

Abode Worldwide Tech Index Report: Multifamily Edition (US)

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Introduction

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While technology has been present in the multifamily sector for some years, global events in 2020 propelled the development and adoption of new innovations in the space, forever changing the way the industry leverages digitization. Driven by emerging necessities, such as the need to provide non-contact solutions and streamline workflows during a nationwide labor shortage, the multifamily sector observed rapid advances in proptech development. Only now is the industry beginning to use technology to its fullest potential.

Proptech investment had reached a record high of more than \$24 billion globally in 2021, but that was just the start. In the first half of 2022, the US alone accounted for \$61.1 billion of proptech investment — more than double the previous year's worldwide total — and multifamily was receiving more attention from proptech startups than any other real estate sector. Now it's predicted that by 2025, 42% of all apartments in the United States will be smart apartments (a home equipped with IoT-powered devices that are automated and can be controlled from anywhere). Where previous innovations focused solely on streamlining portfolio management, we've recently seen a shift towards automation technologies designed to reduce face-to-face interactions, a move that can trace its origins to pandemic efforts to allow operators to continue generating revenue during restrictions. According to Levi Kelman, CEO of real estate development and property management firm, Blue Onyx Companies, this shift in tech development also inadvertently "highlighted overlooked opportunities to improve the rental experience for prospective and current residents," prompting a continuation of this type of innovation.

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Overview of the multifamily sector

The multifamily sector includes any residential property that provides more than one self-contained, separate housing unit. It caters to more than just 'generation rent' as the audience for these communities ranges from families to single inhabitants across every generation.

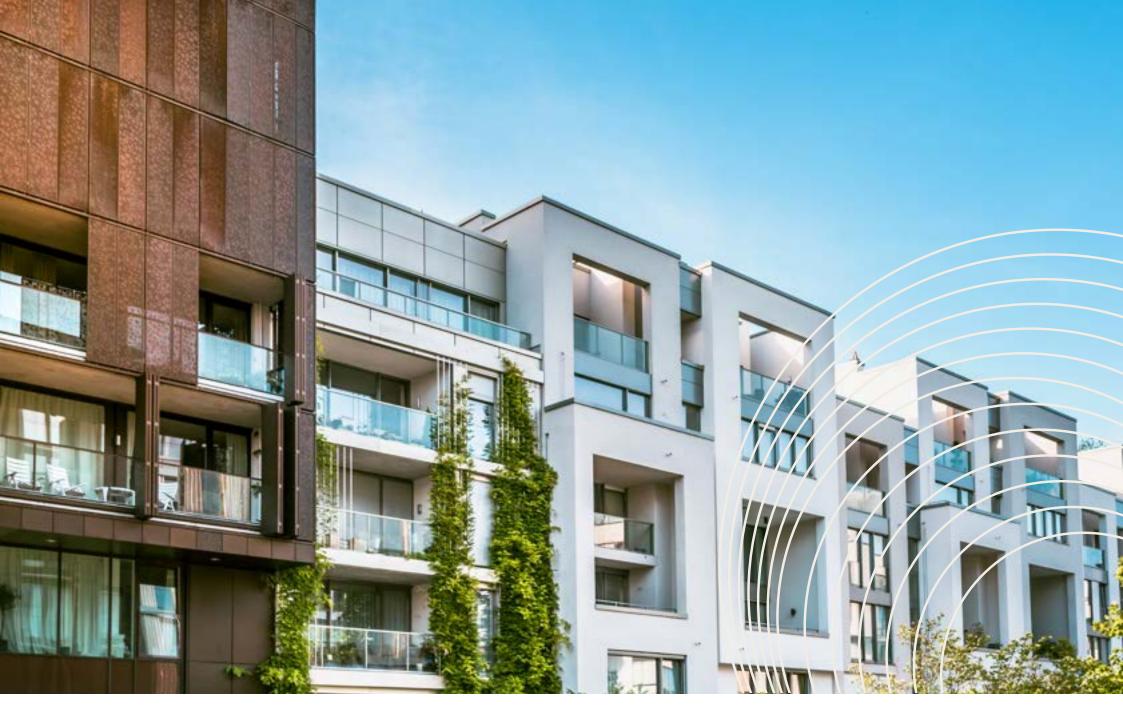
For many years, multifamily operators didn't see their properties as providing a hospitality experience in the same way as those in the other, more traditional, areas of hospitality. Instead, the multifamily landscape was seen as firmly belonging to the real estate stable. This changed as property managers searched for ways to remain competitive during the pandemic. Now, with the help of advanced technology, operators are increasingly realizing the revenue-generating opportunities that their properties present.

