



www.skadlabs.com

SkAD Labs

Intelligent Engineering Software

Bernhard Petermeier, CEO / Co-Founder, SkAD Labs

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Overview

1

WHAT WE DO

SkeletonCAx is a (desktop and cloud) SaaS engineering software, shortening product development time by 50%, and replacing Computer-Aided Technologies, such as CAD and CAE.

- We are focused on the \$14.5bn engineering software market, growing 8-10% annually

2

CURRENT STATUS

We are currently building partnerships to deploy and test our software in real-world environments

Product: SkeletonCAx

Current Stage: Beta

Next Milestone: Simulation/Flexible Solids release Q2 2018

3

FUNDING

Currently Raising: 600kCHF in Q2 2018

Future Rounds: Series A of 3mCHF in Q2 2019

Previously Raised: 430kCHF in early 2017

Monthly Net Burn: 29kCHF

4

TEAM EXPERIENCE

We are a team of business and science leaders that are experts with an accumulated experience of more than 90 years in our field of operation.



5

PILOT CUSTOMERS

Companies that we have pilot projects with, or that we have deployed test licenses:



AUTODESK





The Mission

To reduce development time of (mechanical)
engineering products by 50%

The Challenge

Engineering firms:

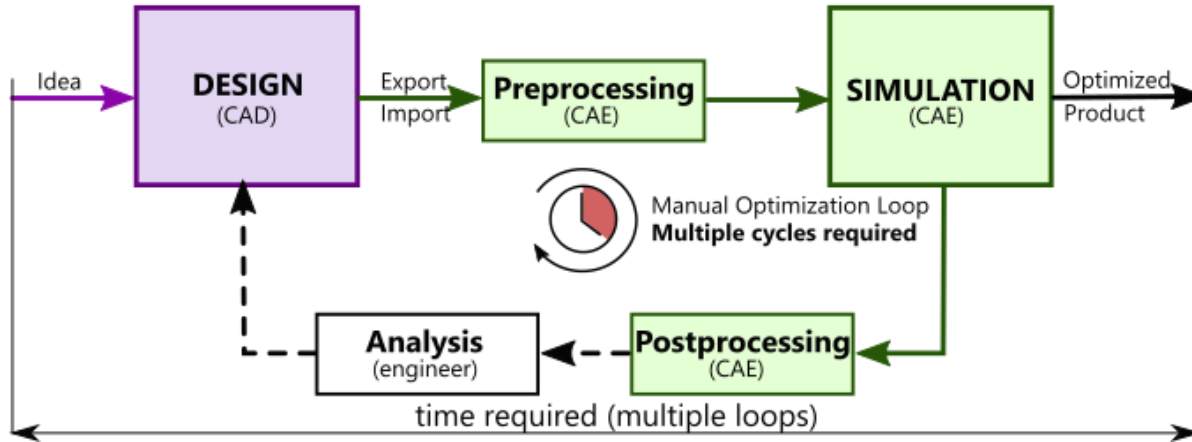
- want to reduce product **development time**, while
- improving **product performance**, at
- lower **cost**

Engineers:

- need to **permanently switch** between CAD / CAE software,
- but **Input / Output** only works **unidirectional** at **large information loss**
- and requires a **high level of manual input** and **interpretation**

