



Syook RTLS impacts for Manufacturing Operations





Multiple Challenges Impacting Manufacturing Operations

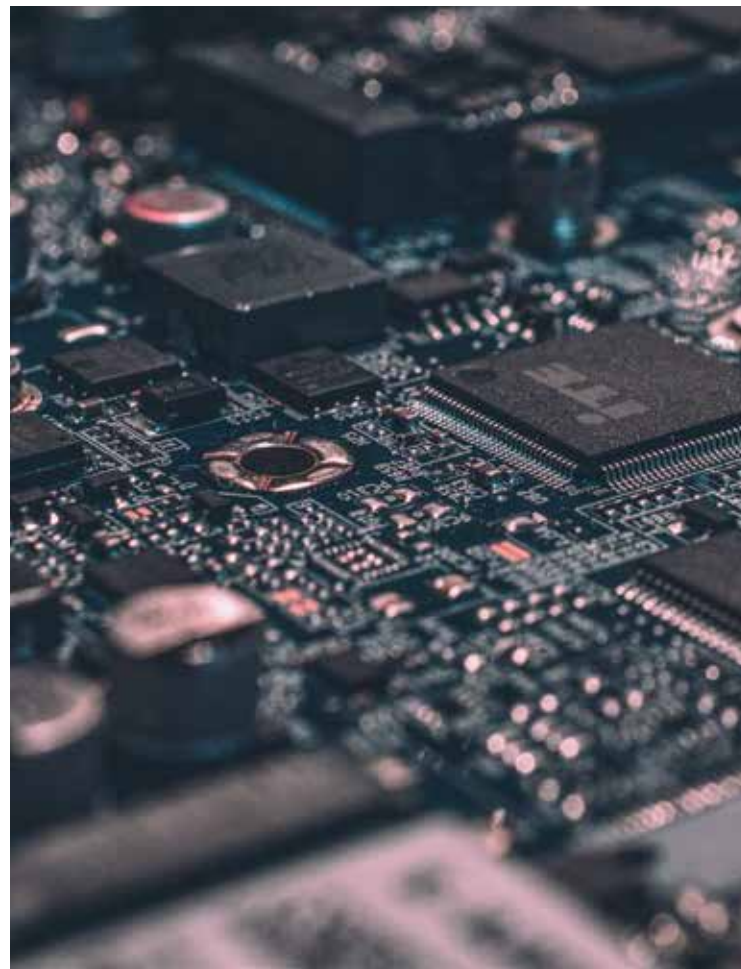


In the face of digitization and new customer expectations leading players in the manufacturing industry are confronting uncertainties. Globalization and the connected economy is putting a lot of price pressure on manufacturers.

As one of the important wealth-generating sectors of the global economy the manufacturing industry accounts for a significant share of the global workforce to develop materials needed by organizations across various industries. The manufacturing industry therefore has been pushed into doing more with the same. Traditionally, the industry has been using processes to scale operations, but after some time, complexity takes over and processes fall apart if not monitored. Hence the industry is increasingly moving towards using new technology to streamline operations.

Moreover, as the demand for innovation and digitization grows higher, companies in the manufacturing industry are facing the need to plan new strategies and invest more in technology to gain a stronger foothold. In order to maintain the growth momentum the industry needs to address the challenges posed by the advent of technology.

From handling shortage of skilled labor, to providing a safe work environment while meeting the ever-increasing demand for cost reductions the manufacturing industries need to wade through complex regulations and tight schedules to remain profitable.





The Top Three Challenges for Manufacturing Sector:

Increase in revenue



In a growing economy like India, manufacturers are under pressure to gain market share and increase the top line to ensure a good return to stakeholders. Newer and innovative products are being launched to gain market share. This is evident by the new launches.

Increase in margins



Manufacturers are increasingly under pressure to increase margins. The mantra in manufacturing is to do more with the same.

Improving compliance



The costs of non compliance in any industry are increasing. This means the sector is investing heavily on improving safety standards and compliance.

Traditional ERP systems and PLM (Product Lifecycle Management) solutions cannot address the above challenges, as they only concern themselves with either the passive information of the assets or the running times of the machines not where the movable parts of the process are located, where they were a minute or an hour ago, or even to know if things are exactly where they are meant to be.

Also, traditional ERP system are meant for functions like finance, HR, marketing, etc. However, dealing with the nature of operations requires a different set of systems.