This shift in perspective led to two years of historic out-performance in the multifamily space. Vacancy rates, which have been on a continual downward trend since 2010 (12.3%), have been dropping even faster. While the industry did witness a small spike in early 2020 (when COVID began), vacancy levels have since fallen below the 7.9% recorded at the beginning of 2019 to an all-time low of 5.6%, showcasing the increasing levels of demand for multifamily.

More recently, however, the multifamily housing market has begun to slow, with vacancy rates rising slightly to 6% at the end of 2022. It could be that this is simply the industry settling down after years of strong performance and rising supply, or maybe it's a reflection of the drastic rent changes witnessed over the last 2-3 quarters. In January 2023, for example, national rent growth hit a record high of 5.6%.

Index: The tech defining modern multifamily

Vice president of NELSON Worldwide, Loren Nelson, has said the ultimate goal of proptech is "to create a personal experience that attracts quality tenants and keeps them long-term" and that the "highestpaying residents won't live or stay in communities without expected amenities". This echoes the findings of Rent, which discovered that over 8 in 10 renters want at least one smart system or device in their apartment. What follows are the cutting-edge technologies that multifamily operators can adopt to build efficiencies, elevate the resident experience and build a moat around their most valuable assets.



Sales and marketing

While marketing can take many forms, prospects are increasingly turning to online listings when searching for available rentals. Because of this, the most impactful multifamily marketing plans now include digital assets. Here are some of the top tech products and solutions for improving your sales and advertising strategy.

01 Listing sites

The key to maximizing property visibility is to list available units across multiple sites. Examples of these websites include Apartments.com, which has a comprehensive database of renters, Realtor.com, which attracts over 100 million monthly active users, and Landing, which enables flexibility for residents.

O2 Advertising and marketing

Another essential for boosting property appeal is implementing a targeted marketing strategy that places your vacancies in front of the right audience. Tech tools such as ApartmentGeofencing.com's advanced location-based advertising, Digible's apartment marketing, which seamlessly integrates into the platforms you already use, Repli's centralized marketing, or PERQ's website conversion tools, can help reach your target market.

03 Virtual property viewings

Virtual viewing technology became particularly sought after during the labor shortage of 2021, when more and more property managers started to lean on solutions to streamline the leasing process. Peek, for example, enables property managers to create a virtual leasing journey for their entire community. The tech also provides prospect-level analytics to highlight interests for targeted outreach.

"You can book a hotel room, check-in and check-out, all without interacting with another person — you can do it all online. We're getting close to that in multifamily. There are a number of tech solutions and tools that, when combined, enable self-leasing," said John Helm, a partner at RET Ventures, a multifamily and single-family rental tech venture capital firm.

04 Self-guided tours

Initially embraced to streamline business operations, self-guided and virtual touring solutions have proven popular with prospective residents. Since employees don't need to be present during these tours, prospects are able to attend around busy work schedules and personal commitments, plus they can view the property at a leisurely pace without feeling pressured by the leasing agent. The automated software takes care of pre-screening and scheduling, and can even link to access solutions for a seamless experience. Companies that provide self-guided tour technology include PointCentral¹, Pineapple, Dwelo, Rently, and the smart apartment platform iApartments.

05 Touring technology

Alongside virtual and self-guided tours, there are also other tech solutions to enhance the touring journey. For example, Engrain's map-based data visualization software, SightMap, can improve engagement, while Hyly.Al offers support for fifteen prospect and resident experiences, including referrals and win backs.

06 Leasing customer relationship management (CRM)

Leasing CRMs such as Anyone Home, Funnel, Rent Dynamics, and LeaseHawk, automate the entire process from the very first inquiry, including communications across all platforms for an enhanced prospect experience and centralized operations. OneDay offers the option of sharing videos during these communications, and Power Pro Leasing Elevated provides multiple apps to streamline the process from self-tour to application.

