

Building Information Modeling as a Tool for the Design and Analysis of Lighting

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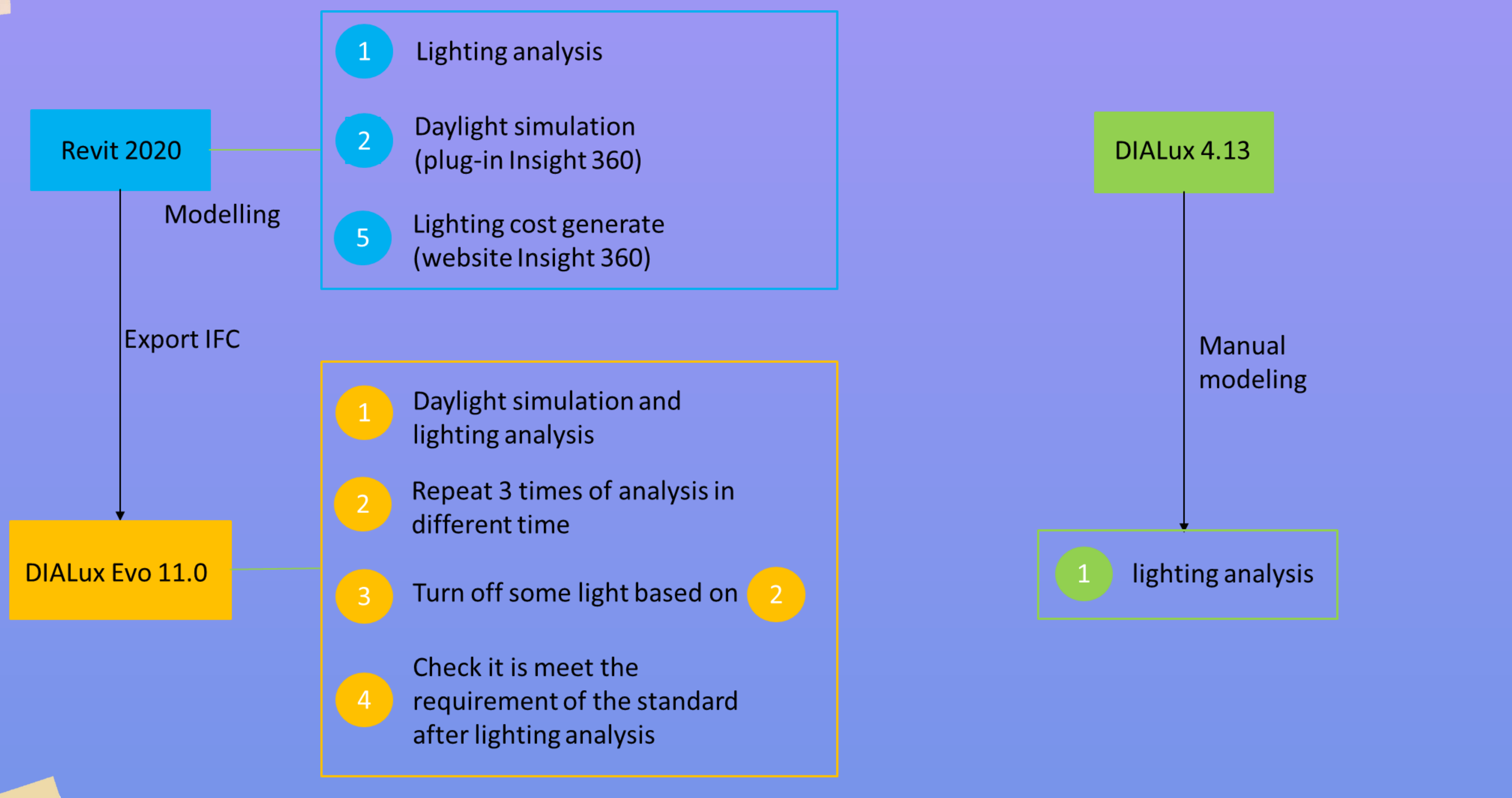
Introduction

Revit is a *Great Performance Software* in engineering, it can provide *Details and a 3D View* of the design. The industry is focused on the further *Development of Revit*. Revit can *Become a Trend* in the industry.

Objectives

1. Explore the BIM used in *Lighting Design and Analysis*
2. *Model Sharing* between different pieces of software
3. *Compare the Results*
4. *Lighting Improvement* after daylight analysis

Methodology



CONCLUSION

- *Great Performance for Daylight Simulation*
- *Good Versatility*
- *No Big Gap of Generated Results* from Revit and DIALux
- *Lighting Cost Save \$0.46 / m2 / per*

Tuesday, Mar 28, 2023	Factor: Newly added analysis
Save: \$ 0.46	
Max: \$ 77.43	
Mean: \$ 23.22	
Min: \$ 1.92	

Finding

Lighting Analysis by Revit 2020 and DIALux Evo 11.0, DIALux 4.13

Daylight Analysis by Revit 2020 and DIALux Evo 11.0

Lighting Cost Analysis by Revit 2020

Limitation

- Not consider the *Award of BEAM Plus*
- *Energy Cost* only includes *Lighting System* on 8/F
- *UGR* and *LPD* will *ignore* (Revit cannot generate the value)

