Real Estate Research

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From Alternative Data to Alpha

IN A NUTSHELL

- Alternative data combined with AI, has the potential to enhance real estate forecasting and alpha generation, by uncovering early signals, hidden relationships and turning points not captured by traditional indicators.
- As transaction processes slow and market polarisation widens, granular, forward-looking signals become more valuable. Alternative data stack spans market, location, behavioural, web and geospatial layers, with deeper layers helping capture real-time asset usage, mobility and sentiment to inform demand, liquidity and cash-flow resilience.
- Sector-specific use cases include job postings for offices, footfall and spending data for retail, freight flows for logistics, rental listings and demographic data for living, and booking data for hotels.
- A key challenge lies in selecting, integrating and interpreting the right signals–when used effectively, alternative data may strengthen underwriting, asset selection, portfolio monitoring and risk management.

Alternative Data: Unlocking Alpha in Real Estate

Alternative Data Alpha refers to the extraction of data from non-traditional sources that have the potential to enhance forecasting accuracy and strategic positioning. Artificial intelligence (AI) excels at processing enormous volumes of information with a speed and precision that can far surpass human capability. But its power goes beyond handling more data more quickly – AI can uncover previously unnoticed relationships, trends and signals hidden within complex datasets.

Real estate markets are entering a phase where traditional indicators alone are often no longer sufficient to fully capture shifting demand patterns, emerging risks and early turning points. Slower transaction processes, higher market dispersion and more frequent structural breaks have increased the value of timely, granular and forward-looking information. Against this backdrop, alternative data is becoming an increasingly important complement to established market metrics.

Alternative real estate data spans a wide spectrum from market-level intelligence such as company disclosures, surveys and qualitative sentiment to high-frequency behavioural and location-based signals, including footfall, consumer spending, web activity and geospatial data. As illustrated in the framework below, the complexity and volume of data increase as analysis moves down the pyramid, but so does the potential to extract differentiated insights that may not yet be reflected in prices or headline fundamentals.

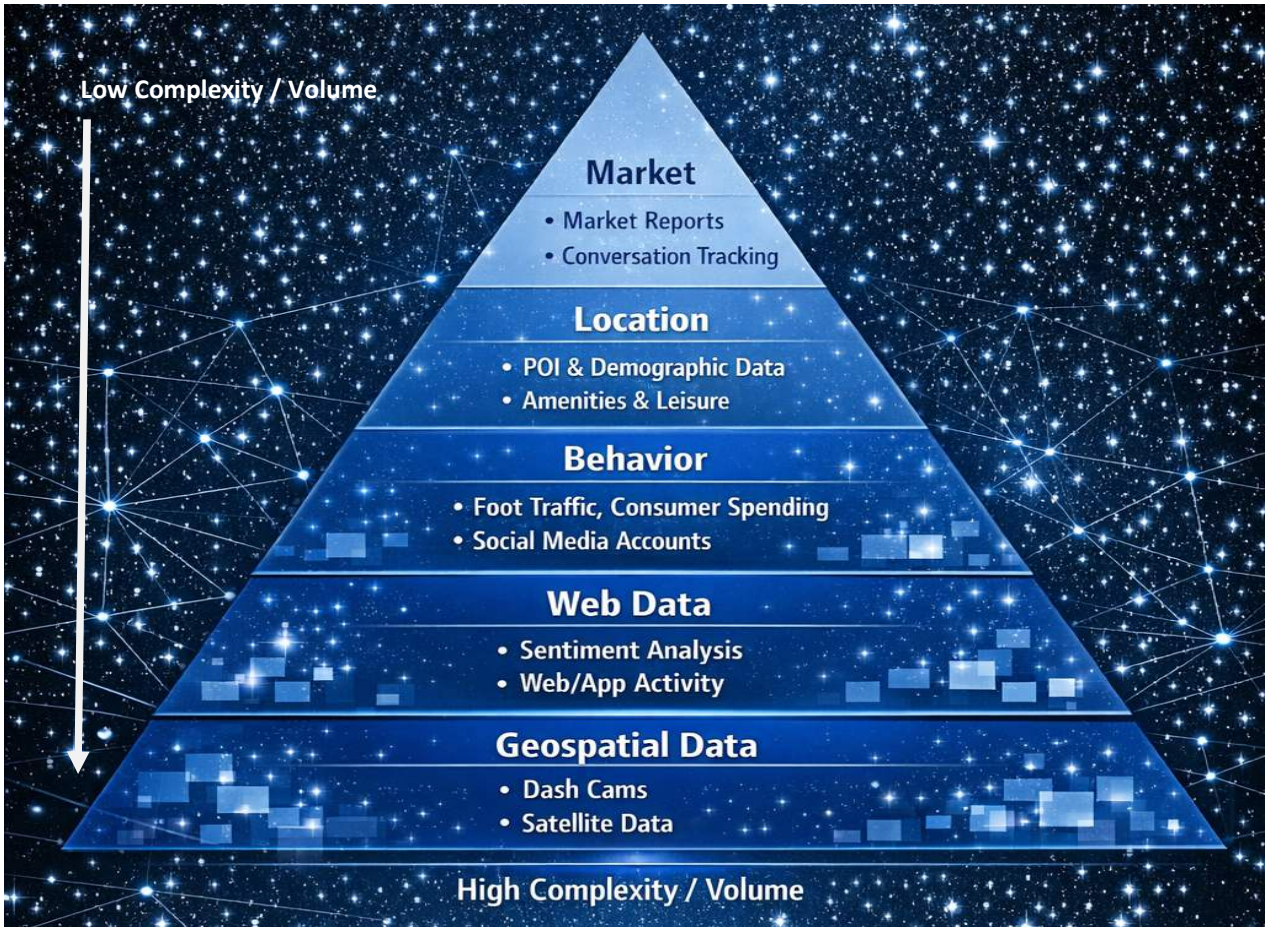
For long-term real estate investors, a key challenge is not access to data, but selecting, combining and interpreting the right signals. Used effectively, alternative data can enhance underwriting, help improve asset selection, support more dynamic portfolio monitoring and strengthen risk management. Used poorly, it risks adding noise rather than insight.

