## Boosting mall revenues through advanced analytics

When a mall operator uses advanced analytics to select tenants, optimize mall layout, and determine rents, its revenues can rise by 20 percent.

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With consumers shifting more of their spending from physical stores to e-commerce and increasingly looking for experiences rather than products, mall operators face serious headwinds. As we discussed in a recent article, <sup>1</sup> malls will survive in this new environment only if they reinvent their business—for example, by tapping into new technologies and modern analytical capabilities.

Advanced analytics, in particular, has the potential to revolutionize almost all areas of the mall business. Unfortunately, many mall operators lag behind their tenants when it comes to using advanced analytics. One oft-cited explanation is that malls haven't traditionally interacted directly with consumers, so they don't have much consumer data to analyze. But we've found that malls already have access to significant amounts of data, including data on shopper behavior, tenant sales, and category performance. What they don't typically have are the analytical skills and tools to generate insights from the data. Most mall operators still make decisions based on tradition, experience, or intuition—thereby leaving value on the table.

That said, a handful of forward-thinking malls are leading the way in advanced analytics. They're using prescriptive and predictive analytics—built into user-friendly tools with strong data-visualization capabilities—to make smarter business decisions. In this article, we home in on how malls are using advanced analytics in an especially critical part of their business: revenue management. They're determining the best mix of stores, understanding and planning store adjacencies that drive higher consumer spending and longer mall visits, and engaging in more-informed rent negotiations with tenants. It's paying off: malls using these tools have increased their leasing revenues by double-digit percentages.

## Assembling the optimal mix of stores

Most mall operators decide opportunistically which tenants to lease to and which units within the mall each store will occupy. Some malls have a basic tenant-category segmentation but lack a systematic and analytical approach to prioritizing, prospecting for, and acquiring tenants. They don't have a datadriven way of answering important questions, such as: What types of stores best attract consumers who live or work in the mall's catchment area? Are my anchor stores driving foot traffic and sales into my mall? Which tenants are unexpected "spend engines" (that is, tenants that are driving cross-conversion and thus creating value despite their own low sales performance)? Which combinations of stores or categories yield the highest collective mall sales?

A mall owner in Asia uses an advanced-analytics tool that crunches sales data and transaction-level data to reveal typical walking routes within the mall and patterns of cross-conversion between categories. The tool quantifies how each store affects overall consumer spending at the mall. In other words, it examines the performance of each store as a spend engine: it shows whether and how much a particular tenant's presence increases or decreases sales at other stores and whether consumers are likely to shop at certain groups of stores during a single mall visit. For example, the company learned that its apparel-heavy anchor store tends to weaken sales at nearby apparel stores while strengthening sales at nearby accessories and cosmetics stores. The tool can also quantify a store's "halo effect" on a tenant's wholesale and online sales.

Such insights are valuable for optimizing tenant selection and placement. By studying the tool's outputs, the company can identify stores that may need to be resized, relocated, repriced, removed, or given marketing support (Exhibit 1). For instance, a tenant with low productivity (that is, low sales per square foot compared with the rest of the mall) but high cross-conversion productivity could potentially be resized or relocated to a smaller unit.

## Matching tenants to locations

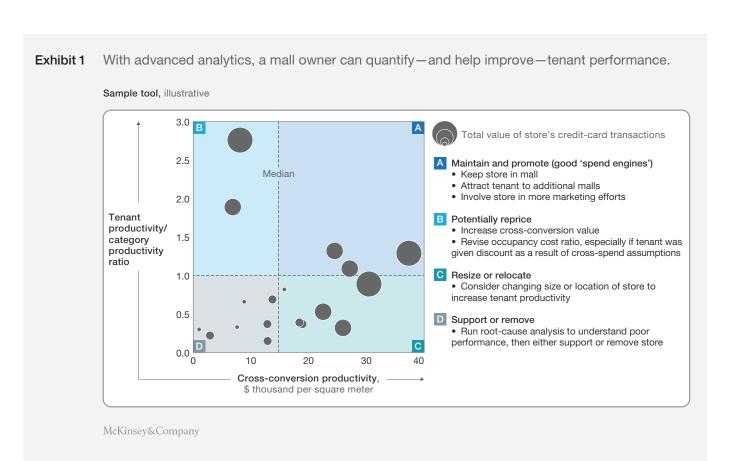
When a leasing team reviews leases set to expire in the next quarter or year, it should study the universe of potential tenants to fill the pipeline: current tenants that might be better off occupying a different unit within the mall, tenants that are in the company's other malls but not in this one, and any potential new tenants that have expressed interest in leasing a unit.

