



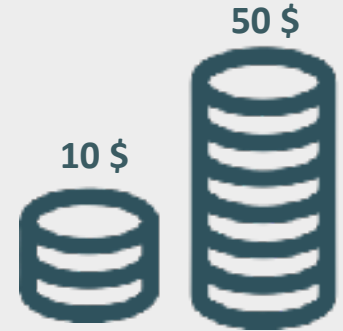
# Costifier

SMART, FAST AND EASY

Machine Learning Software for Cost Estimation

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- As stated in REACH-2021-THEMEDRIVEN-CEA\_2.2,
- Manufacturers **need to optimize production costs**, while keeping performance
- Manufacturers **need to interact with product designers** to build better products which will increase sales



- At the design stage, products are designed with performance, durability, reliability requirements etc.  
**Costs of the designs are not considered**
- **Subsequent cost reduction efforts are ineffective and costly**



Costifier creates conjectural model of the company with **machine learning algorithms** and uses this model for cost and time estimation of products to be manufactured.



Estimate the cost **with high accuracy (>90%) in seconds during design phase**



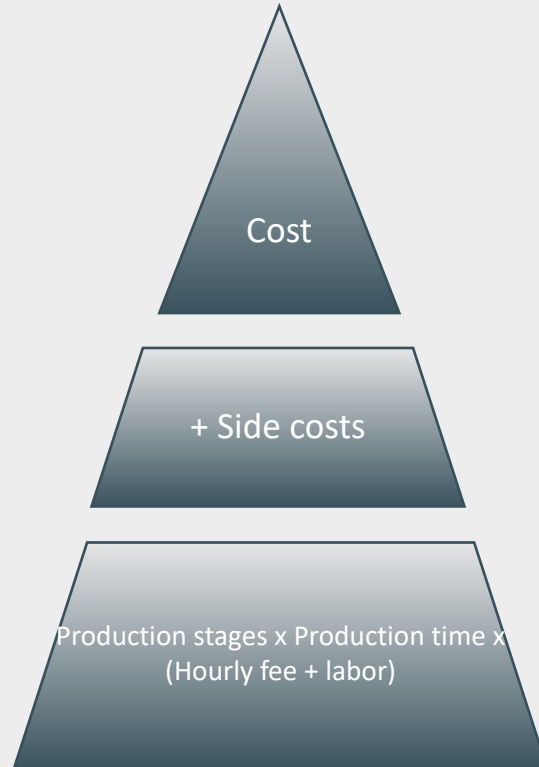
Identify the most cost-effective solution



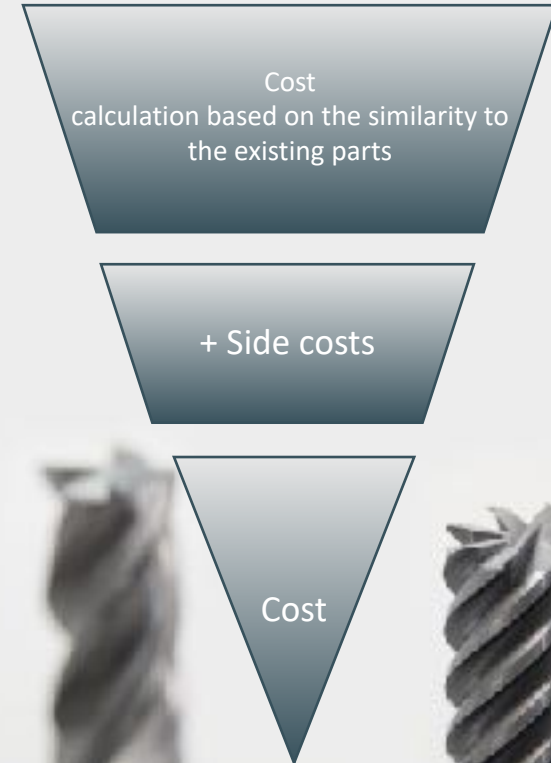
Decrease costs **up to 15%** by optimization



## Bottom to Top (Conventional)



## Top to Bottom (Costifier)



Average **5 times**  
faster and more  
accurate cost  
estimation

- Automatic detection and **digitization of categorical (non-numerical) parameters**
- The **nondimensionalization of the data** (on a scale of 0-1 to prevent them from being overly dominant).
- **Inconsistent and incorrect data are detected and deleted** by preprocessing algorithms.
- **Escalation** (i.e. raw materials, labour costs change) formula is applied for more reliable and up-to-date data since costs may change with time.
- **15% of data are reserved for testing** after model are ready.
- Then Costifier creates **12 different machine learning (ML) models** by using different open source algorithms.
- The models with the highest **accuracy** are saved to be used in cost calculation in proportion to their accuracy rates. Models with lower than **0.9 accuracy** with test data are eliminated.

