FORRESTER

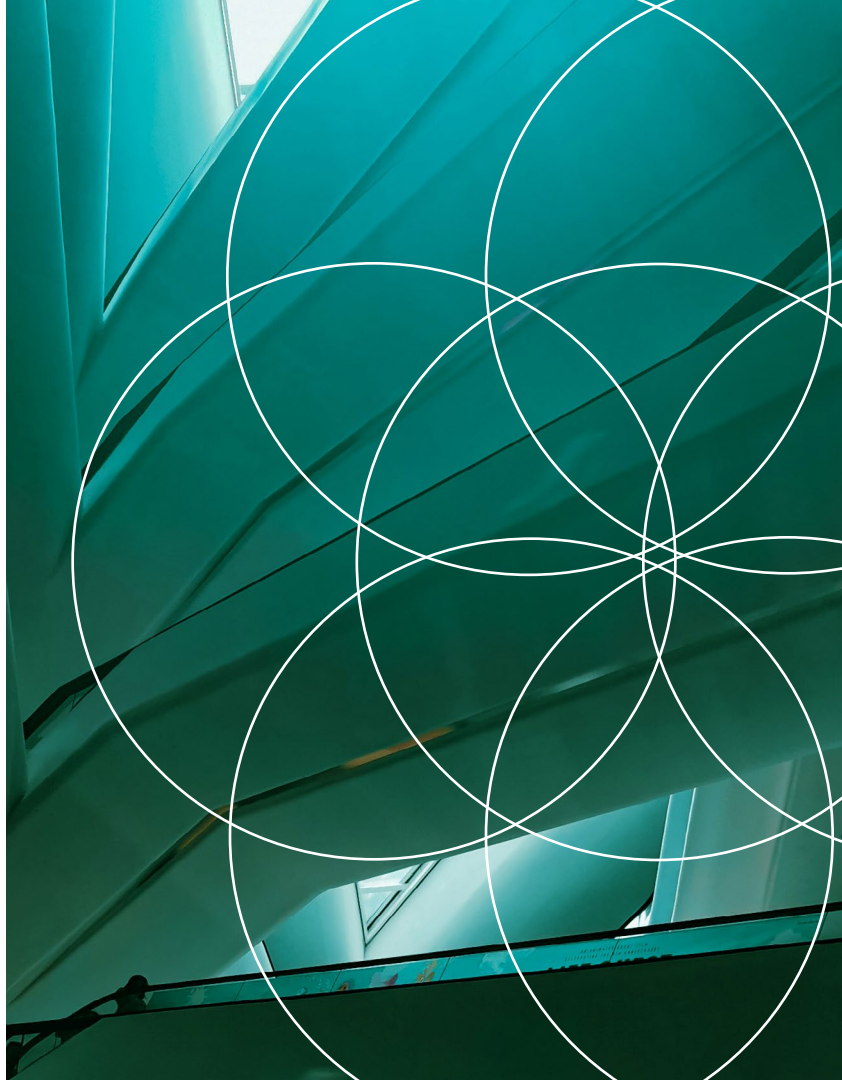# Use Data From The Devices You Make And Sell To Gain Business Value

Why A Best-In-Class Connected Products Management Platform Is Critical To Success

Get started →

Overview

Connected products do more than collect data: They connect manufacturers and their customers. Cheaper sensors, ubiquitous connectivity, and the growing capability of IoT software platforms make it economically viable to connect a far broader set of products than ever before. From providing basic visibility into product usage to powering rich product-as-a-service business models, strategies for connected products are increasingly important to manufacturers of all sizes.

In October 2023, Lexmark commissioned Forrester to study the benefits and challenges of connected products. Forrester surveyed 275 US-based managers in business development, operations, portfolio management, product management, production, or R&D at companies that make connected products or plan to within 12 months. The study found that a robust strategy for connected products is needed to remain competitive, but most companies don't have one and stand to fall behind their competitors who do.

Key Findings

Success will be driven by what companies do with data from the connected products they make and sell. Currently, most struggle to transform data into actionable insight.

Connected products bridge the gap between manufacturers and customers, strengthening and deepening their relationships.

Building a platform internally may theoretically be possible but is usually unsuccessful. A trusted vendor can help manufacturers differentiate their core offering while smartly outsourcing.

