IoT in Field Service

HOW DEVELOPING AN IOT ENABLED PREDICTIVE SERVICE BUSINESS REDUCES MAINTENANCE COSTS AND ASSET DOWNTIME

Some of the technologies enabling IoT today are truly mind-blowing. And the data we can collect about our customers is remarkable. The need for automated tools and data-experts constantly grows. There is such a wealth of information available, and so many tools to capture that information, that it can be confusing. Often, the biggest question is, "**where to start?**"

If you're running a reactive field service business with technicians busy putting out fires in a break/fix model, moving towards an IoT-enabled predictive maintenance approach is a necessity, especially as you see customer behavior and expectations rapidly changing and technological advancements giving birth to disruptive and non-traditional competitors.

According to recent Copperberg Research, a staggering **56%** of manufacturers consider their service business to be reactive, even though **73%** of manufacturers believe their business would gain a competitive edge within 18 months by being more active with IoT. And the potential benefits are plentiful, ranging from reduced equipment downtime, increased productive uptime, cut routine maintenance costs, and increased asset lifespan.

Contemplating what the Internet of Things can do for your service business can be daunting. What strategy should you approach internally? How do you start the conversation with customers? And how do you choose the best fit system for your organization?

In short: how do you get started?

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56%

Manufacturers believe their business would gain a competitive edge within 18 months by being more active with IoT

73%

Source: Copperberg Research Recent Study

THINK BIG, START SMALL

As with any change management initiative, if you are running a large service business, changing the mindset and implementing new tools throughout the whole organization overnight is nigh on impossible. And although there always seems to be money available to fix failures, there never seems to be enough money to prevent them in the first place.

The initial task to get the project started is to convince top management, thus choosing a small pool of customers to start with, either by market, segment, or product line, is critical.

Manufacturers need to develop a long term strategy through a test pilot that will bring clear ROI to showcase to top management and get the internal buy-in necessary to expand the implementation across business units.

EDUCATE YOUR CUSTOMERS

As manufacturers start applying IoT in a predictive service capacity, this enables them to move away from maintenance on a periodic basis and towards maintenance only when it is needed. This will result in eased up workforce schedule and dispatch.

However, efforts must be made to educate customers on the value created.

Many customers can be price-sensitive. For example, when it comes to maintenance of engines, customers tend to only look at the cost of air filtration systems and tend to go for the cheaper option. But dust in the engine's inlet air causes reduced machine performance and increased engine wear, which results in increased fuel consumption and a higher Total Cost of Ownership (TCO).

A study from Komatsu showed that 75% of unplanned stops are avoidable. Being able to gather data on how customers are using products will help reduce a lot of maintenance works caused by the 3i's: incompetence, ignorance and indifference.

It's thus important to develop a strong story telling of the benefits of connected devices. Manufacturers should be able to explain to their customers how sharing data will create value for them in the long run.

CHOOSE THE RIGHT SYSTEM

An organizational shift to develop IoT predictive maintenance also requires IT support. Some of the biggest concerns facing manufacturers venturing into the IoT space relate to connecting legacy equipment to a live environment (imagine a traditional manufacturer established in the late 19th century, selling products with a lifecycle of 30+ years...).

Most importantly, the system needs to generate the right data, enabling a service business to analyze and to convert that data into actionable insight.

In the Copperberg Webinar **How to get started with IoT predictive maintenance***, Jonathan Scott, who is the Director of Data Science and Analytics for Hitachi Solutions, gives a great demo of Hitachi Solutions' IoT Predictive Service Hub (PSH), a solution that allows manufacturers to move away from the break/fix model and use predictive analytics to optimize their field service.

Jonathan uses the example of a wind farm operator, for which availability is everything as its main ressource, wind, is limited and thus downtime is not an option. Jonathan shows the kind of insights and analytics provided by Hitachi Solutions IoT PSH if a specific wind farm emits an alert (in this instance, a turbine has an issue which is identified by the sensors). The solution offers real time data to drive business outcomes.

YOU CAN WATCH THE FULL WEBINAR HERE

*The Copperberg Webinar "How to get started with IoT predictive maintenance"

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CONCLUSION

In a world of increasing globalization, disruptive technologies, changing customer expectations and shifting competitive landscapes, optimizing your field service operations to move away from the old break/fix model and towards a predictive maintenance set-up is a necessity.

There are three important steps to get started towards an IoT-enabled service business:

- *Think Big, Start Small to ensure you have a test pilot that will bring the ROI needed to get top management buy-in on a larger scale implementation*

- *Educate your customers to make them understand the mutual benefits of connected devices and how it will improve the cost and performance of their operations in the long run*

- *Choose the right system that best fits your service operations and will generate the right data to drive business decisions*

Moving towards an IoT-enabled service business is a long process, but the benefits are huge. It allows reduced equipment downtime, increased productive uptime, cut routine maintenance costs, and increased asset lifespan. In the long run, it changes the nature of the relationship between a manufacturer and its customers towards a mutually beneficial performance based partnership on the basis of outcome based solutions.

As Lars Moller, General Manager Services at AI Shirawi Enterprises, said in the webinar: **"you just have to get started. The choice is yours."**