



# THE IMPACT OF BUILDING INFORMATION MODELLING (BIM) ON CONSTRUCTION SCOPE PERFORMANCE

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## ABSTRACT

This study to investigate the impact of Building Information Modelling (BIM) on construction scope performance. The overall finding can concluded that 3 variable of Building Information Modelling (BIM) which are 3D CAD Technology, Object-Oriented technology and parametric modelling do have significant relationship with construction scope performance.

## INTRODUCTION

Building Information Modelling (BIM) was introduce for the new system CAD Technology in construction industry.

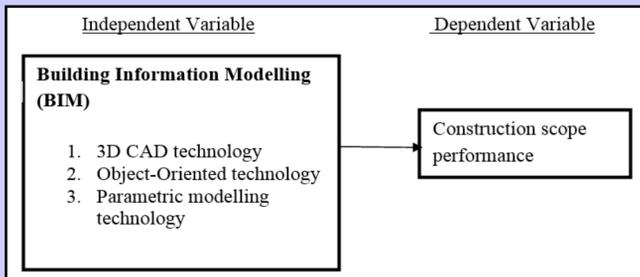
### Research question

- What is level understanding Building Information Modelling (BIM) among employee.?
- How well the BIM perform on construction?
- What is the relationship between BIM on construction scope performance?

## OBJECTIVE/S

- To identify important impact of BIM technology that implement at the construction performance.
- To study about relationship between BIM technology effect on construction scope performance.

## RESEARCH FRAMEWORK

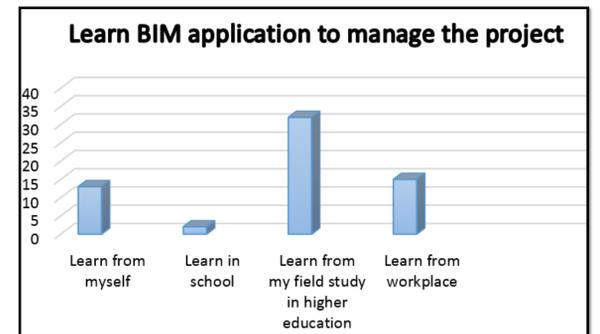
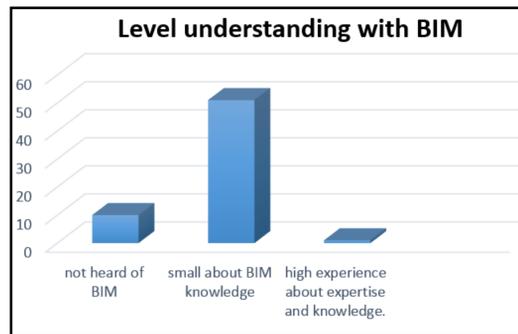


## METHODS

- Using survey questionnaire technique to collect and analysis data in construction industry and academic.
  1. Questionnaire
  2. Google drive
  3. Email
  4. SPSS software
- The hypothesis is answered after data was collected from significant study.

## RESULTS

- The results of relationship between selected independent variable which is 3D CAD technology, Object-Oriented technology and Parametric modelling technology on the dependent variable that are construction scope performance.



Model Summary

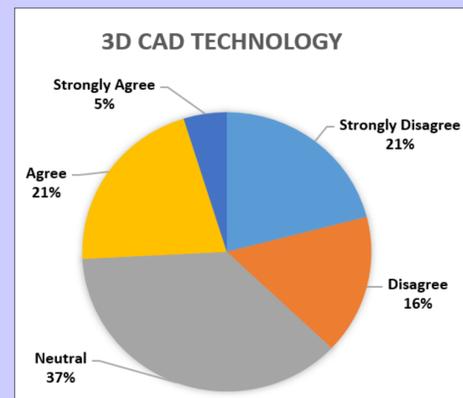
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.913 <sup>a</sup>	.834	.825	2.61164

ANOVA<sup>a</sup>

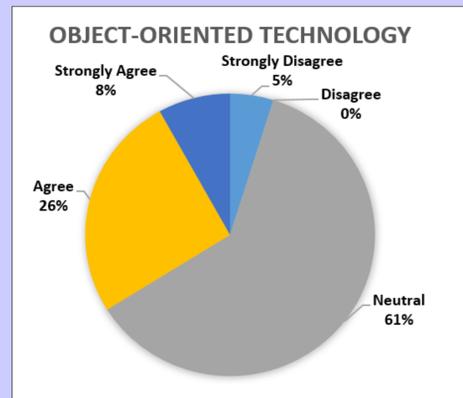
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1981.110	3	660.370	96.819	.000 <sup>b</sup>
	Residual	395.600	58	6.821		
	Total	2376.710	61			

a). Dependent Variable: Total sum Construction performance

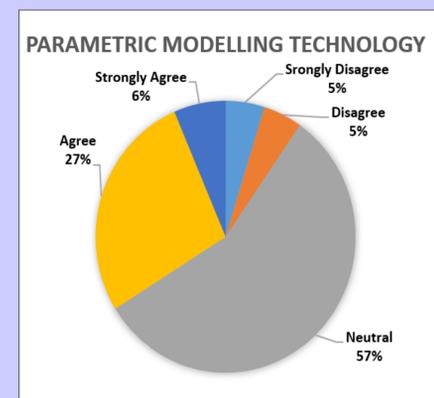
b). Predictors: (Constant), Total sum 3D CAD, Total sum Object-oriented, Total sum Parametric modelling



- Hypothesis relationship between 3D CAD and construction scope performance.
- t : 3.171
- Beta : .260
- Accepted H1



- Hypothesis relationship between Object-oriented and construction scope performance.
- t : 1.954
- Beta : .216
- Accepted H2



- Hypothesis relationship between Parametric modelling and construction scope performance.
- t : 5.239
- Beta : .514
- Accepted H3

## CONCLUSIONS AND RECOMMENDATION

### CONCLUSION

The impact on Building Information Modelling (BIM) on construction scope performance is align with construction objective to manage the project. That the BIM was apply in construction industry which easy interact among construction industry and client. BIM is a new system that introduce in Malaysia construction company.

### RECOMMENDATION

- Get more information and accurate the result to find the different with construction performance
- More focus to learning about BIM for next generation.
- Increase more information about new system that apply in construction industry.