The Problem

Why current CAx systems don't work



Tesla Model S
4-years in development



Airbus A380
15-years in development



Omega 8500 caliber movements
7-years in development

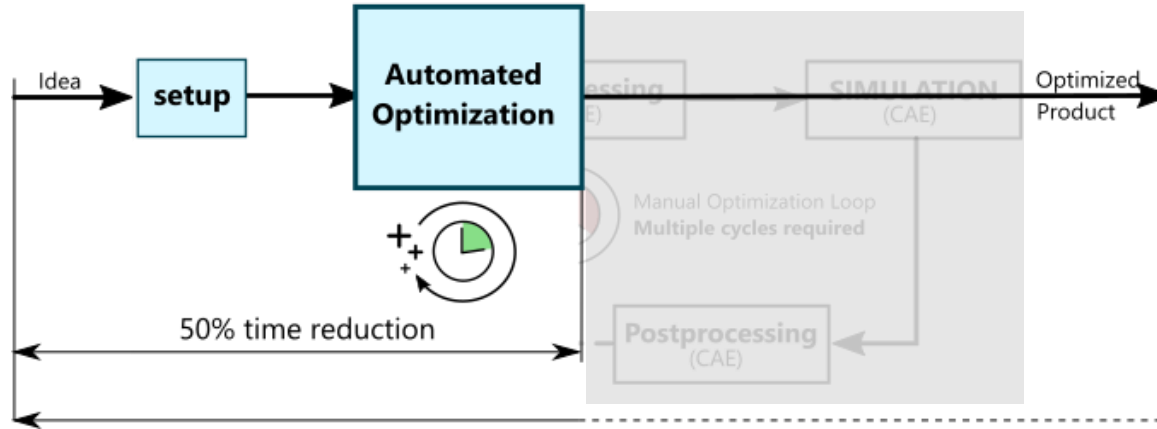


- Product optimization entails many (unidirectional) process steps
- Digital gaps caused by bad compatibility - filled by manual labor

CAx systems are built on **incoherent scientific fundaments** created independently in the '60s and '70s. These solutions **fail to deliver fast product development cycles** due to their **conflicting way objects are represented, processed and stored**.

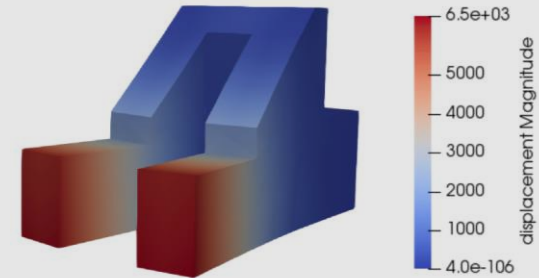
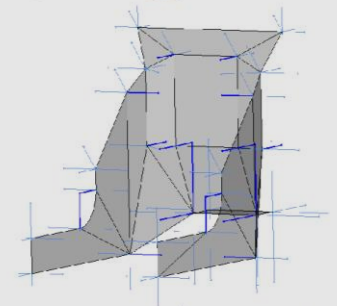
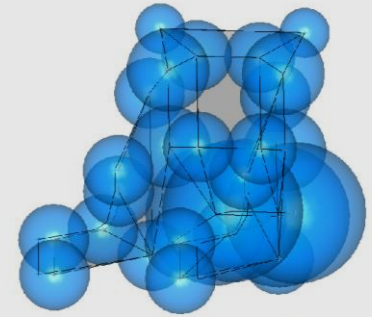
The Solution

Skeleton CAx



- SkeletonCAx allows engineering development procedures to be carried out within one single software environment

SkeletonCAx's patented MARTM technology offers a truly **integrated design, simulation and optimization software solution**, where engineering projects can be tested and modified with **double time efficiency**. It is closing digital gaps and removing time intensive manual tasks of R&D engineers.



Traction



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Cartier



ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

Unpaid Projects:

Parameter study for Cartier speeding up simulation on their product line. Will be transferred into a paid project in the future.

Paid Projects:

205kCHF Swiss [Commission for Technology and Innovation](#) project in cooperation with [Swiss Federal Institute of Technology \(EPFL\)](#)

