



# Transforming asset management: Exploring top trends in Customer eXperience (CX) technologies

## The value

The adoption of **Customer eXperience (CX)** technology use cases stands as a cornerstone for industries striving to elevate both operational efficiency and customer satisfaction.

This paper serves as your backstage pass to the latest developments in CX technology. Before we showcase the use cases, we'll begin by exploring the myriad benefits of CX technologies and how they form the core of a revolutionary paradigm shift. Next, we'll delve into the stages that organisations navigate through in order to build a robust CX capability portfolio, discuss levels for continuous support and enhancement, and, most importantly, present cutting-edge **CX Tech Use Cases**.

By harnessing the capabilities of process streamlining, simulation and Artificial Intelligence (AI), forward-thinking businesses are embracing a new era of predictive insights and personalised interactions to thrive in a highly competitive landscape.

### Streamline processes

### Leverage the power of AI

### Simulate

In the asset management (AM), facilities management (FM), and property management (PM) industries, **Customer eXperience (CX)** technology is becoming increasingly important as firms look for ways to improve their interactions with clients and streamline their processes. From online portals for account management and performance tracking to AI tools for personalised investment recommendations, these technologies are helping asset management firms to deliver a better experience for their clients.

In addition, CX technology plays a crucial role in automating routine tasks within AM, FM and PM by eliminating manual inefficiencies and enhancing operational workflows. Through the integration of streamlined communication channels and automated workflows, these industries are not only improving customer satisfaction but also realising significant gains in operational efficiency. This enables professionals to focus on strategic decision-making and provide value-added services for their clients.

Let's take a moment to talk about the most popular emerging technology on the block – AI. As AM, FM and PM firms develop the next level of important technology in the industry, they have found great benefits in using AI for personalised investment recommendations. By analysing a client's financial goals, risk tolerance, and other factors, **AI algorithms** can provide **customised investment recommendations** that are tailored to the individual's specific needs.

AM firms utilise chatbots and AI tools, alongside online portals, to enhance customer experience. These advanced chatbots swiftly handle common queries, allowing financial advisors to tackle more complex tasks. The emergence of ChatGPT-like technology further equips chatbots to provide immediate answers for calculations and explanations, reducing response time.

