

Cali Technology Solutions

# AI / Product

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# BIM.AI

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<https://www.cali.global/>

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## Definition

BIM.AI: BIM system powered by AI for generative design Automation & Structural analysis to shorten ETA and increase Accuracy.

In our fieldwork, there is a competitive company like :

1. ArchiStar
2. Architectures
3. Conix

They have many features on their platform, and we will present the Pros, cons, and SWOT Analysis to compare them with our company.

## Competitors

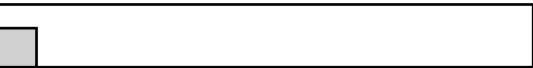
ArchiStar Company : <https://www.archistar.ai/>

### Pros



- ☐ Urban planning
- ☐ Different option of forms
- ☐ Create Database of the city embedded by Governance database
- ☐ Site selection
- ☐ Create Project Reports

### Cons



- ☐ Basic Form
- ☐ Limit LOD Plans 100
- ☐ Lack of Database [structure analysis]

### Pricing



**Starter**

**\$495** / month



**Pro**

**\$895** / month



**Elite**

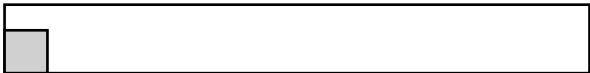
**\$2495** / month



# Competitors

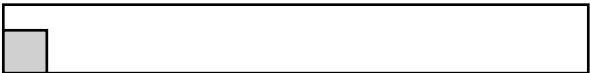
Architectures Company : <https://architectures.com/>

## Pros



- ☐ Introduction of Design Criteria and Modelling
- ☐ Custom Bill of Quantities in the projects
- ☐ Generation of the BIM solution and Project Data

## Cons



- ☐ The platform depend on Cloud systems
- ☐ No structure analysis.

## Pricing

Pro

Monthly

950€

/month

Start 15 days free trial

Most Popular (Save 25%)

Pro

12 Months

850€

/month

Billed annually

Start 15 days free trial

## Competitors

**Conix Company:** <https://conix.ai/assets/conix-landing/index.prod.html>

### Pros

- ☐ Provide many design options.
- ☐ Workshop drawings.
- ☐ Create templets for Façade
- ☐ Choosing site depend on (Setback, Front view ,Dimension).

### Cons

- ☐ Limit solutions for plans
- ☐ Basic shop drawing LOD100
- ☐ No structure analysis
- ☐ Limit Templets of furniture

### Pricing

Up to \$10M revenue

\$249 - \$699

USD per month

Starter

Up to \$20M revenue

\$699 - \$1290

USD per month

PRO

## Our Product / Pros-Cons

CALI Technology solutions Company : <https://www.cali.global/>

### Pros

☐

☐ Open AI-GH (Text2Code )

