Tech-Clarity

making the value of technology clear

Issue in Focus:

PLM Goes Mobile

*Reducing Barriers to
Engineering Decision-Making
and Innovation*

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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.

If you have difficulty obtaining a copy of the report, please contact the author at jim.brown@tech-clarity.com.

Introducing the Issue

Product Lifecycle Management (PLM) provides significant value to engineers and product developers, including control of product data, process management, and better access to information. PLM helps companies manage the increased complexity of today's products and product development environments. As *Tech-Clarity Insight: The Five Dimensions of Product Complexity* states, "*PLM solutions help manage the five dimensions of product complexity on an enterprise scale, resulting in greater efficiency and better products.*" The result is increased innovation, higher revenue, decreased cost, and faster time to market.

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Today, however, there are significant barriers to taking the value of PLM into the plant or into the service center – namely the available devices that run PLM. This means that much of the value of PLM gets left behind when an engineer leaves their workstation to get a firsthand view of production or see their products in the field. This is also the case when a worker in the plant needs information and doesn't have easy access to a terminal. There are further barriers for employees when they travel, according to *Tech Clarity Issue in Focus: Product and Program Management Goes Mobile*, resulting in lag times in decision making and project execution.

The issue is the devices typically required to access PLM information and processes. Traditional choices for PLM have been laptops or workstations with bulky form factors, short battery life, and long boot times. Other choices include smartphones or netbooks, each with their own challenges. Beyond devices, software applications built for a personal computer or engineering workstation are simply not suited for the realities of mobile environments. Some things just don't work on a smaller device but aren't worth the overhead of booting up a laptop or struggling with a smartphone in a mobile environment.

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As a consequence, a lot of decision-making and innovation goes uncaptured or gets put on hold when an engineer is mobile. Manufacturers need to reduce the threshold to use PLM to extend the benefits beyond the desk. Otherwise, they might lose a brainstorm, or a technician might pass on an impulse to verify a detail that could have a large impact on product performance and profitability. Mobile devices like the iPad have set the stage to extend the opportunity for engineers and others in the product lifecycle to contribute, decide, act, and innovate with PLM.

Conclusion

Important product decisions don't wait for engineers to be sitting in front of their computer. Mobile PLM reduces the barriers for mobile workers to quickly contribute, decide, act, and innovate regardless of location. Mobile access to product information leads to better, more timely decisions, better products, and higher productivity. Mobile PLM also allows users such as engineers, manufacturing supervisors, or service technicians to access critical product data in environments that are not practical for laptops and in a more usable way than smartphones. It can also allow companies to get more productivity out of existing resources by extending engineers' ability to work away from the office. Today's new mobile devices and applications offer manufacturers a compelling opportunity to extend the value they receive from PLM to new places and times, furthering their ability to develop high quality, profitable products.

> *Mobile PLM reduces the barriers for mobile workers to quickly contribute, decide, act, and innovate regardless of location.*

Recommendations

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

- Expand PLM information assets and processes to mobile scenarios
- Improve timeliness and quality of decision-making by reducing barriers to access information and applications
- Reduce barriers to capture engineering innovation and inspiration
- Look for opportunities to better share data with downstream resources like Manufacturing and Service in their challenging work environments
- Leverage mobility to extend engineers' ability to contribute while away from their workstations, to improve decision making and shorten time to market
- Look for PLM applications that are specifically designed for mobile devices

> *Leverage mobility to extend engineers' ability to contribute while away from their workstations, to improve decision making and shorten time to market*

About the Author

Jim Brown is the President of Tech-Clarity, an independent research and consulting firm specializing in analyzing the true business value of software technology and services. Jim has over 20 years of experience in software for the manufacturing industries, with a broad background including roles in industry, management consulting, the software industry, and research. His experience spans enterprise applications including PLM, ERP, quality management, service, manufacturing, and others. Jim is passionate about improving product innovation, product development, and engineering performance through the use of software technology and social computing techniques.

Jim is an experienced researcher, author, and public speaker and enjoys the opportunity to speak at conferences or anywhere that he can engage with people that are passionate about improving business performance through software technology.

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