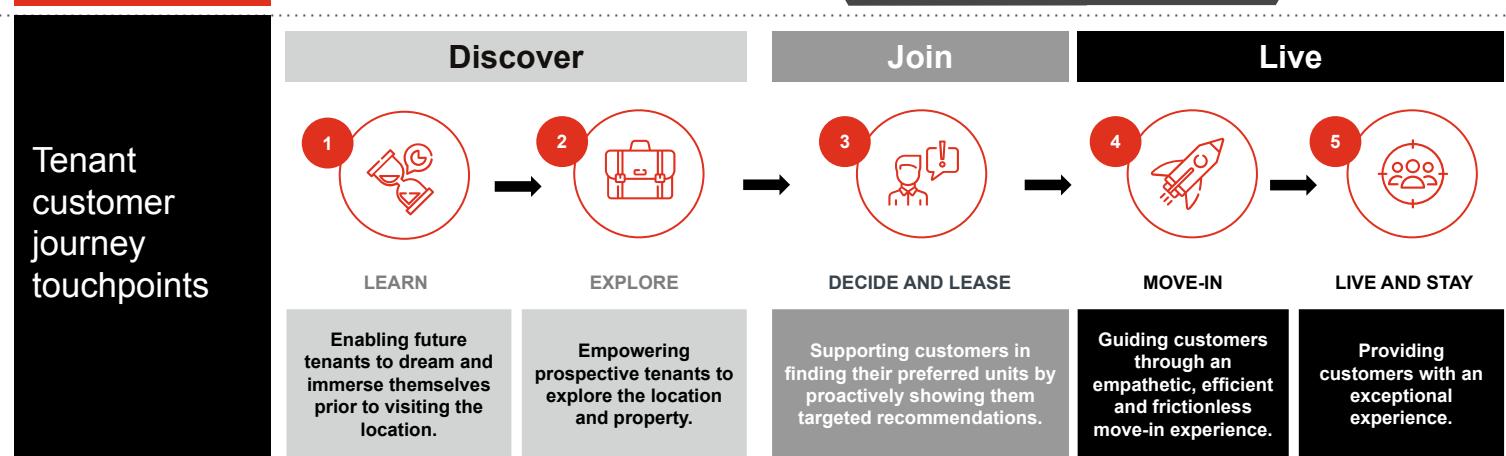
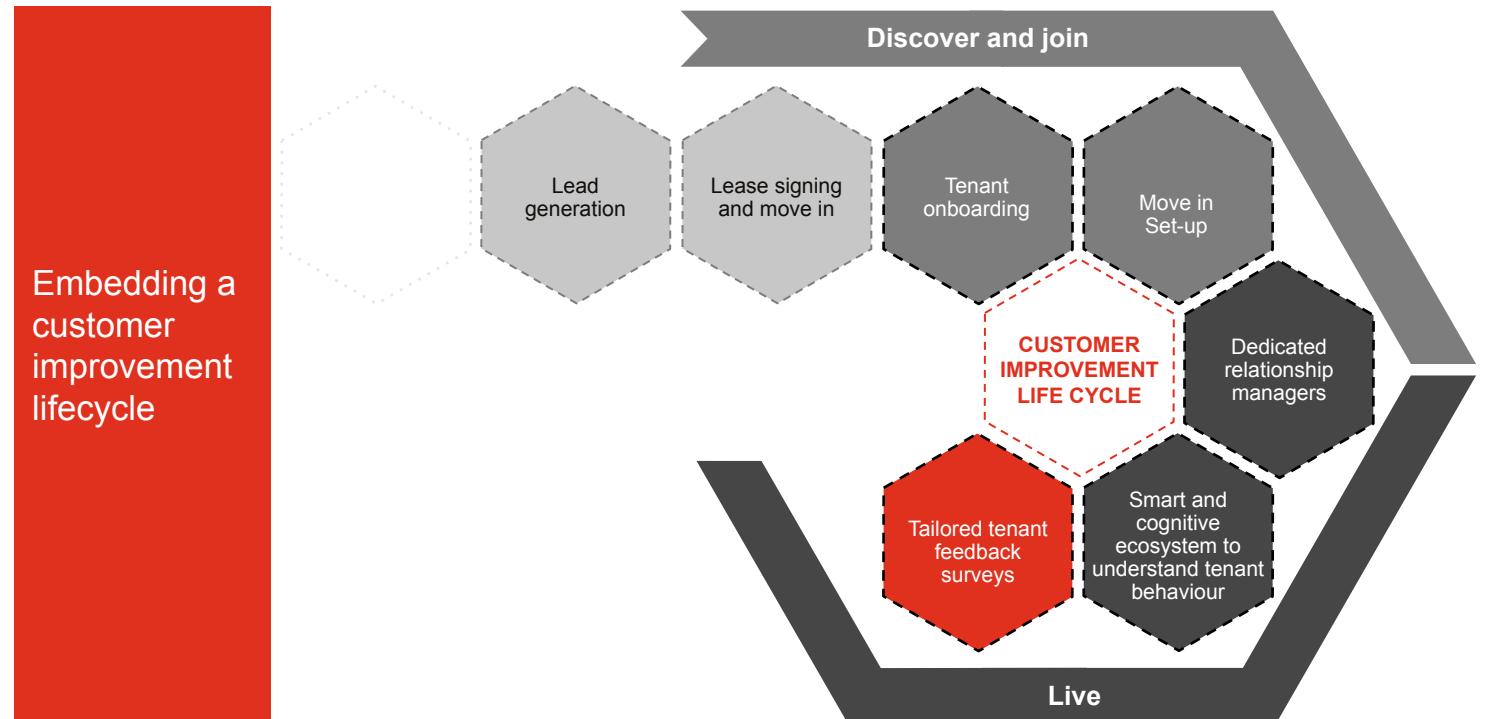
**Digital twin technology** is making waves in the asset and FM industry, which is used to create a virtual replica of a physical asset, such as a machine, equipment, or infrastructure. The digital twin represents the physical asset's characteristics, behaviours, and interactions, and can be used to simulate, analyse, and optimise its performance, maintenance, and upgrades.

Digital twin technology has helped organisations monitor the asset's health and performance, enhance maintenance, optimise upgrades, and improve decision-making. More specific to enhancing customer experience, the digital twin technology is currently being used to: personalise individual experiences, predict customer needs, simulate testing and designs, and offer real-time support. **Check out more** digital twin use cases at the bottom in the "**CX Tech Use Cases**" section.