Other factors which have direct impact on the manufacturing operations but are not addressed by the traditional IT systems are:

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|---|---|
| Presence of the workers | not attendance, but presence of the workers in the area where they are supposed to be working |
| Presence of the trolleys, forklifts and other MHEs | are the workers wasting time trying to locate the equipment they need |
| Wait time of the truck at the entry and exit gate | this might be a logistics issue, but it impacts the manufacturing operations |
| Wait time of the truck at docks for loading and un-loading | this has huge impact on the manufacturing operations but is not addressed by any existing IT system |



How Syook's approach of treating assets as moveable entities solves the challenges in Factories and helps save money

Challenges	Syook Solution
<p>Increase Revenue Growth</p> 	<p>Syook InSite shows the inventory in real time represented as physical entities along with the workers and MHEs. All tagged items are continuously tracked, even if the items are frequently moving the current location and the count of the items are available in real time.</p> <p>Syook InSite enables the production managers to get a real time visibility on each element which impacts production time, whether it is the next load of raw material which is required to be moved from the material store to the production line, or the worker who is supposed to be operating the machine but is out on a break. Locating the maintenance engineer in real time to reduce down time, or locating the forklift to change the production tools, time saved is money earned.</p>
<p>Enabling greater production and service agility with existing resources</p> 	<p>Syook helps you to find each tagged asset in real time on a map, the historical data is available for analysis. Knowing which worker is more efficient and which one is prone to take unscheduled breaks can help develop better retention plans.</p> <p>Syook also tracks maintenance schedules of the machines to identify machines which break down frequently. Syook InSite makes it easy to search items on the facility map based on any associated data attribute, like searching for a specific batch of raw material. Faster locating of inventory, MHE's and workers allows for overall higher production.</p>
<p>Improving compliance reporting</p> 	<p>Manufacturing operations might involve high risk work environment where any mishap can cause HSE issues requiring partial or complete shutdown of the facility. Syook BLE Tags for the workers are provisioned with a trigger button which can be pressed in case of an emergency and assistance can be provided at the exact location in the shortest possible time.</p> <p>This avoids creating panic by localizing the emergency response and speeding up the response as the exact location of the emergency is shown on the map. Syook safe solution also provides real time head count during emergency mustering or evacuation, saving precious time by identifying and locating the missing workers.</p>
<p>Higher Production Efficiencies</p> 	<p>The data gathered on a daily basis by InSite is perfect for conducting a time-motion study. Bring business efficiencies to every part of the operation, gain insight into the interaction between workers and machinery, and even be aware of the condition all assets are in.</p> <p>Syook helps to get insights into smarter material usage, increase flexibility, and ensure just-in-time delivery of material for line-side replenishment. Get the kind of reliable communication, accountability and measurability that ensure just-in-time delivery, reduce downtime and positively impact your production efficiencies.</p>
<p>Better supply chain visibility</p> 	<p>Syook InSite provides real time visibility of the goods from "Floor to Store". Syook can help companies get a tighter grip on on-time deliveries, and product forecasting. The data obtained through asset tracking allows companies to tweak their own production schedules. Syook enables better decision making by providing insightful reports at the click of a button, ensuring available data can be used to find trends to make manufacturing schedules even more efficient.</p> <p>Syook helps to get insights into smarter material usage, increase flexibility, and ensure just-in-time delivery of material for line-side replenishment. Get the kind of reliable communication, accountability and measurability that ensure just-in-time delivery, reduce downtime and positively impact your production efficiencies.</p>



Syook InSite helps to improve worker efficiencies and increases production time:

Presence of the workers

The Blue-Collar workers are the backbone of every manufacturing facility. Even though there are state of the art attendance systems, from Biometric attendance to RFID access cards to record their duty hours but these systems do nothing to measure the actual time the worker spend in his work area. In a factory the workers hired for operating the machines, but few workers could be spending time in sorting area or in cafeteria, impacting the downstream production.

Syook InSite provides the attendance with the location data of each worker, making it possible to see the actual work hours being put in by them at their actual workstation. The real time location of the workers also allows the supervisors to ensure production machines are continuously manned.

Syook InSite also allows configuration of rules for workers, if a worker is away from the workstation beyond a predefined time, the supervisor can get an instant alert. Other rules like overcrowding in a machine room can also be configured, if the predefined threshold of the number of workers in the machine room is exceeded the alert can be triggered.



Presence of the trolleys, forklifts and other MHE's

Precious time is wasted searching for trolleys and forklifts in large factories. Syook InSite tracks these machines in real time and the exact location is always visible on the facility map. Faster locating of the MHE's ensures production time is not hampered by delays in finding such equipment.

Further rules can be implemented to prevent movement of these machines outside the authorized zones/areas, the supervisors get instant alerts on rule violations. Equipment lying around in a corner while it is required elsewhere might appear as equipment shortage but measuring the usage time of these equipment also ensures investment for additional equipment is planned only when the peak utilization of the equipment has been reached.



