# Reinvent PLM for New Market and Manufacturing Leaders



### Imagine 20-25 years ago...



No Google

No iPhone

No Facebook

No Uber

No Google Maps

No Waze

No Online music

No Airbnb

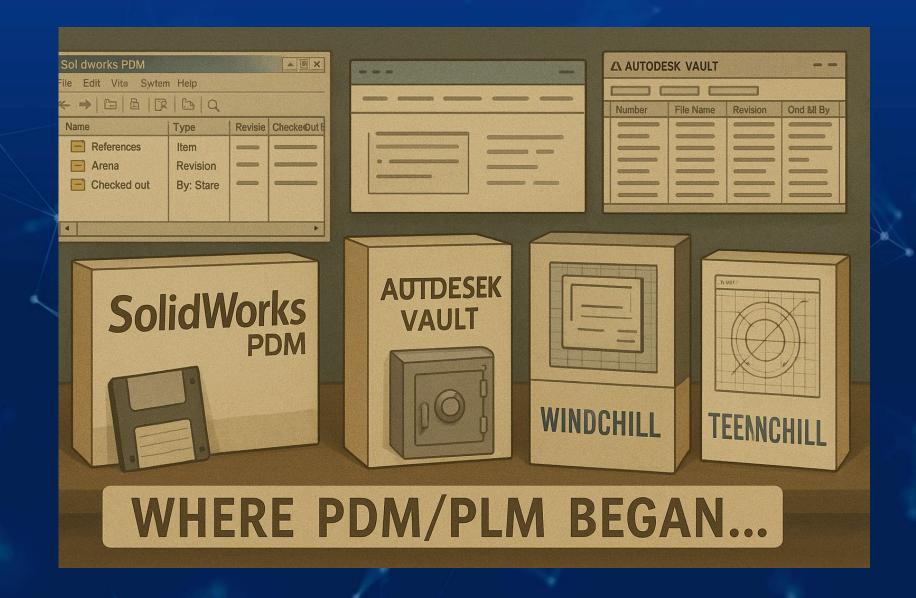
No Expedia

No Wikipedia

But...



### Most PDM and PLM software is essentially the same as it was 25 years ago



### Innovation Built on Empowerment and Agility: Speed, Openness, SaaS

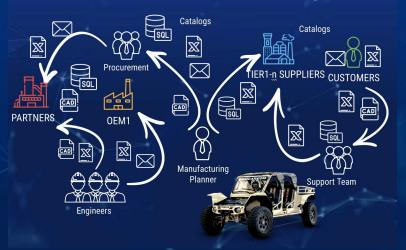


# The last "established" PLM is 25 years old

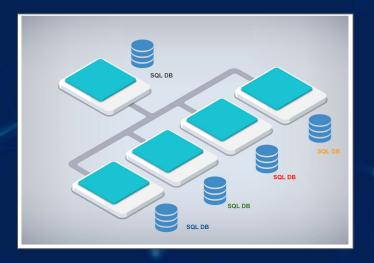
### What is wrong with existing PDM & PLM tools?

- 1. Old tenant architecture and data architecture
- 2. Scalability issues (stuck in the middle)
- 3. Mainly focused on CAD file management
- 4. Rigid data models
- 5. Application logic is tightly connected
- 6. No easy way to recombine the data
- 7. Find relationships between systems is hard
- 8. No analytics, no intelligence

### Modern Manufacturing



Old PDM/PLM tools





### Why OpenBOM?

A digital thread cloud-native platform supporting PDM, PLM, and ERP Integrated Functions Tailored for Modern Manufacturing



- Trusted by over 300 customers and over 50,000 registrations
- Winner of G2's 2023 & 2024 Best Software Award in CAD & PLM
- ~700 reviews in G2's PLM category
- ~100s customer <u>stories</u> and <u>reviews</u>

"The OpenBOM product is a good fit for us as a company. I did not anticipate the overall benefit of the Solidworks integration. It was a big WOW! moment. OpenBOM is a perfectly suited, good value product. It's an excellent match to our needs. OpenBOM forces adherence to a process!"