Mall owners sometimes remodel select "precincts," or sections of a mall devoted exclusively to certain product categories. These remodeling projects provide an opportunity to move tenants to different units within the mall. Assessing all the possible combinations and permutations is a complex exercise that requires the power of advanced analytics.

New tools—let's call them "right tenant, right location" (RTRL) tools—can estimate each tenant's omnichannel sales and the rent it should pay, in

every potential combination of tenants and units. (Note that in determining tenants' rent, a mall operator's primary goal shouldn't be to maximize its own leasing revenue but rather to maximize the combined sales of the mall's tenants. That may seem counterintuitive, since tenants' sales don't directly translate into bottom-line impact for the mall operator. But as each tenant's occupancy cost ratio<sup>2</sup> goes down, the mall's tenancies become healthier and more sustainable, helping the mall remain viable.)

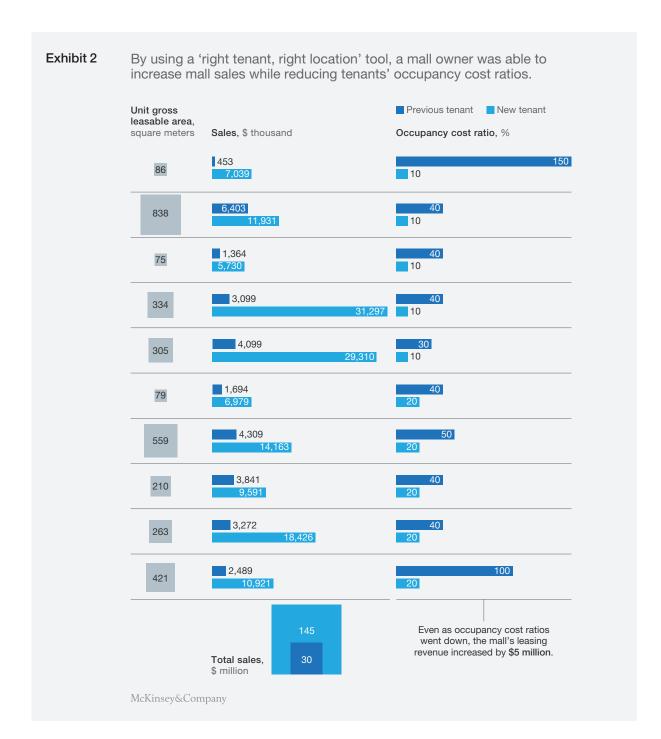
The aforementioned company used an RTRL tool to figure out which ten of its prospective tenants should replace the ten current tenants whose leases were expiring, and which specific units in the mall the new tenants should occupy. The tool showed that, with the new set of ten tenants, the mall could generate an additional \$115 million in sales



compared with the prior year, plus an additional \$5 million in leasing revenue (Exhibit 2).

Sales and productivity data make up the backbone of an RTRL tool; its predictions will be only as

good as the information it has on both current and prospective tenants. The mall owner should gather enough reliable data—ideally, not just on omnichannel sales but also on occupancy costs—to enable the tool to differentiate a tenant's potential



performance in unit A compared with unit B. If the mall owner has no data on a prospective tenant, it should carefully select benchmarks from its current portfolio of stores.