This report sets out how alternative data might be integrated into real estate investment analysis, highlighting practical use cases across sectors and strategies, and explaining how different data layers could be combined to move from descriptive analysis to actionable intelligence.

Alternative Data Sources Overview

At the top of the data stack, low-complexity market and location data remains essential for understanding broad trends and relative positioning. Deeper layers, however, capture how people interact with places, how assets are used in real time and how locations gain or lose relevance — offering early signals that can inform tenant demand, liquidity, operational performance and future cash-flow resilience. At the base, web and geospatial data extend the analytical toolkit further, enabling investors to assess mobility patterns, supply-chain dynamics, development activity and sentiment shifts with greater precision.

Alternative Data Sources



Source: DWS, Copilot, Alpha locations, March 2026

Alternative Market Data

Automatically Analysing company & market reports, surveys via Research Agents

The expanding universe of alternative market data is reshaping how investors generate insights and make decisions. AI-enabled Research Agents now play a central role in this shift, automating the analysis of company disclosures, market reports and survey data through iterative cycles of reasoning, retrieval and review. By integrating internal sources – such as emails, chats and proprietary databases – with external APIs, these systems create a multi-layered intelligence framework that can enhance both speed and analytical depth.

Context-aware summarisation allows Research Agents to tailor outputs to user intent, improving the relevance and quality of market insights. At the same time, AI is transforming workflow automation: conversations from analyst calls or transaction discussions can be captured, classified and logged directly into Excel, while voice-to-text engines and cognitive agents streamline due-diligence processes. Natural Language Processing and machine-learning capabilities further enable the extraction of key statements, sentiment markers and behavioural signals from call metadata.

Together, these advances are elevating data availability and analytical precision, leading to potential improvements in forecasting accuracy and helping strengthen investment processes across asset classes. As the ecosystem of alternative data expands, AI-driven market intelligence is likely to become a core input to differentiated alpha generation.

Key Capabilities:
Multi-source data mining: Pulls from internal databases, emails, chats, and external APIs.
Context-aware summarization: Uses prompts and user history to tailor insights.

Automate conversation tracking and Excel integration

Capture and log key statements from calls directly into Excel (e.g., “Berlin office letting currently difficult”).
Enable transaction call automation: Use voice recognition and cognitive agents to streamline processes. Large Language Models (LLMs) can support advanced voice-to-text conversion and prompt-driven Excel automation. Valuable insights can be extracted from call content and metadata using Natural Language Processing and Machine Learning models.

