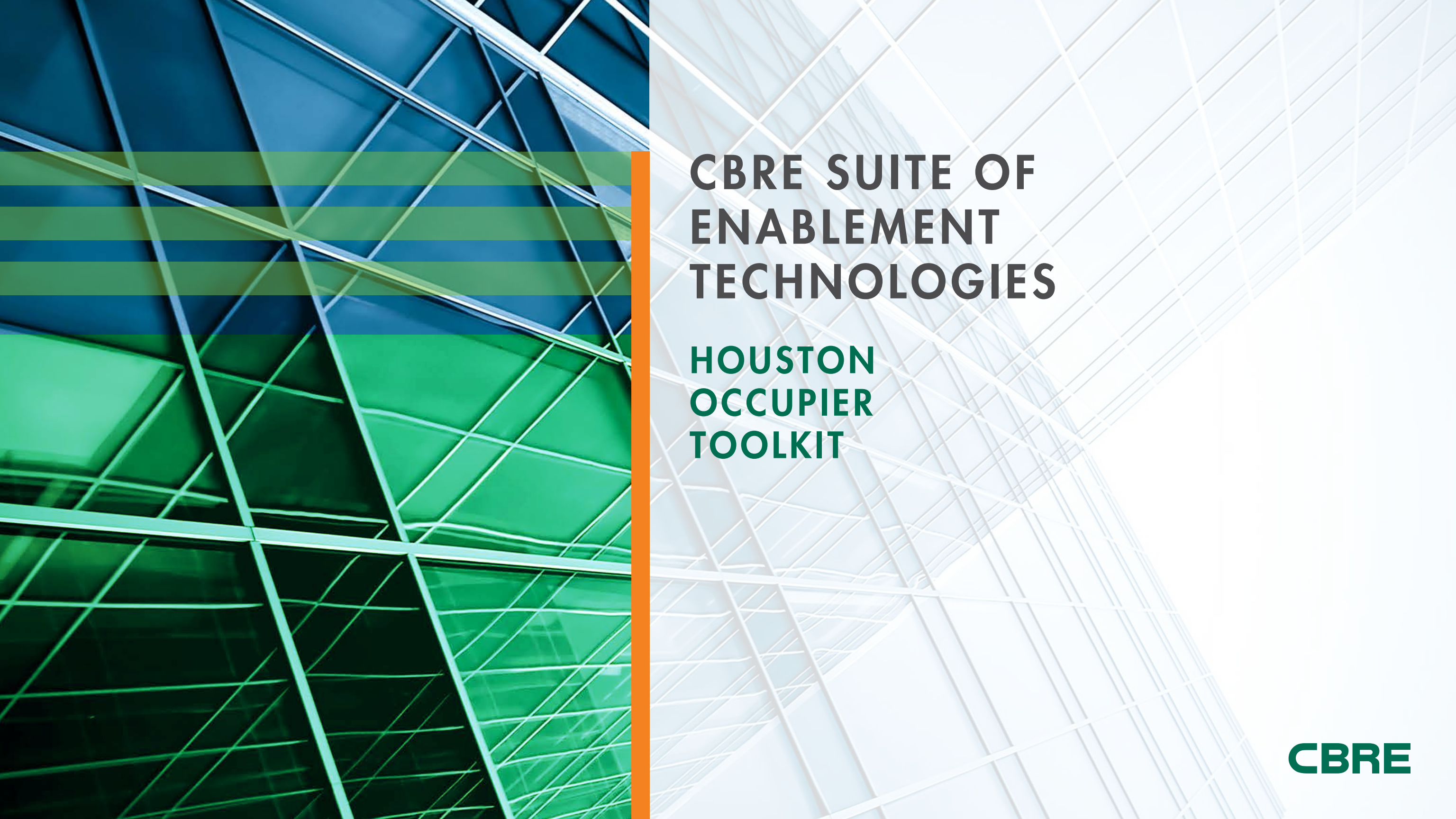




CBRE SUITE OF ENABLEMENT TECHNOLOGIES

HOUSTON OCCUPIER TOOLKIT

CBRE

CBRE VANTAGE ANALYTICS

Customized Client Dashboards

MYVANTAGE

**CBRE
ECONOMETRIC
ADVISORS**

SPACER

GEOSKILL

**COMMUTE
OPTIMIZER**

Needs specific project
number & PVV each time

DIMENSION

FLOORED

**TEAM WEB
SITE**



WE LEVERAGE DATA, TECHNOLOGY AND ANALYTICS TO SUPPORT EVERYTHING WE DO.