An RTRL tool must also be able to take business constraints into account. For instance, if a mall has precincts, the tool shouldn't assign a toy retailer to an available unit in the apparel precinct or the food court. In addition, the mall owner should specify a minimum or maximum category share—for example, high-end apparel at 10 percent of a mall's total square footage, low-priced electronics at 3 percent, and so on. Without sensible business constraints, the tool will inevitably recommend placing high-productivity categories (such as luxury accessories or consumer electronics) in unreasonably large stores.

## Setting a price range for every lease

One major challenge for mall owners around the world is determining rent for each tenant. A typical mall doesn't have clear processes or a shared understanding within the organization on how to set rental targets for each tenant; the asset-management and leasing teams, for example, often arrive at different targets. Publicly available industry benchmarks, by country or category, don't exist. Our own research suggests that a mall's leasing revenue expressed as a percentage of total tenant sales varies widely—from 5 percent for a mall in Brazil to 25 percent for one in Australia.

In theory, the rent for a unit in a mall depends on four variables: the type and location of the mall, the quantity and quality of foot traffic, the characteristics (including size and configuration) of the unit, and the sales productivity of the brand or category that will occupy the unit. In practice, however, it's a different story. We've found that leasing managers base a unit's rent on personal knowledge of the tenant ("I know him, he won't pay more than \$x"), past practices ("Let's increase the rent by 2 percent this year, like we've done every year"), or a combination of gut feeling and business acumen.

A clear view of the overall and unit-level economics of the tenants, combined with an advanced-analytics pricing tool, helps a mall owner in Asia to set better rental targets. The company conducts a thorough analysis of the economics of each of its tenants, studying not just sales per unit but also occupancy costs and profits. It then uses a pricing tool that breaks down the four variables previously listed into approximately 25 subvariables, such as the unit's proximity to a mall entrance and the brand's price positioning. Using multivariable regression, the tool sets a price range (or a "zone of possible agreement") for every current or prospective tenant. Calculating value creation at the unit level—and coming up with a unit's estimated rental value (ERV) for each tenant—thus becomes a much more rigorous process. Use of the ERV tool has put the mall operator on track to capture a 20 percent increase in leasing revenue over five years.

Advanced analytics equips a company to manage and improve not just its short-term performance but also its long-term health. One company's ERV tool made clear that the mall's low-performing tenants were paying rents that were disproportionately higher

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than the mall average—effectively subsidizing other tenants. This was an unsustainable situation: sooner or later, the overpaying tenants would present a considerable vacancy risk, particularly if they were concentrated within a single leasing cycle or mall precinct. The tool also showed that the mall owner could negotiate more assertively with its higher-performing tenants. In such situations, implementing the tool and acting upon these types of insights can yield up to 5 percent of earnings before interest, taxes, depreciation, and amortization per year.

To succeed in the digital age, mall operators will need to instill a culture of fact-based decision making throughout the organization. In addition to implementing advanced-analytics tools, they should invest in collecting more of the valuable data that will inform their business decisions. For instance, they can deploy new technologies (such as beacons, granular Wi-Fi, and facial-recognition cameras) to capture behavioral data. They can launch mallwide loyalty programs to gather individual transaction data and generate insights into the customer journey

across the entire mall ecosystem. They can also pursue partnerships with tenants—for instance, by negotiating preferred rents in exchange for data sharing. Armed with robust data and advanced-analytics tools, malls have the potential to revitalize and revolutionize not just their own business performance but that of the rest of the retail industry as well.

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<sup>&</sup>lt;sup>1</sup> Pranay Agarwal, Raffaele Breschi, and Sandrine Devillard, "How the mall business can reinvent itself for the digital age," November 2017, McKinsey.com.

<sup>&</sup>lt;sup>2</sup> A tenant's occupancy cost ratio is its annual occupancy cost (rent plus service charges) divided by its annual sales.

<sup>&</sup>lt;sup>3</sup> A mall operator should set minimum and maximum category share based on a range of factors, including the mall's location, size, and positioning and the demographic profile of the catchment area. It would also do well to conduct primary research to uncover spending and footfall patterns in the trade area.