John Ellerbrock, President Gates Underwater Products



"I absolutely love that OpenBOM lets me share accurate, complete BOMs with vendors, partners, customers, my colleagues in Israel, and so many more. It is great for my team and great for the company"

Jonathan Drori - Lead Engineer, Tomcar





### **OpenBOM Solutions Strategy**





"Design to Quote" integrated data management solution providing features from PDM, PLM and ERP tailored for SMB/SME Agentic AI workflows - "Zapier for engineers"



### **Analytics + Collaboration**

Enterprise collaborative tools (BOM chat)
Enterprise BOM costing
Contactor collaboration for ODM/CM
Graph data science and dashboards



### Al Workflows & Enterprise Transformers

Digital Thread Solutions Al enterprise transformers for BPA BOM copilot



### Transform Files, Data, and Tools with Data Intelligence and Agentic Al

Knowledge Graph + Enterprise Data Transformers Manufacturing Maintenance **Engineering** 

We are here...

Co-pilot prototyping Graph DB, LLM, RAGs

Research for industry ontologies and knowledge araph building

Graph queries to product data and application layers, integration, and graph navigation. Product model mergers and similarities.

Flexible data model, real-time collaborative services, integration services, integrations with major CAD, PDM, PLM, ERP and other sources

Multi-tenant platform 60k regs, ~2k customers, global availability, microservices, polyglot persistence (Neo4j, MongoDB, Elastic, etc)

AI/ML Models

Intelligence

**Industry & customer** 

ontologies

Knowledge

Graph Data, Graph Queries

Mapping Data Models

**Analytics** 

Domain & Customer Schemas, Integrations, and

**Customer Product Data** 

**Product Data** 

AI-driven workflow layer

on top of existing tools using new gen data modeling and AI technology

Cloud Architecture, Storages, Databases, Data Models

**Platform** 

OpenBOM Product Knowledge Graph (PKG)



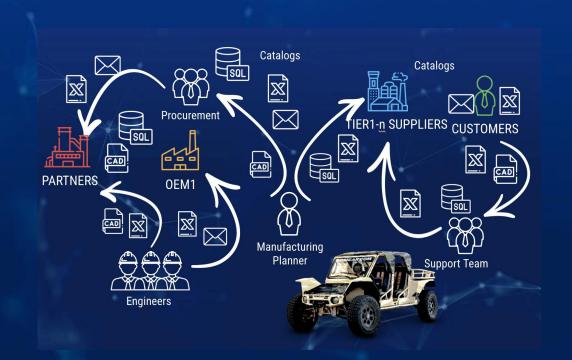
### **OpenBOM Strategy:**

Collaborative Workspace Connecting Engineering Data to Business Processes using Graphs and Agentic Al

**Exclusively for Manufacturing Leaders** 



# **Engineering and Manufacturing Data Management Challenges**



- 1. Product complexity growth
- 2. Cost and competition pressure
- 3. Supply Chain turbulence
- 4. Traceability and maintenance
- 5. Regulation and compliance

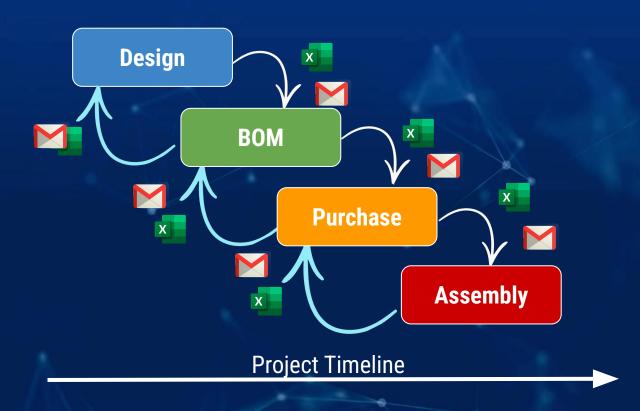
While <u>68%</u> of industrial companies CEOs are increasing digital investments, only <u>25%</u> of manufacturers trust their data's organization and reliability.



#### **Chaos of Disconnected Documents**

#### **Chaos of Emails with File Attachments**





Disconnected Process using emails and files, the information is hidden in the documents



### Solution: Collaborative Workspace For Engineering & Manufacturing Teams

Organized Product Data + Connected Agile Data Driven Process

#### **Empower Engineering to Move Faster:**

- Streamline design collaboration
- Eliminate manual BOM work
- Ensure data accuracy and traceability
- Connect design to procurement seamlessly



#### **Reduce Operational and Material Cost**

- Gain early supply chain insights
- Eliminate errors and mistakes
- Improve cost tracking
- Reduce rework and improve collaboration

#### **Increase Product & Services Sales:**

- Accelerate time-to-market
- Strengthen customer connections
- Simplify maintenance
- Align designs with requirements