07 Leasing chatbots

Al is taking the world by storm and transforming the way we do business in many industries – the multifamily leasing process is no exception. Automated leasing assistants such as BetterBot, Zuma's Al leasing agent, Kelsey, and solutions like Diffe.rent provide lead-to-lease support, immediately addressing queries for a more efficient service and an enhanced prospective resident experience.

08

Reputation management and surveys

To ensure your multifamily business strategies, including targeted marketing and tech rollout plans, are successful, you need to know what residents are looking for. This is where survey technology, such as retention and reputation management surveyor, SatisFacts, or reputation manager, GraceHill, can help.

09 Real estate analytics

According to Knock, a multifamily CRM and performance management platform, 85% of corporate property management companies believe better performance insights would improve business growth and profits. Real estate analytics by Knock and similar companies, Markerr, RealPage, and REBA, support property managers in making smarter business decisions based on historical and predictive data, as well as current trends. Zebel's analytics platform also supports property managers in the very early stages of development.

10 Investment management

If you're new to the industry or looking to expand your inventory, investment management tools such as Kairos, can help you identify locations with the highest potential. These solutions dive deep into the macro landscape, supporting you to make the right decisions based on population growth, income, employmentpopulation ratios and occupancy.



Property management

By automating workflows with tech solutions, teams can focus on purpose-driven tasks rather than repetitive day-to-day jobs. This streamlining of business operations doesn't only boost revenue but can also improve employee satisfaction.

12

11

Property management platforms and all-in-one hubs

Every step of the property management process used to be manual, from leasing agents giving tours to collecting rent. Now managers are able to automate these tasks with the support of proptech and manage every element of the business through one centralized software platform (PMS). These PMS can either be in the form of apps, online portals or IoT hubs.

Examples of property management platforms and all-in-one hubs in the multifamily space include Lavanda¹, AppFolio, Entrata, and HappyCo.

Property operations and maintenance platforms

To advance workflows even further, property managers can link operational tech products and software on one easy-to-use platform. Leonardo247's unified platform, for example, streamlines operations and maintenance workflows and automates day-to-day tasks.

Other examples include repairs manager Plentific, smart property tech platforms like PointCentral, Homebase, and Arize, web-based repairs solution Fixflo, property maintenance software Property Meld, community manager Community Boss, and operations platform Losjitech.

13 Payments

Whether it's collecting deposits, rent, or other charges, there's a tech tool to help you streamline your payment processes. For example, Zego Pay automates rent payments, Jetty offers financial services to both renters and property managers, LoanBoss facilitates debt management, Obligo offers an alternative to deposits, and Pay Ready supports post-residency payment.

Other rent payment tech companies include Domuso and Flex.

14 Noise monitoring

Noise monitoring technology has been very prominent in the short-term rental sector, but recently the solution has begun to cross over into the multifamily space too. Tech companies, like NoiseAware and Minut, provide plug-and-play automated monitoring solutions for property managers to reduce disturbances and de-escalate situations that could lead to asset damage in common areas.

15 Air quality & HVAC management

Considering that, on average, Americans spend 90% of their time indoors, having good air quality in residential buildings is pretty important. HVAC technology providers, like Motili, can help by increasing ventilation and filtering the air. Motili and PointCentral are both examples of IoT specialists that offer HVAC management systems, which monitor performance and send property managers and maintenance personnel alerts as soon as problems are identified.

16 Water management

The United Nations predicts that, by 2030, 40% of the world's population will be affected by water scarcity. Water management technology monitors usage through IoT-connected sensors and will immediately notify property managers and maintenance teams when abnormalities in consumption or faults are noticed. This proactive maintenance prevents leaks escalating into major problems. Since up to 10% of properties in the US have ongoing water leaks wasting over 90 gallons a day, water monitoring also has the power to reduce bills. In more extreme cases, such as when a pipe bursts, water management tech can shut off the supply using smart water valves to avoid major damage. Examples of water management tech companies include PointCentral and WaterSignal.

Environmental, social, and governance (ESG)

Governments have been putting the hospitality industry under increasing pressure to ensure carbon emission deadlines are reached, and resident expectations of eco-performance have been rising too. Last year, for example, AMLI Sustainable Living Index found that almost 9 in 10 people are concerned about climate change. On top of this, 8 in 10 believe that living in an apartment with green initiatives is beneficial to their health.

