

At Predixion Software, we believe that predictive analytics has the power to create a smarter, safer and healthier world – and that power should not be limited.

Predixion envisions a world where you can predict everything!



With the explosion of the Internet of Things (IoT), data is everywhere. Everyone and everything collects it. But it's what you do with that data that really matters. It's not enough to just look in the rear view mirror at what happened. The real opportunity is in turning this data into actionable insights – predicting what could happen next and knowing what you should do about it. Traditional analytics tools, however, can't handle the analysis of IoT data.

The main reason is that the IoT generates data in motion. It's not stagnant and sitting in a data warehouse somewhere; it is streaming thousands of statuses and updates every second. In addition, the “things” that generate a lot of machine or sensor data are often in remote areas with limited connectivity. Many use cases for the IoT require immediate actions that take place “close to the edge” such as emergency shut downs or production line changes. It takes a solution – uniquely suited for the IoT – to address these complex scenarios.

### *That's where Predixion comes in.*

Predixion Software is the only advanced analytics solution that can embed predictive models on the device, on the gateway and in the cloud – so the analytics are where you need them, when you need them. Our patent-pending Machine Learning Semantic Model™ (MLSM) enables analytics to be easily embedded into a variety of production environments including existing applications, databases, real-time streaming engines and even directly on to connected or disconnected devices. This unique capability gives Predixion an advantage over traditional analytic tools that cannot handle the speed and volume of streaming data or the real-time actions required when dealing with use cases that involve devices or machines with limited connectivity. Advanced analytics and automated actions on the device or machine are required to realize the return made on connecting all these things in the first place.

## Predixion Insight™ for IoT

### Data Shaping in Runtime:

Predixion can help you prepare streaming data over time windows to ensure smooth flow of data generated by IoT devices to predictive models resulting in more accurate models and better business outcomes.

### Optimized Predictive Algorithms

**for IoT:** New Predixion algorithms, which include Decision Forest, Boosted Trees, Logistic Regression and Principal Components Analysis, provide flexible choices that enable a better fit for the data dynamics of the IoT.

**Interactive Runtime Support:** On-device and on-gateway execution of predictive analytics in the IoT including OSGI runtime environments, Raspberry PI devices and PMML ensures solutions will run on very small footprint devices and on the gateway with the flexibility of broad platform support.

### Machine Learning Semantic

**Model™:** Patent-pending technology allows you to create predictive packages and enables “predict anywhere” flexibility so these packages are portable and can be embedded on a device, on the gateway and in the cloud—so the analytics are where you need them, when you need them.

## ADVANCED ANALYTICS USE CASES FOR THE IOT

### Energy, Utilities & Manufacturing

- Predictive Maintenance – Know when a part is at risk of a failure before it happens to avoid costly downtime.
- Field Service Optimization – Cluster service calls to optimize resources and reduce costs.
- Inventory Optimization – Ensure the right parts are in the right place at the right time.
- Asset Utilization & Optimization – Understand the capacity and usage of key assets, as well as probability of future usage, in order to optimize utilization in real-time.



### Transportation

- Driver Incident Risk – Generate driver specific incentive and training programs to reduce risk and improve safety.
- Predictive Maintenance – Know when a part is at risk of a failure before it happens to avoid costly downtime.
- Driver Attrition – Predict driver turnover before it happens and recommend retention strategies to reduce costs.

### Health and Life Sciences

- Remote Patient Monitoring – Predict and intervene on patients with high risk of deteriorating health to improve patient outcomes.
- Preventable Hospital Admissions for COPD Patients – Tailor interventions based on predictive remote monitoring to improve patient engagement and reduce costs.
- Predictive Maintenance – Predict risk of failure for high cost clinical devices to proactively schedule maintenance and avoid unplanned downtime.

**For more information go to [www.predixionsoftware.com](http://www.predixionsoftware.com)**