

BIM Data Visualization

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About NSW



NSW is an independent architectural firm with offices in Oslo, Hamar and Svolvær.

NSW delivers full services within architecture, planning, urban design and interior design. This covers new projects as well as refurbishment and transformation projects.

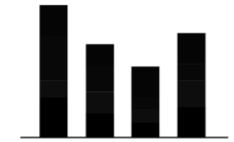
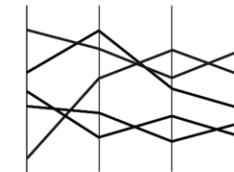
NSW has extensive experience in BIM dating back to 2009.

Data Visualization

A primary goal of data visualization is to communicate data clearly and efficiently via information graphics and plots.

Effective visualization helps users to review and consume large amounts of data.

4	6	0	1	4	6
6	7	0	5	9	4
8	3	3	4	0	3
5	4	5	0	7	7
7	8	6	0	6	0
1	9	1	1	4	8
8	1	7	9	0	5



BIM & Data Visualization



The true power of BIM lives in the “I” (Information) reflecting mountains of data generated at an astonishing rate.

Filtering through it is critical to be able to get new insights.

Types of Data in a Project



Design information & requirements



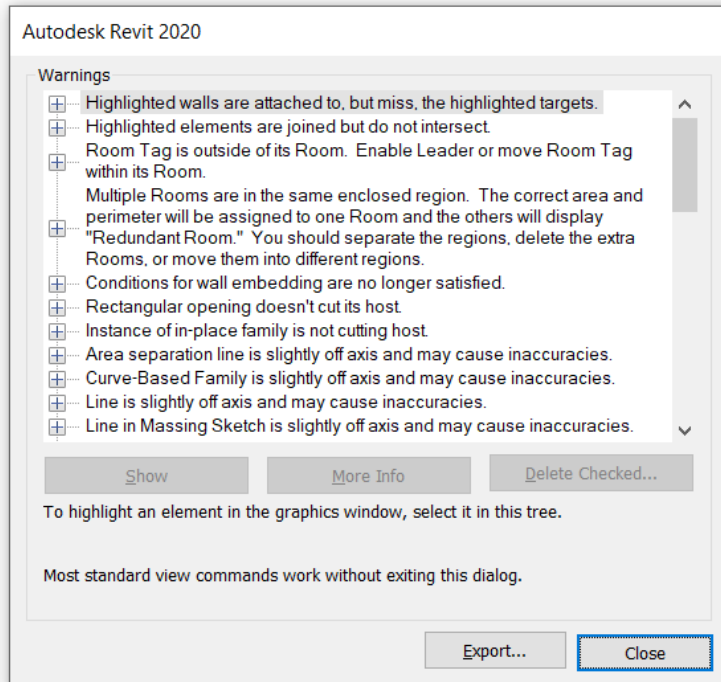
Project Data



Model Integrity

Case study

Model Warnings Dashboard



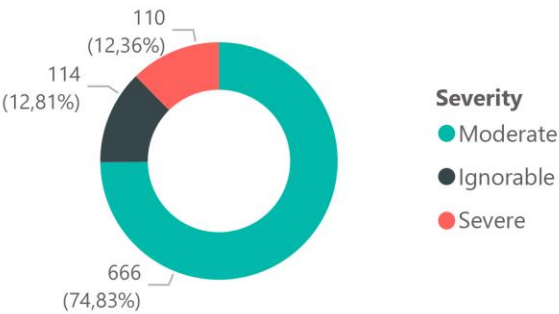
From Raw Data



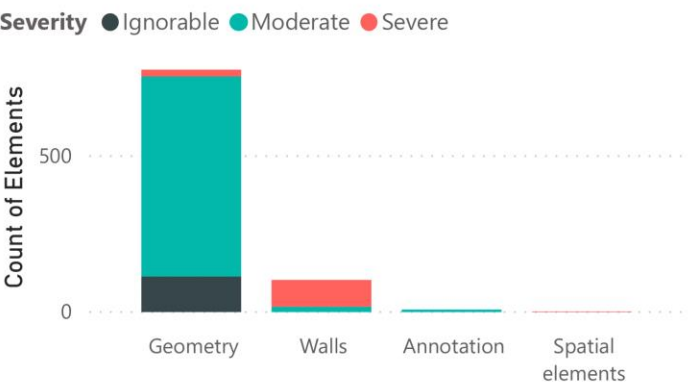
	A	B	C	D	E
1	LEVEL	WARNING	ELEMENT	CATEGORY	SEVERITY
2	Plan U1	Rectangular opening doesn't cut its h	Rectangular Straight Wall Opening : F	Walls	2
3	Plan U1	Highlighted walls are attached to, bu	Walls : Basic Wall : Betong 300 : id 3	Walls	2
