

Using Data to Turn a Wrench

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There is a joke about a mechanic that charged his customer ten thousand dollars to fix their car. On the invoice, the charges broke down to one penny for a screw and \$9,999.99 for the labor to replace it.

The customer, of course, questions the mechanic, “why does the labor cost so much, you only replaced one screw?!” The mechanic gives the same explanation that software engineers often have to: “I had to know which one to replace.”

For building owners and managers, this point really strikes home whenever we experience problems that we can't resolve. We don't care if someone just comes over and pushes a button, we just want the problem fixed. We are willing to pay for the value of the service rather than the work itself.

This is precisely why it is critical to have important building information at the fingertips of those that must solve any one of the many problems that arise in every commercial building. When things go wrong, the expensive part is figuring out exactly what is wrong in the first place in these complex systems. The faster problems can get precisely diagnosed the faster they can be fixed.

Buildings all have their own personality. Even though they all use the same components, when all the pieces come together, they all operate differently depending on location, occupancy, and usage factors. There is no such thing as a “cookie cutter” building, so for facility management software to be able to give precise recommendations it needs to be customizable. If it is one-size-fits-all, you won't use it. If it wastes time with unnecessary data and false positives, you won't use it.

The job of the facility managers is to find the right screw and do what needs to be done to replace it. If building managers are going to take time out of their already busy schedule to incorporate a new software, it needs to be able to drive specific insights quickly and efficiently. There are few instances that reinforce the saying “time is money” like dealing with angry tenants, asset managers, or owners. Therefore, going from problem to diagnosis to resolution in the shortest time possible should be the priority when creating any facility management processes.

Even though understanding the problem is the first step, nothing good happens if someone doesn't turn a wrench. At PointGuard, that is what we design our software to do. We have found that general data, like building energy usage, is not enough. Energy analytics tells you broadly when a facility is using too much energy, but does not tell you where or how to fix it. We designed our system to tell you not only that there is abnormal energy usage, but that there is a loose set screw on the 3rd floor, in VAV-3-27, serving the CEO's office for a tenant whose lease expires in 14 months and that is not only wasting energy but also causing a comfort problem.

When it comes to something as complicated as a building system, fixing a problem is never straight forward. There are many opportunities for false positives, so data needs to be able to help facility managers listen to their buildings in more sophisticated ways. The bulk of the savings comes from spending less time figuring out the solution to the problem. PointGuard is software that truly helps facility teams turn a wrench and not waste time.

