## To Whom it may concern,

My name is Sami Boulos, and I am a 5<sup>th</sup> year senior at The Pennsylvania State University in the Architectural Engineering Department. For my senior thesis, I am discussing the recent introduction of BIM into the construction industry, and the response it has received in the industry. More specifically I am trying to focus on 3D modeling and the positive and negative feedback to using this tool. Below is a survey that should only take 15-25 minutes of your time, and asks questions pertaining to the topics I stated above. Please help me with my thesis by completing this survey and emailing it back to me at <a href="mailto:seb307@psu.edu">seb307@psu.edu</a>. Thanks very much in advance! I f you have any questions or comments, please contact me.

Kindest Regards,

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## 3-D Modeling Survey to the Construction Industry

## SECTION 1 What kind of company do you work for? \_\_\_\_Owner \_\_\_\_Architect \_\_\_\_Construction Manager General Contractor \_\_\_Trade Contractor \_\_\_\_Supplier \_\_\_\_Manufacturer \_\_\_\_Other: \_\_\_\_\_ Have you participated in a design or construction project using 3-D Modeling? \_\_\_\_Yes. Please proceed to SECTION 2 (pg.2) \_\_\_\_No. Please proceed to SECTION 3 (pg. 4) **SECTION 2** 1. How many projects have you participated in using 3D modeling? \_\_\_1-2 \_\_\_\_3-4 \_\_\_\_5 or more 2. Could you please give a brief description of those projects, i.e. location, type, size, and explain what aspect of the project used 3D modeling? 3. What software was being used for the 3-D modeling? \_\_\_\_AutoCAD 3D AutoDesk Revit AutoDesk VIZ Other: 4. In your company, how many employees are dedicated to the creation and/or maintenance of 3D models for projects? \_\_\_\_1-2 3-4 \_\_\_5 or more

5.	Please indicate the phase or aspect of the project where 3D modeling was used: MEP Coordination SuperStructure Sequencing Entire Project (full integration) Other  If Other, please describe below:
	ii Other, please describe below.
6.	When the project was completed, did your company complete an evaluation of the 3D modeling tool to determine its overall effectiveness? YesNo
	If yes, please explain the results.
7.	In your opinion, what are the advantages/disadvantages of 3D modeling?
8.	Please provide your personal experience/ opinion about 3D modeling, i.e. is it worth the investment to use for construction projects?
9.	Would you recommend the company continue to build projects using the 3D modeling tool? YesNo If yes, please provide explanation.

## **SECTION 3**

Recently there has been a push for Building Information Modeling (BIM), a full-integration of multiple resources into a 3D and 4D model of the project to help coordinate and sequence a construction project. These resources include materials data, accurate 3D models, using that same 3D model broken down into segments to illustrate the sequence of the construction phases over time, and much more. These tools help the entire project team to better visualize the construction of the building.

Would your company be interested in the use of 3D modeling as a tool on a project? YesNo If yes, has the company begun to do this already?
If no, please provide explanation.
Do you feel that you have adequate knowledge of design and construction methods using 3D modelingYesNo Please provide explanation.
What reasons do you feel have prevented or are hindering the growth of 3D modeling in the industry?
Thank you for your time and input. Your participation in my senior thesis research is greatly appreciated. Again should you have any questions, feel free to contact me.
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