#### Mitigate Product and Operational Risks

- Ensure early BOM visibility
- Identify supply issues early
- Maintain regulatory compliance
- Strengthen cost control

Accelerate Development and Reduce Risks via Design, Quoting, and Production Integration



# 3 Points Strategy To Integrate Design, Quoting, and Production

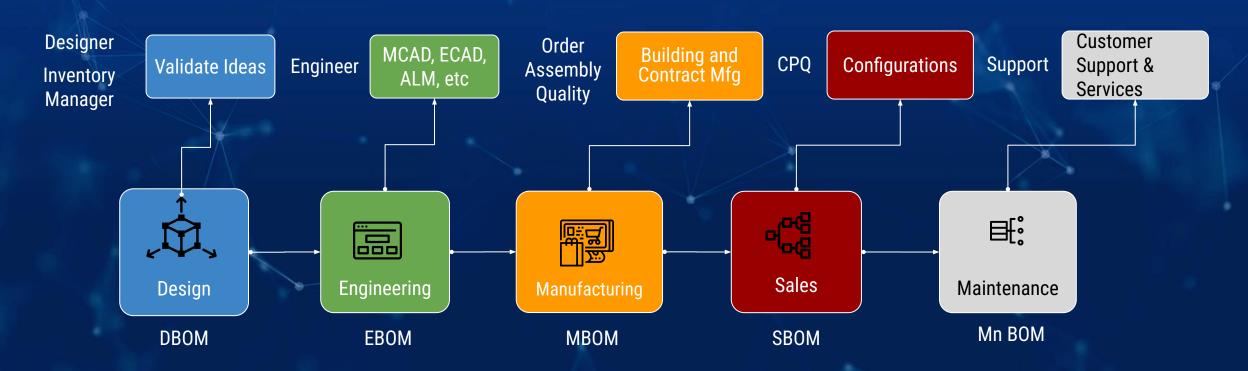
- 1. Digital BOM and Connected Product Lifecycle (PDM/PLM)
- 2. Seamless Design Integration with Multi-CAD Support (CAD Add-ins)
- 3. Integrated Production Management (RFQ/PO, Inventory, ERP)

<u>OpenBOM</u> is a cloud-based platform (<u>SaaS</u>) specifically designed for engineering teams and manufacturing companies. It provides an integrated suite of <u>PDM, PLM, and ERP</u> functionalities, seamlessly tailored to meet the needs of <u>growing manufacturing teams and medium size enterprises</u>



### Digital BOM and Connected Product Lifecycle (PDM/PLM)

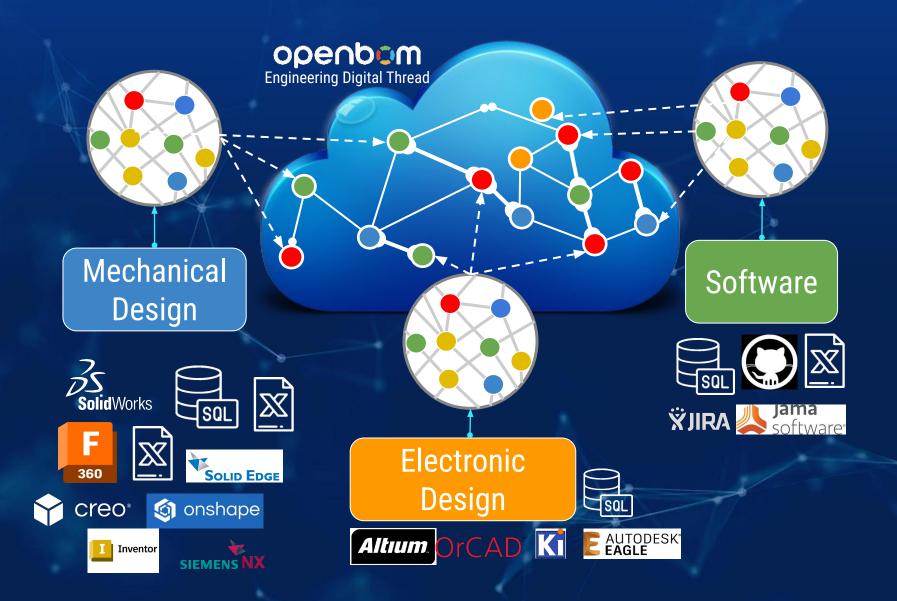
• Flexible Data Model • Revision Control • ECO/ECN • Graph Navigation • xBOM • Cost rollup • CAD/PDM/ERP • Role-based instant data sharing