Manufacturers Must Turn To Connected Products To Compete

It's easy to assume that the changes brought by the age of the customer only apply to direct interactions between a business and its customers. But by weaving digital thinking and digital processes deep into the way a company thinks about business, it becomes possible to transform that business with digital services by augmenting the physical products on which it built its reputation.[1]

Connecting physical products to the internet of things makes sense, from tracking a product's location to monitoring its use of consumables like fuel or ink. But you should go beyond just collecting data. A connected product connects the entire value chain: manufacturers, owners, operators, maintainers, and end users. Done well, this connection can be worth more than the product itself.

86%

said adopting a connected products strategy will enable their company to gain a competitive advantage in the future

Most Companies Struggle To Transform Product Data Into Insight

You've connected your products, but have you connected the dots? In this study, 78% of respondents were at companies where all or most of the products they make are connected. It's clear that in the future, success will be defined not by whether a product is connected but by what the company does with the data it collects.

However, as competitive pressure grows, most manufacturers of connected products struggle to translate product data into actionable insights. At the heart of this problem is the absence of a robust strategy to monetize connected products.

This is not surprising, as managing this shift can be hard for product companies.

"To what extent to you agree or disagree with the following statements?"
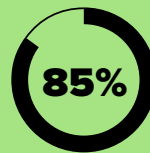
85% In the future, success will be driven by what companies do with the information collected by IoT-connected products.

My organization urgently needs to turn device data into actionable insights. **76%**

67% We struggle to turn device data into actionable insights.

My organization does not have a robust connected products strategy in place. **54%**

Retention, Revenue, And Growth Are The Top Priorities

Business leaders have many important priorities, but the most critical are improving customer retention, increasing recurring revenue, and growing in a mature market. A strong strategy for connected products can be a highly effective tool to help accomplish all of these goals.

The key is to bring the customers with you on the journey. You must share with them the value created by using connected products. When you do this well, connected customers are more likely to continue working with you, allowing you to build a business based on recurring revenue.

A strong connected products strategy also empowers companies to innovate in product designs, offer more value, and even build new revenue streams in a mature market.

Critical Priorities For Business Goals At Respondents' Organizations For The Coming Year

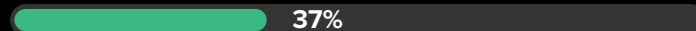Improving customer retention

43%

Increasing recurring revenue

41%

Driving growth in a mature market

40%

Addressing competitive threats or becoming more competitive

38%

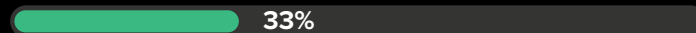Adding value to a mature product set

37%

Becoming more resilient in a challenging economic climate

36%

Generating new revenue streams

34%

Becoming more innovative in our product portfolio

33%

Base: 275 US-based managers or above in business development, operations, portfolio management, product management, production, or R&D
Source: A commissioned study conducted by Forrester Consulting on behalf of Lexmark, December 2023
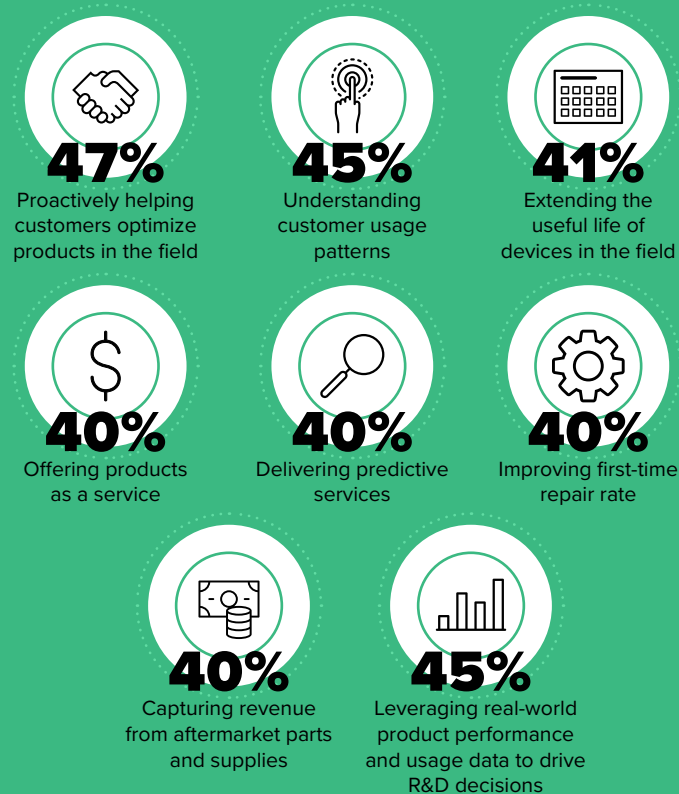
A Strong Connected Products Strategy Drives Success By Understanding And Helping Customers