- A manufacturing case study results with about 200 manufacturing data

**~90%**

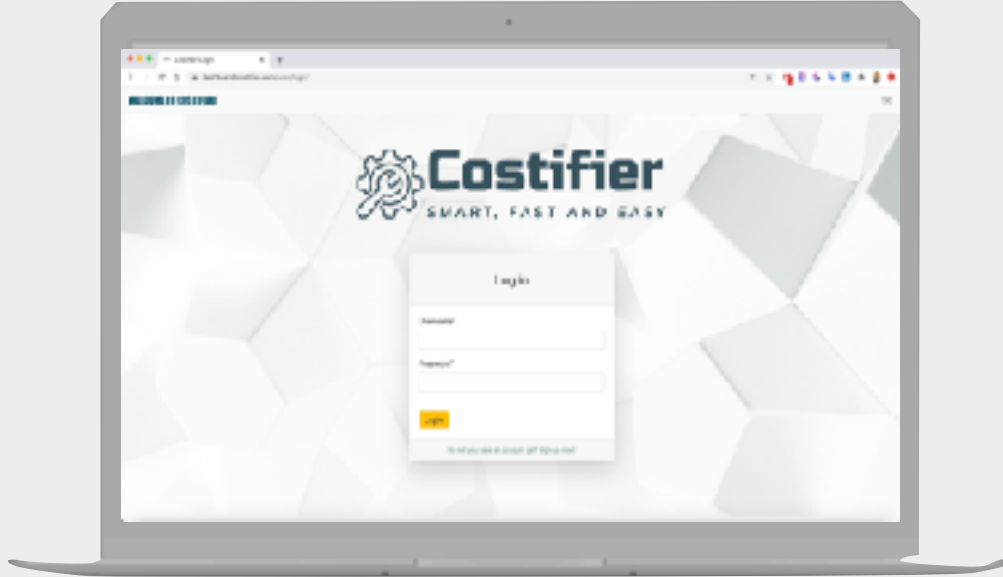
**Costifier** prediction  
accuracy relative to  
**actual cost**

**30%\***

Better Cost  
Estimation for Bidding



\*When Costifier estimation and SME cost estimation compared during bidding



[costifier.sfmyazilim.com](https://costifier.sfmyazilim.com)

- They can sign up and create their own models by uploading their data.
- The cost estimation process, which takes 4-5 hours a day, can be reduced to minutes.
- Production costs can be reduced up to 15%.











## SAAS

- Basic Model
- Premium Model
- Optimization Model

## API

- License Fee
- Maintenance Fee  
(25% of license fee annually)



	 <b>Costifier</b> SMART. FAST AND EASY	 <b>aPriori</b>	 <b>SIEMENS</b> PERFECT COSTING SOLUTIONS Software • Knowledge • Services	 <b>DASSAULT SYSTEMES</b> SolidWorks Costing
Company Specific Highly Accurate Model	✓			
Industry Average Models		✓	✓	✓
Automatic calculation with 3D model	✓	✓	✓	✓
Up to 15% Cost Reduction	✓			
Constantly Updated Smart Software	✓			
Cost	\$	\$\$	\$\$\$	\$\$\$

Europe, Middle East and Africa  
Manufacturing Industry\*  
**100- 150 Billion €**

EU Manufacturing Industry\*  
**2 – 3 Billion €**  
(app. 250,000 companies)

