2023 EDITION

20for20

Special Excerpt:
The State of BI in 2023

Includes Sponsor Viewpoint by

REBA Real Estate Business Analytics

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DATA AND ANALYTICS

Data and analytics had another busy year in 2022 and the steady growth of this important area has been a feature of the last five years of 20 for 20. The current industry controversy surrounding revenue management (RM) means it was excluded from this year's discussions. However, one consistent finding from the previous years of 20 for 20 is that RM has been almost entirely absent from executive priorities.

The conversations about data and analytics mostly centered on business intelligence (BI), and Figure 13 indicates the activity level this year. When asked, *"Did your company conduct a BI initiative in 2022,"* 19 out of 20 said they had. Of those, four practitioners—who have been using their own internally built platform for multiple years—reported initiatives that were in line with *"business as usual."* Fifteen out of the 20 respondents said that they had conducted a new project indicating that this is a large and growing part of the technology footprint.

Figure 14 drills deeper into those 15 projects, breaking down the initiatives and showing an even split between three types:

- **Implementing a BI application,** which is typically a third-party, "off-the-shelf" solution.
- **Developing an existing platform,** which means the functional extension of a bespoke client platform that already exists.

Figure 13: "Did Your Company Conduct a BI Initiative in 2022?

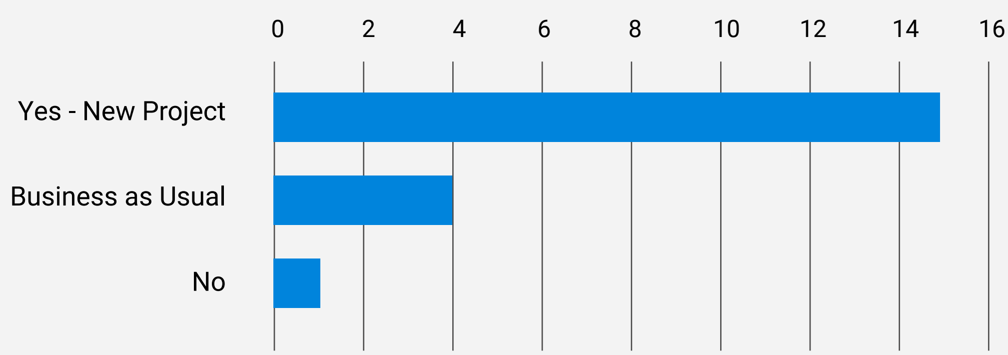
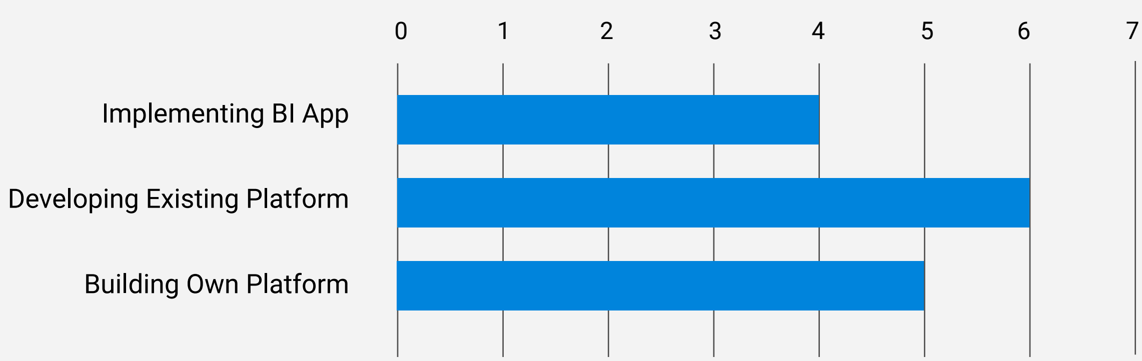


Figure 14: Breakdown of 2022 BI Initiatives



- **Building our own platform,** which means starting a new design-build project to create a bespoke BI resource.

Those implementing a third-party application mostly did so to aggregate data; in particular, combining data from different property management systems. Operators running properties on separate instances of the same PMS, or, in some cases, many instances of multiple different PMSs, implemented BI to get a single view of their portfolios. Phasing out spreadsheets and saving the time and inaccuracy of using multiple systems were the other main drivers.

The companies embarking on projects to build platforms had similar aspirations to those rolling out software. In addition to aggregating data, some wished to acquire more data externally and felt constrained by PMS vendor platforms. Others wanted to migrate to a more cohesive platform that worked how they wanted. There was also evidence of more cultural objectives, for example, making decision-making more exception-based or making it as easy as possible to correlate information and create visualizations of anything that matters to business performance.