It's no surprise that the top two most important operational goals involve the customer. Proactively helping customers optimize products in the field and understanding customer usage patterns are essentially tied for first place. A strong strategy for connected products helps both, further demonstrating how critical this is to remaining competitive.

However, the benefits of a connected products strategy go beyond the customer. They include extending the useful life of products in the field, reducing the cost of service, and enabling predictive services.

The Importance Of Operational Goals To The Future Success Of Respondents' Organizations

47%
Proactively helping customers optimize products in the field

45%
Understanding customer usage patterns

41%
Extending the useful life of devices in the field

40%
Offering products as a service

40%
Delivering predictive services

40%
Improving first-time repair rate

40%
Capturing revenue from aftermarket parts and supplies

45%
Leveraging real-world product performance and usage data to drive R&D decisions
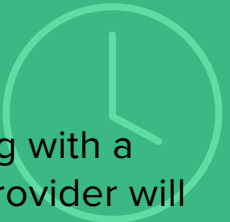
Base: 275 US-based managers or above in business development, operations, portfolio management, product management, production, or R&D
Note: Showing "Very important" responses
Source: A commissioned study conducted by Forrester Consulting on behalf of Lexmark, December 2023

Manufacturers Are Struggling To Achieve Their Goals For Connected Products

Despite how much manufacturers stand to gain, most have yet to crack the connected products code. Many manufacturers now have data from these products but are unable to transform it into meaningful, actionable insights. They must solve this problem in order to succeed. Until they do, they will continue to struggle — and the promise of connected products will continue to elude both them and their customers.

76%
said not partnering with a proven solution provider will signifigantly delay success.

"How challenging, if at all, is it for your organization to achieve the following goals?"

Delivering predictive services — **65%**

Extending the useful life of devices in the field — **62%**

Capturing revenue from aftermarket parts and supplies — **61%**

Proactively helping customers optimize products in the field — **61%**

Understanding customer usage patterns — **61%**

Leveraging real-world product performance and usage data to drive R&D decisions — **60%**

Offering product as a service — **57%**
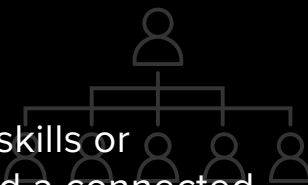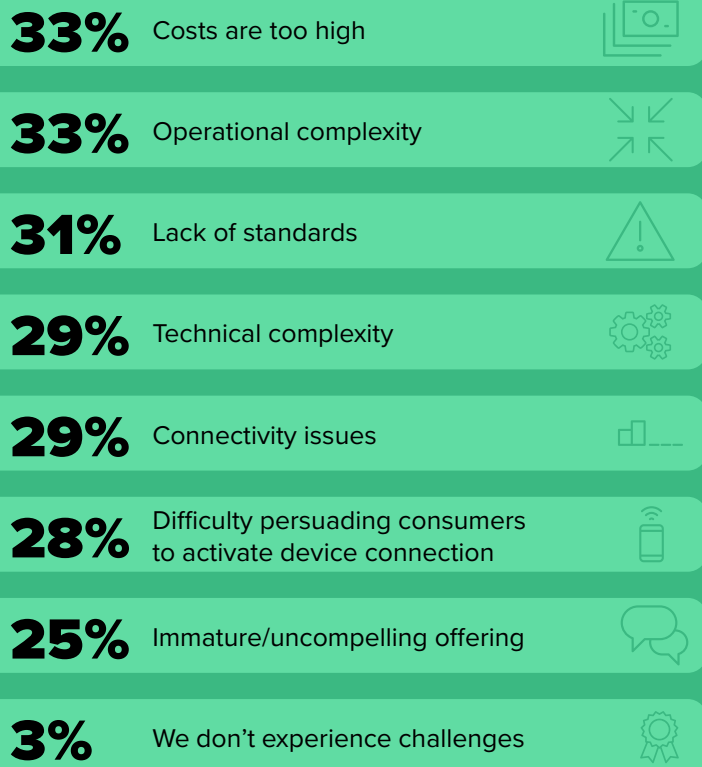
Costs And Complexity Are The Biggest Barriers

