



BOM Management Buyer's Guide

***Boost Performance
with Digital BOMs***



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***This summary is an abbreviated version of the report and does not contain the full content. A link to download the full report is available on the Tech-Clarity website, www.tech-clarity.com.**

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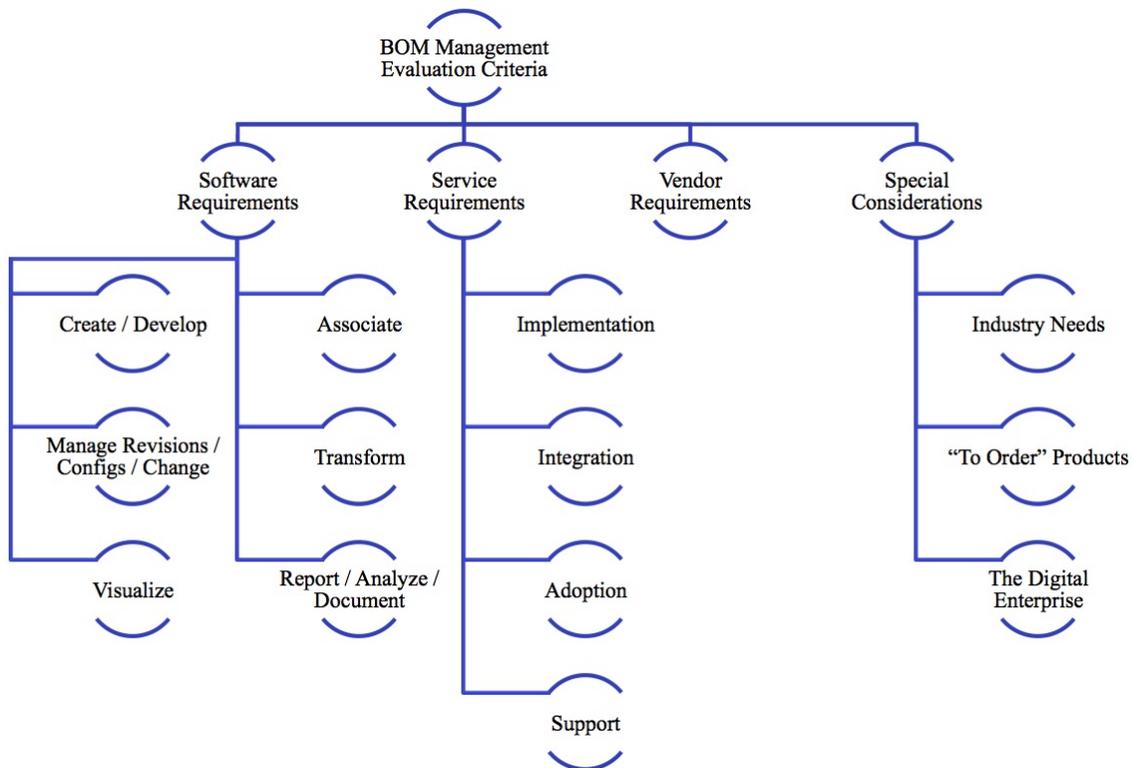


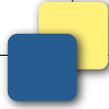
Executive Overview

Managing Bills of Material (BOMs) is a fundamental need for any manufacturer. Without effective control of product structures, companies struggle with inefficiency and errors. On the other hand, improving the maturity of BOM-related processes helps to manage complexity, improve efficiency, prevent mistakes, and enhance collaboration across departments and the supply chain. The resulting benefits can be strategic, leading to increased agility and faster time to market that impact top-line financial performance. Beyond improving today’s performance, driving better BOM management creates the foundation for even greater improvements as a step toward the digital enterprise.

Improving the maturity of BOM-related processes helps to manage complexity, improve efficiency, prevent mistakes, and enhance collaboration across departments and the supply chain.

This Buyer’s Guide is a reference tool for manufacturers selecting a system to improve the maturity of their BOM management practices. The guide is composed of sections covering software, service, and vendor requirements plus some special considerations. These are all important factors that impact implementation success and ROI.





Each of these sections includes a checklist with key requirements to investigate when selecting software to enable and improve BOM management. The guide also touches on special considerations for companies with “to order” products and a few special considerations to keep an eye on by industry. It also touches on the importance of improving BOM management to support digital enterprise opportunities including the Internet of Things (IoT), Virtual Reality (VR), and Augmented Reality (AR).

Conclusion

BOM management helps manage complexity and streamlines operations. It provides an important, foundational element that serves as the backbone for all engineering, manufacturing, and service activity. An accessible, trusted source of product structure information is valuable and improves traceability and control. *“Our objective was to create a single, standardized global product structure and we’ve achieved that. Any designer at any time can collaborate and participate with a common dataset,”* says Mark Mitchell of Jabil. *“People have the information they need, and nobody needs to call me during an audit – that’s the best metric!”* he concludes.

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Effective BOM management provides enterprise-level benefits, improving business performance and alleviating disconnects across the business. *“PLM is not about optimizing within silos, it’s about connecting across silos. BOM management helps us streamline and prevent errors across the product lifecycle,”* offers the PLM Architect. The net result is efficiency and cost gains combined with revenue improvement from better collaboration and faster time to market, making BOM management an important operational tool and a key driver of improved profitability.

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prevent errors across the product lifecycle.
PLM Architect, Major Appliance Manufacturer***

Supporting BOM management at the enterprise level requires the right solution. It’s important to evaluate key solution characteristics, but also to go beyond. Companies should develop a requirements list that helps encourage a holistic decision encompassing software functionality, service-related needs, vendor requirements, and any special considerations based on their industry, size, and product strategy. Finally, the plan should look beyond current needs to support the digital future where digital twins, AR, VR, and IoT rely on sound BOM information.

Recommendations

Based on industry experience and research for this report, Tech-Clarity offers the following recommendations:

- Think big, but remain agile and take BOM management improvements in steps
- Recognize the importance of accurate, complete, timely, and accessible product structures
- Know your needs
- Understand the value
- Look for functionality, but extend requirements to vendor and service
- Consider any special needs for your business, industry, or geography
- Build the foundation for the digital enterprise, recognizing the BOM management is a key enabler
- Get started

About the Author

Jim Brown is the President of Tech-Clarity, an independent research and consulting firm that analyzes the business value of software technology and services. Jim has over 25 years of experience in software for the manufacturing industries. He has a broad background including roles in industry, management consulting, the software industry, and research. His experience spans enterprise solutions including PLM, ERP, quality, service, manufacturing, supply chain management, and more. He is actively focused on researching new digital enterprise initiatives and technologies including cloud computing, digitalization, smart manufacturing, AR, VR, and the IoT. Jim is passionate about improving product innovation, product development, and engineering performance through digitalization and the use of software technology.

Jim is an experienced researcher, author, and public speaker and enjoys the opportunity to speak at conferences or anywhere he can engage with people with a passion to improve business performance through digitalization and software technology.

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