets.kpmg.com

Real Estate Digital Transformation Future Predictions

In an industry where 41% of customers[6] purchase properties even without seeing them, the push for a complete digital transformation across the board will only grow stronger.

According to Bernard Marr, an expert on business and technology, customers are increasingly connecting via digital channels in the first turn. With this in mind, the future of many real estate organizations will include:

- Connecting with customers via mobile and web-based apps
- Establishing an omnichannel presence and customer experience
- Investing in new, digital only-products

5. https://assets.kpmg.com/content/dam/kpmg/es/pdf/2022/10/real-estate-innovations-overview-2022-markets.pdf
6. https://www.forbes.com/sites/forbesrealestatecouncil/2021/03/08/

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Meanwhile, technologies will spread throughout real estate, leading to new products and services. Key advanced technologies include:

Technology	Projected Market Cap	Use Cases	Examples
Artificial Intelligence (AI) & Machine Learning (ML)	$1,335.89 billion in the real estate market by 2029[7]	• Real-time virtual assistants through chatbots • Customer insights analysis & segmentation	Redfin, Zillow, SmartDraw, RealCrowd, etc.
Big Data	$588.54 billion by 2030[8]	• Housing prices prediction • Customer behavior, competition, and market trend analysis	Near, Rentometer, Revolution RE, Ility, Whiterock AI, etc.
Internet of Things (IoT)	$3,352.9 billion by 2030[9]	• Smart home applications • Commercial property & residential complex management • Property maintenance monitoring	SmartHab, XY Sense, SmartOne, etc.
Augmented Reality (AR) & Virtual Reality (VR)	$1151.9 million by the end of 2023[10]	• Virtual, 360-degree property tours • Vivid & customized concept visualization during designing • Training & workflow optimization	OpenSpace, 3vjia, Spacely, etc.
Blockchain & Smart Contracts	$1.515 billion by the end of 2032[11]	• Secure network for recording, storing, and sharing real estate information • Enterprise-scale automation • Transparent, affordable, and near-instant transactions	ShelterZoom, Ubitquity, realT, Owny, Closinglock, etc.
Metaverse	$14.11 billion by the end of 2023[12]	• Creation, purchase, sale, and exchange of virtual real estate tokens • Autonomous virtual communities for governance & interaction	Acura, Estee Lauder, CVS, etc.

7. https://www.maximizemarketresearch.com/market-report/global-artificial-intelligence-ai-in-real-estate-market
8. https://finance.yahoo.com/news/global-big-data-analytics-market
9. https://www.fortunebusinessinsights.com/industry-reports/internet-of-things-iot-market
10. https://www.alltheresearch.com/report/380/augmented-reality-ar-virtual-reality-vr-in-real-estate-market-ecosystem
11. https://www.futuremarketinsights.com/reports/smart-contracts-market
12. https://www.globenewswire.com/en/news-release/2023/05/30

5 Disruptive Digital Solutions in the Real Estate

The future of real estate digital transformation is here, evident by the increasing number of PropTech projects and applications across the board. To date, 58% of real estate companies[13] acknowledge investments in a digital-first strategy, with prevalent applications in:
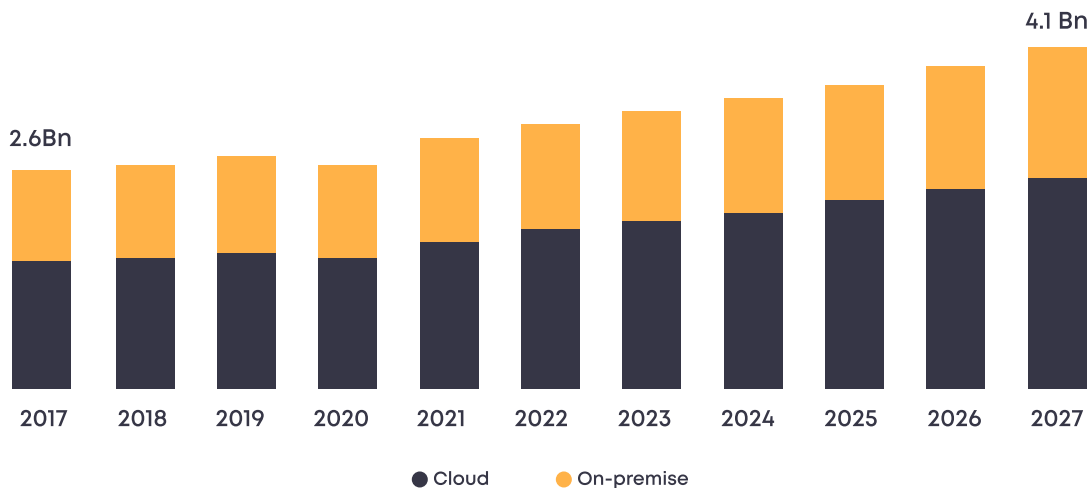
Real Estate Marketplaces