OpenBOM creates a digital twin of your product lifecycle, organizing information and streamlining processes across teams, contractors, and suppliers



# Seamless Design Integrations with Multi-CAD support (CAD Add-ins)



CAD File Management, Cloud Storage and Versions

Multi-CAD Integration: Expertise in file and data capture from multiple engineering data sources

Automatic Derivative Files (STEP, PDF, STP, etc)

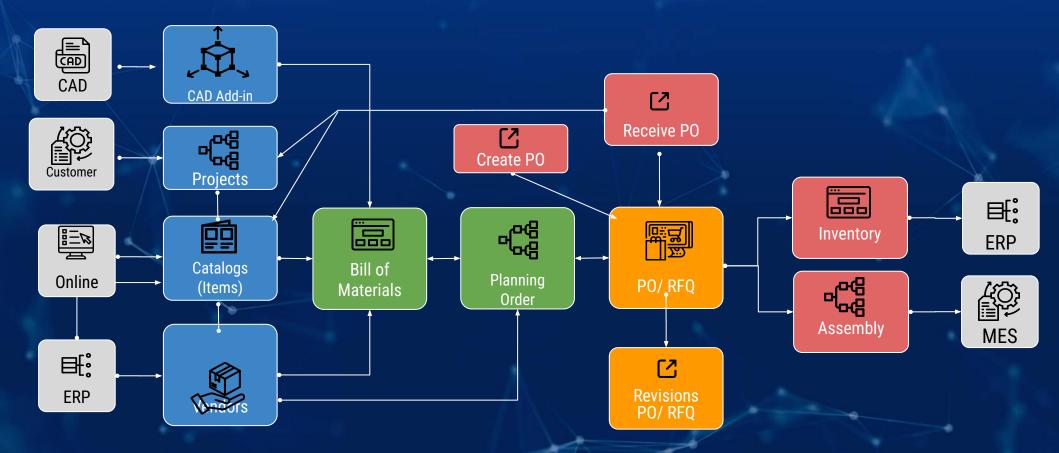
Dedicated Add-ins for CAD systems and specialized API Toolkit

Unified BOM Creation Across Systems MCAD, AECO, ECAD, Software



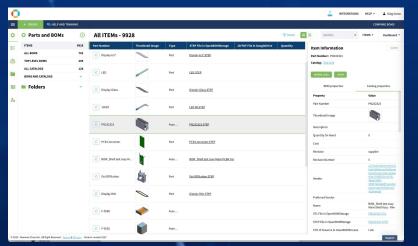
# Integrated Production Management (RFQ/PO, Inventory, ERP)

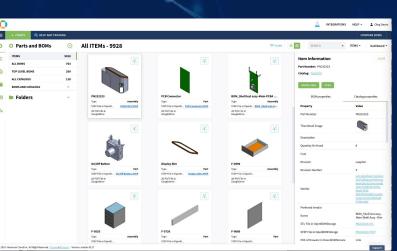
● Inventory Management ● Flexible Data ● RFQ/PO lifecycle ● Vendor Management ● Gap Calculation ● AVL/SL ● EBOM/MBOM

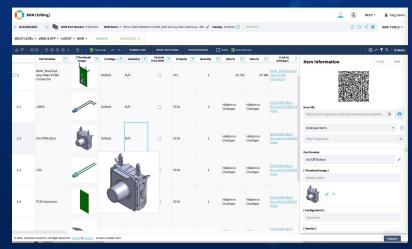


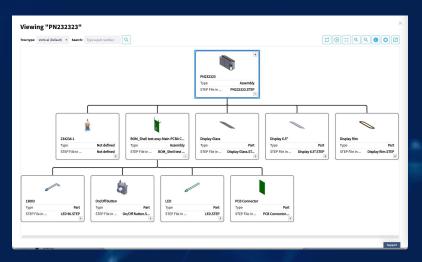
OpenBOM simplifies inventory management and streamlines the design-to-quote process by integrating data across engineering and manufacturing. It fosters collaboration by connecting engineering and procurement teams

### Simple and Easy User Experience Combined with Powerful Functions









- Flexible data
- Data driven user interface
- Real-time collaboration
- Instant data sharing
- Multi-view xBOM support
- BOM comparison
- Custom objects
- Real-time collaboration
- Graph Navigation
- CAD file management
- Revision control
- Change management
- Cost rollup
- Formula support



### Tomcar – BOM for All Contractor and Suppliers



"I absolutely love that OpenBOM lets me share accurate, complete BOMs with vendors, partners, customers, my colleagues in Israel, and so many more. It is great for my team and great for the company"

Jonathan Drori - Lead Engineer, Tomcar

### **Problem**

Before OpenBOM, we did not have a final BOM that was accurate or easy to share. We needed a full product BOM. We have detailed formal agreements with partners, we could tell them what to build [in terms of the product], but couldn't tell me what to buy, there was too much Tribal Knowledge!