☐ Using LOD300 In projects

☐ Modular.AI

☐ Above 410 thousand plans

☐ Many option of furniture

☐ Structural Analysis

### Cons

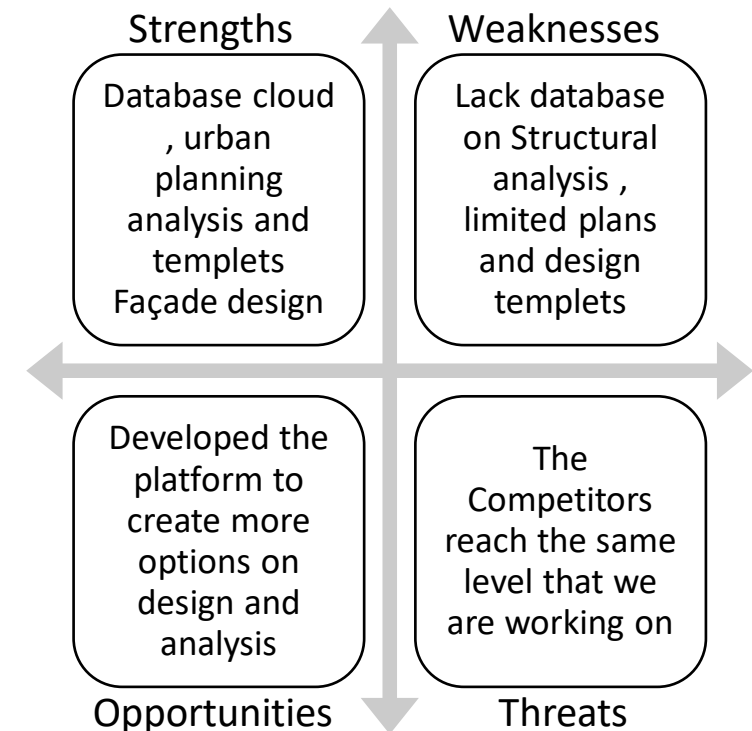
☐

☐ No MEP System in (road map)

☐ Lack of MEGA project Database like (Hospital, Commercial, Airport)

☐ No 5,6,7 BIM.AI (Road map)

## Competitor SWOT Analysis



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# Modeler.AI

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## Definition

We have noticed a lot of research discussing 3D-GAN and how to describe shapes created in three dimensions using GAN models, the best method to approach 3D-GAN, in our opinion (area of expertise), is by comprehending and respecting how 3D forms operate in 3rd-dimensional environments and how humans recognize distinctive features in any geometry since Rhino/Grasshopper is the ideal program for comprehending and analyzing 3D geometry, we turned Pytorch 1.11.0 into Torch.NET [.NET Framework 4. X] which is powered by NVIDIA CUDA 11.3 with GPU CUDA, a scenario that took us 3 months to apply. [Thanks to SciSharp as well produced Torch.NET with.NET Core three years ago]

We are confident that this strategy will greatly assist many ML Engineers and Architects in using Deep Learning (GPU) inside Rhino/Grasshopper or even Revit/Dynamo, 3D-GAN & 3D Features to prevent the extrapolation of memory usage. When using the 3D Features Extractor, you can regulate the output geometry's resolution by using a fixed number of vertices. (Fixed number of vertices = fixed memory use) You may extract all the features from scanned geometry and/or Point Cloud data with the aid of a 3D Features Extractor.



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Our product aims for a set of customers that would benefit from its services based on:

1. Fields: whether you are a Designer or an Architect or from any field that includes 3D Modeling, this tool will be of assistance.
2. Needs: the design process requires some solutions to save time and effort which can be attained using this service.
3. Values: Companies or individuals that include developed technological services in their infrastructure are more reliable than others that use traditional solutions the thing that will gain client's trust.
4. Academic range: its application is wide open for any 3D modelers; you can be a passionate student with a 3D modeling approach or a big industry that utilizes 3D modeling in I products.

## Competitors

- Dream Fusion (Google Inc.) <https://dreamfusion3d.github.io/>

### Pros



- ☐ Capable of generating a 3D model from an image  
Its capable of generating a 3D model from an image generated by the imagen text-to-image diffusion model to understand its angles better.

