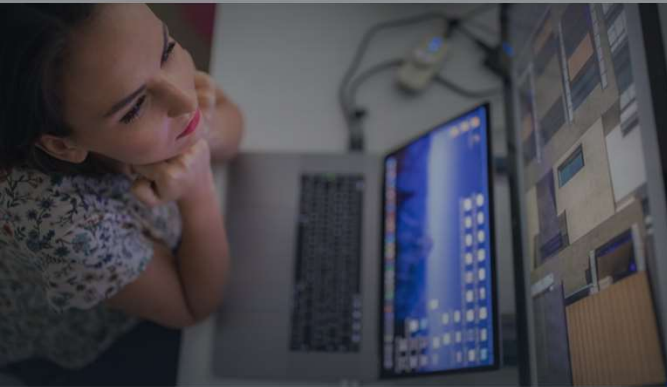




Design better neighborhoods with outcome-based design and AI

BIM Seminar 2022

Raoul Lindberg / Strategic Account Executive / raoul.lindberg@autodesk.com



MACRO TRENDS

Globalization
Urbanization
Climate Change
COVID-19

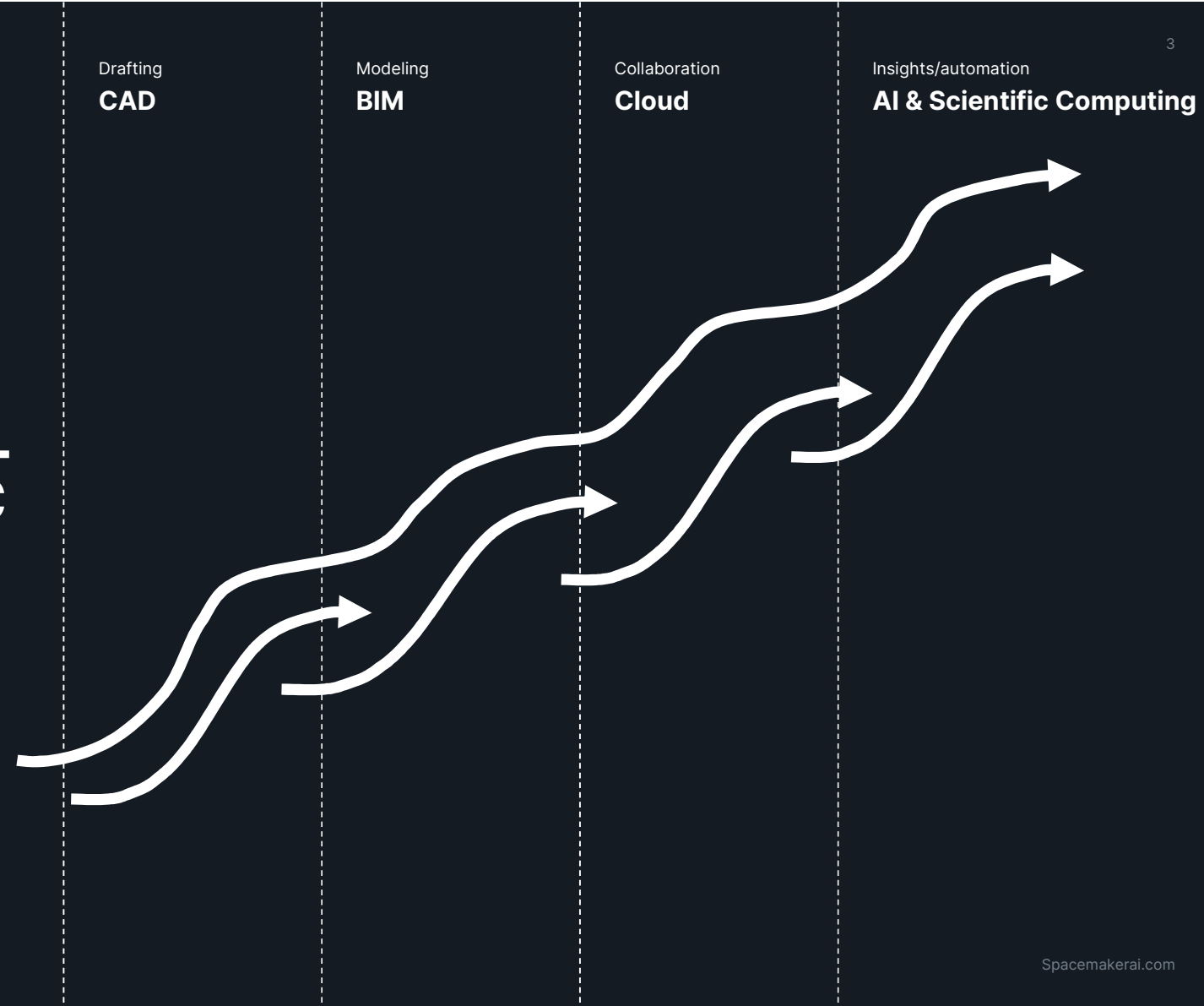
INDUSTRY TRENDS

Project Complexity
Labor Shortages
Industry Consolidation





TECHNOLOGICAL ENABLERS IN AEC

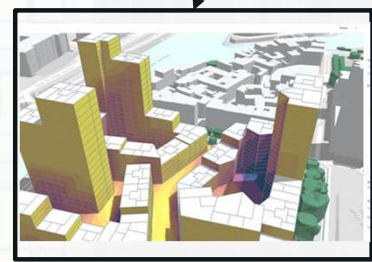
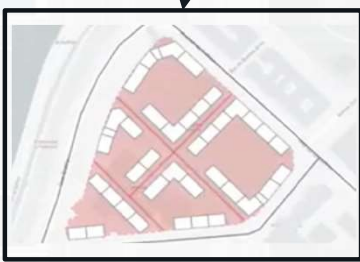


