

## TIG Symposium Digitalization

### A short review and a big thank you

Rankweil/Austria – May 2019

**Within the scope of our TIG Symposium on Wednesday, 8th May 2019, we spoke about exciting topics around the subject of digitalization, together with 5 guest speakers and over 100 participants. The presentations were varied, visionary and very interesting. The "Open Space" workshop was well-attended and brought up exciting discussions.**

"The topic of digitalization has become widespread. It seems as if every company is facing an upheaval that is intensified by the digital transformation. Some feel magically attracted to this seemingly new world, while others are more skeptical.

For us who work in the industry, digitalization means the unrestricted networking of production units for data collection! On the basis of this data, insights must be gained that lead to production-optimized adjustments of our business models and thus to greater flexibility and decisive competitive advantages", explained Wolfgang Frohner, CEO of TIG.

### A data scientists tale – from architecture to applications

Michael Aichinger, CEO of unisoftware plus GmbH, explained the different disciplines, the architecture and technology possibilities, as well as application examples for machine learning.

"Data Science is a multidisciplinary field that uses scientific methods, processes, algorithms and systems to extract knowledge and insights from structured and unstructured data," emphasizes Michael Aichinger.

In particular, he addresses the exponentially growing amount of data that will be produced in the industry over the next few years. In 2020, for example 1.7 MB of data per person per second will be expected. One of the growth drivers in data generation is IoT. Conventional database systems can no longer process these data volumes. The trend is towards cluster-oriented big data systems.

### Industry 4.0 - control room with predictive systems

BOCAR, with 12 production plants in Mexico and the USA, develops a cross-machine data acquisition solution for entire production cells based on TIGs existing traceability solution. On the basis of a comprehensive data acquisition (big data approach) analysis tools can be set up, significantly increasing

productivity and quality. Nico Jordi, Engineer for Technical Application - BOCAR GROUP, explains impressively that the ultimate goal is a "control room" in which at least two specialists are responsible for optimizing production and improving quality. In the course of this matter, the production must be digitized.

## **Predictive Maintenance and Predictive Quality in Manufacturing**

IoTco LLC is involved in BOCARs project "control room with predictive systems", which focuses on topics around "Predictive Analyzes". Mohamed Abuali, CEO of IoTco LLC, emphasizes that comprehensive data collection of machine and process data is the entry into digitalization. Without data, no OEE (overall equipment effectiveness) is possible, not to mention further analysis which go into the prevention of process deviations or wear of equipment. "Think big, start small, act now with a proof of value", is Mr. Abualis recommendation in the approach to digitalization projects.

## **How we started with TIG in 2015, and where this has been leading us through the years**

Kongsberg Automotive AS is one of the largest automotive suppliers with over 10,000 employees and 40 production sites in 18 countries. "Due to the strong growth, we had the problem of getting the OEE inadequate and therefore we went in search of a suitable MES solution," said Sture Sørli, Senior Process Engineer of Kongsberg.

In 2014 Kongsberg evaluated the situation and due to the high integration possibility of injection moulding machines, the decision was made for TIGs MES solution TIG authentig. In 2015, the company started with the module "Monitoring", for production monitoring and calculation of the OEE. Today, TIG authentig is fully implemented and Kongsberg now controls the entire production with the MES solution, which according to Kongsberg has unique injection moulding DNA.

## **The Digital Factory Vorarlberg**

Prof. (FH) DI Robert Merz showed the industry's global developments and how universities are responding to them. With several industrial partners, the FH Vorarlberg realizes a digital factory for demonstration, including all facets of production. The Digital Factory FHV includes CAD planning, intralogistics, robotics, adaptive manufacturing methods as well as assembly. Currently, the concept is being expanded and upgraded to become a cloud manufactory.

## LiT – the new TIG training academy

Training and Knowledge Management are upon the key assets for running a digitalization project efficiently and smoothly. TIG wants to take training to the next level and offers its valued customers possibilities to utilize TIG products in the best possible way.

### **Customers take center stage**

TIGs advanced training programs focus on the specific business goals of the customers. For the coaching TIG will work out a training plan and draw up an agenda around the needs of the customer. The basic training gives everyone an outline of the topic and accounts for about half of what could be covered. The rest is adjusted, tuned and added, based on the specific needs of your own company.

### **The LiT academy focuses on:**

- Trainings: Standard, configured or customized
- Webinars on selected and up-to-date topics
- e-learning platforms with online courses
- TIG certification program

Customers benefit from more than 25 years of expert knowledge in the implementation of digitalization and MES projects.

## “Open Space” workshop

The "Open Space" workshop, as part of the TIG Symposium, allowed participants to bring in their own questions, ideas and open points on digitalization. Among other things, questions such as "Are data the oil of the future?" or "What are the most important requirements for a digital factory?" were discussed.

Open Space thrives on and with the self-organization of the participants and impresses as a working method through the unusual combination of efficiency in the development of results on the one hand and creativity, inspiration and fun in cooperation on the other hand.

We are very happy about the numerous participants and the good atmosphere at the TIG Symposium. The feedback has been overwhelmingly good.

**Markus Fehr, employee of Engineering for Quality GmbH:**

"Many thanks for the valuable event, which has offered me an update on digitalization in the plastics industry and in the education of the state of Vorarlberg. Congratulations on the venture with the "Open Space Session", which gave me additional possibilities for a targeted exchange of information. I was impressed by TIG and this symposium. TIG not only knows how to connect machines but also people."

The entire TIG team would like to thank all speakers and participants for the successful event. Thank you for being there.





## **TIG – Technische Informationssysteme GmbH**

TIG develops and sells Manufacturing Execution Systems (MES) worldwide and has

- connected more than 15,000 injection moulding machines worldwide,
- 7 of the top 10 automotive suppliers as customers.

Founded more than 25 years ago as a specialist for production machine networking, TIG is now the industry leader in quality assurance and production optimization. TIG distributes and maintains its product portfolio globally via locations in Rankweil, Schwertberg and Vienna (Austria), as well as York (USA), Shenzhen (China) and Singapore. More than 350 customers and numerous big-name manufacturers of injection moulding, rubber or recycling machines rely on the state-of-art MES solution by TIG.

### **Press contact:**

Jennifer Wimmer, Marketing  
TECHNISCHE INFORMATIONSSYSTEME GMBH  
Lehenweg 2, A-6830 Rankweil  
tel.: +43 5522 41693-0, fax.: +43 5522 41693-15  
e-mail: [j.wimmer@tig.at](mailto:j.wimmer@tig.at), homepage: [www.tig-mes.com](http://www.tig-mes.com)