As a result, multifamily property managers have been leaning on a range of tech solutions to improve energy efficiency across their communities. There's a solution available for everything from reducing hot water wastage while residents wait for a shower to warm (Evolve Technologies) to virtual grid softwareas-a-service (SaaS) enabling operators to distribute solar energy across multiple units (Ivy Energy).

18 Smart thermostats

This popular household device is increasingly a must-have for residents. Alongside higher revenue potential, they enable remote temperature control and centralized monitoring of multiple units across a single platform, helping to reduce energy bills. Providers of smart thermostats for multifamily buildings include INTEREL and PointCentral.

19 Contactless elevator

Ever since the global health crisis in 2020, contactless solutions have risen in popularity to the point that residents now expect a certain level of hands-free tech in properties. Property managers can now install contactless elevators in their multifamily buildings to keep residents and employees safe. Avigilon Alta (previously Openpath) offers a fully touchless elevator service that is powered by mobile and cloud-based instructions.

20 Communications

A strong communications system helps to give residents a first-class living experience. Tech innovations, such as Activ Answer, which connects residents to on-call staff, Courtesy Connection, a property management answering service, and Al assistants EliseAl and Hyro, enable property managers to provide this level of service without compromising team workflows.

21 Utility management

Expense management tools such as Conservice support property managers in keeping utility costs to a minimum by avoiding late fees and ensuring no saving opportunities are missed. Offering lower and reliable utility bills can make properties more attractive to prospects facing higher cost of living rates.

22 Move in tr

Move-in tracking

According to Shyft, 9.8% of US residents move home every year. To stand out to these prospects, property managers can use onboarding technology like Moved for a competitive advantage with automated processes that improve the moving experience.

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Accounts payable (AP) automation

To reduce the cost of processing payments and time spent on managing invoices, property managers can automate AP processes with software such as Nexus. These electronic solutions completely eliminate the need for paperwork.





Security

Building security is not only essential for the safety of your residents and employees, it also protects your assets. Tech solutions can help you ensure the security of your communities.

24 ID verification

Property managers need to know who is entering and living in their buildings. Previously, such a task would involve a lot of paperwork, which can be challenging when you own multiple large communities. Luckily, property managers can now automate the entire screening process using ID verification tools such as MRI Software and CheckpointID.

25 Pet policy management software

Research shows that, on average, between 65% and 70% of US households own pets. So, if you're going to boost resident appeal with pet-friendly policies, you're also going to need processes in place for onboarding residents with pets. PetScreening's pet policy management software helps property managers who want to welcome pet owners find new revenue opportunities and carry out pet verification for assistance animals.

26 Compliant smart cameras

Property managers can turn to compliant smart cameras, such as ICS Advanced Technologies, for remote monitoring of common areas. Investing in security tech such as this for your multifamily communities can reduce liabilities, boost resident satisfaction and attract interest from higher-quality prospects.

27 Access technology and video doorbells

Thanks to the development of contactless solutions, multifamily property managers can now have complete visibility over who is in their communities, using digital mobile applications that can be accessed from anywhere. Community smart lock solutions take away the need for physical keys that can be lost or stolen. Instead, they only require a code or app, which operators can remotely provide to visitors, maintenance teams, and employees at the touch of a button for enhanced operational efficiency and improved security. This technology also offers residents a seamless access solution for their own convenience and safety, and a way for them to grant easy access to guests. Access technology powers other multifamily solutions like self-guided tours, improving the experience of touring prospects.



Smart access tech is one of the more widely used smart home solutions alongside smart thermostats and voice-controlled devices, with almost a third of renters saying they already use smart locks in their homes. Tech companies in this space include community access solution LiftMaster, biometric key control supplier HandyTrac, gate and amenity door solution Gatewise, as well as Igloocompany, RemoteLock, ADT Multifamily, ASSA ABLOY Global Solutions, Comelit USA, and PointCentral.