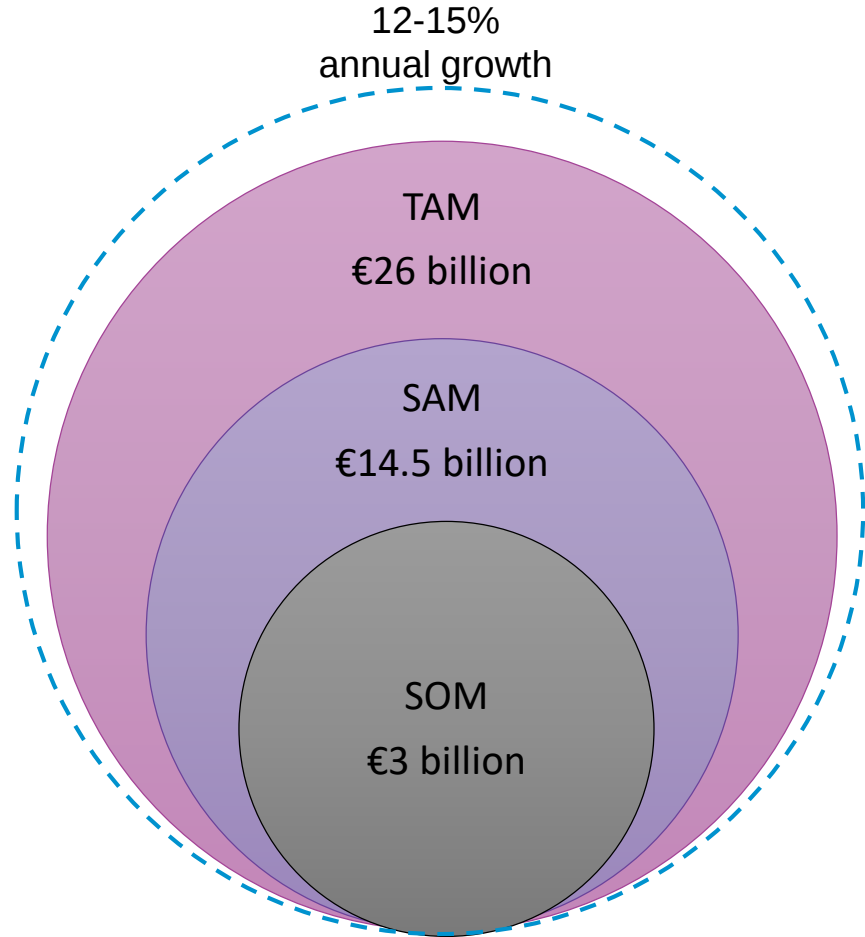
[Second project with Cartier](#) in negotiation

Deployed Licenses:

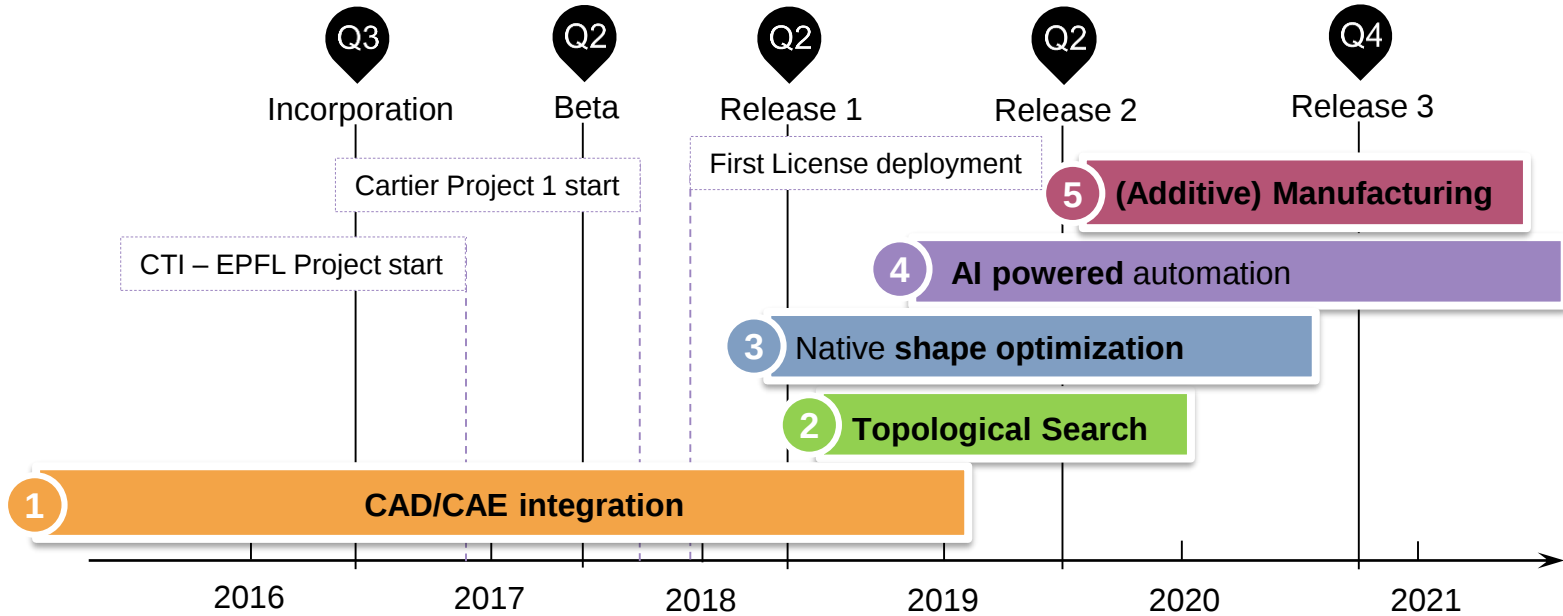
Beta license deployed to Autodesk Inc. kernel team