Location Intelligence Data

Location Intelligence is rapidly becoming a key source of potentially alpha in real estate investing. Powered by AI and advanced geospatial analytics, it transforms static spatial information into dynamic insights on the physical, social, and economic fabric of neighbourhoods. By integrating **Points of Interest (POI)**, **amenity dynamics**, and **population movement patterns**, investors and developers can gain a multidimensional understanding of place – far beyond what traditional mapping can deliver.

POI datasets catalogue the distribution of key amenities, from retail and leisure to transport, education and healthcare. These indicators support strategic decisions in site selection, asset valuation and benchmarking, as proximity to high-quality amenities has been closely linked to rent premiums, occupancy and long-term performance. Tracking amenity dynamics over time – such as openings of restaurants, gyms, or cultural venues – can provide early signals of gentrification and emerging submarkets. Leisure-focused amenities, in particular, can serve as useful indicators of tenant satisfaction and rental uplift.

AI models can detect subtle shifts in amenity patterns, population flows and accessibility metrics, helping investors to assess growth corridors and future hotspots with greater precision. Platforms leveraging real-time geospatial APIs can further enhance visibility into evolving neighbourhood characteristics.

Ultimately, Location Intelligence is not simply about mapping where things are but understanding what they signify for asset performance and market trajectory. For investors who embrace it, this intelligence becomes a strategic compass, potentially helping gain sharper insights, smarter capital allocation and more resilient portfolios. Powered by AI and geospatial analytics, it enables investors, developers, and urban planners to evaluate the physical and social infrastructure of neighbourhoods with precision. From POI to amenity dynamics and population flows, this data stream can transform static maps into dynamic insights.

Behavioural Data

As the digital and physical worlds converge, the real estate sector is increasingly turning to behavioural data – captured through AI from consumer interactions, mobility patterns and financial activity – to gain predictive insights into urban dynamics. Behavioural data can provide real-time insight into how people interact with places, capturing patterns of movement, spending, sentiment and usage that are not visible in traditional real estate indicators. As transaction activity slows and market dispersion rises, these signals have become increasingly important for identifying demand shifts and emerging risks at an early stage.

In real estate, behavioural data can help translate human activity into investment intelligence – from footfall and consumer spending to location popularity, tourism intensity and social sentiment. These datasets help investors move beyond static assumptions, offering a more dynamic view of asset utilisation, tenant demand and location resilience. Key use cases span underwriting, asset selection and portfolio monitoring. Behavioural signals can validate location quality, detect early changes in demand, flag operational stress and help differentiate performance within markets long before it is reflected in rents, valuations or official statistics.

In an environment of higher uncertainty and faster structural change, behavioural data is increasingly viewed as a critical complement to traditional fundamentals, supporting more informed, forward-looking and risk-aware real estate investment decisions.

Key Behavioural Data Streams and Their Strategic Value:

Source: DWS, Copilot, March 2026

- Google Maps Trends: Real-time data on restaurant and bar popularity reveals the vibrancy and social appeal of neighbourhoods. High ratings and footfall tend to with lifestyle desirability, often preceding residential demand and price appreciation.
- Social Media Accounts: AI models analyze geotagged posts, influencer activity and engagement metrics to assess cultural relevance and community sentiment. These insights help identify emerging lifestyle hubs and gentrifying districts.
- Hospitality Industry: Booking density, pricing trends and guest reviews offer a proxy for short-term rental demand and tourism appeal. High Airbnb activity often signals transient population flows and investment potential in hospitality or mixed-use developments.
- Credit Card Transactions (Retail): Aggregated spending data from retail outlets provides a granular view of consumer behaviour. AI can detect shifts in purchasing power, brand preferences, and retail health – key indicators for commercial real estate viability.
- Foot Traffic Data: Sensor-based and mobile-derived foot traffic data can reveal pedestrian density and movement patterns. This can be critical for retail site selection, transit-oriented development and public space optimization.
- Hotel Reviews & Ratings: Hotel performance data can reflect tourism trends and traveller sentiment. High-rated hotels in a district often correlate with broader hospitality and leisure investment opportunities.
- Consumer Spending Data (Credit Cards): Transactional data across sectors enables macro-level analysis of economic vitality. AI models can segment spending by geography, category and time, helping forecast retail and residential demand.
- Loan Defaults: Default rates offer a cautionary signal of financial stress and credit risk in specific areas. When layered with other behavioural data, they help identify overleveraged markets or vulnerable demographics.