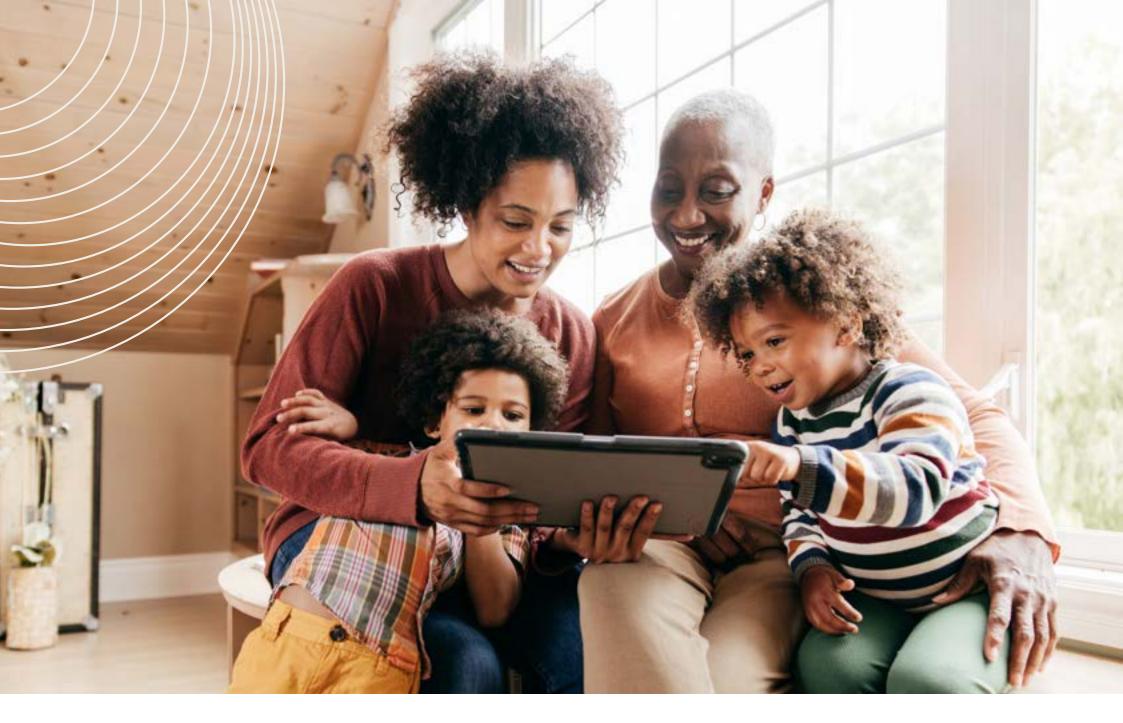
Those looking to take security one step further can install video intercom technology, such as the solutions by ButterflyMX and InvictusXP, which enables both property managers and residents to visually identify guests and visitors before granting them access to the building.



Protecting your assets is a top priority. Insurance technology, such as Assurant, allows property managers to reduce their liability from residentcaused damage with risk mitigation solutions while tech like LeaseLock can replace deposits, guarantors, cosigners, and surety bonds with smarter loss protection solutions.

29 Cyber security

Shared online portals and folders enable seamless access to information but it doesn't come without its risks. Advanced technologies, like the softwaredriven security solutions that Abacode offers, help property managers to protect themselves by predicting and preventing cybersecurity issues, as well as dealing with compliance requirements.



Resident experience

Proptech advances have sparked a revolution for the resident experience. Expectations have been rising, with residents showing more and more interest in solutions that provide convenience – examples include:

30 Resident apps

Keeping prospects and residents happy and engaged helps increase sign-ups and renewals. There's now an app for every step of the journey, from improving the resident onboarding experience with Elevated Living to providing a consistent, hotel-like brand experience with engagement app Flamingo. Pinata even offers residents a credit building program to make their living experience more affordable and rewarding.

Just like property management systems that give you an all-in-one platform to manage access and resident experiences, apps like Livly provide residents with a mobile app for managing their amenities and other housing needs.

31 Resident satisfaction software

According to the resident reward platform, Rentgrata, 36% of prospects who communicate with current residents through the tool sign a lease agreement, as renters want 'social proof' before making decisions. The technology is designed to enhance the onboarding process, improving the appeal of your communities.

There are also tech solutions to support property managers in improving the entire resident experience. For example, Opiniion enables operators to better understand their residents through realtime feedback for every step of the journey: tour, move-in, work order, renewal, and move-out.

32 Voice assistants

Last year in the United States, there were around 142 million users of voice-powered devices, such as Amazon's Alexa. That's nearly half the country's population. This figure is set to rise a further 15 million over the next three years. In multifamily buildings, these devices can improve communication between property managers and their residents, as well as help to create a fully connected home when linked with other smart devices such as smart thermostats and lights.

