White Paper
Data-Based Decision Making

Organizations that gravitate toward quantitative management tools share something in common: a preference for making decisions based on verifiable data, not assumptions. Clients who rely on quantitative data are in good company. In a recent Herman Miller survey of 173 real estate and facility leaders across North America, we found that over 62% prefer to make their facility planning decisions based on quantitative data.

For many such organizations, that penchant for hard data is what makes Herman Miller's Space Utilization Service so intriguing. The Space Utilization Service is one element within Herman Miller Performance Environments, a bundle of related services that help clients control real estate costs, while creating more effective workspace for employees.

"Any organization that believes management decisions should be based on quantitative data will see the benefit in measuring their space utilization," says Tracy Brower, director of Herman Miller Performance Environments. "It's a logical addition to the ways you can use data to manage your business better."

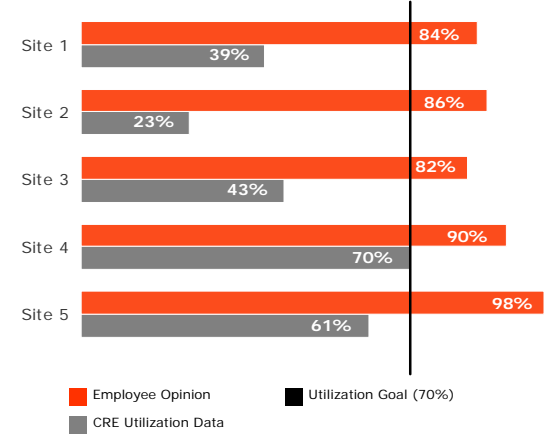### The case for measuring space utilization

Herman Miller's Space Utilization Service aims to reduce costs and improve quality, focusing on real estate and work environments. The service uses wireless sensors that attach unobtrusively beneath all chairs within a workplace during a three-week study period. The sensors track occupancy by detecting movement; Herman Miller then analyzes the resulting data to recommend better ways of using the space.

"The first step toward using your space more efficiently is to understand how you're using it now," Brower says. "For that, you need hard, accurate data. Which spaces are underused? Does your work environment support your work style? Do you have the right balance between individual and collaborative space?"

Often, Herman Miller finds, the answers are surprising. In the course of conducting dozens of Space Utilization studies across a range of industries, Herman Miller has discovered a vast disconnect between presumed and actual usage. When people are asked about the percentage of time they use their spaces, they generally report 82% - 98% usage. Herman Miller's electronic space utilization demonstrates actual average 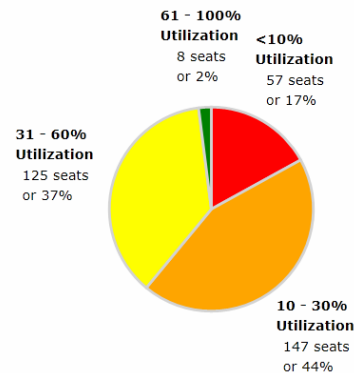utilization of 19% - 37%. This disconnect between actual and perceived usage provides the opportunity to re-think the use of space, the allocation of space, and the optimization of real estate.

Figure 1: An example of one company's actual vs. perceived utilization of space

- Site 1: 84% / 39%
- Site 2: 86% / 23%
- Site 3: 82% / 43%
- Site 4: 90% / 70%
- Site 5: 98% / 61%

Legend:
- Employee Opinion
- CRE Utilization Data
- Utilization Goal (70%)

Private offices, for instance, are unoccupied about three-fourths of the time on average, while workstations are unoccupied about 60 percent of the time. As for conference rooms, most are designed for a dozen or more people, but are rarely used to capacity.

Figure 2: An example of one customer indicating how many seats are used frequently, occasionally, or rarely.

- 61 - 100% Utilization: 8 seats or 2%
- <10% Utilization: 57 seats or 17%
- 31 - 60% Utilization: 125 seats or 37%
- 10 - 30% Utilization: 147 seats or 44%

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Performance Environments

"Understandably, when organizations see data like that, they figure there has to be a way to get more value from their real estate," Brower says.

How? Perhaps it makes sense to start sharing some workstations, especially as workers become more mobile. Sometimes, it's a good idea to pare back the square footage for workstations and private offices, so that more room can be devoted to collaboration space instead. Or maybe it's wise to cut down on big conference rooms in favor of smaller meeting areas that invite informal interaction.

"There's no one-size-fits-all recommendation," Brower says. "It all depends on the data—and the goals of the client organization."