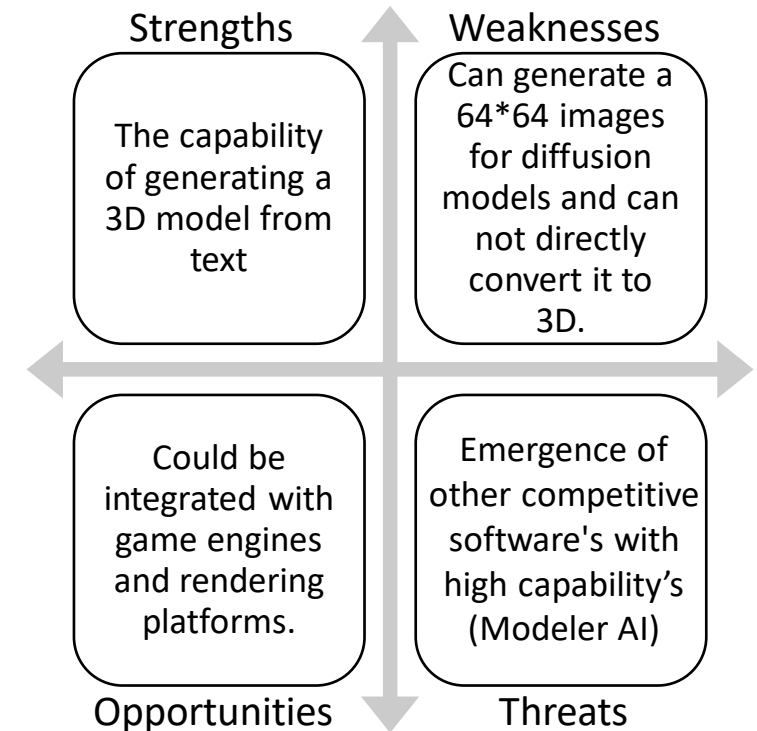
### Cons



- ☐ It only provides the model in .STL/.PLY format
- ☐ can not create a 3D model without a diffusion model and can only use 64\*64 images

### Pricing

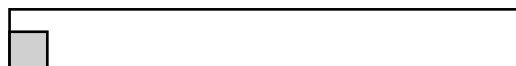
For now, its not open for testing therefore there is no pricing plans out yet.



## Competitors

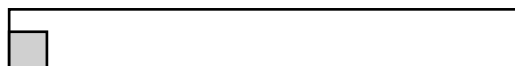
- Dall-E 2 (Open AI) <https://openai.com/blog/dall-e/>

### Pros



- ☐ capable of generating a 2D image from text captions by a trained neural network
- ☐ creating anthropomorphized versions of animals and objects, combining unrelated concepts in plausible ways

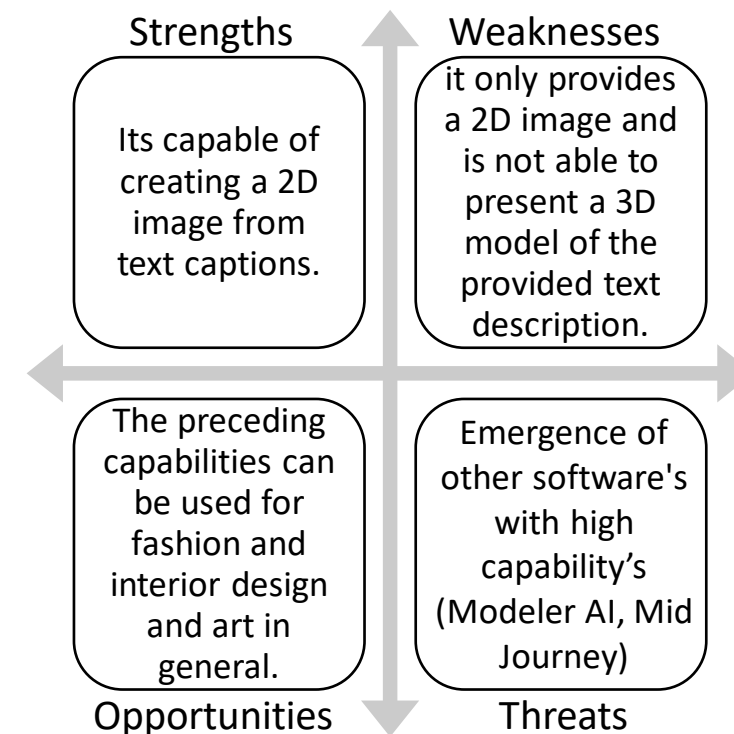
### Cons



- ☐ yet it only provides a 2D image and is not able to present a 3D model of the provided text description.