33 Package management

Having a safe and secure drop-off area for resident packages is essential in this era of online shopping and next-day delivery. There's a whole range of tech solutions on the market designed to help you meet these needs. They range from package management solutions, like Fetch, HelloPackage, and Position Imaging, to storage lockers such as Luxer One and Package Concierge, for safe and automated dropoffs. There are even temperature controlled storage lockers, like those offered by Smiota and Parcel Pending, for hot or cold food deliveries.

34 Building wayfinding

Improve the experience of touring prospects or community residents by providing building wayfinding technology, such as Point Maps. The digital map platform enables the addition of indoor digital maps and seamlessly integrates maps into your website, mobile, and kiosk.

35 _{WiFi}

A reliable WiFi connection is not only essential for resident satisfaction, it plays a vital role in running all of your IoT tech solutions. There are a range of companies dedicated to improving the service your communities receive, such as Blueport, DOJONETWORKS, and Quext Connect – which offers a cost-effective, high-speed network with proactive issue detection. Nomadix offers secure WiFi solutions for visitors to your multifamily community, DISH Fiber provides live streamed TV, and Frontier has an internet phone product.

36 Smart home control

Multifamily residents increasingly seek convenience in their homes. Smart home controls, such as Brilliant's touchscreen app, enable residents to adjust temperature, lighting, access, and even music with the touch of a button, all in one place.

37 Deposit solutions

According to deposit solution technology, flatfair, there's around \$6.45 billion held up in housing deposit schemes. Moving can cost a lot and residents are often required to pay for a new deposit before receiving their previous one. With its No Deposit solution, flatfair enables residents to secure housing with a small fee. Property managers are still protected, as any damages will be paid for when residents move.

38

Built in apartment services

Tech such as Please assist me's app enables residents to manage hired assistance for tasks such as rental cleaning, chores, and laundry. If they're using some of the access solutions, it's a seamless experience for both parties.

Rising tech pioneers

Findigs - a digital underwriting platform that allows prospects to submit applications that are then automatically verified, reducing the risk of fraud for property managers.

Nomad - a solution that supports the marketing of vacant rentals and offers property managers guaranteed rent, while also providing a 24/7 maintenance concierge and tools to protect your investment.

TurboTenant - a property management software platform that streamlines advertising, applications, resident screening, and payment collection.

Mynd Property Management - a property management company with comprehensive and efficient solutions for operators and investors, such as property leasing, payment collection, maintenance workflows, and financial reporting.

MeetElise - an AI-powered leasing assistant that helps property managers automate the leasing process by responding to questions, confirming property tours, and sending post-tour follow-ups.

What's next for the multifamily industry?

After years of construction delays, over 700,000 units are set to enter the market across the US in 2023, swelling multifamily housing supply to the largest on record since 1980. Because of this, the industry could start to decelerate as greater supply places downward pressure on rents and asset values. However, CBRE forecasts that this oversupply will be short lived, suggesting that 'it ultimately will lay the foundation for a healthy market' in the years to come.

In terms of multifamily housing technology – over \$50 billion of capital has been invested in real estate technology companies in the last five years but, due to challenges in the economy, fewer operators are willing to invest in tech products for long-term benefits. Instead, property managers are onboarding tools that offer an immediate impact on business operations, such as those that solve inefficiencies for streamlined operations and cost-savings. This means automated monitoring tech for in-unit devices, like HVAC and water systems, leasing solutions, self-guided tours, and maintenance platforms, could find more favor in the next two years – likewise, any solution that drives immediate operational improvements and generates labor savings.



About Abode Worldwide

Abode Worldwide is an award-winning public relations agency dedicated to raising the profile of game changing technology solutions and enterprise level operators transforming the global multifamily, short term rental, hotel, student accommodation, coliving, and senior living sectors. The agency sits at the heart of the developing intersection between work, life, and play in the property and hospitality markets.

To learn more about Abode Worldwide's public relations and content marketing programs, check out our website or contact Jessica Gillingham, CEO & founder of Abode Worldwide, at jessica@abodeworldwide.com.

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1 This company was a client of Abode Worldwide at time of writing.