Real estate marketplaces are digital platforms that bring together buyers, sellers, and renters of real estate properties. These platforms provide comprehensive, searchable databases of property listings, making it easier for users to find the type of property they're looking for, in their desired location, within their budget.

Real estate marketplace and associated listings on the internet help businesses target up to 97% of buyers[14] who search for new homes online. Even better, some real estate companies are integrating their online marketplaces with tools that help buyers calculate or compare mortgage rates and home insurance offers, delivering a truly digital-first experience.

Property Management Software

Property management software is a digital solution designed to help real estate professionals, such as property managers and landlords, streamline their operations. Ideal property management software can automate day-to-day commercial and residential property management activities, such as tenant communication, rent collection, and maintenance requests.

Property Management Software Market Size, By Deployment Type, 2021-2027

Source: www.kbvresearch.com

13. https://assets.kpmg.com/content/dam/kpmg/nl/pdf/2020/sectoren/real-estate-innovations-overview-2020.pdf
14. https://www.foxbusiness.com/personal-finance/shopping-for-houses-online-tips-for-buying

Real Estate Development Software

Real estate development management software is a digital solution that assists developers and project managers in handling all aspects of real estate development, from initial planning and construction to sales and property management.

An ideal software solution comes with a suite of features, including risk & compliance evaluation and business information modeling (BIM) tools. End-to-end designs can also include an integrated customer relationship management (CRM) module, a feature that can help grow conversions by up to 300%[15] and increase sales by 29%.

Workspace Management Software

Workspace management software provides tools to help landlords, tenants, and property owners effectively manage and utilize their physical spaces. Whether it's an office, a warehouse, or a retail store, optimizing the use of available space leads to improved efficiency, cost savings, and a better working environment.

In addition to employee-centric features, such as room reservation, desk booking, and wayfinding, workspace management software can help real estate businesses integrate a well-structured hybrid model into their day-to-day operations. This can help save up to 30%[16] on office costs.

Financial Solutions

Real estate businesses are turning to digital accounting and finance tools to increase accuracy, reliability, and efficiency when processing transactions. For instance, accounting solutions that are integrated with the cloud provide real-time reporting features, giving you around-the-clock insights into the financial health of your business.

With real-time monitoring of your marketing expenses, payroll, utilities, and employee salaries, you'll not only improve decision-making but also increase the chances of surviving amid cutthroat competition. And if the business survives for 1,000+ days[17], you'll be sure that it's built to last - 1,000 Day Survival Guide For Startups, Sanjay Mehta.

Data and Analytics Platforms

Data and analytics platforms, utilizing advanced technologies like Big Data, Artificial Intelligence (AI), and Machine Learning (ML), are revolutionizing the real estate industry. Companies such as Cherre, a leader in real estate data and insight solutions, CompStak, known for its commercial real estate transaction information services, and ATTOM Data Solutions, a leading provider of property data, are at the forefront of this transformation. They provide insights on market trends, customer behavior, property values, and competitive analysis, enhancing decision-making, growth opportunities, and marketing strategies.

Predictive analytics can forecast real estate trends and prices, beneficial for investors and developers, while customer analytics helps deliver personalized services, improving customer satisfaction. Furthermore, these platforms assist in risk assessment, portfolio management, and regulatory compliance, leading to enhanced efficiency and productivity. According to a report by Mordor Intelligence, the real estate software market, encompassing data and analytics platforms, is anticipated to grow at a CAGR of 8.9%[18] from 2021 to 2026, reflecting the increasing adoption of such disruptive digital solutions.

15. https://www.mindk.com/blog/real-estate-crm
16. https://www.deskbird.com/blog/office-cost-cutting-ideas
17. https://www.imbankgroup.com/ke/importance-of-monitoring-your-businesss-financial-health/
18. https://www.mordorintelligence.com/industry-reports/property-management-software-market

Top 7 Benefits of Digital Transformation in Real Estate

01. **Optimize Cost Allocation and Cost Reduction:**

Digital transformation tools, such as accounting software, allow you to plan effectively and identify cost-saving opportunities in real-time, a strategy that is heralded by Gartner to have the potential of cutting operational costs by up to 30%[22] by 2030.