### Pricing

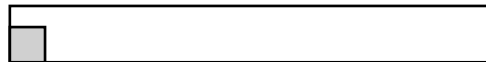
currently free to use, but there is a catch. You're allotted 50 free credits during your first month's use and 15 free credits after that.



## Competitors

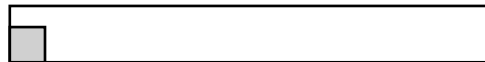
- Mid journey <https://www.midjourney.com/>

### Pros



- ☐ Generates a 2D image from text captions, It uses machine learning to create pictures based on text
- ☐ The MJ bot goes out and finds images that are like what you have described and combines them uniquely and artistically

### Cons

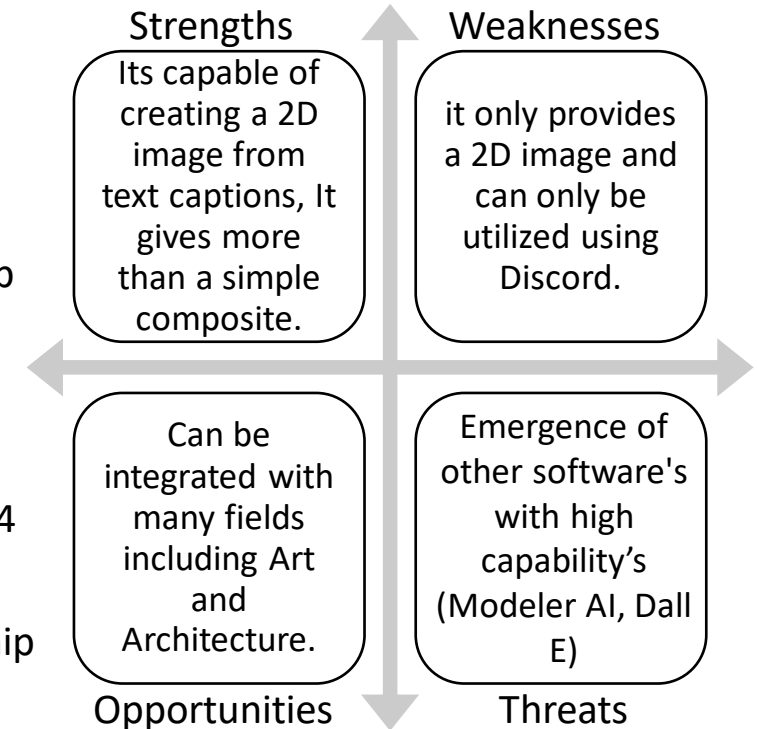


- ☐ It only provides a 2D image and is not able to present a 3D model of the provided text description
- ☐ Works only through Discord

## Pricing

Currently Free but:

1. Basic Membership (\$10/month)
2. Standard Membership (\$30/month)
3. Private Visibility Option (+\$20/month)
4. Incremental Billing (\$4 for 60 GPU minutes)
5. Corporate Membership (\$600/year)



## Competitors

- Kaedim 3D <https://www.kaedim3d.com/>

### Pros



- ☐ Consumes an AI software to create a digital 3D content from 2D images in a fraction of the time it takes human designers