Strategic Implications for Real Estate Stakeholders

Hyperlocal Demand Forecasting: Behavioural data could enable granular forecasting at the block or street level, enhancing precision in site selection and pricing strategy.
Lifestyle Mapping: By integrating social media, foot traffic and spending data, investors can build psychographic profiles of neighbourhoods that can inform branding, tenant mix and amenity planning.
Risk Calibration: Loan default data and spending volatility help calibrate financial exposure and may inform underwriting decisions for real estate-backed assets.
Dynamic Portfolio Optimization: Behavioral signals can support more portfolio rebalancing based on shifting consumer preferences and mobility patterns.

Behavioural data, when harnessed through AI, offers a living map of urban life – capturing not just where people go, but how they spend, interact and feel. For real estate professionals, this represents a paradigm shift from static analysis to dynamic intelligence. As the sector evolves, those who embrace behavioural data will likely be better positioned to anticipate change, mitigate risk and unlock hidden value.

Web Data

AI-driven analysis of web data is reshaping our understanding of real estate dynamics, offering real estate forecasters a sharper lens into sentiment, demand and emerging trends.

Source: DWS, Copilot, March 2026

Sentiment Insights

AI models now parse millions of social media posts, forum discussions and news articles to gauge public sentiment toward specific neighborhoods, developments or housing policies. This sentiment layer adds a behavioral dimension to location analysis, helping to reveal not just where people live, but how they feel about it.

Historic Web/App Activity

Longitudinal data from property search platforms, navigation apps and local service reviews can reveal evolving patterns of interest and accessibility. These digital breadcrumbs help analysts understand how user engagement with a location has changed over time, often correlating with infrastructure upgrades or demographic shifts.

Online Content

The sheer volume of real estate-related content, ranging from virtual tours to influencer commentary, provides a rich dataset for machine learning models. This content explosion enables granular analysis of consumer preferences, architectural trends and even pricing psychology.

Strategic Implications for Investors

Early Signal Detection: Web data can enable the identification of trend inflection points before they manifest in hard data. This is particularly valuable for opportunistic investments and urban regeneration projects.
Behavioural Layering: By integrating sentiment and virality metrics, investors can better assess the "soft value" of a location – its cultural cachet, lifestyle appeal and brand perception.
Dynamic Forecasting: AI models trained on historic web activity can simulate future demand scenarios, helping developers and municipalities align supply with evolving preferences.

Implementation

Natural Language Processing (NLP) enables machines to understand, interpret and generate human language. It is central to processing unstructured data in capital markets, including research reports, regulatory filings, earnings calls and social media. Visual and tabular interpretation converts raw data into charts, dashboards and structured reports.
Model Context Protocols (MCP) is a framework for building scalable and secure AI agents. It enables:

- Structured planning: Agents break tasks into subtasks and iterate until diminishing returns.
- Tool integration: Supports external APIs, databases and analytical tools.
- Context management: Maintains memory across sessions for continuity.

NLP and MCP can be combined to turn large-scale alternative web data scraping into a structured, AI-ready intelligence pipeline for real estate. Web scraping first collects unstructured text from sources such as news, social media, reviews and corporate websites; NLP then processes this raw content to extract sentiment, topics, entities, events and trends at asset, tenant or location level. MCP acts as the interface layer that governs how these NLP-derived signals are exposed to AI models, helping to ensure that only relevant, time-stamped and well-defined context is accessed during analysis. Together, this setup can allow AI systems to reason over continuously updated web-based signals – such as shifts in location sentiment, emerging demand narratives or early stress indicators – while maintaining transparency, scalability and control. In practice, NLP creates the signals from web data, and MCP can help make those signals usable, auditable and safely integrated into forecasting, underwriting and decision-making workflows for alternative real estate data.

Geospatial Data

Geospatial analytics – the fusion of location-based data, satellite imagery and AI-powered video intelligence – is increasingly seen as a transformative force in real estate strategy. Geospatial data could reshape forecasting accuracy, risk modeling and investment decision-making across sectors and geographies.

Real estate has always been about location. But today, location is no longer a static coordinate; it is a dynamic, data-rich context. Geospatial analytics integrates GIS systems, satellite imagery, dashcam footage and mobility data to reveal patterns in urban development, infrastructure evolution and behavioural flows. Platforms like ArcGIS and DataCalculus now offer access to over 15,000 variables – from demographics and consumer behaviour to environmental risk and traffic density – supporting greater hyperlocal forecasting precision.

