



Should we Subsidise the Canteen? Holistic Decision-Making with Data



At Chronos we embarked on our [Smart Buildings](#) journey just as the world locked down. Luckily, we had found an excellent data partner in MIT Technologies and its UCentric platform. Although, with most buildings being almost empty, the momentum for any shifts to smarter office management was simply not there.

Understanding your Carbon Footprint

However, this gave us time to really consider what our offering can bring to potential users. We identified the measurement and monitoring of Carbon Footprint as a prime driver, and I am sure this will still prove to be the case today.

The ability to connect to many systems, both internal and third party, and present and report on this data enables a comprehensive initial and ongoing measurement of key parameters that determine a building's Carbon Footprint. This ability also extends way beyond this important main function.

I was intrigued by a demonstration of this wide-ranging ability. The fundamental ability to take a holistic view of your building. Taking in data from a variety of systems such as security, power consumption, equipment management, as well as external data. This can include likes of travel and weather updates. This led to a UCentric user posing this simple question: "Should we still be subsidising our canteen?"

Learning Lessons from the Data

The task seemed a simple one. How many people per day used the canteen? What did they purchase? And how much did it cost to deliver this service? Data was available including what was served, when it was served, running costs of kitchen equipment and catering staff. All of which was monitored in UCentric. Use of the internal access security system meant that people's movements were also easy to quantify. So the task at hand – should we still be subsidising our canteen – was easily answered in the affirmative.

However, the data also revealed something of greater importance – the flow of people at various times to visit the canteen. Especially at peak times of the day. To give a little context, the building in question had two main entry and exit points: with one close to a busy train station. Most people travelling by train therefore accessed the building from that specific entry point. A considerable number, including train travellers who would prefer a coffee before going in to work, used the other entry point.

The flow of people passing through the building could easily be modelled, and an Emergency Evacuation Policy was built around this model (not to mention the sharing of security badges – but that’s a different story for a future article.). Although we have data around those key lunch times and other breaks that show at several times during the day, this model is not adequate.

For instance, if a fire were to break out when several people were in the canteen, then the existing policy could break down. We know for sure that panic easily causes herd behaviour and when it matters most, the movement of people steadily through the two exit points breaks down as everyone rushes to the same exits.

Summary

Remember, most if not all the data used in this study was available pre-UCentric but siloed for that system. In these scenarios, you could have different systems operating independently without clear communication – or ignored completely.

For me, this illustrates that employing smart systems in and of themselves may not be enough for you to ensure the safety and well-being of your staff, or the effective management of your estate.

Steve Newcombe

Sales Manager