Technology and analytics are a strategic priority for our clients and foundational to CBRE’s solutions – they impact governance, performance management, reliability, transparency and stakeholder engagement. Most important they drive value and determine what key business decisions we make through the entire real estate lifecycle.

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 COMMUTE OPTIMIZER BY DIMENSION	 COST LAB	 DIMENSION
 GEOSKILL	 FLOORED PLANS	 GLOBAL LABORVIEW
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TRANSACTION P.7		
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■ PLAN

COMMUTE OPTIMIZER BY DIMENSION

Why Do Clients Need It?

Commute Optimizer is an online interactive scenario planning tool that is used to compare different locations by drive distance, drive time and cost. With this web-based tool, the user can see real options on interactive maps in any US market. Import employee addresses and easily segment by employee type or location; C-suite, Administrative, Sales teams or City name. Replace non-intuitive paper maps with this dynamic and robust application.

What Does the Tool Do?

Commute Optimizer shows in real time how a location will affect employee commute time, distance and cost. On screen recalculations for any location with immediate results provides powerful on-demand intelligence for site selection.

COST LAB

Why Do Clients Need It?

Clients need a view into the performance of their facilities relative to a range of performance levels and operating scenarios. **CostLab** can help forecast the “should/expected” operating and maintenance costs for every asset type in over 400 locations.

What Does the Tool Do?

CostLab is an online cost analytics tool that uncovers savings, develops budgets and generates capital plans. Its specialized cost models range from simple corporate facilities to data centers and USAF launch sites. **CostLab** is the only tool available to estimate an entire facilities life-cycle costs with worldwide coverage. It provides thorough component inventories, maintenance and repair cost forecasts and facility operational estimates for nearly all commercial property types to maintain a healthy portfolio. It helps clients:

- Find opportunities to drive savings or accumulate deferred actions within a portfolio
- Determine the cost impacts of multiple operating scenarios, including M&A activity
- Receive quality and complete facilities data
- Budget capital spending to mitigate risk

DIMENSION Our Flagship Location Intelligence System

Why Do Clients Need It?

The right location is critical to a successful real estate strategy. CBRE developed **Dimension** to bring the location story to life. It helps our clients visualize the impact of potential real estate decisions by combining proprietary data, market knowledge, client requirements and multi-media content with highly-visual, leading-edge mapping technologies. **Dimension** provides our clients with the confidence to make faster, more educated location decisions.

What Does the Tool Do?

- Create maps with data sets that update as new data comes online
- Bring maps, images, and multimedia content to life in one compelling and shareable story
- Build highly visual, virtual site and property tours and 3D market overviews
- Provide enriched market views of demographics, retail spending, segmentation, employment data and competitive landscapes
- Perform spatial analysis and create hot spots and patterns
- Create geocode addresses and determine drive time, along with routes and directions
- Show changes over time in many data sets to help explore and define patterns



GEOSKILL The Internal Labor Market Reports Tool

Why Do Clients Need It?

GeoSkill is a digital solution giving you instant access to CBRE's Labor Analytics' market overviews so you can win, keep and grow your relationships and expand your servicing capabilities. **GeoSkill** helps you start the talent conversation using CBRE's Labor Analytics expert perspective.

What Does the Tool Do?

GeoSkill™ delivers customized one-page market summaries, enhancing your client service capabilities in an instant. With just a few clicks, you can deliver powerful labor market intelligence on-demand. It's designed to use with minimal training and works with both your laptop and mobile devices. Best of all, you now have immediate access – at no cost to you.

FLOORED PLANS Interactive leasing tool for creating 2D & 3D floorplans.

Why Do Clients Need It?

Creating tenant test-fits can be time and labor intensive, and can result in rounds of revisions, incremental costs and ultimately, frustration. CBRE **Floored Plans** puts the control in your hands and delivers client the ability to showcase limitless possibilities quickly and without additional costs.

GLOBAL LABORVIEW The Global Location Decision Tool

Why Do Clients Need It?

Navigating complex, labor-driven real estate decisions across portfolios and asset classes requires accurate and ontime information in the hands of real estate professionals. **Global LaborView**, a proprietary, web-based application delivers leading demographic and economic indicators, coupled with accurate labor market and business intelligence for locations worldwide.

