Proposed Deployment of a Space Utilisation Monitoring and Reporting System

Brief Summary:

Coventry University estates department are seeking to make better use of the spaces that we occupy. To this end it is proposed that we deploy a system of space utilisation monitoring and reporting which is accurate and which is both unobtrusive in its installation and anonymous in its data gathering, i.e., it does not track or use individual people as a source of reference for either location monitoring or data recording. Therefore, the system under consideration is a heat/motion-based system. This type of system is already widely adopted by a number of leading universities and is extensively, and successfully, used within many other sectors, both public and private.

Purpose:

It is important that we understand how our spaces are used in order to better predict and respond to the pressures that we are likely to face in the future. Identifying where there are opportunities for better – more effective – use of space or, where there are deficiencies that negatively impact upon our performance, will be imperative if we are to successfully manage our estate. The data gathered by such a system will not only enable us to better respond to the pressures on space, but also to improve the qualitative aspects of space by providing more of the 'right types' of space and to identify specific problem areas.

Method:

Heat/motion sensors, which detect the presence of people, will be placed within all relevant work settings, i.e., desks, meeting tables, break-out seating areas, etc. These wireless sensors relay real-time information on occupancy to wireless receivers which, in turn, forward the data to an independent 'secure' cloud-based storage facility. This facility is accessed solely by designated and trained personnel within the estates space management team, via a specialist data analytics dashboard.

Proposed Dates and Duration of Deployment:

Ideally, estates would wish to commence gathering useful data as soon as it is practical to do so. However, we anticipate that this may not happen until July 2018 at the earliest. As the system under consideration is specifically designed to be re-deployable, it will be the intention of estates to deploy the system in localised areas for periods of a few months at a time, or of a sufficient duration within which to get a reasonable appreciation of fluctuations in use. However, whereas the system is not intended as a 'permanent' or 'long-standing' installation, it may be necessary to periodically return to a particular space in order to assess any significant periodic or seasonal fluctuations in work patterns/use, or to assess the effectiveness of any newly established space-use protocols.

Data Retention:

Data gathered and analysed will be used to inform future space planning, space-use protocols and space provision and, therefore, will only be kept and drawn upon for as long as it remains useful in order to satisfy these purposes. Gathered data will be held independently in 'secure' cloud-based storage for as long as estates deem necessary, whereupon it will be deleted.

Obviously, this data is not particularly very sensitive, due to its intended anonymity, and is not required to be kept beyond what estates regard as being useful. This would be a relatively short period of time (possibly only one academic year).

However, estates may wish to retain some data, in its broadest sense (i.e., summary graphs, charts, etc.), in order to measure and compare, or even demonstrate, overall improvement in space use.

FAQ - Could any individual directly, or indirectly, be identified by the data or outputs from the project?

This is not the purpose, nor is it a specifically intended function of the system under consideration. However, in theory, it could be possible to identify an individual's patterns of occupation if they were more sedentary in their type of work, i.e., specifically assigned to particular desk/workspace or sequence of activities. However, this would not be easy to do and it is possible to configure the system so that any personal association with location is masked. Furthermore, as the data collected at such a granular level will be solely for the use of the estates space management team, any unintended association between gathered data and specific people would not be generally available.

Any data reports generated by the system - and offered to others for review - would primarily be in the form of summary data (including graphs, charts, etc.) and, as such, would not generally be able to be associated with any particular individual's presence or activities.

Finally, it is worth reiterating that these types of systems are already widely used within the HE sector and extend to applications which capture live space availability, demand analysis of social and informal learning spaces, people counting for teaching spaces, as well as for accurate analysis of academic and administrative space. It would also be fair to say that the deployment and utilisation of this type of sensor technology is now becoming best practice within the HE sector.