2. What advice would you provide to the board of BIM Consultants?

BIM design tools allow the extraction of different views from a model for the production of drawings among other things. These different views are automatically consistent, as they come from a single definition of each “object instance”. The value of a sustainable building is the quality of building performance delivered to solve problems of consumers – developers, owners, and building users – within the constraints of time and cost of resources used to deliver the quality. The delivery of functional, environmentally responsible and maintainable and easy to operate, safe and secure building will solve consumers’ problems. The difficulty of delivering the required sustainable building value to consumers is due to several building delivery professionals working in silos – fragmentation. This paper discusses the role of building information modeling (BIM) in reducing the fragmentation among professionals at each and across building delivery stages using evidences from the literature. It is evident from the literature that BIM provides a virtual repository that allows easy access to and sharing of information and knowledge in real time. Thus, BIM provides a platform for professionals to work in an integrated environment at any stage of the building delivery process. However, the maximization of the benefits BIM provides through the virtual repository depends on the contracting method adopted for the building delivery. The identification of knowledge gained and gap from the literature led to suggestion of future research direction needed to improve the delivery of sustainable building value to the consumers. BIM objects have a big impact on the effort to virtually represent the entire lifecycle of a built structure. This realistic model of the building can help the project team to stay on the same page and communicate crucial updates on a timely and straightforward manner when necessary. Furthermore, a well-constructed BIM model can allow construction managers to run a number of alternative scenarios in order to visualize the entire planned sequence of the project. This visual representation can subsequently be shared with the client and the other stakeholders and function as a basis for further action.

3. How would this risk assessment aid in the decision on whether or not to proceed with the new HR strategy for Nerds Galore?

When implementing the HFRM model, one of the most critical of all decisions is that of the

rating of human based risk factors. Saaty’s Analytical Hierarchy Process (AHP) is used for weighting and prioritization of RSFs/RIFs taxonomy in new Human Factor Risk Management (HFRM) model. The analytic hierarchy process was developed by Saaty to provide decision makers with the means to deal with complex decisions involving many attributes of varying degrees of subjectivity. Its purpose is to present a method “whose application reduces the study of even formidably intricate systems to a sequence of pairwise comparisons of properly identified components”. The study is organized into four main sections. After the introduction, the drivers of the human factor risk management model are explained in section two. The methodology of this study is provided in the third section. A verbal model is used for developing the Human Factor Risk Management (HFRM) model, which contains a full-set of risk shaping/influencing factors (RSF/RIF) and a score formula. Finally, we conclude with a summary and significance of new model as well as with a brief discussion of future research possibilities.

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