What Does the Tool Do?

Built on a highly visual and intuitive user interface, **Global LaborView** synthesizes labor and market intelligence in realtime. It delivers a data-led starting point for making informed portfolio strategy, workforce optimization and location planning decisions for our clients. It enables clients to address one of the biggest enterprise challenges facing their organizations moving forward: how to successfully navigate and implement solutions at the intersection where the corporate need for human capital meets real estate. It benefits clients by:

- Providing instant access to quickly assess macro site-selection factors throughout the Americas, Europe, Middle East, Africa and Asia Pacific
- Supporting customized market scoring using client and skill requirements, of critical and proprietary data points for side-by-side comparisons and immediate decision support
- Delivering executive level and detailed reporting and analysis
- Analyzing market scalability for expansion and/or growth
- Monitoring competitive market activity by city
- Offering in-depth data to support real



PLANS PRO CBRE's Enterprise Test Fitting and 3D Visualization Tool

Why Do Clients Need It?

Historically, the test-fitting process—evaluating, planning, rendering, and validating an occupier's use of space—has been costly, cumbersome and slow. Changes to a test-fit can result in rounds of revisions, incremental costs and ultimately, frustration.

What Does the Tool Do?

Plans Pro is a browser-based enterprise test fitting and 3D visualization tool that helps teams make better, faster decisions around new and existing space using custom design standards. The tool enables you to easily view, edit, visualize, manage, and download test fits in real-time, in their browser. **Plans Pro** offers ultimate editing flexibility and customizability, allowing you to upload your specific design standards in both 2D and 3D, including furniture assets, room naming and smart room filling logic, and 3D finishes.

Benefits include:

- Faster test fit turnaround with support from a dedicated production team and an intuitive test fit editor
- Ability to customize all 2D and 3D furniture assets, room filling algorithms, and naming conventions so that test fits satisfy any company's unique needs and reflect their custom design standards.
- Improved client buy-in with the use of 2D test fits and instant, 3D walk-throughs that effectively communicate the look and feel of a space across audiences
- Quick assumption testing that allows ideas to be tested in new and existing spaces and can be shared easily with stakeholders
- Easy access across teams – both CBRE professionals and/or internal client employees can use the tool and access test fits in one place. Plans Pro is available in English in every market.

PORTFOLIO OPTIMIZER

Why Do Clients Need It?

With more pressure on businesses to drive exceptional performance, identifying cost savings and operational efficiencies within real estate portfolios is critical to bottom-line success.

What Does the Tool Do?

Portfolio Optimizer is a proprietary web-based tool that enables our professionals to combine client portfolio data with market intelligence to uncover efficiencies and cost saving opportunities for our clients by:

- Analyzing their portfolios with customizable dashboards and mapping views
- Comparing properties and leases against local, national and global real estate benchmarks
- Highlighting and prioritizing portfolio savings opportunities
- Understanding potential implementation costs and complexity of savings options
- Leveraging proprietary market rent forecasts and research data to support recommendations and analysis



SPACER Define Your Future Workplace with CBRE's Custom Space Program Technology.

Why Do Clients Need It?

The right office space can help you hire competitive talent, keep your employees healthy, reduce operating costs, or create the perfect conditions for the next big idea. Each goal has a direct impact on how much space you choose to occupy, but the task of creating a highly customized workplace that meets your goals can be daunting. That's where **Spacer** comes in.

Spacer helps define your next workplace, using a process perfected by CBRE's workplace strategy team.

What Does the Tool Do?

Spacer is a free, web-based technology that allows real estate decision makers to generate custom workspace utilization programs.

Through a simple survey, the technology is designed to understand your company's unique goals and priorities, and instantly match with an office profile summarizing your company characteristics.

Spacer identifies the spaces needed for the jobs people will be doing, the events and rituals that make your office special, and the diverse needs and preferences of your people. The end result is an architect-ready space program that includes sizing, seat ratios, modularity, circulation and more.

TRANSACTION

FLOORED BUILD Interactive 3D Environmental Creation Tool

Why Do Clients Need It?

Visualizing a built-out space, even with the help of plans and renderings, can be a challenge. Clients want to understand what it will look like, how it will 'feel' and how it will serve their business.

Floored Build provides the ability to highlight a property's key areas, features and views that make it unique and desirable.