## The new paradigm shift

A revolutionary shift in asset management is underway, marked by a departure from traditional methods. The focus is on embedding a **new paradigm** that emphasises the management of assets and the delivery of services through an enhanced customer experience using technology, also referred to as customer experience enablers. The customer experience enablers put the customer experience at the heart of everything by creating seamless and life-enhancing consumer journeys.

Customer-centric approach	Technology's role	Monetising data	Higher return focus
The journey begins with a customer feedback approach, recognising the need to move beyond perceiving assets in isolation to embracing a holistic understanding of customer experience.	Utilising technology is key to bringing this new paradigm to life, not only to cut costs and maximise returns but also to unlock the potential of monetising valuable customer data.	The ability to understand how customers interact and move provides valuable insights that can be monetised for further enhancements.	Asset managers are encouraged to see this shift not merely as a technological investment but as a fundamental reorientation to cut costs and improve returns.



Examples of enablers of customer experience
<ul style="list-style-type: none"> <li>Metaverse</li> <li>AR/VR wearables</li> <li>5D screens</li> <li>Motion detection Sensors</li> <li>Digital twin</li> <li>Virtual tours</li> <li>Smart mobility system</li> <li>Biometric access devices</li> <li>Smart robots and chatbots</li> <li>AI-driven recommendations</li> <li>Online lease platforms</li> <li>Digital twin</li> <li>Smart contracts</li> <li>eWallet</li> <li>Mobile apps</li> <li>IoT-enabled homes</li> <li>BMS</li> <li>Biometric access</li> <li>AR/VR wearables</li> <li>eWallets</li> <li>CRM</li> <li>CAFM</li> <li>Tenant portals</li> <li>Predictive maintenance</li> <li>IBMS and BMS Edge devices</li> <li>Metaverse</li> <li>Wayfinding tools</li> <li>eWallets</li> <li>Community platforms</li> </ul>

## Develop your CX tech roadmap in four stages

Organisations find the most success when they figure out where they are, where they want to go, and the right steps and support needed to get there. Organisations can conduct **the four-stage cycle of visioning, discovery, planning, and implementation** as a starting point to understand their customers' needs and pain points.

### 1 Stage 1: Visioning

#### Creating a technology vision

The initial step in building a robust customer experience (CX) technology roadmap is to create a clear and compelling technology vision. Define what CX success looks like for your organisation and how technology will enable that success. Engage key stakeholders across the company, including CX, IT, marketing, and operations teams, to ensure alignment. This vision will serve as the guiding light for your CX technology journey, helping shape your strategy and prioritise investments in technologies that best support your CX goals. It's the foundation upon which you'll build the rest of your CX technology roadmap.

### 2 Stage 2: Discovering

#### Audit existing CX technologies that support your CX vision

To improve your CX technological capabilities, it is vital to first audit your current CX technologies and how they align with your CX vision. Make a plan for the processes and activities necessary to meet this vision, and map out your current and future technology capabilities for various streams and functions within your organisation. Use this information to identify gaps or redundancies in your organisation's CX technologies and skills, including those used by other functions, such as marketing, commerce and product. This will provide a solid foundation for implementing changes and improvements to your CX strategy.

### 3 Stage 3: Planning

#### Invest in CX technology and skills to fill the gaps

To ensure that your CX technology and skills are aligned with your vision, it is critical to build a business case for any additional investments in these areas. All customer-facing teams involved in the CX delivery should support and fund this business case. To start, prioritise established CX initiatives, such as Voice of the Customer (VoC) activities and customer call centres. As you move forward, consider iteratively supporting less mature activities, such as CX analytics and personalisation programmes, as they develop within your organisation. Using your CX vision as a guide, you can make informed decisions about where to allocate resources and ensure that your CX technology and skills align with your overall goals.