4	Plan U1	Highlighted walls are attached to, bu	Walls : Basic Wall : Betong 300 : id 4	Walls	2
5	Plan U1	A wall and a room separation line ov	Walls : Basic Wall : Betong 300 : id 2	Walls	0
6	Plan U1	A wall and a room separation line ov	Walls : Basic Wall : DSUH - Badekabir	Walls	0
7	Plan U1	Highlighted walls overlap. One of the	Walls : Basic Wall : IS01 (13x2 95) : ic	Walls	2
8	Plan U1	Highlighted walls overlap. One of the	Walls : Basic Wall : DSUH - Badekabir	Walls	2
9	Plan U1	Highlighted walls overlap. One of the	Walls : Basic Wall : IV20 (12,5x2 120	Walls	2
10	Plan U1	Highlighted walls overlap. One of the	Walls : Basic Wall : IV18 (15x2 120) :	Walls	2
11	Plan U1	Highlighted walls overlap. One of the	Walls : Basic Wall : IV13 (12.5 70) : id	Walls	2
12	Plan U1	Highlighted walls overlap. One of the	Walls : Basic Wall : IV13 (12.5 70) : id	Walls	2
13	Plan U1	Highlighted walls overlap. One of the	Walls : Basic Wall : IS01 (13x2 95) : ic	Walls	2
14	Plan U1	Highlighted walls overlap. One of the	Walls : Basic Wall : IV13 (12.5 70) : id	Walls	2
15	Plan U1	Highlighted walls overlap. One of the	Walls : Basic Wall : IS01 (13x2 95) : ic	Walls	2
16	Plan U1	Highlighted walls overlap. One of the	Walls : Basic Wall : IS01 (13x2 95) : ic	Walls	2
17	Plan U1	Highlighted walls overlap. One of the	Walls : Basic Wall : IV- Eikefiner : id 4	Walls	2
18	Plan U1	Highlighted walls overlap. One of the	Walls : Basic Wall : Betong 300 : id 2	Walls	2