The next paradigm

Powered by macro/industry trends and technological enablers

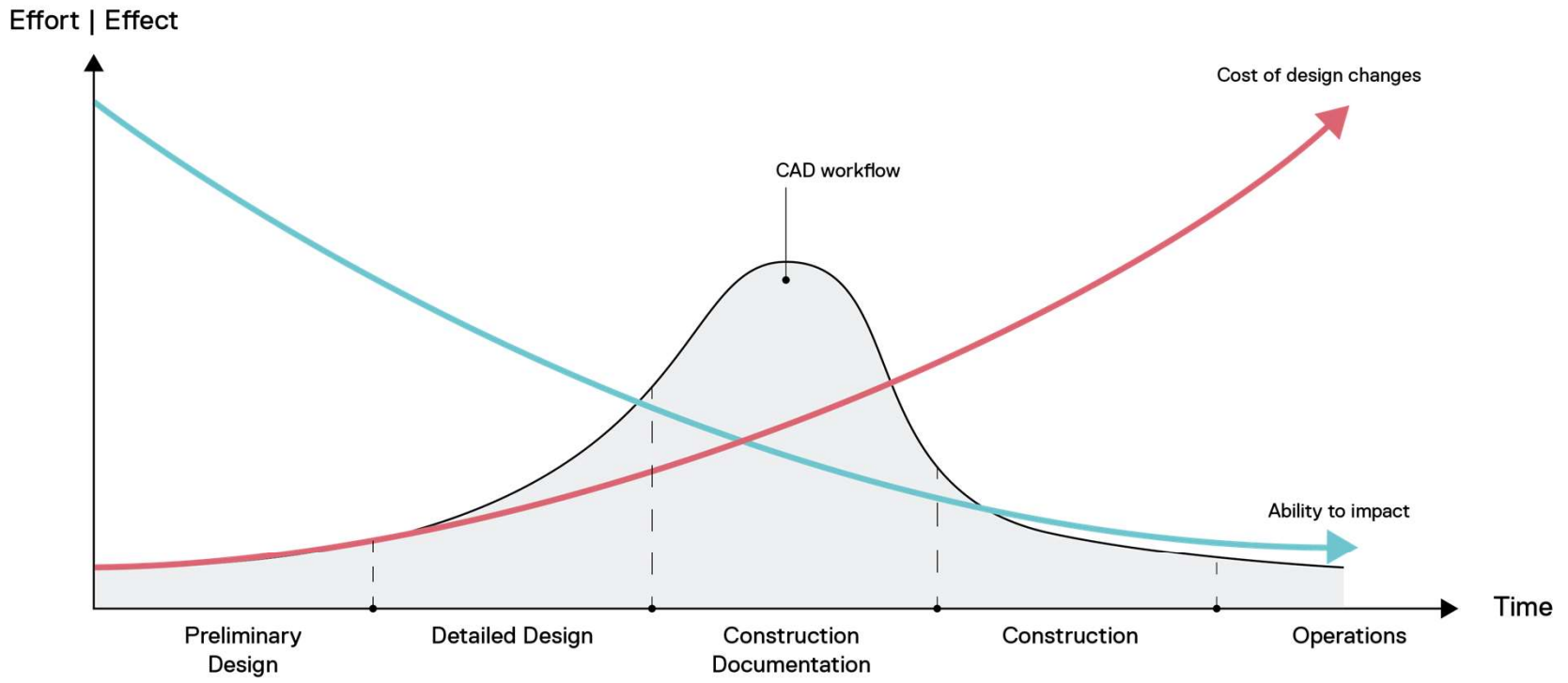


SITE ACQUISITION / SITE DEVELOPMENT