Perhaps unsurprisingly, the broadest range of objectives for BI projects came from those who had done major development on existing platforms. A few had hired senior data resources and planned to build more ambitious roadmaps. Centralization was a driver, as tools created to manage a business from more central locations become corporate data assets, for which there must be uses beyond simply enabling a centralized process.

The newest objectives emerging from these interviews were those relating to AI. Multiple 2022 and 2023 projects concern the introduction of AI into analytical processes. Some operators had been exploring machine learning tools and plan to release them on data sets during 2023. Others, while not having specific plans to roll out AI, had identified its scalability requirements, creating a need for a different architecture.

Leveraging AI may require considerable additional processing capacity, but only for short periods. Some peaks in processing—concurrent analyses at budget time, for example—would be infeasible in traditional private database infrastructures. Hence, several technology leaders have felt the need to move their entire infrastructure to the cloud, where there are no limits on processing capacity.

A Growing Appetite for Insight

The level of activity in multifamily BI has been growing steadily in each of the five years of this survey. This year's interviews attempted to learn more about the causality of that growth. We know that a level of reporting is necessary for any business, and we know that the need to aggregate data from systems is a frequent driver of projects (see above). But these factors do not explain the continued growth in the sector.

To get a handle on *why* companies are devoting considerable and growing time and resources to these projects, we asked the question differently compared to previous years. We asked leaders to provide examples of specific insights that they were or would be able to find out from their BI initiatives that would otherwise have been unavailable to them. The question yielded an impressive variety and number of examples, which are categorized below.

Business Control, i.e., any metric or insight that increases a company's control over a cost or revenue driver:

- *We've been pulling data from multiple sources* *to help us analyze revenue management system settings. We've got a better handle on things like leasing velocity, so we can learn things like 'we were a month late in changing that setting.' That's far more effective than over-riding price recommendations."*

- *"We started tracking rent-income ratios portfolio-wide to ensure managers were using our guidance and to understand our overall risk exposure."*
- *"We created a "digital workboard" as part of our maintenance transformation, and we want to turn this and other centralization-related tools into corporate data resources."*
- *"To centralize admin, you have to understand, for example, exactly what's entailed in processing a move-out from bow to stern: how long it takes, how many steps are involved, etc. You also have to understand the impact on customer sentiment, which meant we had to set up metrics that enabled us to track everything."*
- *"We depended on our revenue management system for renewal stats, but they were tainted with skips and evicts. We wanted to define the metrics to our specification."*
- *"There's a compulsion to panic when a property's performance slips, and we've been developing tools that enable us to characterize aspects of performance against the market and quickly establish whether it's the team or the market that's the problem."*
- *"We wanted to define a marketing funnel that reflects our business and allows us to know with confidence how much demand we need to buy, which used to require multiple spreadsheets."*

Customer Insight, i.e., anything designed to understand customer sentiment or improve a company's ability to improve customer experience:

- *"We're trying to determine if cellular connectivity scores impact retention rates."*
- *"We've been identifying target customer groups and trying to understand sentiment and how we could change strategies, change the questions we ask on tours, etc., and update our sales training."*
- *"We're trying to understand self-guided tours. We can see how many tours were done, but we want to understand their impact on leasing outcomes, whether or not there were multiple tours, etc."*
- *"We want to see how service request completion within 24 hours correlates with asset performance."*
- *"We want to understand customer journey orchestration: how our customers travel through our organization and what we can do proactively. Why is a customer choosing to do this thing at some point in this journey, and how can we use that insight to improve?"*

> ***"We've been pulling data from multiple sources to help us analyze revenue management system settings...That's far more effective than over-riding price recommendations."***

HR, i.e., anything that improves a company's ability to organize and develop its associates:

- *"We know that great community managers* *impact performance, but we want to know more about how. For example, when one leaves, how does it affect KPIs, and how long does it take to recover?"*

- *"We're getting more systematic about training opportunities—when we budget, we look at trends and how we align skill requirements to training."*
- *We wanted to make bonus potential transparent to associates, but it was hard to do: we pay quarterly bonuses to a formula based on various metrics (performance, reputation, customer satisfaction, etc.). We've used our BI platform to pull that information together and surface it in a way that is accessible to our teams."*

New Insight, i.e., a catch-all for any things that companies are trying to find out from BI that they would not otherwise know:

