The Origin of Everything:

HOW CAD Changed the World

A Lot Has Changed Since The Early Days Of Blueprinting

Anatomy of a Designer

70s

DRAFTING TABLE

DATE	SCHMIDT + HAMBACH
TITLE	ISO DRAFTING MACHINE
DATE	08/01/1955
COST	GERMANY

The Dawn of Digitized Design

CAD Software Transformed Design From The Inside Out

80s

COMPUTERS

UNIX SYSTEM

ORIGINAL LIST PRICE

$100,000+

DATE	CALMA
TITLE	DIMENSION IV SYSTEMS
DATE	1982
COST	UNITED STATES
TITLE	CADS (CALMA NASA-DOD OPERATING SYSTEM)

PRODUCT NAME

PRO/E-2 software

Used for educational institutions in CDC,DEC for commercial concerns in Prime, Apollo, Ametek, Sun

AVERAGE PRICE PER SEAT

$50,000

The Adoption of Computer Aided Design

90s

COMPUTERS

IBM OFFICE-STYLE DESK & PRINTER

Original List Price

$138,000

DATE	Silicon Graphics Inc.
TITLE	Indigo2 IMPACT R10000
DATE	01/01/1996
COST	UNITED STATES
TITLE	IRIX 6.3 IRIX 6.5.22

PRODUCT NAME

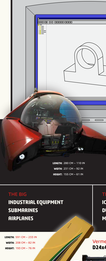
PTC Pro/ENGINEER

Rule-based constraint. Sometimes "unique" parameters, or "variational" is used to describe this.

AVERAGE PRICE PER SEAT

$14,000 - $20,000

SOLIDWORKS brought 3D design to every designer's desktop



Bringing CAD software to Windows machines was much cheaper than dedicated CRO workstations

$250,000	Silicon Graphics Onyx Reality Engine2
$18,000	HP 9000 Series 700 workstation
$10,000	Silicon Graphics Indigo 2 IMPACT
$2,000	Intergraph Intergraph Intergraph

PRODUCT NAME

SOLIDWORKS 95

AVERAGE PRICE PER SEAT

$4,000

SOLIDWORKS CRO software also made design more accessible to users

- creation software took months to master versus years
- Did not require specialized hardware
- Received computers or reasons ARM systems

Today we can use CAD to make almost anything

THE BIG
INDUSTRIAL EQUIPMENT
SUBMARINES
AIRPLANES

THE SMALL
ICE CREAM MACHINES
SUPERBILLS
MICROROBOTS

Intelligent Robots
D2A6 6DOF Series II

THE TINY THE UNIQUE
RING DOORBELL CAMERA
BOSTON DYNAMICS ROBOTS
HUMMINGBIRD ROBOTICS

Endoskeleton
Frozen Treat Machine

CAD is not just software, it's a community

CONFERENCE SPEAKERS WHO INCLUDED:

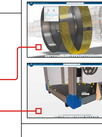
MythBusters
Science Entertainment Experts

Marc Raibert
Founder of Boston Dynamics

Jamie Siminoff
Entrepreneur and CEO of Ring

Mon, Sep 19, 2016 | 10:00 AM - 11:00 AM
Mark Sylvester, CTO, Solidworks
Solidworks World → WORLD

Since 1995, a passionate group of designers, engineers, students, makers, and executives has gathered to learn, network, and celebrate SOLIDWORKS and its community. The annual event has evolved over the years to become a key industry touchpoint for 3D CAD and all aspects of product development.



SOLIDWORKS Users International Community	8 million+ Solidworks users	850,000+ Solidworks Customer Accounts	200+ SOLIDWORKS User Groups

Designing the Future:

The Golden Age of Design

2024

COMPUTERS

A COMPUTER
DESK, COUCH, TABLE,
COFFEE SHOP, ETC

DATE	Surface Laptop Studio 2
TITLE	Surface Laptop Studio 2
DATE	2023
COST	CHINA
TITLE	WINDOWS 10/11 PRO

SOLIDWORKS SUBSCRIPTION

- INDUSTRIAL DESIGNERS
- MECHANICAL ENGINEERS

1998	2015	2016	2021
ACADEMICS	ENTREPRENEURS	CHILDREN	DIY ENTHUSIASTS
SOLIDWORKS 98 Plus	SOLIDWORKS for Startups	SOLIDWORKS Apps for Kids	SOLIDWORKS for Makers

With creators contributing to the community every day

Solidworks With Ryan Fallahi	Jerry&Ryfwrgything Zack Nelson	Hacksmith Industries James Hobson	Praveen Singh (Solidworks Fun)	Solidworks Tutorials with Nathan

But The New Age of CAD Software Is Just Beginning

The Yesterday, Today, and Tomorrow of CAD

2025+

TO BE DETERMINED

AI TOOLS

SOLIDWORKS

DESIGN ASSISTANT

Predictive AI Assistance Based On Your Workflow

- Design Assistant **Selection Helper**
- Design Assistant **Mate Helper**
- Design Assistant **Sketch Helper**
- Design Assistant **Smart Mate**

SOLIDWORKS

AURA AI

'Virtual Companion'

Generative Artificial Intelligence and Large Language Model

- **Learns From User Behavior**
- **Instant Response Time**
- **Summarizes Company Know-How**

SOLIDWORKS

AI DRAWINGS

Artificial Intelligence and Machine Learning

- **Image To Sketch**
- **Instant Assembly Creation**
- **Produce 2D Drawings From 3D**

Here's to the next 30 years of CAD software

SOLIDWORKS

SOLIDWORKS.COM

SOURCES

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HOWBOURGEONS