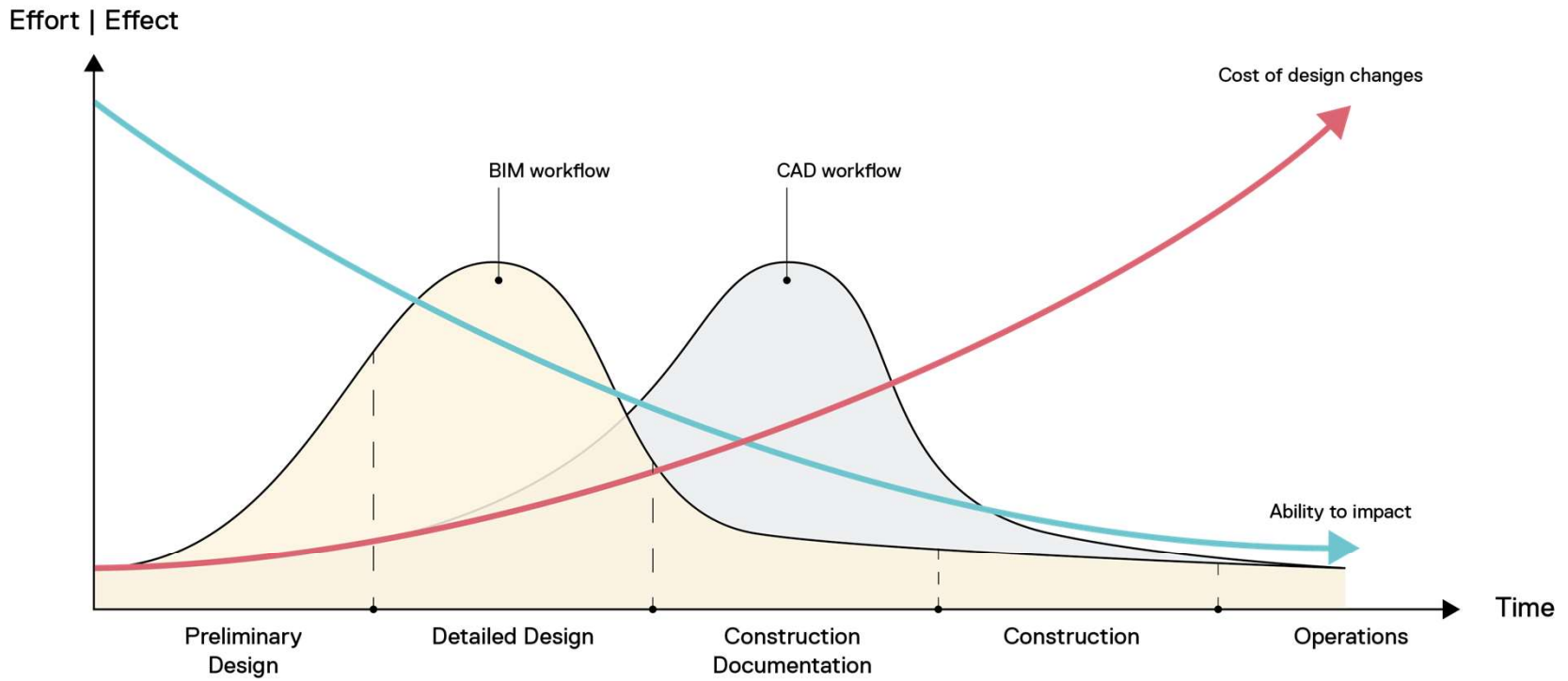
Export / sync models

CAD workflow



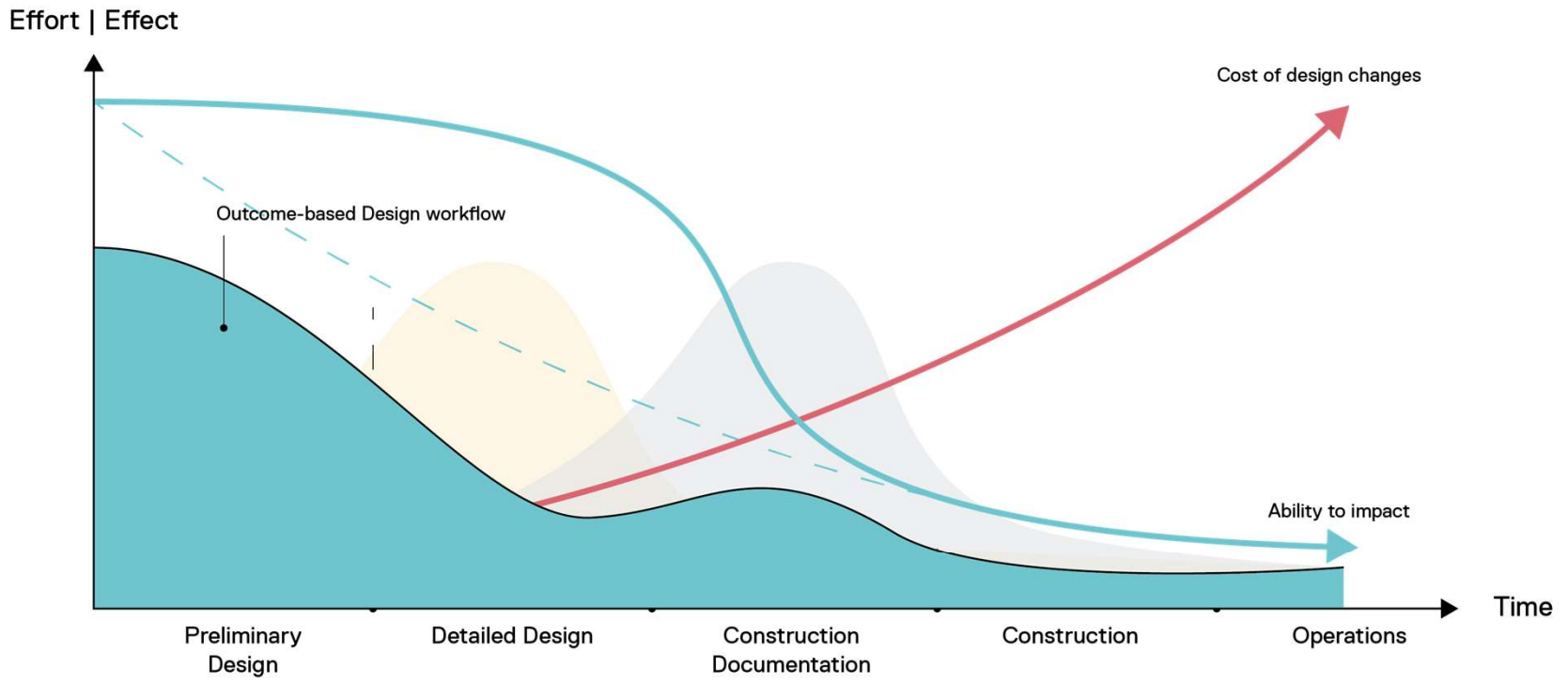
Source: McLeamy Curve
Spacemakerai.com

BIM workflow



Source: McLeamy Curve
Spacemakerai.com

Outcome-based Design workflow



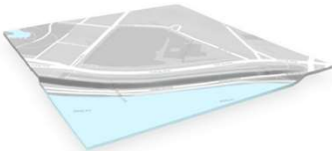


This is Spacemaker!