To Structured Information

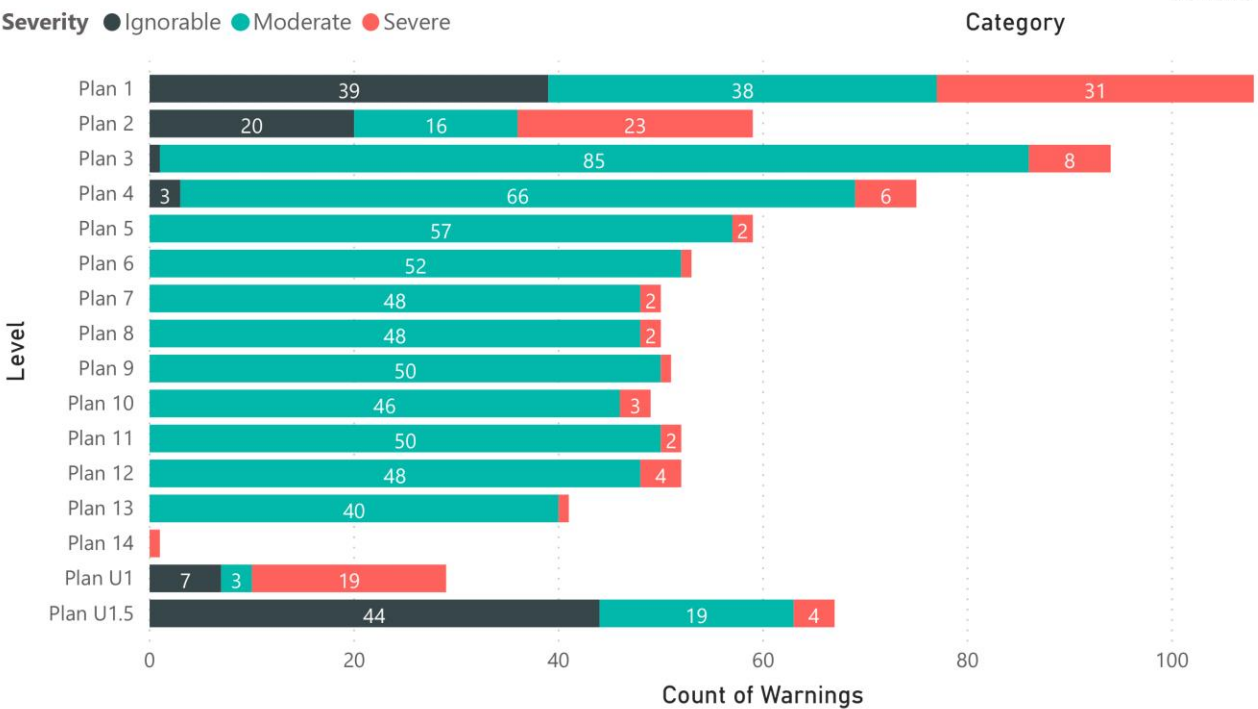
Warnings by Severity



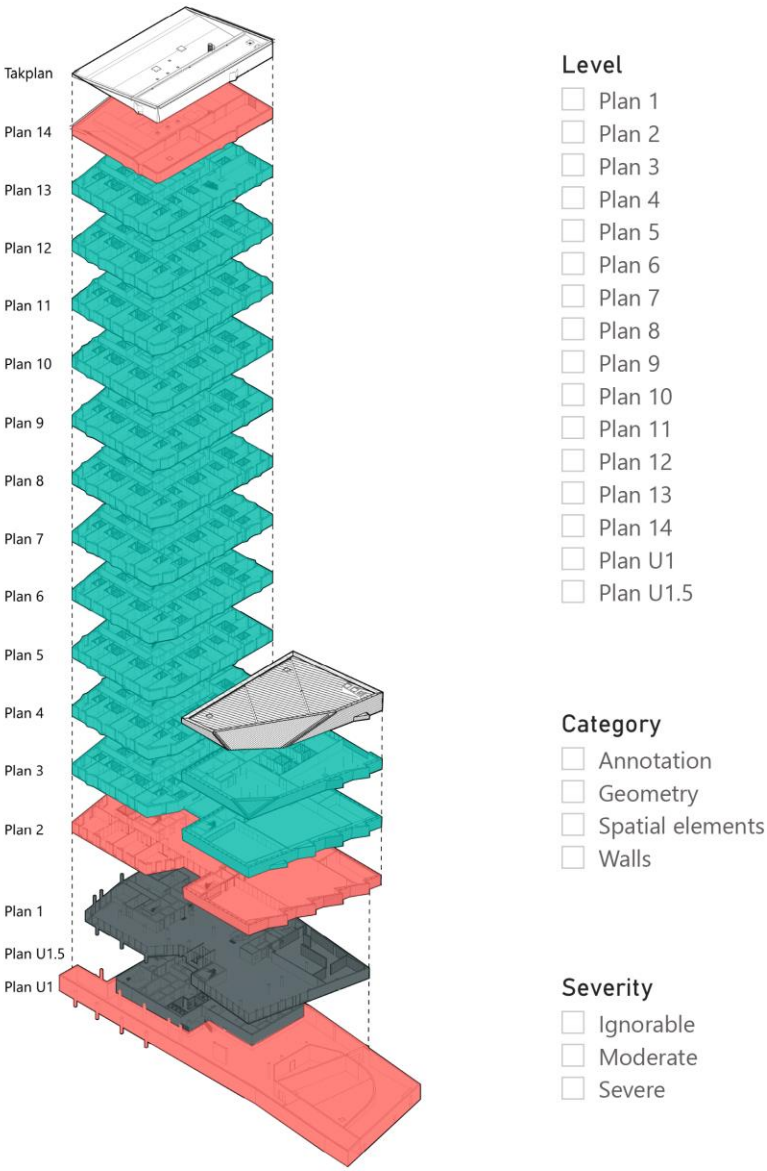
Elements by Category and Severity



Warnings by Level and Severity



Predominant Severity by Level



To Presented Insights

Overall Workflow



Database

Identify which data to track



Process automation

