

Reinvent PLM

Create a modern data network and process layer on top of existing tools

Oleg Shilovitsky CEO, co-founder



Aerospace



Machinery and Complex Equipment



Furniture and CPG



Medical Equipment, High-tech & Electronic



Automotive



Food and Beverages

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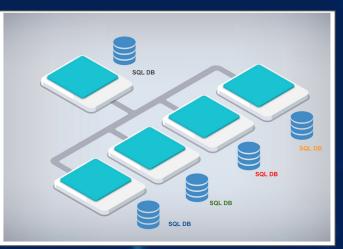
What is wrong with existing PDM & PLM Tools?

- 1. 25+ years old tenant architecture and RDBMS
- 2. Cannot scale beyond a single company
- 3. Mainly focused on CAD file management
- 4. SQL Tables and local IDs foundation
- 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



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Why OpenBOM?

The Ultimate Combination of PDM, PLM, and ERP Functions Tailored for Modern Manufacturing





Beyond PLM (since 2009) - 4,500 articles

OpenBOM:

- Trusted by over 400 customers and over 50,000 registrations
- Winner of G2's 2023 & 2024 Best Software Award in CAD & PLM
- 600+ reviews in G2's PLM category
- Discover customer <u>stories</u> and <u>reviews</u>

Oleg Shilovitsky, CEO and Co-Founder:

- 25+ years with PDM/PLM development
- Worked for Dassault Systèmes and Autodesk
- Visionary in PLM and data management for manufacturing
- Author of Beyond PLM, a leading industry blog
- Over 4,000 articles about engineering and manufacturing

OpenBOM Solutions Strategy



Ultimate combination of PDM+PLM+ERP for Midmarket

"Design to Quote" integrated data management solution providing features from PDM, PLM and ERP tailored for SMB/SME

Analytics + Collaboration

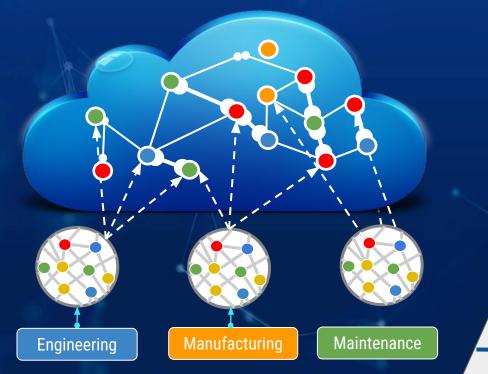
Enterprise collaborative tools (BOM chat) Enterprise BOM costing Contactor collaboration for ODM/CM Digital Thread Solutions Al enterprise transformers for BPA BOM copilot

AI and Enterprise Transformers

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OpenBOM Vision: Build A Process Layer and AI on top of existing tools

Knowledge Graph + Enterprise Data Transformers



Strategy: Build a new PLM \rightarrow <u>a process</u> <u>layer on top of existing tools using new gen</u> data modeling and AI technology

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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

Cloud Architecture, Storages, Databases, Data Models

Platform

We are here...

Co-pilot prototyping. Graph DB, LLM, RAGs

Research for industry ontologies and knowledge graph 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)

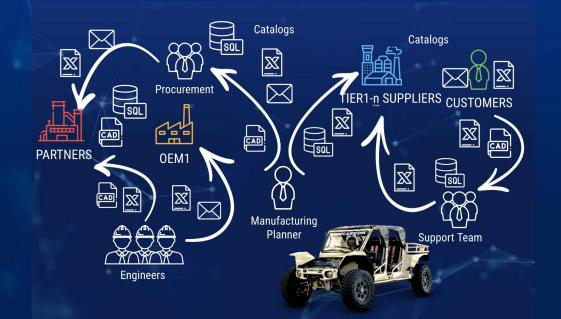
OpenBOM Product Knowledge Graph (PKG)

OpenBOM Strategy:

Collaborative Workspace Connecting Engineering Data to Business Processes

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.