Satellite and Dashcam Data: The New Real-Time Indicators

Satellite imagery has become a cornerstone of macro-level forecasting. It enables:

- Freight tracking for logistics hubs
- Land use change detection for urban expansion

Meanwhile, dashcam analytics from taxis, Uber fleets and municipal vehicles offer granular, street-level intelligence. AI-powered platforms like Safety Track and Sieve transform raw footage into structured insights:

Privacy-preserving workflows such as IOTA ensure secure data handling, enabling scalable deployment across jurisdictions.

Computer Vision (CV): Computer vision allows systems to process and extract information from images or visual data.

Forecasting with Geospatial Precision

Geospatial integration is a logical next frontier rather than an immediate deliverable: the European forecast model already pairs macro drivers with real-estate fundamentals, and could be strengthened over time by adding geospatial layers

- Parcel-level boundary data for site selection
- Mobility patterns for retail footfall forecasting

Recent internal work on shapefiles and heatmaps for London MSOAs demonstrates how interactive dashboards can visualize price changes and population dynamics at micro-geographies.

Geospatial analytics is increasingly redefining how we ask questions in real estate. It shifts the focus from "What's nearby?" to "What's changing?" and "What's coming next?" For investors, developers, and strategists, this can mean earlier signals, smarter decisions, and potentially a competitive edge in a market where timing and precision are paramount.

Sector Analysis

Alternative data are most powerful when they are aligned with the specific demand drivers, operating dynamics and risk factors of each real estate sector. In office markets, signals such as job postings, lease searches, corporate sentiment and construction activity can provide an earlier indication of tenant expansion, contraction and future leasing momentum. In retail, footfall patterns, mobility data, card transactions and location-based digital activity help reveal catchment strength, consumer behaviour and the sales potential of individual assets and micro-locations. In logistics, freight indices, trade flows, port traffic and other supply-chain indicators can improve visibility on goods movement, demand nodes and operational bottlenecks before these trends become fully visible in conventional market data.

In living sectors, rental listings, asking prices, demographic indicators and online search activity offer a more granular view of affordability, migration, household formation and local pricing pressure. In hospitality, booking trends, guest reviews, tourism statistics and air-traffic data can provide an earlier read on travel demand, occupancy prospects and the resilience of hotel cash flows. Rather than replacing traditional real estate fundamentals, these signals complement them by helping investors identify turning points earlier, segment markets more precisely and strengthen underwriting, asset selection, portfolio monitoring and risk management.

Sector	Key alternative signals	What it signals	Main investment use
Office	Job postings, lease searches, corporate sentiment, office construction indicators	Tenant expansion or contraction, future leasing momentum and incoming supply	Leasing risk assessment, rental growth assumptions, submarket selection and supply-demand monitoring
Retail	Footfall, mobility data, card transactions, Google Places activity, reviews	Catchment strength, consumer behaviour, location relevance and tenant sales potential	Tenant mix decisions, asset underwriting, catchment analysis and ongoing asset monitoring
Logistics	Freight indices, trade flows, port traffic, air freight trends, supply-chain proxies	Demand nodes, goods movement, trade intensity and operational bottlenecks	Warehouse location selection, demand forecasting and logistics corridor assessment
Living / Residential	Rental listings, asking prices, demographic data, online search activity, valuation data	Affordability trends, migration, household formation and local pricing pressure	Market selection, rent forecasting, affordability analysis and residential demand monitoring
Hotels / Hospitality	Booking density, pricing trends, guest reviews, tourism statistics, air-traffic trends	Travel demand, local market momentum, occupancy prospects and revenue resilience	Hotel underwriting, demand forecasting and monitoring of recovery or slowdown trends

Conclusion

The increasing use of alternative data and AI marks a structural shift in how real estate markets can be analysed and forecast. AI can dramatically expand the ability to process granular, high-frequency and non-traditional data, helping uncover patterns and early signals that are increasingly critical in slower, more heterogeneous and less transparent markets. At the same time, forecasting remains inherently judgment-based: contextual understanding, local knowledge and experience are essential to interpret signals, assess structural breaks and avoid false precision.

The greatest value therefore lies in a balanced, human-in-the-loop approach. Used as a decision-enhancing tool rather than a substitute for expertise, AI-driven alternative data has the potential to materially strengthen underwriting, asset selection, portfolio monitoring and risk management. For long-term investors, combining advanced analytics with disciplined judgement can provide a more resilient, forward-looking investment framework – supporting better-informed decisions across increasingly complex real estate markets.

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