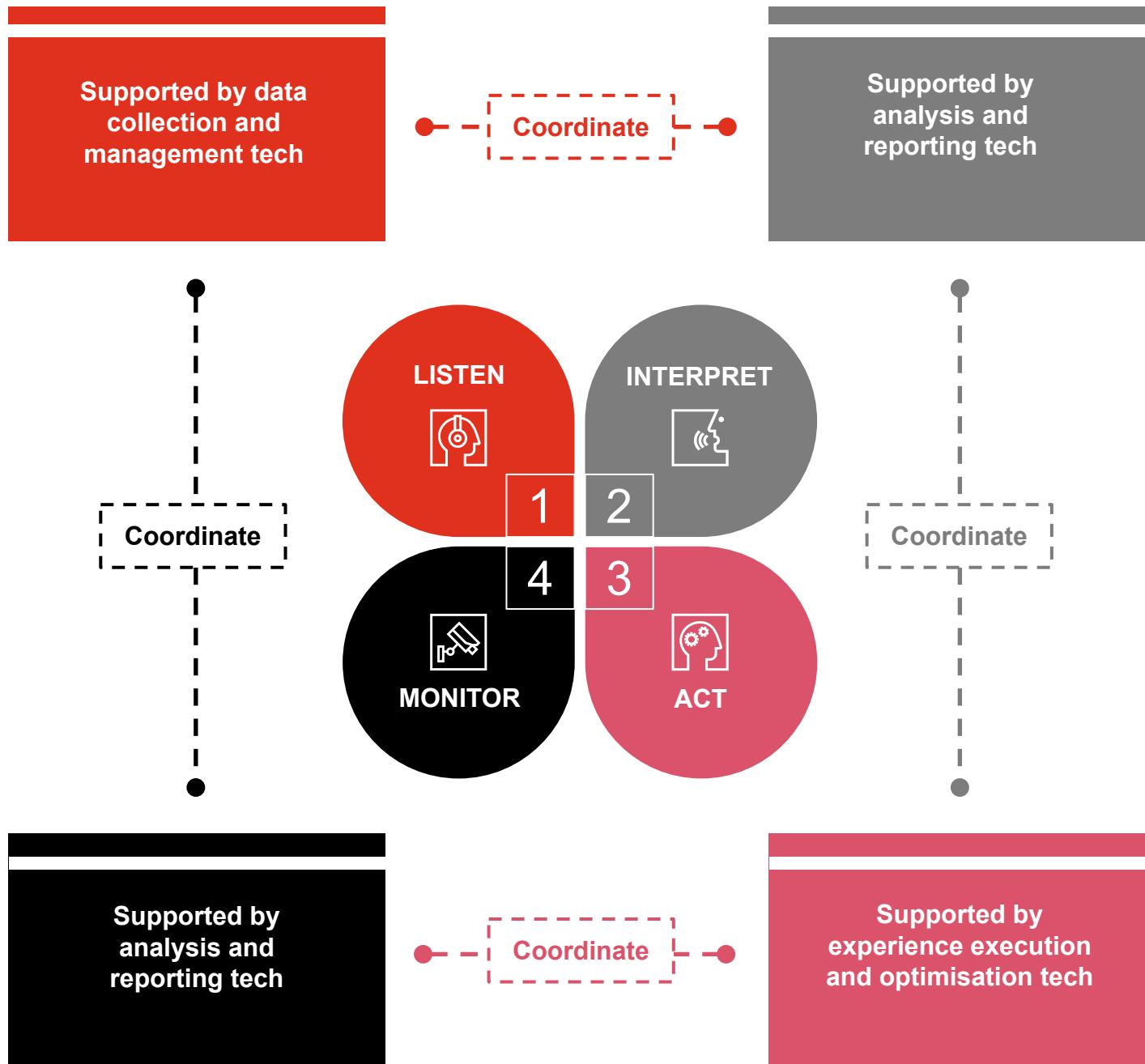
### 4 Stage 4: Implementing

#### Monitor and integrate technologies to support your CX technology portfolio

After filling any gaps in your core CX technology portfolio, focus on seamlessly making the various technologies work together. You can gain powerful insights into customer needs and preferences by linking qualitative and quantitative data, such as customer survey responses and website behaviour analytics. Additionally, consider integrating the CX team's technology with other functions, such as using a customer feedback management tool to inform marketing, sales, and support changes. As you continue to evolve and grow your business, always be on the lookout for new ways to integrate data, insights, and technologies to support new areas of your business.