- "*When looking at a new deal in a market, our acquisitions and development team has historically used a gut check or an external data report. Now we can cook up a set of metrics that aggregate what we know about performance in a given market."*
- *"With multi-phase developments, we can now use the unit mix from the first phase and find out how it performed. Because the phases span multiple years, this is incredibly rich insight, especially true on the high-end developments, (e.g., if we identify that some people might pay for a second bedroom as an office.)"*
- *"We wanted to know which industries our residents worked in so we could be proactive in telling investors what our exposure was to, e.g., layoffs."*
- *"We're looking for '10% more NOI' opportunities, which means we're scrutinizing how aspects of our operating model contribute to NOI and whether or not a source of NOI for one property is likely to transfer to another."*
- *"We'd like to leverage advanced analytics to build a new renewal model."*
- *"We've been establishing digital twin properties—e.g., if an existing property is three years older than this new one, can we use it to predict what's going to happen at the younger property? We're a long-term hold so those trends can be powerful."*

"We've been identifying target customer groups and trying to understand sentiment and how we could change strategies, change the questions we ask on tours, etc., and update our sales training."

Real Estate Business Analytics

WHY 2023 WILL BE ABOUT INSIGHT

REBA

It feels uncontroversial to say that 2023 will differ greatly from the recent past in multifamily. The prevailing economics are already slowing the pace of deals, creating an environment where operating performance—particularly cash flow—takes center stage.

The challenge will be to optimize existing operations to find new sources of NOI, whether on the revenue or cost side of the ledger. Accomplishing this entails searching for opportunities that operators are not currently exploiting in their businesses. Performance upside comes not from adding rocks to the pile but from looking under the ones already there.

Refocus on Insight

Multifamily is competitive, and every property has unique demand and financial drivers. Improvement can come from many sources, most of which are to do with insight into the individual property and the local market it serves. There are many unique financial drivers that we could exploit. For example, work order completion and customer satisfaction tend to correlate with renewals, but how?

Marketing strategies and tactics vary as properties suffer shortfalls in leads or conversions and occasionally both. Diagnosing and predicting problems, which may be specific to unit types or individual units, enables us to focus on need periods and lower cost per lease.

Revenue management and concession strategies have more to contribute than ever when markets become challenging. Smart operators can improve financial performance by proactively managing exposure and gaining greater leverage from amenities.

These are just a few examples of performance improvements we expect owners and operators to try to exploit this year. Exploiting them requires reliable cross-platform insight. The challenge, as always, is seeing the forest for the trees.

Technology as an Opportunity (Not an Obstacle)

As operators sharpen their focus on fresh insights, the underlying technology landscape is changing. Companies are increasingly implementing best-of-breed technologies, each with its own data structure. Third-party management portfolios typically accommodate multiple different property management systems.

With complex system and integration environments, operators must take control of their data. The technology choices for a given property or portfolio should not limit the availability of insights.

This need for insight to transcend technology will accelerate as operators implement new technologies that produce new types of data. IoT devices like smart locks and the burgeoning range of sensors are one example; emerging AI apps are another. Both create vast data sets that will present both processing challenges and opportunities for greater insight.

While exploiting these data sets may not be today's problem, operators must consider scalability in their plans for managing and exploiting data. The more open and more scalable data infrastructures can be, the fewer limits operators will find on their ability to exploit analytics.

A Culture of Open-Mindedness

Improvement opportunities lie in asking the right questions and enabling a culture of evidence-based decision-making. It is the job of technology to remove obstacles from the knowledge available to your organization rather than create them.

Management's job is to focus and align organizations around the KPIs that matter to individual properties and portfolios. Identifying, understanding and exploiting these insights should be at the heart of analytics in 2023—and beyond.

ABOUT THE AUTHOR

Dom Beveridge is founder and principal at 20 for 20. He has more than 20 years' experience in leadership and consulting roles in technology and analytics sales and marketing. He has ten years of multifamily experience, most recently as a principal with D2 Demand Solutions and previously in various roles with the Rainmaker Group (owners of the LRO revenue management platform), through the company's sale to RealPage, Inc. In his pre-multifamily days, Dom was a strategy consultant for Capgemini Ernst and Young after spending much of his early career designing and implementing revenue management systems and consulting projects with Talus Solutions (the creators of LRO), Manugistics, Inc. and JDA Software, Inc.

ABOUT REAL ESTATE BUSINESS ANALYTICS

Real Estate Business Analytics (REBA) is a data analytics company on a mission to change how the rental housing industry uses data. We help multifamily leaders ask insightful questions about their business by giving them access to all their data in one central location. We do this by offering a suite of solutions that deliver portfolio, property, and profit insights so you can unlock your aha moments and make better decisions, faster. With REBA, you can eliminate Excel hell, bad data, excess cost, and analysis paralysis with tools built by multifamily for multifamily.

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