Market Size

- **Total Addressable Market (TAM):** €26b global engineering software market
- **Serviceable Addressable Market (TAM):** €14.5b mechanical CAD and CAE market, growing at 8% and 10% annually
- **Serviceable Obtainable Market (SOM):** €3b engineering SMEs, Watchmakers, MedTech in DACH countries + France
- €5 billion **untapped SME market** globally (52% of current CAD users that don't simulate would use CAE software if it was easier to use)**



Roadmap



- 1 Allows the fusion of CAD (design) and CAE (simulation) into one digital model – 50% shorter product development
- 2 Allows searching for geometries instead of keywords
- 3 Automated geometry optimization for mechanical products
- 4 Allows high automation level to democratize CAE access to non-experts
- 5 Rapid 3D printing functionality to speed up prototyping

Customer Acquisition



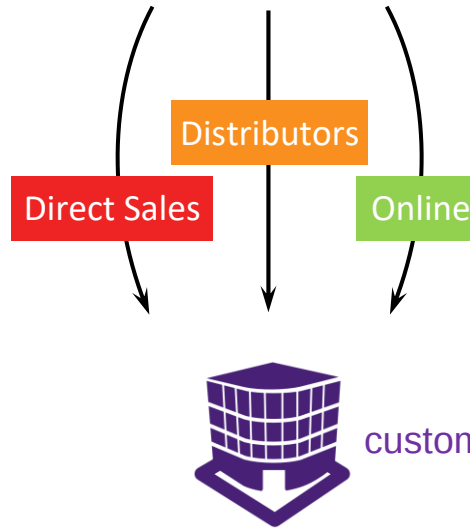
Direct Sales:

Enterprise Sales Process

- 1) Meeting
- 2) Demo
- 3) Technicals
- 4) Commercials
- 5) Closure

SME Sales Process

- 1) Demo sign-up
- 2) E-mail nurturing
- 3) Site revisits, key pages
- 4) Adding key members
- 5) Closure



Online:

- Online marketing in professional journals, magazines, blogs
- Social Media Managers for professional network platforms
- Skadlabs.com webpage ads
- Engineering software platform ads (e.g Novedge, Infinite Foundry, etc.)

Distributors:

- Word of mouth marketing
- Value Added Resellers (VAR): 10-20% commission based
- Importance of traditional VARs and distributors is shrinking

Core Team + 6 Software Developers



Dr. Bernhard Petermeier

CEO / Co-Founder

MSc – Mech. Engineering
PhD – Mechatronics
MBA – INSEAD
Global Leadership Fellow - WEF



Dr. Bogdan Lazar

CTO / Co-CEO / Co-Founder

MSc – Mech. Engineering
PhD – CAD & Production, EPFL
multiple patents, extensive
industry experience



Dr. Ian Stroud

Chief Scientist / Co-Founder

retired EPFL lecturer, co-
inventor of modern Computer-
Aided Design, author of CAD
technology books



Gerald Chaignat

Sales Director

pre-sales and sales
veteran for various CAD
vendors, like Unigraphics,
Pro/Engineer and CATIA

Offering

Current Ownership:	92% with Founders, 8% with early Angel Investor
Investment Needed:	600k CHF in Q2 2018 Series A - 3m CHF, Q2 2019
Use of Funds:	Launch Release 1 of SkeletonCAx Build up a Sales Team Product Development
Previously Raised:	205k CHF Swiss Commission for Technology and Innovation (CTI) 230k CHF Angel Investors (Convertible Loans)
Current Investors:	Dr. Kern Sibbald (Autodesk Co-Founder, NASDAQ: ADSK), Innovation Managers and Simulation R&D Engineers i.a.

Locations



Lausanne/Switzerland @ EPFL
R&D, Headquarters



Timisoara/Romania @ StartUp Hub
Software Development



@skadlabs

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