Efficiency and effectiveness

In its quest to measure, analyze, and improve real estate occupancy, Herman Miller's Space Utilization Service parallels other data-driven disciplines. As with other quantitative management tools, the Space Utilization Service works best when organizations establish control limits for the data being collected. Herman Miller encourages clients to set boundaries for the data based on desired outcomes for their workspace.
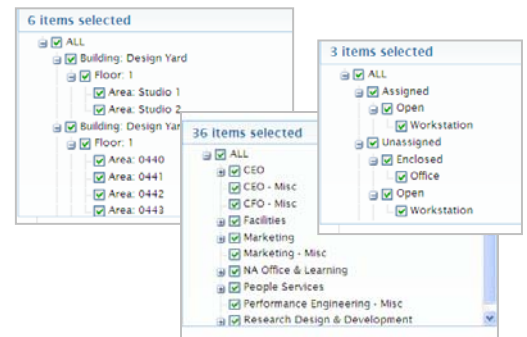
For instance, what's an acceptable range for the percentage of time your workstations or private offices are unoccupied? Once the data falls outside whatever range you specify, it might be time to realign your space to better support the way it's actually being used. In this way, the value of space utilization data increases in proportion to how often it's collected.

"It becomes an early detection tool for usage trends that fall outside desired parameters," Brower says. "Certainly, any organization can benefit from a snapshot of space utilization, but most will realize greater value from regular data gathering – think of it as a regular physical for the space."
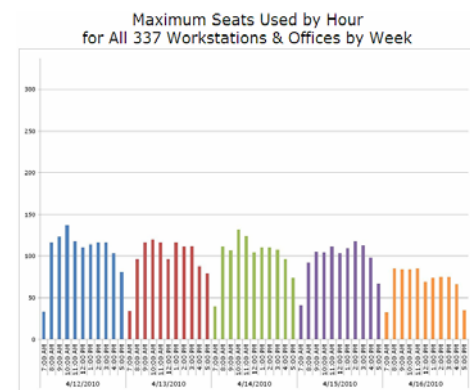
Figure 3 This chart helps identify how many spaces are occupied for solid lengths of time and how many are just used for short lengths of time, which may be considered candidates for a mobility program.

Figure 4 Ability to drill down to business unit, space type, physical location, and/or by week

**Figure 5** View of how many seats were in use each hour.

Either way, the data uncovered by Space Utilization studies can be used to build a business case for workplace change, one that draws on objective analysis rather than subjective opinions.

"Space utilization data can help organizations find a balance between efficiency and effectiveness," Brower says. "The efficiency comes from reducing real estate costs, while the effectiveness comes from realigning space in a way that better supports how your people actually work."
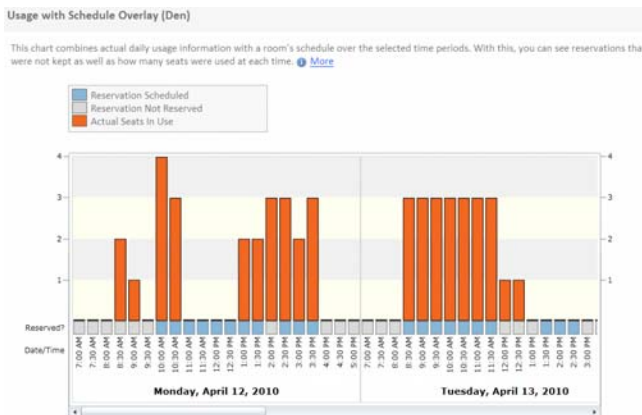
Figure 6 Sample of Additional Individual Space Reporting:

Figure 7 Example of Conference Room Reporting:
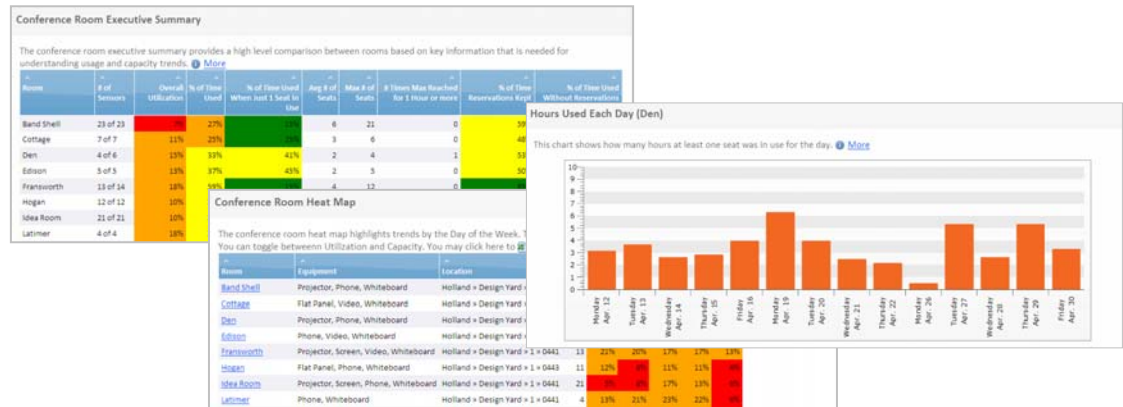
Figure 8 An example of comparison of actual usage compared to the conference room reservation data.

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