Thesis title:

Decision Making Model for Energy Efficient Applications in Green Buildings

Abstract :

Green building, also known as sustainable building and sustainable construction. Today's world there are single and multi-attribute rating systems given for green building. UK Building Research Establishment's (BRE), Environmental Assessment Methodology (BREEAM), the U.S. Green Building Council's (USGBC), Leadership in Energy and Environmental Design (LEED), Green Building System, Australia Sustainable Energy Development Authority's (SEDA), Australian Building Greenhouse Rating Scheme (ABGRS), the Ministry of Housing and Urban-Rural Development of China's 2005 national "Green Building Evaluation Standard" are few of them. The outcome of these standard criteria ranking or evaluation systems is a huge experience with their use. Data will be initially collected through a series of structured interviews with industry related people, knowledge expertise, experienced personnel based on the analysed metrics of literature and the decision-making metrics of benchmarking systems given for green buildings to gain opinions. Interviews can be digitally recorded and subsequently transcribed. This analysis will generate a sense of emotion or feeling-state out of the interviews and will filter the information in the "neutral," "positive" and "negative" senses. Also, the data can be collected from online platforms. The web has already created a platform for individuals to express their opinions, post their reviews and comments on green building concepts, express their expertise knowledge in forums, discussion groups, chat rooms, social networking groups and blogs about green building on energy efficiency. The constructed green building decision-making model will identify the green technology awareness, reputation and popularity over time and it will be able to track professional perception of new products or features. Also, it will evaluate the opinions over the satisfaction of applying energy efficient tools to green buildings. The model can be further used to moderate the relevant green technology course modules and the model will help the decision-makers to convey the optimistic perception pinpointing the target audience or demographic.