Wait time of the truck at the entry and exit gate

Thousands of billable truck rental hours are spent outside the factories processing paperwork to allow entry/exit to the trucks. Other than the impact on the surrounding areas, like traffic jams and loitering drivers causing law and order problems, this directly impacts the profits of the factory.

With Syook InSite it is possible to create paperless gate pass, pre-approved truck information, leading to major time savings at the gate, which translates to additional profits and faster shipments.



Wait time of the truck at docks for loading and un-loading

When trucks arrive at the dock for loading/un-loading the dock supervisor needs to ensure that the necessary workers, forklifts, cranes, etc. are immediately located, but in large factories with dozens of docks this is a major challenge.

Syook InSite allows advance alerting to the dock supervisor whenever a scheduled truck has entered the factory gate, the real time location of the workers and equipment is shown on the map, helping the supervisor the gather all the resources at the dock in time to receive the truck. Faster Truck In Truck Out translates to higher throughput, better utilization of space and overall better cost efficiencies.

Syook InSite offers up the ability to conduct time-motion studies to increase worker efficiency and, optimize resource flow in manufacturing operations.

Control access to restricted areas, monitor visitors to the facility and improve the efficiency of your emergency response plan with InSite, a cost-effective solution for increasing safety standards.

Compliance monitoring is time-consuming. But with the right rule configuration on the InSite dashboard, many aspects of compliance monitoring can be automated and compliance itself is likely to see improvement.



A Painless Solution



Minimal Integration Costs

Advanced BLE tags are a lightweight solution with lower set-up costs than other RTLS technologies, and can be quickly integrated with existing IT infrastructure.



Completely Configurable

InSite can be configured to improve productivity, efficiency, security, and compliance of any operation. From visitor management to asset tracking, we can have it all



Easy-to-use Interface

A dashboard with complete visibility of your operations, and the ability to define and redefine how you track it. Virtually monitor operations from anywhere, at any time.



End to End solution

All parts of the puzzle are owned by Syook. Just call Syook and the problem goes away.





InSite: An Overview

An IoT solution, backed by a powerful indoor positioning engine and accessible on desktop and mobile for ease of use



Indoor Positioning Engine

A positioning engine, based on proprietary algorithms, that tells you the real-time location of your people, patients and assets with industry-leading accuracy.



Advanced Analytics Dashboard

With a dashboard that is configurable for your specific use cases, create rules for information (eg. asset utilisation rates) or implement processes (eg. set turnaround time for patient discharge to two hours). Heatmaps are included, too.



Instant System Alerts

Anyone with an InSite account has the power to set alerts for pre-defined events. Configure emails and SMSes to be triggered when conditions are met, such as the entry of a visitor into a restricted zone.



Optimised For Minimal Hardware

The accuracy of InSite's positioning engine ensures that hardware is utilised optimally. This enables us to offer high location accuracy levels with a smaller set of devices. The savings are passed on to your operations.



Always Online

Syook InSite comes with a smartphone app, which means that it is accessible from anywhere, at any time. Aside from benefits to your administrators, it enables all your staff to use the information on-the-go while at work. Set-up user roles and improve the audit process, too.





Getting Started with Syook

How we deliver RTLS, optimised for your operation, without any intrusion into your day-to-day processes

#Step 01

We Understand Your Needs

We understand your use cases to recommend a framework that is optimised for project success.

#Step 02

Hardware Solution Planning

We study the layout of your facility to map out hardware needs for optimal accuracy.

#Step 03

Hardware Configuration

Our deployment team will configure readers and run tests to optimise location accuracy for your facility.

#Step 05

All Systems Are Live!

Tags are assigned to people and assets. Data will flow into the dashboards.

#Step 04

System Deployment

We deploy the hardware, setup the interface and provide training on the platform and its capabilities.



Your Partner For IoT Success

Quick, seamless set-up

We will ensure that your implementation is tested and operational within weeks, with a strong team available on site throughout the installation phase.

Ongoing Support

InSite is built as a self-serve platform, but our Customer Success team will provide all the training your staff needs during installation, and offer support on an ongoing basis.



Continuous Improvement

We're devoted to your Industrial IoT success. The Syook team is always available to improve the accuracy and functioning of InSite for your operation.



Simplifying operations for good

Contact Us

-  **Website** syook.com
-  **Email** info@syook.com
-  **Phone** +91 9501118225

Syook is building Industrial IoT for organisations of all sizes to optimise their operations. Our first product, InSite, provides businesses visibility into their operations by monitoring the movement of people and assets, enabling a successful transition to Industry 4.0.