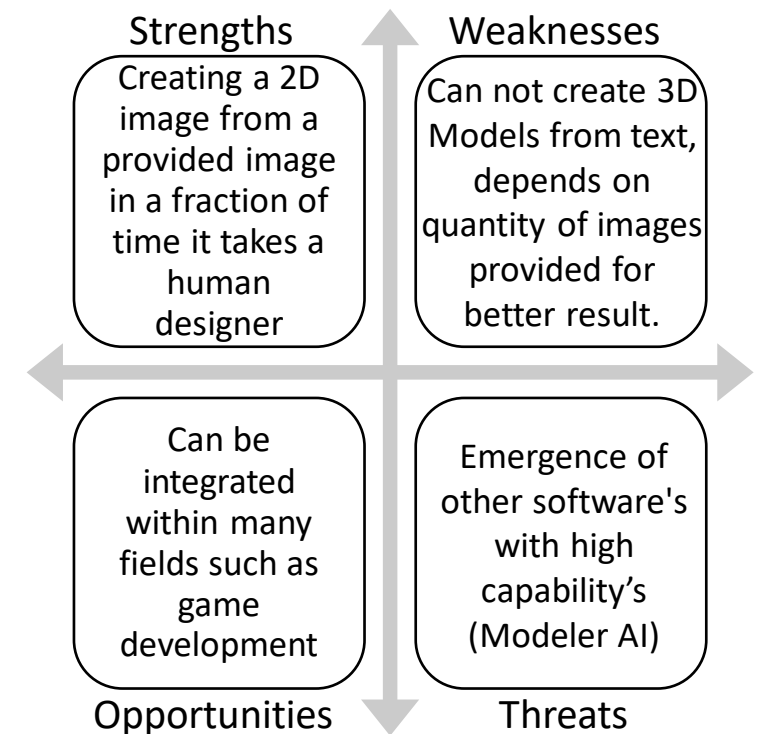
### Cons



- ☐ Unable to create the 3D content from plain text
- ☐ Efficiency of the result is affected by how many vies you provide for the model

## Pricing

The service is subscription-based, with pricing starting at \$299/month – which makes it possible to generate up to 30 models and request up to 10 iterations – and rising to \$7,700/month for up to 1,000 models.



## Competitors

- NVIDIA AI (GET3D) <https://nv-tlabs.github.io/GET3D/>

### Pros



- ☐ Trained using only 2D images
- ☐ Generates 3D shapes with high-fidelity textures and complex geometric details

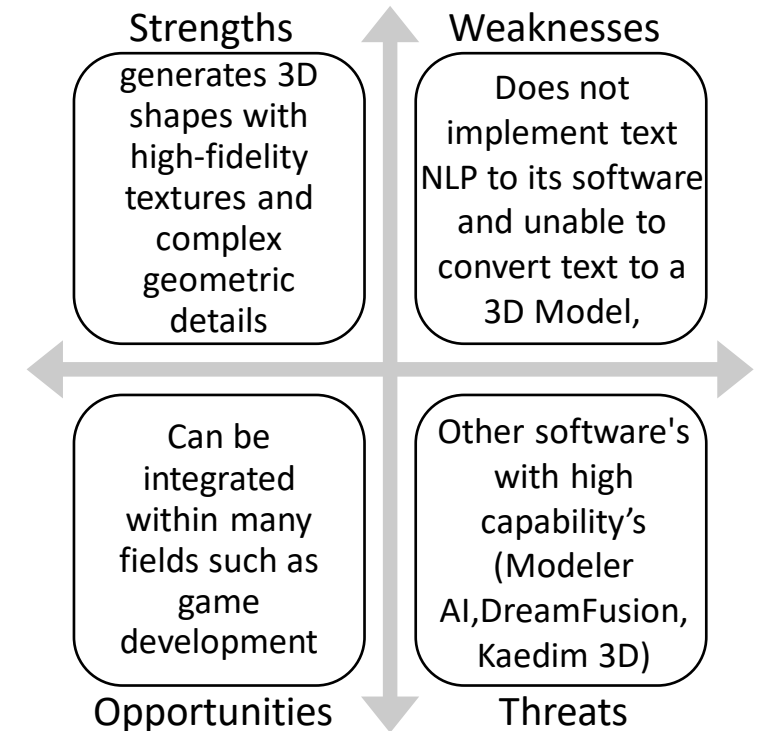
### Cons



- ☐ Does not implement text NLP to its software meaning it is unable to convert text to a 3D Model
- ☐ Only trains on 2D images to create a 3D Model with the image's features.

### Pricing

its free to use, with the use of the NVIDIA Source Code Licence.



## RoadMap

