

Ten benefits of capitalizing on your data with advanced analytics and the Internet of Things

We live in a world where devices, sensors and other “things” are proliferating and producing tremendous amounts of data. By 2020 the Internet of Things (IoT) – connected devices or “things” emitting data – is expected to reach 26 billion installed units. That’s up from 0.9 billion just five years ago, [according to Gartner](#). Connecting your things to harness untapped data or creating new opportunities by capitalizing on advanced analytics can transform your data into actionable insights. Improving processes, pursuing new product and service opportunities, and improving customer service are some of the ways organizations are gaining a competitive edge with a combined IoT and advanced analytics strategy.

Here are 10 benefits of capitalizing on your data with IoT and advanced analytics to unlock new potential in your business.

1. Collecting and analyzing your data can transform your business.

Data is only ones and zeros until you turn it into insights that provide business impact. The integrated emergence of the Internet of Things (IoT) and advanced analytics marks an opportunity for organizations to gain views of their business that weren’t available before. IDC estimates companies that are leaders in using data assets to their advantage will capture \$1.6 trillion more in business value than those that lag behind. Whether the data suggests a new business model or presents a potential new revenue stream, when you apply advanced analytics to the data from the Internet of Things, you can see new ways to transform your business.



2. Connecting things you already have makes economic sense.

You have untapped data all over your business. By using the Internet of Things you can make use of these data sources to improve your business. Start with the things you have already—your systems, devices, sensors and data—and focus on the areas of your business that can yield data insights that provide quick return. A common place to start is operations by connecting systems and line-of-business assets, such as machines on your factory floor or trucks you use to deliver products, to improve performance visibility, which can streamline maintenance and help to reduce downtime.



3. Analysis of diverse data sources provides deeper insights.

Start with your existing IT investments and build upon them to access diverse data sources. With Azure IoT Suite, you can connect the diverse line-of-business assets that you have today, and collect untapped data. With Cortana Analytics, you can apply advanced analytics to the data those assets generate to gain deeper insight into what your customers want and your employees need.

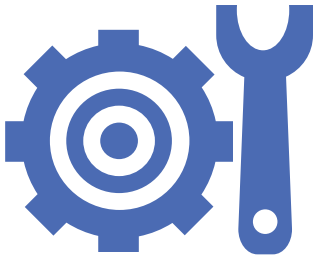
4. Integrating new data streams delivers a more comprehensive view of your overall business.

Whether you’re seeking a top-level view or drilling deep into certain metrics, integrating existing systems with new data sources, such as those from devices, can provide a more thorough picture of your business. Use these combined insights to create new business models and find new ways of staying ahead of the competition.



5. Process automation offers remote monitoring possibilities so you know the status and health of your assets.

By 2020, Gartner estimates more than 85 percent of data will be automatically generated – from every device, sensor, upload, tweet, purchase, shipment and keystroke. Remote monitoring offers better visibility into operational status by collecting data from your assets and using that data to trigger automatic alerts or actions, such as maintenance requests. By automating alerts from your systems and devices, you can respond proactively to potential issues rather than reacting after the fact. You can also analyze previously untapped data to improve business outcomes.



6. Predictive maintenance provides opportunities to better manage and maintain your business assets.

Take action earlier on emerging trends, streamline processes and avoid costly downtime by anticipating the maintenance needs of devices and other assets from insights within data. Dive deeper with asset optimization to gain comprehensive intelligence from advanced analytics that can inform your maintenance schedule or create new business opportunities altogether. For example, by gathering data from new or existing sensors and systems, companies can go beyond preventative maintenance to offer predictive and even preemptive maintenance to avoid costly downtime.

7. Your data can help your business learn and adapt.

Businesses that learn and adapt will continue to thrive. By monitoring and analyzing data from multiple sources in near real time, you can enable your business to innovate and make the most of the situation. With machine learning capabilities from Cortana Analytics Suite, your business can apply historical data to a new problem by creating a model and using it to successfully predict future behavior or trends. By analyzing purchasing behavior, for instance, you can predict what your customers will order and suggest those items and complementary products at their next visit, providing better service to your customers.

8. You gain more certainty when insights are easier to uncover.

Spend less time wondering and more time taking action. Data insights can help you respond more quickly to competition, supply chain changes, customer demand, and changing market conditions. Collecting and analyzing data gives you quick insight into developing trends, so you can change your production activity, fine-tune your maintenance schedule, or find less expensive materials.



9. Bringing solutions to scale is smooth and efficient.

New ideas are born when you work with new partners, new technologies, new assets and new data streams. Comparing results from different store locations, for instance, lets you identify the most successful services and roll them out nationwide. The Internet of Things lets you scale from the smallest data point to global deployments, and advanced analytics lets you turn those data insights into intelligent action.



10. Microsoft is an enterprise-proven IoT and advanced analytics partner.

Microsoft is the proven leader in the enterprise space offering a large network of partners and a commitment to innovative solutions for today's business challenges. Whether you need to connect assets and analyze data, or process loads of data you already have, Microsoft meets you where you are by working with what you have now, and offering solutions for every step of the journey.

Put Microsoft and its partners to work in your organization to bring your data to life with IoT and advanced analytics.

The [Azure IoT Suite](#) offers preconfigured solutions and predictive, finished applications that target core business scenarios to help enterprises quickly realize value. The [Cortana Analytics Suite](#) is a fully managed big data and advanced analytics suite that transforms data into actionable insights supporting business transformation.

Ready to take advantage of your data? [Learn where to start.](#)

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