**150 Million €**

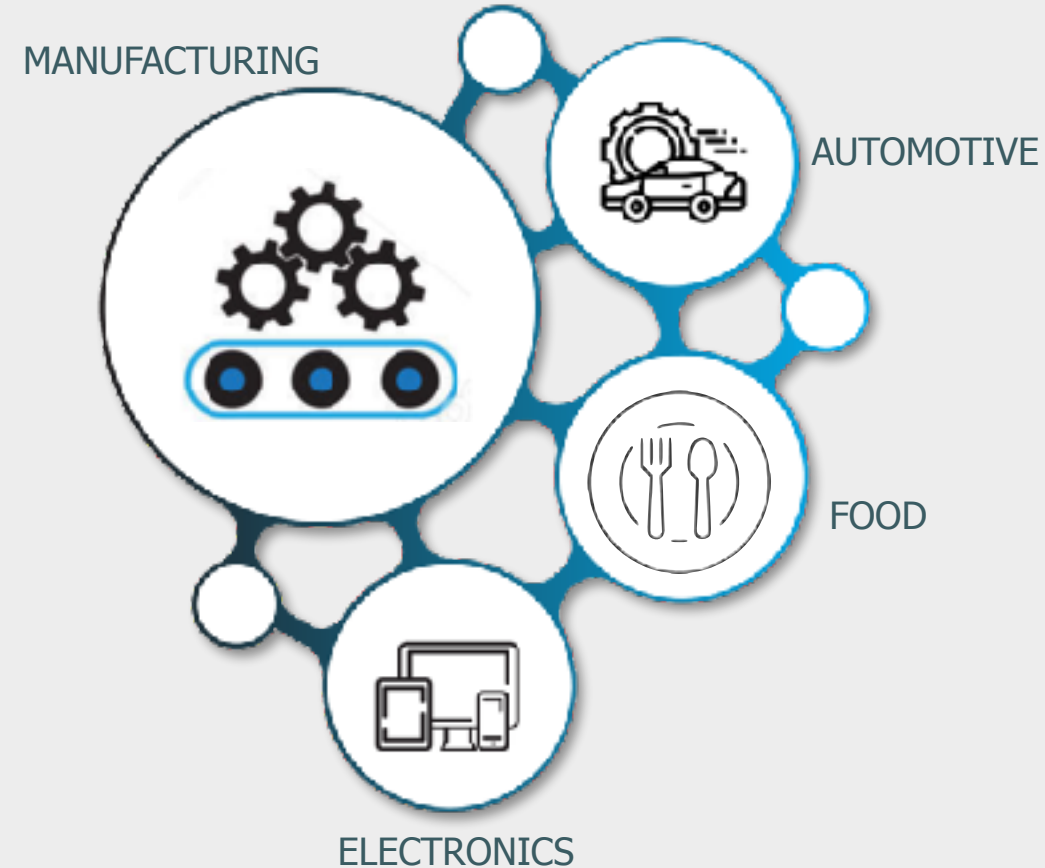
Companies with available data in the  
manufacturing industry in Europe (about  
50,000)

\*Ref: U.S. Census Bureau, Statistics of U.S. Businesses

\*Ref: ILO; Euromonitor international; Economist; BCG report



## SECTOR INDEPENDENT SOLUTION



- Costifier is also applicable to other sectors such as automotive, electronics and food.





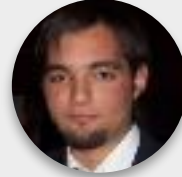
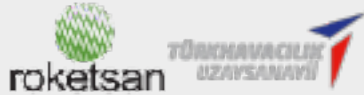
Ersan TURAN

**CEO / Business Dev.**



- 2009 Aerospace Eng.
- 2009 Mechanical Eng. (Minor)

**10+ Experience**



Dr. Ömer Anıl TÜRKKAN

**CTO / Software Dev.**



- 2009 Aerospace Eng..
- 2010 Computer Eng. (D. Major)

**Phd and 10+ Experience**



Prof. Dr. İnci BATMAZ

**Advisor**



- 1984 Statistics
- 1986 Computer Eng
- 1994 Statistics

**Phd and 25+ Experience**



Eray Birinci

**Software Development**

**10+ Experience**

Abbas Can Güven

**Software Development**

**Full Time**

Sait Soyalp

**Marketing &Sales**

**Full Time**

Oğuzhan Deniz

**Marketing &Sales**

**Full Time**

# Fast and accurate cost estimation for the product to be manufactured during design phase

- ML based digital modeling for accurate predictions
- Up to %15 cost reduction with optimization algorithms





# Costifier

SMART, FAST AND EASY

Thank you

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