

Electronics Supply Chain has Room to Grow on the Digital Maturity Scale



A new survey finds that three-quarters of electronics industry professionals are still using some type of ad hoc spreadsheets when sourcing products.

Organizations compare and benchmark themselves against many different metrics, with “digital maturity” being one of the newer comparisons being made both across companies and entire industries. Defined as the measure of an organization’s ability to use technologies to achieve its business goals, **digital maturity** is typically broken down into four levels: nascent, emerging, established and advanced.

Where nascent companies may lack the budgets, skillsets and cultural components needed to execute on their digital initiatives, for example, advanced organizations make continued investments in digital business strategies (regardless of economic indicators) and are already using advanced/emerging technologies like artificial intelligence (AI) and generative AI, among others.

So where does the typical electronics supply chain stand on this hierarchy of digital adopters, and what else needs to be done to help it advance? According to a new Supplyframe report, there is current “ample opportunity” for the electronics industry to enhance its digital maturity levels.

75% Still Use Spreadsheets

For *The 2024 Digital Maturity Model & Report for the Electronics Industry*, the company surveyed electronics industry professionals and learned that about 75% of them are still using some type of ad hoc spreadsheets for sourcing goods. Nearly as many (70%) manually-validate and optimize their bills of materials (BOMs) without access to real-time intelligence.

Also, close to half (43%) said that their sourcing teams are reactive and follow the lead of the engineering departments. Supplyframe says its research uncovers “persistent challenges and opportunities for elevating digital maturity across new product introduction and procurement processes.”

For example, just 16% of those surveyed reported having some level of collaboration and alignment between engineering and sourcing during design. Less than 10% said that they use a third-party solution that is purpose-built for the electronics industry, and only 1% said they can accurately identify upcoming critical events before they impact their business.

“Investments in digital transformation are rising, and some of the turmoil in the global manufacturing and supply chain arena has stabilized,” said Supplyframe CEO and founder Steve Flagg in a press release. “But this research – which shows companies across sectors rate their digital maturity between one and two on a five-level scale – uncovers persistent challenges and opportunities for elevating digital maturity across new product introduction and procurement processes.”

Industry-Specific Insights

Breaking the results down by industry—and using a scale of 1-5—Supplyframe says the digital maturity scores of companies in the automotive and transportation industry and the component manufacturing arena were just 1.0. Averages for the high-tech and OEM sector and the industrial equipment space were only slightly higher at 1.3. The average for companies in the life science industry registered a bit north of that at 1.6. And although the aerospace and defense industry fared a bit better, it only landed at 2.1 on the five-level scale.

Moving the needle on digital maturity in electronics may take some work. Supplyframe says more than a third (36%) of electronics industry professionals consider cost, supply, quality, new product introduction sourcing and technology as significant challenges. “This points both to the broad scope of the challenges facing global manufacturers,” the company says, “and to the dire need for transformation within the entire design-to-source journey.”