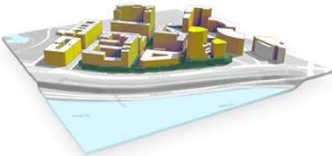


Early phase planning - re-imagined.

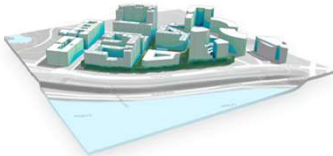
Automated data



AI-powered design



Fast integrated analysis



Seamless collaboration



While reducing loss of data between design iterations and projects

Access to 100+ analysis on each design proposal



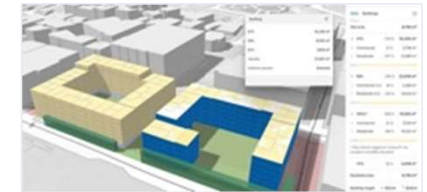
Site



Wind



Sun



Density



Noise



Daylight



View



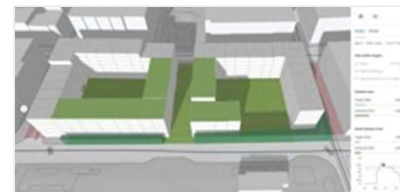
Apartments



Buildings



Terrain



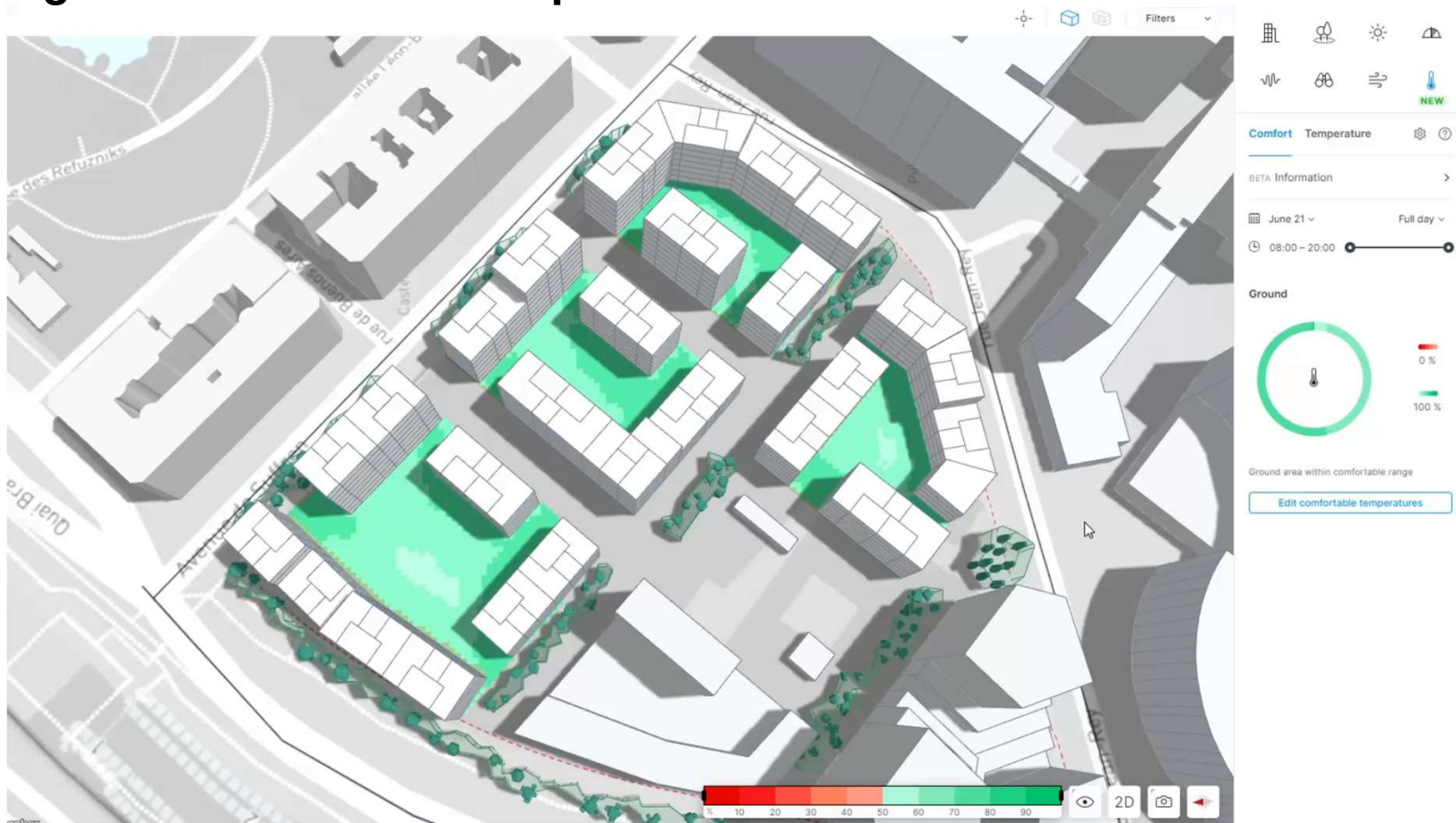
Outdoor area



Effects on neighbours

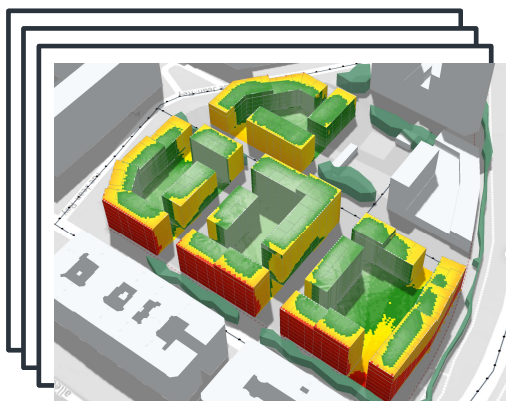
Microclimate analysis

– Design sustainable outdoor spaces



Instant noise analysis

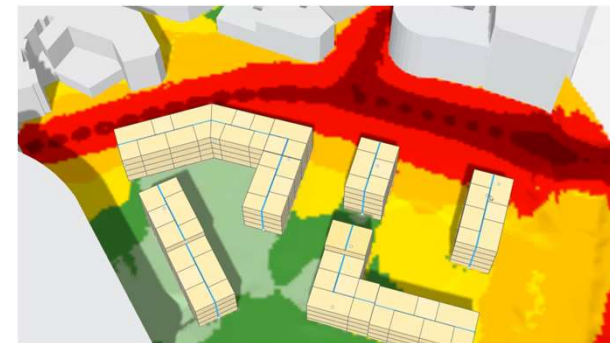
– With Machine Learning (ML)



Noise analysis



Training with
dataset (20.000+)



Instant Noise
Analysis

Instant sun analysis

– Make the right choices as you design

Kiikri | Untitled (3) ▾

Design Analyze Explore

Area Units Parking

Area	Units	Parking
Site area		8,142 m ²
> GFA	197 %	16,020 m ²
> GIA	177 %	14,418 m ²
> NIA	159 %	12,976 m ²
BC	39 %	3,204 m ²
Building height	+ 14.7 m	14.8 m
Buildable area		8,092 m ²
Facade area		8,580 m ²
Functions		Residential
Area types (2)		

mapbox

2D

Help

Spacemakerai.com

An aerial photograph of a city street. The street is filled with cars and has a crosswalk. On the left side, there is a park area with several large, circular green structures. On the right side, there are several multi-story buildings with red and white facades. The text "Case example" is overlaid in the center of the image.

Case example



Schmidt Hammer Lassen Architects, Breivika Utvikling Bodø AS



SPACEMAKER

An  **AUTODESK** product