## Four-level support process

The **four levels of supporting** your organisation's CX technology are: Listen, interpret, act, and monitor. They work in a constant coordinated fashion and are all supported by actionable analysis and technology. The coordination must happen simultaneously as illustrated in the graph below:



## CX tech use cases

To understand how the real world is using technology to enhance its customer experience, we have categorised the latest technology trends with actual use cases in the tables below. Each of the categories is tied to the industries they serve:

Customer targeting IoT	Industries
<b>Smart lock technology for agents and families</b>	Residential leasing
<b>Used by:</b> AvalonBay, Greystar, The NRP Group	Commercial management
<b>Building energy tracker</b>	Facility management
<b>Used by:</b> AvalonBay, Colliers, HighGate, Rudin	Property management
<b>Touchless showings, virtual showings, AR space</b>	Retail
<b>Used by:</b> Global Holdings, Ulta Beauty Properties, Hotel Brooklyn Bridge, Skanska Construction, CBRE Property Management, Hilton	Hospitality
Customer targeting beacon tech	Industries
<b>Customer flow, retail behaviour and marketing, asset tracking, Wayfinding</b>	Residential leasing
<b>Used by:</b> Cisco	Commercial management
<b>Close proximity beacon solutions</b>	Facility management
<b>Used by:</b> Amazon, Nike, Hyatt, Apple	Property management
<b>Beacon and property app for managers and residents</b>	Retail
<b>Used by:</b> Wehner Multifamily, Boutique Apartments, Edison47 Residents, CityGate Group, Capital LLC	Hospitality
<b>Beacon tech for higher education</b>	Education
<b>Used by:</b> NC A&T State University, Eastern Connecticut State University, NCA-TSU	
Augmented reality (AR) and virtual reality (VR)	Industries
<b>Virtual walkthroughs: AR and AI floor plan conversion</b>	Residential leasing
<b>Used by:</b> Colliers Property, Techstars	Property management
<b>Real estate VR development</b>	Retail
<b>Used by:</b> Alliance Residential, Greystar, Ojala Holdings, Bright Realty	Hospitality
<b>Retail out-of-the-box AR/VR solutions</b>	Education
<b>Used by:</b> Giant, Mercedes-Benz, COTY, Remax	
<b>Virtual staging of living/workspaces</b>	
<b>Used by:</b> Remax, Better Homes & Gardens, Century 21, Keller Williams, Berkshire Hathaway	
<b>Immersive VR education</b>	
<b>Used by:</b> Yahoo, Facebook, Ericsson, European Commission	

Artificial intelligence	Industries
<b>IVR system, NLP, and voice gateway tech for customer interaction</b>	Residential leasing
<b>Used by:</b> Mizuho Bank, Vodafone, Purolator, Generali France, Savronik	Property management
<b>Text/speech, machine learning, translation, ChatBots, auto code reviews for CX experiences</b>	Retail
<b>Used by:</b> T-Mobile, 3M, Intuit, Discovery	Hospitality
<b>AI customer acquisition and engagement opportunities</b>	Education
<b>Used by:</b> Macy's, NBC, P&G, Exxon	
<b>Repetitive customer support inquiries and CRM integration</b>	
<b>Used by:</b> KLM, Quicksilver, Volcom, Snipes	
Automation	Industries
<b>Automating client interactions and generating leads via CRM integration, automated follow-ups, reporting, remarketing potential audience, and custom lead generation forms</b>	Residential leasing Commercial leasing
<b>Used by:</b> Corcoran, Berkshire Hathaway, Georgia Properties, Howard Hanna	Facilities management
<b>Automating offer acceptance timing and accounts management</b>	Retail
<b>Used by:</b> Royal LePage, The Brooks Group, Northbridge, Mannington Mills	Hospitality
<b>Document management with customers</b>	Education
<b>Used by:</b> Macy's, NBC, P&G, Exxon	
<b>Repetitive customer support inquiries and CRM integration</b>	
<b>Used by:</b> Remax, Keller Williams, Metrobrokers	
Robotics: In-store interaction and sign in/check out	Industries
<b>Hospitality concierge and butler robots</b>	Residential leasing
<b>Used by:</b> Hilton, Aloft, Henn na Hotel, Hotel EMC2	Property management
<b>Smart homes and mobility</b>	Retail
<b>Used by:</b> Amazon, Crowne Plaza	Hospitality
<b>Retail and hospitality robotic solutions</b>	Education
<b>Used by:</b> Walgreens, Caesars Palace	
Prop-tech use cases	Industries
<b>Remote venue/home control, accessibility, security, and touchless tenant experiences</b>	Residential leasing
<b>Used by:</b> Several hotel chains and apartment complexes	Commercial leasing
<b>Online booking, payments, availability management, map, insightful city guide generation</b>	Facility management
<b>Used by:</b> Forbes, Mashable, The New York Times, TechCrunch, and The Washington Post	Property management
<b>Online estimated net proceeds calculator, full 360 inspection report generation, listings map search view</b>	Retail
<b>Used by:</b> Reviews.io, Wall Street Journal, Better Business Bureau	Hospitality
	Education