Shifting to a new way of thinking and operating is hard. For years, building a great product was enough. Now, manufacturers face new challenges as they endeavor to transform their businesses.

The inherent complexity of building a platform at the scale needed to manage advanced connected products means that even though you might be able to do it on your own, you probably shouldn't. This is an excellent opportunity to form strategic partnerships that allow you to focus on your core differentiators, outsource smartly, and accelerate your journey up the maturity curve.

58%
lack the internal skills or resources to build a connected products management platform.

"What challenges, if any, does your organization face in achieving its connected product goals?"

33%	Costs are too high
33%	Operational complexity
31%	Lack of standards
29%	Technical complexity
29%	Connectivity issues
28%	Difficulty persuading consumers to activate device connection
25%	Immature/uncompelling offering
3%	We don't experience challenges

Cost Is The Most Common Concern About Working With A Vendor

Not only did respondents report that cost is the biggest challenge they face in achieving their goals for connected products but it is also the most common concern they have about working with a vendor; this applies to both implementing and maintaining a solution. But 54% of respondents believe their organization can't improve its connected products strategy on its own.

Fundamentally changing a business requires a vision and long-term commitment. It also requires understanding the ROI. If you see costs as a barrier, this may indicate an uncertain ROI. If this is the case, working with a seasoned vendor may help you clarify the ROI early on and move your company closer toward its connected products goals.

"What concerns, if any, do you have about buying or licensing a vendor-supplied solution to manage connected products and data to improve your organization's connected product strategy?"

Cost to implement the solution
42%

Cost to maintain the solution
42%

Vendor's ability to keep up with technology advancements
38%

Vendor's long-term viability
33%

Insufficient vendor security
33%

Vendor lock-in
28%

Vendors don't understand my organization's unique needs
23%
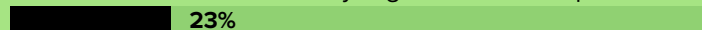
I have no concerns
4%

A Connected Products Management Platform Would Improve CX, Drive Revenue, And Increase Innovation

The shift to a service model can be hard for products companies to manage. Leaders at those companies must recognize that they must build, sell, monetize, and support products differently. They must also recognize that they don't need to do this alone.

Respondents' top three benefits of a connected products management platform tell an important story. Manufacturing leaders believe that if their company were to invest in a platform to manage its connected products, it would improve the customer experience, increase revenue, and unlock innovation.

If companies can harness the customer data they collect, they can go beyond improving CX and designing better products. Improving customer understanding can also inform marketing efforts and lead to more effective use of marketing dollars.

"How, if at all, would you expect investing in a connected products management platform to benefit your organization?"

57% Improve customer experience

55% Increase revenue

55% Increase ability to innovate

47% Appearing modern and more innovative

43% Reduce costs

40% Enhance sustainability

Base: 275 US-based managers or above in business development, operations, portfolio management, product management, production, or R&D
Source: A commissioned study conducted by Forrester Consulting on behalf of Lexmark, December 2023

Connected Products Management Platforms Are Critical To Achieving Operational Goals

IoT provides a wealth of data on the location, state, and use of machines. That data helps manufacturers of those machines improve design — and helps users understand and optimize their investment. It can also help makers better understand and support customers.

The greatest benefit is expected to come from optimizing products in the field. When you know what's wrong and can anticipate the need for maintenance before downtime, first-time repair rates will naturally rise, which reduces the cost of service.

Manufacturing leaders overwhelmingly reported that they expect investing in a connected products management platform to dramatically reshape their ability to achieve product-related goals. This can't be understated. In addition, the data helps build evidence-backed business cases to secure new financing.

