

A Live Project to Improve Energy Performance of Retail Organisations

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Introduction

Live projects have long been used to facilitate learning in the built environment disciplines, particularly architecture. This in-depth case study is drawn from another built environment discipline: project management and evaluates the process of developing an energy assessment model for concession-based retail organisations, which was recognised as a real shift in the way sustainability was delivered by The Green Apple Awards in 2012. The great benefits, e.g. a £27k saving in energy costs during the first year, that academic research delivered in a commercial environment are identified.

First, the key features of live projects are drawn from the literature. Then the unusual context for this live project is set. The differences between this live project and the more common setting of the full-time student being taken into the 'real-world' are thus identified. An explanation of the process through which the assessment model was developed as part of an MSc Dissertation, how it was used by the employer, and its benefits to the business follows. The next section draws out the key aspects of working in this different live project setting. A short discussion on whether a live project in this setting requires a different approach than the usual full-time student scenario concludes the case study.

There is a tendency in the literature to associate live projects mainly with architectural education (Sara, 2006; Harriss & Widder, 2014), although some authors report live projects in other disciplines, e.g. business (Hummel, 2009). Also, the main novelty of live projects is considered to be the re-positioning of a full-time student in the 'real-world'. This case study aims to close these two gaps in the literature by reporting on a live project within the project management discipline from the perspective of a part-time, mature student with a highly pressured full-time job and a young family. The findings are drawn from an in-depth interview with the student and the relevant company literature.

The case

Engagement of real clients or users in real-time settings, distinguish live projects from other forms of projects (Sara, 2006). The clients contribute to defining the remit of the work, rather than it being 'imposed' by the lecturer (Sara, 2011). Hence, boundaries between theory and practice are blurred, creating learning opportunities conducive to Schön's (1991)

concept of a reflective practitioner and Senge's (1990) concept of personal mastery where aspiration and reality are tested against each other. Students find a new motivation to undertake the associated work as their outputs gain relevance for practice and as they have the opportunity to reflect on their practice in the academic setting.

Although the case study project shared the above characteristics with typical live projects, it was different from them in two main ways. First, the student was already employed by the company in question and identified the need for this research, which would also fulfil the requirements of his MSc Dissertation. Hence, one of the main challenges of live projects widely reported in the literature, i.e. setting up the project and introducing it to the students, did not even become an issue. Second, unlike many companies involved in live projects which 'see using university students as a chance to gain from free work' (Chiles & Till, 2007: 7), this business made a significant investment to the project both by sponsoring the student during his MSc course and by providing capital investment for the project.

As a result, the student stated that '[creating] something of value so the investment the company had made yielded a measureable return' became one of his main motivations. Against a backdrop of financial challenge, shrinking economies and a downturn in business performance, investing to deliver on sustainability agendas was not a priority for this large format concession based retail organisation, which develops retail space in an airport environment. The researcher saw the value in making such an investment as it could distinguish the company as a leader in its sector as well as yielding savings. Persuading the business to make this investment became the main motivation for the project.

A four stage energy assessment model was developed, following the standard approach to postgraduate dissertations with an academic acting as the supervisor. The model was tested on a 21,000 sq ft duty free retail unit in the heart of Birmingham Airport. One of the real successes of the research was the way in which many interested parties came together to resolve the challenges as part of a collaborative working group, which consisted of key stakeholders from each of the businesses involved. Through the early engagement of the airport operator the project team, lead by the student, were able to protect some of the existing systems from being stripped out and to challenge traditional thinking in a concession led space. Overall, the model yielded a £27,000 saving in energy costs in its first year of operation against a capital investment of £50,000. It also brought the prestigious Champion of Champions accolade at the 2012 Green Apple Awards for Environmental Best Practice, as well as the Retail Green Champion award.

The main similarity between this unusual live project and those that are more common for FT-students is the significance of relevance and of reflection. Relevance of the subject matter to his day-to-day work was the key to finding the very difficult balance between work, family and study commitments; and the motivation to work hard to achieve his goal of obtaining a postgraduate degree to get a prestigious professional accreditation. The process of reflection helped the student develop skills in critical thinking and analysis which have changed his approach to handling business decisions:

'The dissertation in particular, but the MSc overall, taught me to think differently, more deeply and to constantly challenge why and even why not. So often, Project Management focuses on delivery, ticking boxes, dismissing risk and driving out cost-all fairly short term. The ability to think more creatively and explore theories has changed the way I do business.'

Conclusions

The case study has revealed that the key difference a live project undertaken by a part-time student in employment and one that is undertaken by a full-time student, is the way in which academic engagement influences practice. The former type of student benefits from reflection that is encouraged, often required, in the academic context, and that helps the student make sense of their experience in the light of theory. Thus, critical thinking and analysis skills are developed. They yield a more creative approach to making business decisions. The full-time students however are prepared for practice through live projects. Another difference is the role of the academic in setting the project. Much less effort is required to set the project when a part-time student is involved as the student tends to set the project and the academic plays a supervisory role in this process. The key similarity is that relevance remains an important factor in motivating both types of students.

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Dr Esra Kurul has been working in Higher Education in the UK for more than a decade. She is involved in research and teaching. She has been leading externally-funded research projects, has widely published in prominent journals, and presented at international conferences. Esra adopts a problem-based learning (PBL) approach in her teaching because it enables students to learn skills that are highly transferable to working life. She leads a team which is leading the development and delivery of blended- learning programmes at Oxford Brookes University.

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