## Omnichannel and digital twin use cases

## Industries

**Omnichannel for consolidating all customer inquiry channels (email, website, social media, blogs, etc.)**

**Used by:** City Property (SA), Black Rock Asset Management, Vanguard Property management

Residential leasing

Commercial leasing

Facility management

Property management

**Omnichannel for consolidating customer tasks from multiple channels into one**

**Used by:** Bank Of America

**Omnichannel for single shopping experience on any platform/device while accessing memberships and rewards**

**Used by:** Oyo Rooms, Starbucks, Oasis, Amazon

City management

**Digital twin for building maintenance, maintenance prediction, real time monitoring and cost reduction and collaborative planning**

**Used by:** International Finance Corporation, GE Renewable Energy, Leading Manufacturing Company, Leading Railroad Company

City development

Property development

Mobility

**Digital twin for pre-sales activities with enhanced visualisation (interacting with replicas), personalisation (tailoring requirements to customers unique needs), Simulation of Scenarios (e.g. real estate buyers can visualise day vs. night), and Data-driven insights (e.g. real-time data from IoT sensors showcasing performance)**

**Used by:** Giga city projects, large development initiatives, AM/FM firms

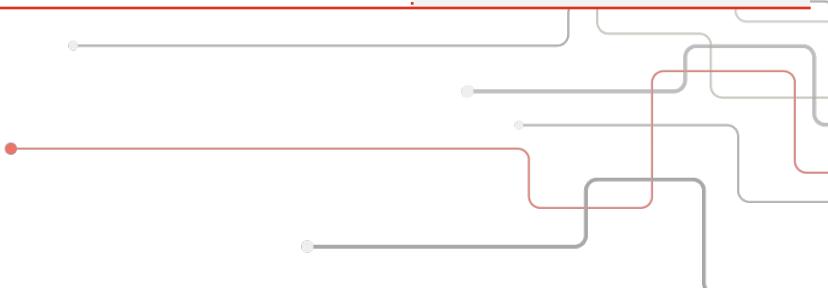
Hospitality

Entertainment

Finance

**Digital twin for sales conversion activities with PoC DEMO's (hands-on-experience), customer engagement (overcoming objectives and building confidence), collaborative decision-making (with multiple stakeholders), remote sales**

**Used by:** Giga city projects, large development initiatives, AM/FM firms



Overall, customer experience technology is helping asset/facility/property management firms to deliver a more convenient, personalised, and efficient service to their clients. The integration of these technologies, offering seamless access to critical information and employing AI for tailored recommendations, plays a pivotal role in elevating the overall experience for both service providers and clients. PwC is dedicated to helping organisations in their journey and making the most out of their technology roadmap. Our contribution has enabled organisations of all sizes to evolve into their maturity phase, set up their support levels armed with the right technology and process, and realise increased customer satisfaction and sales. We invite you to connect with us for a personalised consultation where we can assist you in shaping your vision, refining your planning, and implementing your strategic roadmap. Let's embark on this journey together.

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## Sources

Paper authored by our consulting experts. Use case review utilized PwC's expertise and researched using the following sources:

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[Gartner Technology Trends in Customer Service and Support 2021](#)

[Gartner Emerging Customer Service Technologies Trends](#)

[Gartner Go Beyond Surveys for a Successful Voice of Customer Program](#)

[Forrester Tame The Asset Management Beast](#)

[Forrester How To Build Your CX Technology Portfolio](#)

[Top 100 AI Startups to look out for from 2021 - Overwrite](#)

[Forrester Now Tech: Digital Asset Management For Customer Experience, Q2 2021](#)

[Gartner Digital Asset Management \(DAM\) Technology Companies - Reviews and Ratings](#)

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