02. **Achieve Scalability:**

Unlock a new world of greater flexibility when the need to scale arises. With digital solutions, you can upscale or cut down operational resources to respond to market fluctuations and evolving business goals faster.

03. **Improve Data Security:**

Digital transformation allows you to compute in the cloud, an ultra-secure environment for shielding your sensitive real estate data against cybersecurity attacks. The Ponemon Institute estimates this can lower data breach risks by up to 28%[23].

04. **Enhance Customer Experience:**

Leverage AI for personalized recommendations or VR to provide immersive property tours and enhance customer experience by leaps. According to a recent report by PWC, 86% of buyers[24] will readily pay more if you provide a superior customer experience.

05. **Seamlessly Integrate with Other Business Tools:**

Modern digital solutions can integrate seamlessly with your existing tools to consolidate business management, optimize operational efficiency, and streamline workflow – ultimately saving time and resources.

06. **Improve Product Performance:**

Unlock the potential of your heritage IT infrastructure by modernizing it for enhanced user experience and functionality. This will improve both employee and product performance in the long haul.

07. **Track Sustainability Metrics:**

On top of fostering healthy work environments for employees and living conditions for tenants, digital solutions allow you to track sustainability goals and execute eco-friendly strategies with ease.

22. https://www.gartner.com/en/newsroom/press-releases/2021-04-28

23. https://www.ponemon.org

24. https://www.pwc.com/us/en/services/consulting/library/consumer-intelligence-series/future-of-customer-experience.html

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Challenges in Real Estate Digital Transformation

While digital transformation has a huge potential to help organizations ascend to unprecedented heights, 41% of companies[25] still find it challenging to keep up with the trend. Here is a summary of challenges to anticipate when implementing a digital-first strategy in the real estate industry – based on ORIL's experience.

Business Challenges	Technological Challenges
• Limited talent pools of IT experts in specific roles or tech stack	• Integration challenges with legacy systems or third-party software
• The risk of balancing quality work and faster time-to-market	• Data collection, handling, and analysis challenges due to enormous sets or quality inconsistencies
• Unique branding, proposition, and distinction from the competition, given that nearly everyone is implementing a digital-first strategy	• A growing business can face scalability bottlenecks after reaching the peak
• Limited budget and resources	• High development costs for customized software
• Training and adoption	• Performance issues or outages in the event of bugs or late software updates

Steps to Successfully Adopt a Digital-first Strategy in Real Estate

A digital transformation journey is not a one-fits-all strategy. Nevertheless, there are basic facets of this process you can't pass by to achieve desired results from your tech endeavor.

- Implement data-driven strategies
- Adopt innovative services and products
- Design experience-centric products
- Boost agility in operation and supply chain

- Create a digital-ready tech architecture
- Foster an engaged and empowered workforce
- Facilitate seamless interactions and commerce

26. https://www.nar.realtor/research-and-statistics/research-reports/real-estate-in-a-digital-age

How ORIL Implements Digital Solutions for Real Estate

At ORIL, we leverage digital transformation to shape functional and easy-to-use solutions that cater to the dynamic requirements of the real estate industry. We strive to bridge the gap between businesses and their clients, turning groundbreaking ideas into tangible, market-ready solutions.

Identifying Real Estate Needs and Leveraging PropTech

At ORIL, we begin our process by understanding the unique needs of the real estate industry and leveraging our PropTech (Property Technology) expertise. This allows us to shape user-friendly, functional, and innovative solutions that streamline operations and improve customer interactions.

Advanced Transaction Processing

We take the hassle out of financial transactions by developing efficient processing systems that secure multi-currency gateways and automate expense management. To further empower our clients, we build robust data analytics platforms, enabling them to leverage data for better decision-making and more effective client communication.

Simplifying Contract Management

We understand that efficient contract management is crucial for real estate businesses. That's why we design seamless online contract management systems to streamline operations and improve overall efficiency.

Guaranteeing Experience and Security

Our clients choose ORIL for our proven industry experience, top-notch technology expertise, and commitment to reliability and information security. We believe in creating high-performing solutions that align with our clients' business needs while keeping their data safe and secure.