What Does the Tool Do?

Floored Build is a web-based immersive 3D interactive technology that redefines the experience of leasing space allowing environments to be explored from every angle, visualizing spaces that do not yet exist or are being repositioned for specific needs. To create a **Floored Build** presentation, teams work closely with an internal developer and architect to build a virtual 3D model that turns sketches, photos, floor plans and CAD plans into bespoke 3D experiences. **Floored Build** helps clients imagine possibilities, experiment with space and turn ideas into reality with the following features:

- Bespoke, mobile-optimized 3D experiences that recreate existing spaces, visualize remodeled spaces or demonstrate planned sites that have not yet broken ground
- Virtual fully interactive 3D tour environments that explore both the space and exterior environments from any remote location
- Send 3D experiences via web links and embed them into sites and presentations
- Create additional content and collateral, including screenshots, 2D renderings and promotional video



TRANSACTION

Transaction Management Workflow Solution

Why Do Clients Need It?

As real estate transactions become more complex, effectively managing engagements across multiple markets is critical to bottom-line success. Precise management of resources, timelines and data are critical for delivering superior outcomes and performance.

What Does the Tool Do?

TransAct, our proprietary customized transaction management solution enables our clients to stay fully informed on all activities through a centralized, web-based dashboard and real-time, customizable reporting. Its comprehensive project management and tracking helps power operational efficiencies, better team collaboration and streamlined workflows across the entire transaction management process by:

- Centralizing transaction management tasks in one easy-to-use tool
- Gaining visibility into critical dates and other key portfolio information
- Running customizable reports specific to individual user needs
- Enabling better decision-making through advanced mapping and market analytics
- Comparing benchmarks and KPIs to ensure optimal performance

BUILD

KAHUA Cloud-Based, Collaborative Project Management Solution

Why Do Clients Need It?

To improve collaboration between project managers, client team members, vendors, and partners.

What Does the Tool Do?

Kahua is a proprietary customizable, web-based solution that enhances the quality of project deliverables and improves efficiencies in managing and tracking every aspect of a project. Its multi-layered security strategy ensures project data is safely shared. Key features allow clients to control budget, schedule and scope by:

- Utilizing paperless document management via a secure online environment to provide instant access to project team members in standard file formats
- Improving team accountability by assigning scheduled events to individual project team members with auto-generated email notifications
- Controlling cost management to ensure budgeting, bidding, contracting and payment processes follow a defined schedule of values
- Maintaining progress by taking Kahua with you – it's mobile platform easily extends multiple business processes utilizing portable device technologies
- Leveraging a variety of out-of-the-box, existing or custom reports that integrate with current dashboards





MANAGE

MAXIMO & SERVICEINSIGHT Industry-Leading Computerized Maintenance System (CMMS)

Why Do Clients Need It?

Optimizing the efficiency of facility operations is essential to success. Both proprietary CMMS platforms, **Maximo & ServiceInsight** provide easy methods to initiate, schedule and dispatch work to on-site operations or third parties. Both tools offer global capabilities, multi-language and currency, flexible setups and user-friendly interfaces, along with mobile apps.

What Does the Tool Do?

This workforce enabling technology allows facility teams to provide a safe, enjoyable and productive environment for clients, vendors, and visitors. The data in either systems will be the client's data. CBRE owns **ServiceInsight** and we license FMP from IBM. Key features include:

- Service requests via client portal, mobile app or call center
- Optimized global job plan library
- On-demand and planned maintenance schedules and management
- Technician work order management
- Vendor dispatch and management
- Mobile applications for work order requests and technician productivity
- Customer notification of work status
- Customer satisfaction feedback mechanism



MYVANTAGE A Powerful Interface for Vantage Analytics

Why Do Clients Need It?

Corporate real estate leaders are eager to leverage their portfolio data for better decision-making, but many are hindered by common data issues such as gathering data across disparate sources, ensuring accuracy and completeness and interpreting data for meaningful insights.

CBRE's Vantage Analytics services include designing, implementing and supporting tailored analytical solutions for large occupiers of commercial real estate. We automate data integration from CBRE, client and third-party sources in a scalable data warehouse supported by strong data governance. Data is then translated into impactful analytics and visual dashboards used by clients to make business-critical decisions.