Sources: Manufacturing 2030 NAM report, An EY research about trends in discrete manufacturing, CIMdata 2023 market research

OpenBOM Transforms Chaos Of Disconnected Documents Into Organized Product Data



<complex-block>

• Excel/STEP/PDF • Legacy DBs • CAD/PDM/ERP • Emails

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

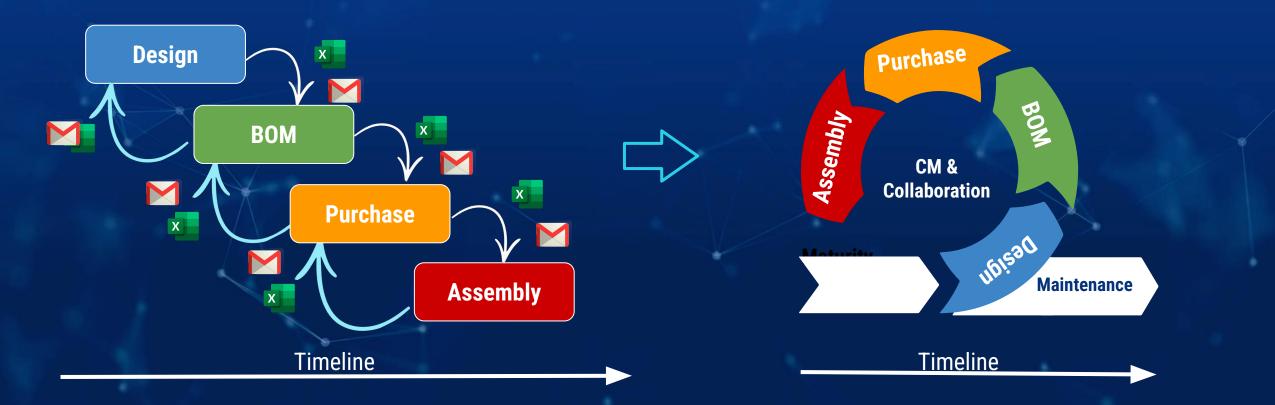
• Online Data • Connected Systems • Digital Thread • Process

Connected Process using application manipulating granular data semantically connected together

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OpenBOM Transforms Emails and Spreadsheets into a Connected, Data-Driven Process



• Excel/STEP/PDF • Legacy DBs • CAD/PDM/ERP • Emails

Slow and Disconnected Process using emails and documents, the information is hidden

• Online Data • Connected Systems • Digital Thread • Process

Agile and Connected Process using application manipulating granular data semantically connected

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Solution: Collaborative Workspace For Engineering & Manufacturing Teams

Manufacturers Partners Engineers Suppliers Altıum 🕥 onshape

Organized Product Data

Connected Agile Data Driven Process



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

Increase Product & Services Sales:

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

Reduce Operational and Material Cost

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

Mitigate Product and Operational Risks • Ensure early BOM visibility • Identify supply issues early • Maintain regulatory compliance

• Strengthen cost control

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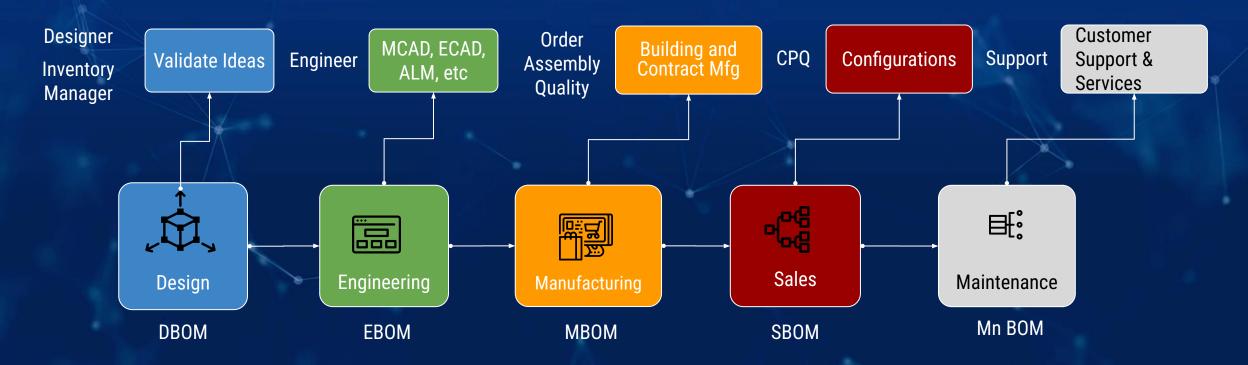
3 Points Strategy To Integrate Design, Quoting, and Production

