# Innovation-centric IoT drivers are gaining ground

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## Introduction

Enterprises leverage IoT data and solutions for a variety of reasons. We've tracked the evolution of four high-level drivers as part of 451 Research's Voice of the Enterprise (VotE) IoT survey for more than three years now, allowing us to see how IoT drivers are evolving over time. While internally focused drivers like optimizing business processes and reducing risk have always dominated, more externally (or innovation-) focused drivers are growing rapidly.
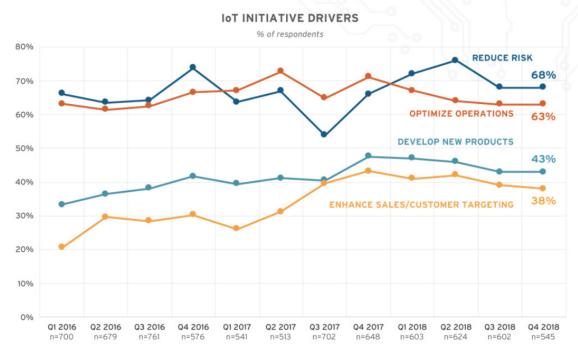
### 451 TAKE

Enterprise IoT adoption is increasing, and as our VotE survey data demonstrates, it is also evolving and expanding as business users understand the possible uses of new IoT data and insight. Optimizing internal business processes will always be a key enterprise IoT driver – and alone can have potentially industry-altering impact. Building a better supply chain or continually perfecting a manufacturing line via IoT-enabled insight can separate industry disruptors from laggards, winners from losers. That said, IoT can also deliver altogether new types of data and insight about customers and how they use products and services that enterprises can use to drive even greater innovation. New customer insight can improve marketing and sales, and more real-time and actual data about how customers use a company's products can significantly improve the development of new products and the enhancement of existing ones. The increasing focus by enterprises on leveraging IoT for these more innovation-focused use cases is significant and worth noting for vendors and providers working to drive IoT deeper into the enterprise.

### What the data says

Since its inception more than three years ago, 451 Research's VotE IoT survey has been asking what drives IoT projects to implementation. The top two drivers are: using IoT insight to improve operational efficiency and to reduce enterprise risk. While those two IoT drivers have always ranked highest, respondent rankings of them have also been relatively flat (see below).

**External vs. internal IoT drivers: A tale of two tiers**



Source: 451 Research, LLC

That enterprises focus primarily on those two drivers makes sense. IoT data often comes from within an enterprise, thrown off by machines and equipment or created by sensors in commercial and industrial spaces. The insight derived from analyzing that data can be used in a variety of ways to improve existing business processes: more predictively anticipating when machines need to be repaired, optimizing manufacturing and supply chain processes, and reducing operational risk via an improved view of what is actually happening with an organization. Such insight is invaluable and can provide an early mover with significant competitive advantage over rivals, and an upstart with new ways of doing business that can disrupt entire industries.

Yet even as critical as those more internally and operationally focused IoT drivers are, they aren't the only benefits driving IoT adoption. Interestingly, there has been a surge in the rankings of the two more innovation-centric drivers: improving customer targeting/sales and enhancing new product development. While those goals haven't yet reached the same heights as the more internally focused drivers, they have gained significant ground – indicating a notable evolution of the factors driving enterprise IoT adoption.

## What the data means

While internally focused IoT drivers largely make use of IoT data from within an enterprise's four walls, externally or innovation-focused drivers leverage not only that data, but also, increasingly, IoT data coming from external sources. For instance, retailers are increasingly able to not only track customers within their stores, but also to understand the aggregate footfall traffic in and around where they do business. Manufacturers can measure product quality by the number of defects they catch coming off their factory lines, as well as via real-time insight into how customers are using their products – increasingly instrumented with real-time sensors – out in the world.

How are enterprises using IoT data and insight to improve or enhance product development? According to our VotE IoT data, 66% of respondents leveraging IoT for new product developments benefit most significantly by gaining market data previously not available to them. Other new product development benefits enabled by IoT include improved tracking of product lifecycles, access to rapid customer feedback to iterate and improve products, and the shortening of supply chain and manufacturing cycles to speed time-to-market.

Enterprises are gaining similar benefits in leveraging IoT to better understand their customers and improve sales. The top use case in this area is capturing and analyzing historical data to spot and capitalize on long-term trends made possible by new types of IoT data and insight. That use of IoT takes advantage of new types of connected endpoints, as well as advances in data analytics, to glean insight from the mountains of IoT data that can be generated and collected. Beyond that trend analysis, our survey respondents leverage IoT for other customer- and sales-centric purposes, as well, including using location data for just-in-time marketing and combining IoT data with other data to attain a 360-degree view of their customers.