



Speaker interview with **Partha Ray, CEO, dDriven Solutions Pte Ltd.**

He will be sharing his insights on Demystifying Digitalization and how it can impact your business on 26<sup>th</sup> October.

**1. At dDriven Solutions, what are some of the work you are doing that will interest downstream operators? Is there any new findings which is worthy of mention?**

Within a very short period of time, dDriven has already become the Trusted Digitalization Advisor to key Fortune 500 Organizations in the petroleum downstream industry. We have successfully implemented complex Digitalization projects for some of the biggest operators.

Our expertise lies in:

- Creating Digital Twins of all entities involved in operations, be it a machine or a function such as Maintenance, Procurement, HR, etc.
- These twins are live (with real-time data) and are augmented with analytics to provide insights, such as identifying the bad actors causing production loss, and foresight to things like machine failure, optimal set-points, etc.
- The live Digital Twins are exposed to users through animated graphical “Tiles” on desktop and mobile devices.
- Using advanced analytics such as Machine Learning and Artificial Intelligence to radically improve Safety, Maintenance, Energy Consumption, etc.

The above has allowed our customers to:

- Monitor operations from anywhere, at any time, and get a 50,000 ft. perspective while being able to drill-down to details on demand.
- Get prioritized exceptions or potential exceptions and anomalies, drawing attention of the right stakeholder at the right time and within the opportunity window.
- Get clear perspective of the economic impact or in specific terms, “Lost Profit Opportunity” of excursions and anomalies.
- Keep an eye on what’s happening, get multi-dimensional perspective, analytical insights into root-cause, predictive foresight, economic impact of excursions in all the areas of their operations including Planning & Scheduling, Production, Inventory, Shipments, HSE, Quality, Process, etc.

The main thing that we are witnessing is that the senior management as well as other stakeholders have started realizing that data is gold. There is a lot of value they can derive from data and they are willing to understand how, and where to start. Many of them are very keen to launch “Digital Innovation” initiatives with us. After the deployment of some of our solutions, our customers started experiencing the immense value technology offers by breaking the barriers of functional silos, IT-OT silos, organizational silos, while silently re-engineering and transforming many of the traditional business processes and workflows, and enabling cross-functional visibility and collaboration.

An example from one of our customers clearly shows the value that can be unlocked by breaking down the barrier between machine, material management, procurement, production and maintenance data. After our solution was deployed, our customers quickly realized that a particular type of solenoid was causing the maximum production loss due to breakdown. They had insufficient stock of critical spares while the inventory of non-critical spares was bloated causing a lot of last minute “Emergency Purchases”. They also saw collaboration increase between maintenance and operations – now, priorities assigned against each work order by operations were much more accurate as compared to before where everything was just assigned a value of 1, and, the number of overdue priority work-orders actually dropped to zero in few days’ time. This is the power of **data-Driven** visibility and collaboration.

Data and advanced computing techniques are not only breaking silos, increasing collaboration and changing business processes, but also tackling problems such as corruptions and other reliability issues, fugitive leaks, process anomalies, working capital tied in dead-inventory, quality give-away, and many more.

## **2. What are the latest technology adoptions by downstream operators in Asia? Are there any success stories that other operators can learn from?**

We see keen interest and early adoption of Digitalization amongst downstream operators in Asia. One must realize that Digitalization is not one technology or a single tool. It also cannot be put in either the IT or OT basket. It is a confluence of many things including IT and OT.

We are part of major initiatives in Fortune 500 companies who have taken a firm first step in retaining, harmonizing and harvesting the data out of the field and automation layers, from the MES layers, and from the ERP & Business layers. We know of focussed initiatives on retaining and harmonizing organizational data, planning proper architecture so that the data can be processed or harvested by applications.

We are working on some critical initiatives where operators are looking to predict the most optimal process parameters out of their golden batches, use machine vision for process safety and perimeter security, etc.

Most importantly, we see keen interest of the senior management in understanding the “what, why and how” of Digitalization.

These are the early days of “Digitalization” and there are success stories from which one can learn. There are also failures to learn from. We can discuss specific cases over an across the table discussion.

### **3. What’s the greatest impact IoT, data analytics and AI will have on the industry? What lies ahead of operators and how will they adapt?**

The greatest impact of IoT, Analytics, Artificial intelligence and related technologies will be change of business processes, changes in the traditional organization structure and culture, required skill-sets, and best-practice benchmarks in every aspect of the business and so on.

We have seen such changes in the early adopters and will discuss some cases during our presentations. We have also seen the fear and resistance to it and shall discuss how leadership can mitigate it.

What lies ahead is exciting disruptions and a roller-coaster ride through “Digital Darwinism”. During our presentation, we will share some of the experiences we have had throughout our digitalization journey in the downstream industry and highlight key critical success factors in those projects.

As far as adoption is concerned, it starts with the leadership. They have to get involved, understand the potential it offers and the cost of lagging behind. They have to provide the leadership that is essential to embracing and realizing the value of this change, rather than merely “adapting” to it.

### **4. What will be the highlight of your presentation at Asian Downstream Summit?**

Our intention here is to help the operators understand Digitalization and its potential impact on their business. The areas we are planning to focus on will be:

- Demystifying the technical mumbo-jumbo behind Digitalization
- Explaining it in simple language and conveying the business impact that it creates – Digitalization without Jargons
- The changes it will bring about in organizational structure, culture, business processes, performance benchmarks, etc.
- The potential roadblocks and critical success factors

We shall also talk about some of the benefits we have seen early adopters experience from the disruption that Digitalization brings about.