"How much would you expect investing in a connected product management platform/ solution to benefit your organization's ability to achieve its operational goals?"

Proactively helping customers optimize products in the field
77%

Offering product as a service
77%

Leveraging real-world product performance and usage data to drive R&D decisions
75%

Delivering predictive services
74%

Reducing the cost of service
74%

Capturing revenue from aftermarket parts and supplies
74%

Understanding customer usage patterns
73%

Extending the useful life of devices in the field
72%

The Best Vendors Offer An End-To-End Solution And Help Implement Transformation Strategies

Security is always at the top of any list of vendor selection criteria. What follows is crucial to understanding what manufacturers need from a third-party vendor to help with their connected products strategy.

Manufacturers most need an end-to-end solution; they also admitted they need help. Respondents said their company needs a vendor that can help implement a connected products strategy transformation and operationalize insights. After that, they want to maintain control over their data, have a short time to value, and integrate well with existing business systems. And the cherry on top is avoiding vendor lock-in, which was critical or important for 73% of respondents.

"When considering a vendor to help with your organization's connected product strategy, how important are the following selection criteria?"

85% Cybersecurity

End-to-end solution **83%**

82% Ability to help implement connected product strategy transformation

Maintaining control over our data **80%**

80% Time to value

Ability to help operationalize insights **78%**

78% Ability to integrate with existing business systems

Avoiding vendor lock-in **73%**

Base: 275 US-based managers or above in business development, operations, portfolio management, product management, production, or R&D
Note: Showing "Important" and "Critical" responses
Source: A commissioned study conducted by Forrester Consulting on behalf of Lexmark, December 2023

Conclusion

Data from connected products offers insight into how these operate in the real world. This study found that:

- **Monetizing the data from connected products is critical to future success and will define market leaders**. But most manufacturers of connected products struggle to turn data into insights.

- **Building partnerships is key.** Few traditional manufacturers can do this alone. Designing, delivering, supporting, and funding a profitable service is a very different proposition than making a traditional physical product.

- **Data from connected products is not simply a way to improve products or upsell service contracts.** The connection allows manufacturers to create value in entirely new ways that strengthen their relationship with their customers.

Endnotes

[1]Source: Use Data From The Industrial Internet Of Things To Deliver Customer-Centric Business Models, Forrester Research, Inc., August 2, 2021

Resources

Related Forrester Research:

Report: Use Data From The Industrial Internet Of Things To Deliver Customer-Centric Business Models, Forrester Research, Inc., August 2, 2021

Related Blogs:

Michele Pelino, Use IoT Heat Maps To Identify Opportunities For Operational Excellence, Forrester Blogs

Project Team:

Lane Abernathy,
Demand Generation Consultant

Alex Martini,
Demand Generation Associate Consultant

Contributing Research:

Forrester's Technology Architecture & Delivery research group

Methodology

This Opportunity Snapshot was commissioned by Lexmark. To create this profile, Forrester Consulting supplemented this research with custom survey questions asked of 275 US-based managers in business development, operations, portfolio management, product management, production, or R&D at companies that make connected products or plan to within 12 months. The custom survey began in November 2023 and was completed in December 2023.

ABOUT FORRESTER CONSULTING

Forrester provides independent and objective research-based consulting to help leaders deliver key outcomes. Fueled by our customer-obsessed research, Forrester's seasoned consultants partner with leaders to execute their specific priorities using a unique engagement model that ensures lasting impact. For more information, visit forrester.com/consulting.

Demographics

COUNTRY	
United States	**100%**

INDUSTRY	
Manufacturing	**58%**
Agriculture, food, and/or beverage	**16%**
Technology and/or technology services	**15%**
Consumer product goods	**6%**
Electronics	**4%**

RESPONDENT LEVEL	
C-level executive	**20%**
Vice president	**38%**
Director	**28%**
Manager	**14%**

COMPANY REVENUE	
>$5B	**13%**
$1B to $5B	**31%**
$500M to $999M	**27%**
$400M to $499M	**12%**
$300M to $399M	**12%**
$200M to $299M	**6%**

Note: Percentages may not total 100 due to rounding.