### Result

Tomcar uses OpenBOM To Deliver Full Product Definition Shared Globally With All Company Users and Manufacturing Partners



Read the full story



### **Gates Underwater Products**



"The OpenBOM product is a good fit for us as a company. I did not anticipate the overall benefit of the Solidworks integration. It was a big WOW! moment. OpenBOM is a perfectly suited, good value product. It's an excellent match to our needs. OpenBOM forces adherence to a process!"





John Ellerbrock, President Gates Underwater Products

#### **Problem**

Gates' team looked how to connect Design Engineers, Manufacturing and Supply Chain Teams Together? It includes: Capture and maintain BOMs, (2) Provide a single repository for cost and inventory, (3) Perform product pricing calculations and forecasting, (3) Document and manage costs of good sold (4) Share and allow simultaneous use..... Not emailing!!

#### Result

Gates has engineers on CAD, folks in manufacturing and assembly, and recently incorporated OpenBOM in our supply team. OpenBOM fits the size of Gates business as its scale, Since then the scope of what Gates put in OpenBOM has grown, it allows to control more information, specifications, and requirements.





### **OpenBOM Growth Product Offering for 2025-2026**

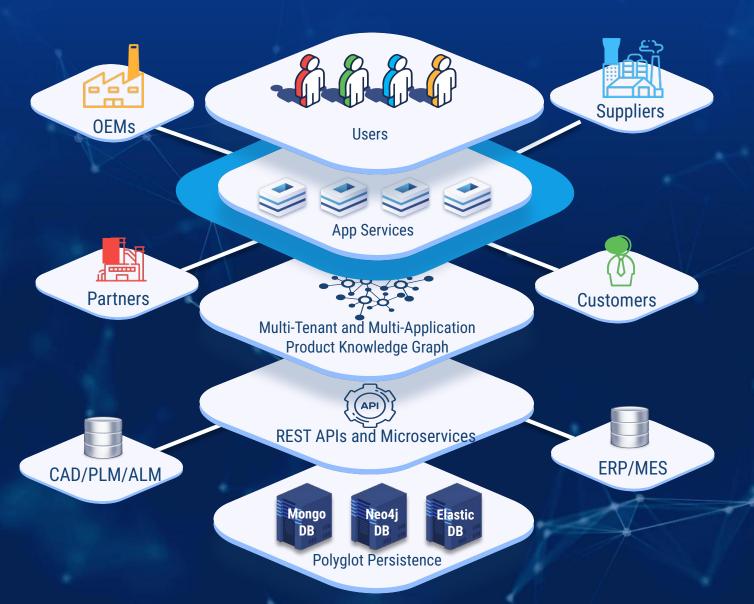
OpenBOM reimagines traditional PDM, PLM, and ERP services by offering a Collaborative Workspace solution that addresses five key challenges faced by every engineering and manufacturing team:

- Streamlining CAD data management and BOM creation
- Simplifying complex Bill of Materials (BOM) management and release process
- Improving Order Management (RFQ, PO, Inventory)
- Ensuring accurate data transfer to ERP
- Enabling seamless collaboration with contract manufacturers

Schedule a demo meeting



# **OpenBOM Technology Foundation**



- Containers and web services
- Microservices Architecture
- Connected & federated (not monolithic)
- Multi-tenant data model (multi company)
- Polyglot persistence + graph based
- Flexible data model and global scale
- SaaS cloud services (applications)
- Data linkage/merge using REST & graphs
- Openness vision
- Easy to Configure and Customize
- Easy to Upgrade
- Patented real-time collaboration
- Simultaneous collaborative data editing
- Role-based instant data sharing
- Graph data science support
- AI/LLM support in research
- DBaaS for MongoDB/Neo4j/Elastic
- AWS ECS (pub, private) + DevOps





# Thank you!

Oleg@OpenBOM.com +1 (978) 760 1885