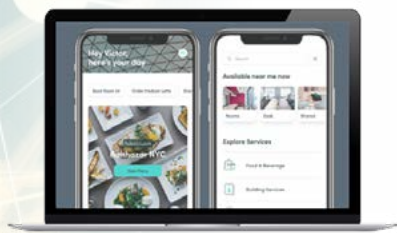
myVantage is CBRE's proprietary interface that provides convenient, customized access to the wide range of visual dashboards produced by Vantage Analytics. Designed for large occupier clients and CBRE account teams, myVantage serves as a powerful extension of our Vantage Analytics offering and enables transformational decision-making across cost, quality, speed, risk and experience.

What Does the Tool Do?

myVantage provides access to Vantage Analytics and beyond. With myVantage, users can leverage integrated portfolio data to drive deeper insights and uncover opportunities.

Key features of the tool include:

- Customizable homepage view that provides quick access to frequently used Vantage Analytics dashboards.
- Attractive, easy-to-navigate user interface to simplify accessibility for clients and account teams.
- Connectivity to data and analyses in one, centralized location with single-sign-on (SSO) capabilities, as well as the ability to add custom tiles using any URL (note, users may have to log in if the URL application is not part of SSO).
- Direct integration with Tableau.
- Additional modules:
 - File ingestion allows users to upload data that will automatically flow into Vantage Analytics dashboards. The Business Analytics team will coordinate with your account if this is needed for your solution.
 - Database access provides a secure environment for account teams to look up the credentials to connect Tableau or other applications directly to the Enterprise Data Platform (EDP). Note, only those developing dashboards will need this capability.



SEQUENTRA Global Property Administration & Management System

Why Do Clients Need It?

Sequentra is a central repository for portfolio-related information that allows an occupier to manage their primary property, lease and sublease data. It eliminates the risk and cost of missing critical portfolio events.

What Does the Tool Do?

Sequentra is an industry-leading application that provides better, safer and faster information for occupiers needing to manage their primary property, lease and sublease data. Adaptable to support users across all asset classes and agile to manage lease data by property and providing users with the flexible reporting needed in today's world. It benefits clients by:

- Fully servicing the core deliverables for lease administration
- Supporting clients in the readiness of the new lease accounting standards
- Assisting clients in the compliance and governance of managing and reporting lease events, and in providing transparency to the underlying data
- Capturing data at both the property and lease level, providing more significant insight than other market tools, which only work at the lease level

SERRAVIEW "Workplace of the Future" Tool

Why Do Clients Need It?

Future portfolio planning requires a strong occupancy planning solution.

What Does the Tool Do?

Serraview is an industry leading application that provides space planning and management functionality, centralizing all workplace data in one place and enabling real estate professionals to more effectively advise on space inventory utilization. It benefits the client through:

- Accurate, detailed and verified data that provides clients with the confidence needed to back up multi million-dollar long-term leasing decisions
- A software suite designed to help you communicate and engage with the business from the Workplace Portal, Visual Block & Stack, Kiosks and Scenario Planning tools
- Improvements to portfolio data, employee satisfaction and productivity of a property team

HOST

Why Do Clients Need It?

In the past, concierge services for CBRE clients and offices were typically provided by outside firms. Host now allows us to self-perform these services, leveraging a proprietary training and performance ecosystem, called the **Host Method**, to drive elevated experiences. Hosts are responsible for creating a supportive and comfortable atmosphere; welcoming visitors; and supporting all employee-facing services (reception, IT support, meetings and events).

Host's scalable product suite creates an employee-centric workplace experience through:

- Host talent – Service-experience focused, certified professionals dedicated to elevating the workplace experience.
- Host training – Advanced training and certification program to drive elevated, consistent workplace experience services.
- Host technology – An employee-facing mobile app with a customized operating platform that connects individuals to their workplace.

What Does the Tool Do?

Host technology is an experience platform that connects the employee or a tenant to the physical building environment, amenities and communities that matter the most. The platform engages the user in a meaningful way to help navigate the workplace, request help, reserve workspaces, use food and beverage services, and access building and concierge services.

The **Host** employee-facing mobile app and experience services platform provides the following benefits to our clients and their employees:

- Optimizes utilization of space, access to amenities, and delivery of building systems
- Improves culture, community and connectivity
- Enhances the employee experience and sense of accomplishment through a personalized, anticipatory response to day-to-day needs
- Delivers valuable data to drive experience-aligned decisions