- 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)

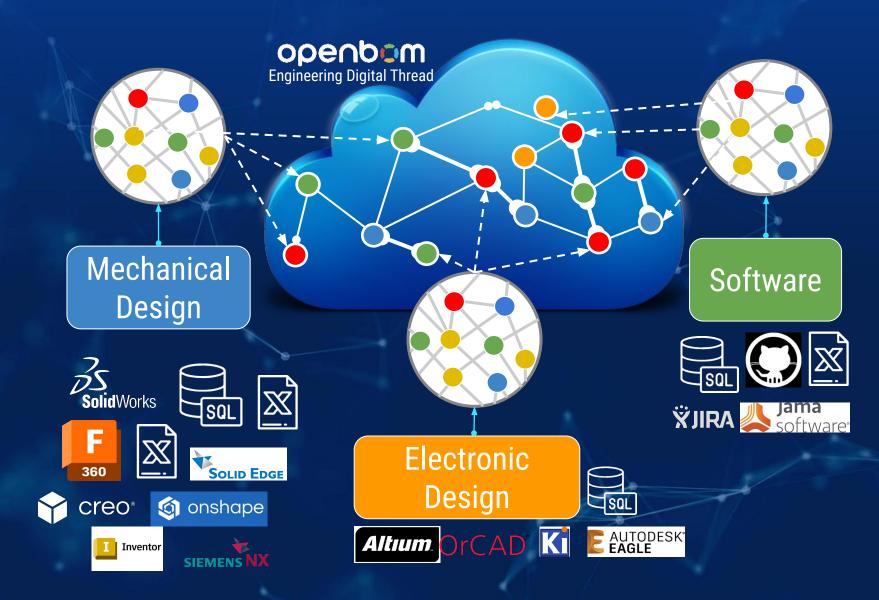
• Flexible Data Model • Revision Control • ECO/ECN • Graph Navigation • xBOM • Cost rollup • CAD/PDM/ERP • Role-based instant data sharing



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

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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

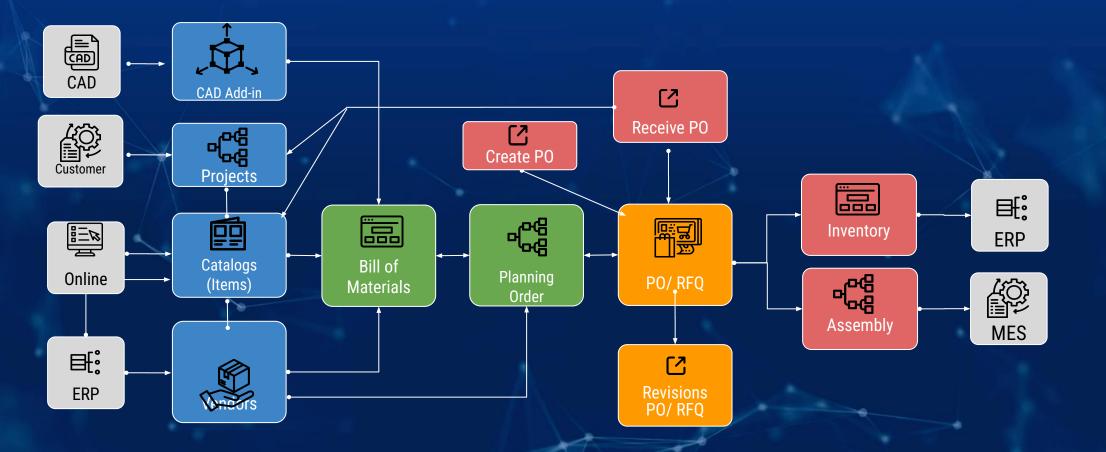
Automatic Derivative Files (STEP, PDF, STP, etc)

