

OPTIMIZING PHYSICAL ASSETS

A key driver of economic growth this past century has been the steady expansion of human productivity as reflected in the sheer number of physical assets that we have invented and now manage. Unfortunately, as widely reported, human productivity has plateaued creating intense pressure to identify new areas of growth. We believe that the key for sustainable economic growth in the 21st century is unlocking the value of those physical assets. Internet of Things (IoT) technologies are fundamental to make that happen. Through our extensive experience and expertise, we have developed a full suite of IoT products and services that enable our clients to optimize physical assets to usher in the next industrial revolution. There are two key avenues to unlocking value: managing physical assets more effectively and deriving greater benefits from the assets an organization manages.

The proper procurement, maintenance and repair and replacement of physical assets, or assets with a useful life greater than one year, is a challenging proposition for most organizations. Simply maintaining and updating static inventories of assets is difficult for many entities, and a surprisingly large percentage don't update their inventory of assets on a regular basis. This is all changing with the advent of IoT technologies. IoT offers low cost sensors and attenuators so that all physical assets and the key components of each one can be monitored and tracked in real-time from anywhere. Organizations can easily maintain and update inventories and can even use predictive analytics to create replacement schedules that reduce downtime, improve maintenance and repair and extend useful life. IoT offers the opportunity to understand the health of physical assets to truly generate a greater return on investment for that physical asset.

While IoT can help reduce downtime and extend the useful life of physical asset, organizations must also maximize the utilization of a physical asset to fully benefit from the power of IoT. The metrics that define utilization of a physical asset must be carefully defined. When properly established, metrics provide the performance measurement system necessary to fully optimize physical assets for any organization. The value of IoT is that it provides the ability to create, identify, collect and quantify the utilization metrics of any physical asset.

What is the defining thread that weaves all of this together, from financial data on the cost of procurement, to maintenance data on health of an asset and to utilization data on performance of a task? We call it Data Resources™. Data Resources is having the right information, in the right form, at the right time and in the right hands. Because of our interdisciplinary strengths we understand how to identify the Data Resources necessary to optimize physical assets. Our innovative methodology of ASSESS, PLAN, DEPLOY™ gets our clients there faster.

For our clients we assess their strategy for use of physical assets, understand the current data generated from their physical assets, and review the information communication technology that currently collects and stores that data, in order to recommend the best use of IoT to optimize their physical assets. With a clear understanding of the goals and objectives of the IoT project, we plan our clients' roadmaps, use of intelligent systems, and methods to improve performance so that together we develop comprehensive cost-effective solutions. Finally, with clear outcomes and deliverables defined, we deploy code, provide testing, and offer integration and enhancements to deliver IoT that optimizes our client's physical assets. In so doing, our clients increase their competitiveness, generate new growth and leverage the IoT next industrial revolution.