Driving Business Results with Real Estate Platforms

Our digital solutions are focused on achieving tangible business results for real estate. OThis includes developing a web-based real estate bidding application used by over 40 agencies and 3,500 monthly users, and assisting Rentometer with comprehensive rental price data analysis across the US. With a strong emphasis on our clients' objectives, we design innovative solutions to deliver impactful outcomes.

Choosing ORIL as your software development partner means aligning with the digital transformation reshaping the real estate industry. We're dedicated to fostering your growth, automating operations, and ensuring competitiveness in a rapidly evolving market, all while focusing on your specific business results.

Creating Data-Driven Products

At ORIL, we harness the power of data to create robust, insightful products. Our approach involves integrating and pulling data from a variety of sources, allowing us to build comprehensive analytics for our clients. It empowers our clients to make data-driven decisions, boost their operational efficiency, and enhance their strategic planning.

ORIL's Real Estate Digital Transformation Use Cases

As an innovative digital-first strategy implementation partner for businesses in the real estate industry, ORIL has worked on several projects with successful outcomes. Here are some of our use cases for inspiration.

Real estate bidding platform

A seasoned real estate business approached ORIL seeking to build a web-based application for real estate bidding. Our team built an intuitive and user-friendly application that is now used by over **40 real estate agencies** and attracts an average of **3,500 users per month**. The platform is accessible even from low-end mobile devices and has hosted over **1,000 auctions** to date.
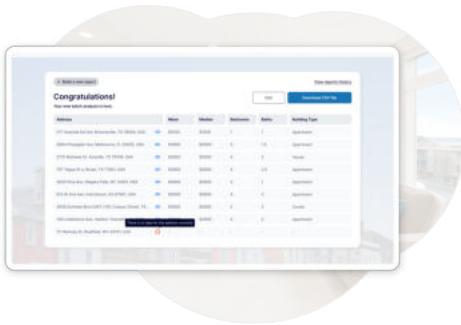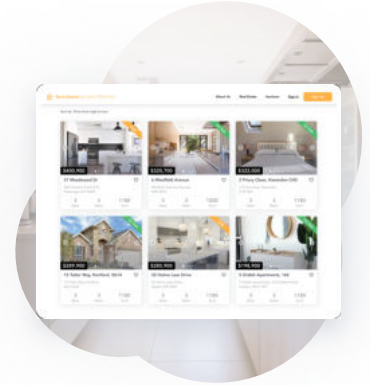
Rentometer

Rentometer partnered with ORIL to build a new Batch Processor tool that would allow "low tech" customers to make a system-to-system connection to the platform and automatically submit multiple properties to the rent analysis engine. Our team delivered a stand-alone web application with bulk analysis, report history, and user credits processing features. Today, the app connects to the API to allow **quick analysis of the whole address batch** and can be easily incorporated into the web page for greater convenience.

gReenvision

gReenvision is a tool enabling users to imagine a future with zero CO_2 emissions, at both individual and national levels. The client commissioned ORIL to create an accessible online resource to educate users about energy systems and guide them towards a carbon-neutral lifestyle. This included building a user-friendly web platform and an algorithm for calculating household energy needs.

The result is a platform used to promote carbon-free energy at events, enlightening over 1000 households and driving towards a single goal – a carbon-free future.
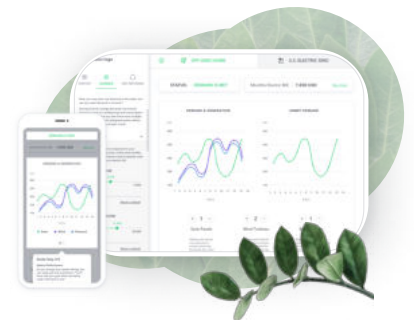
The Final Word

The future of PropTech promises an exciting landscape of opportunities for real estate organizations. The emerging technological advancements will play a pivotal role in transforming various sectors of the industry. By proactively embracing a digital-first strategy real estate businesses can not only enhance their current operations but also future-proof their organizations. This approach helps in task automation, cost reduction, and overall efficiency enhancement, ultimately fostering growth and strengthening competitiveness in the industry.

About ORIL

ORIL is an experienced software development company and design agency, enabling PropTech, HealthTech, and FinTech, among other industries, to optimize digital-first strategies with intuitive and easy-to-use digital solutions. Among the services that we specialize in include UI/UX design, product development, IoT development, digital transformation, and dedicated teams. Since 2015, we have built an expansive team that has delivered 50+ projects and managed to maintain a 2-year average client engagement rate.

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