Dedicated Add-ins for CAD systems and specialized API Toolkit

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

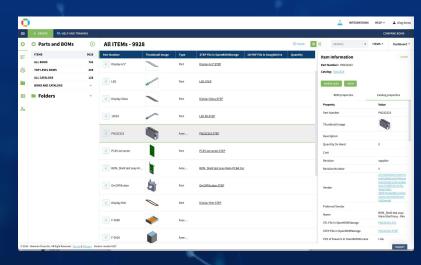
Integrated Production Management (RFQ/PO, Inventory, ERP)

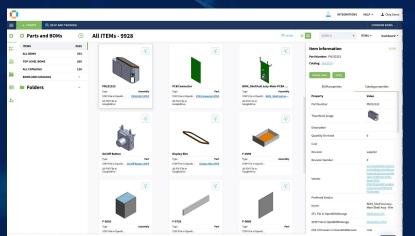
● Inventory Management ● Flexible Data ● RFQ/PO lifecycle ● Vendor Management ● Gap Calculation ● AVL/SL ● EBOM/MBOM

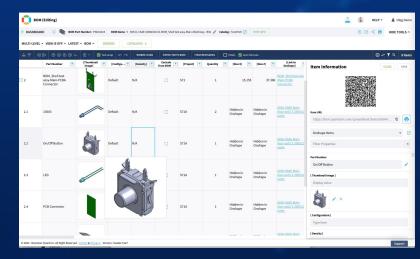


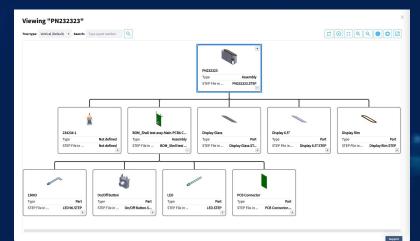
OpenBOM simplifies inventory management and streamlines the design-to-quote process by integrating data across engineering and manufacturing. It fosters collaboration by connecting engineering and procurement teams

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!

<u>Result</u>

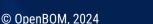
Tomcar uses OpenBOM To Deliver Full Product Definition Shared Globally With All Company Users and Manufacturing Partners





Read the <u>full story</u>





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!!

<u>Result</u>

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.







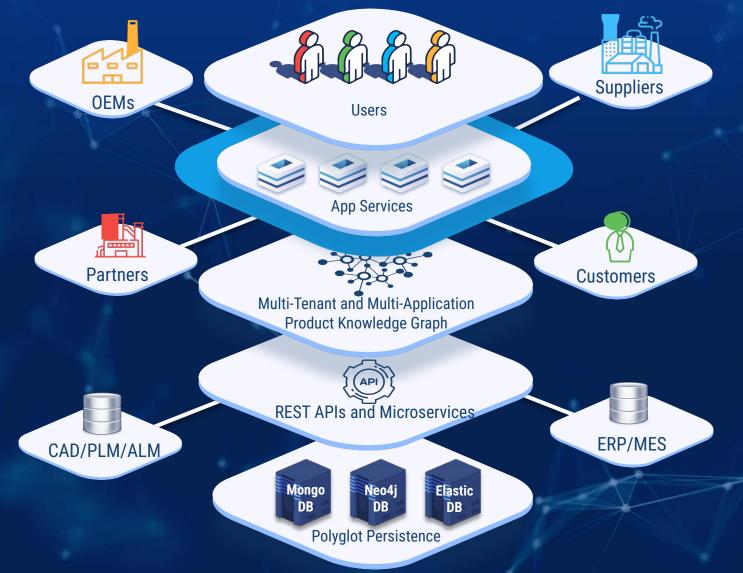
OpenBOM Platform Offering

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

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Thank you!

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