Use Visual Programming tools to automate data collection



Quality presentation

Use Data Visualization tools to summarize and visualize data for maximum impact

Demo

From Raw Data to Structured Information

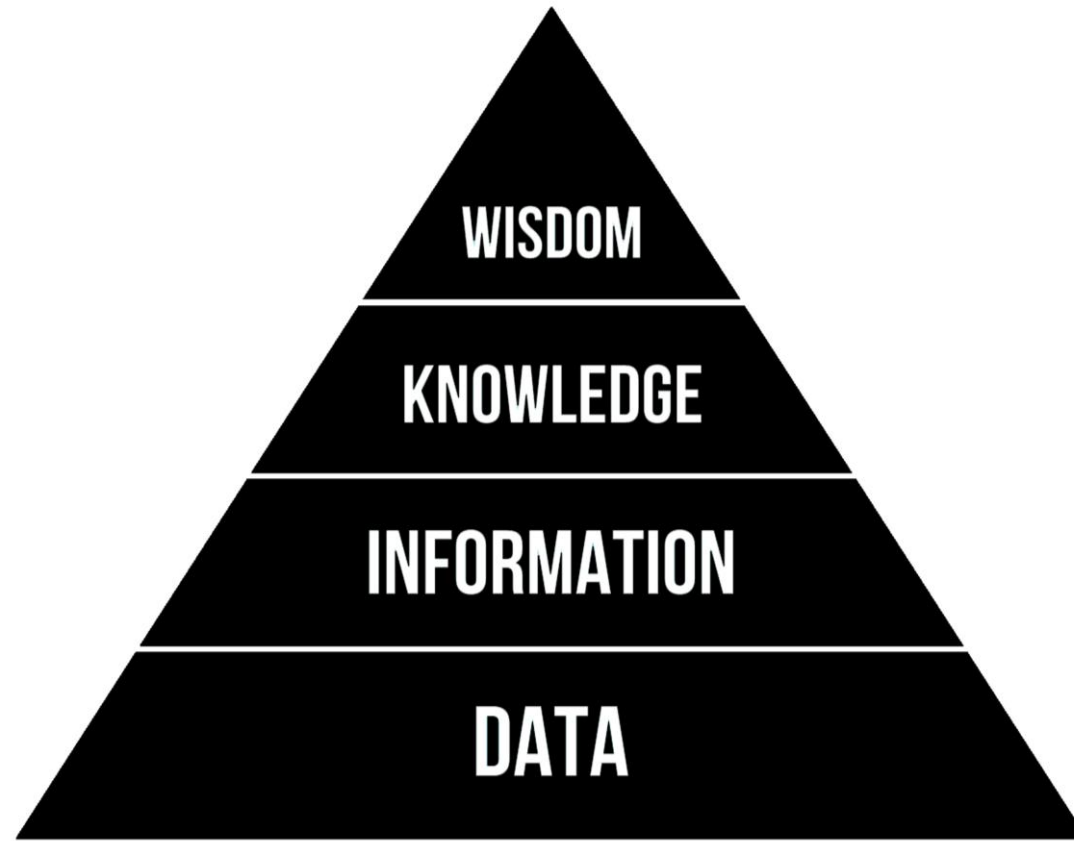
Video

Demo

From Structured Information to Presented Insights

Video

Conclusion



Thank you

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