occuspace

University Student Spaces

Challenge

The Purdue University Libraries team wanted to more clearly understand differences in occupancy of its seven academic libraries across campus. Previously, they had relied on WiFi data and gate counts to identify the occupancy of their spaces with limited accuracy.

As part of the Purdue 2022 Libraries Master plan, the Libraries team initiated a project with design firm, Perkins&Will, to assess library foot traffic and make data-informed design recommendations to boost utilization and improve student experiences.

Perkins&Will sought a technology solution to help monitor occupancy to overlay with anecdotal feedback and other indicators of space use.

Solution

Perkins&Will contacted Occuspace to deploy the company's privacy-friendly occupancy monitoring sensors across all seven Purdue libraries.

The sensors were installed in less than a day and began to report continuous foot traffic data. Perkins&Will then analyzed the data in 15- and 60-minute intervals as part of the Master Planning project.

Perkins&Will also collected observational and user perception data (how full does the library feel?) in addition to evaluating course schedules to link activity at specific times of day. They wanted to understand how occupancy influences and contributes to foot traffic fluctuations for library space design needs.

All of the data points contributed to the firm's final Master Plan recommendations for each of the libraries.

> **"We've taken the guidance from Perkins&Will and the Occuspace data to rethink the use and design of our largest library. We also plan to offer the live data as a convenience to students."**
>
> — Beth McNeil, Dean of Purdue University Libraries

> **"Occuspace's technology enables us to analyze customer building use patterns with a new level of granularity and certainty, helping us see innovative design opportunities for our clients to enhance spaces and student experiences."**
>
> — Derek Jones, Practice Leader, Principal at Perkins&Will

Results

With Occuspace space utilization data as a resource, Purdue Libraries and Perkins&Will were able to make better data-informed Master Planning decisions to enhance the use of library spaces.

For the Libraries team, the project instilled confidence in the data for ongoing space utilization and optimization analysis. By identifying which spaces are underutilized, Purdue can determine design, furniture selection, and how they introduce those spaces to patrons to maximize use.

Purdue Libraries is working with PurdueTHINK, a student-led group, to make Occuspace's real-time data available to students in the libraries via digital signage and the Purdue mobile app.