

VISUAL SHOP FLOOR AS A DATA HUB IN QUALITY MANAGEMENT

Case study NetQM: Visual Shop Floor in practice



Fig. 1: © NetQM, Production site, Bosnia url: https://www.karriere.at/f/network-quality-management

ABOUT NETQM

NetQM is a high-tech full-service provider in the field of mechatronics. The group of companies with locations in Austria and Bosnia and Herzegovina develops and produces technologically complex series parts from product development to prototype construction to series production. The portfolio covers the areas of cable assembly, electronics, mechanics and injection moulding as well as individual special developments.

Customers come from the automotive industry, racing, telecommunications, medical technology and many more. The company employs 400 people. The headquarters are located in Puch near Hallein, the production site in Bosnia and Herzegovina.

www.netqm.at



Visual Shop Floor as a data hub in quality management

At NetQM, a high-tech full-service provider in the field of mechatronics with locations in Austria and Bosnia and Herzegovina, Solunio's *Visual Shop Floor* software has become an important tool in quality management.

Many stand-alone workplaces that were not really connected. A lot of paper instead of digitized information. And thus hardly any possibilities to visualize and meaningfully evaluate the data. The

company NetQM wanted to change these general conditions and take the internal processes a step further towards digitalisation: "Our goal was to centralize and, above all, visualize the information that was floating around distributed in the different departments. Instead of the individual data islands, we wanted to create a digital platform where the data is brought together," explains project manager Lukas Höller-Strasser from the company NetQM. During the search

for a suitable software, NetQM came across the company Solunio and its Visual Shop Floor software platform. "In the end, this solution convinced us because it brings together and visualizes the scattered data via simple interfaces from the systems like a data octopus," says Lukas Höller-Strasser.

Efficient quality management

Currently, NetQM uses Visual Shop Floor especially for its quality management.

"In the past, the shift and department managers met at shift changes with pen and paper to check and update the data. To be honest, I have to say that the update was not always implemented. Today, Visual Shop Floor brings together the various data from our ERP system and displays it live on the screens during meetings. This means that the responsible employees are

always up to date, which proves to be a great advantage. Certain quality and process data that were not really considered before are now easily accessible and thus also receive the appropriate attention," says Lukas Höller-Strasser.



Quality control in the production process

NetQM also uses Visual Shop data usable in real time. The current quality figures are visualized on around 80 screens in the form of andon boards. If deviations occur, signal points indicate a possible need for action. "Visual Shop Floor shows us the top 3 error sources as well as the top 3 articles where deviations occur. The QM department thus immediately recognises where it needs to initiate measures." Visual Shop Floor also makes it possible to control performance, because those responsible can see the target time deviations at department level. "We have the overunder-comparison of

the target times and the Floor in production to make corresponding articles shown. This way we know immediately where the target times are exceeded or fallen short of." This continuous monitoring extends to the inspection systems area. "The inspection systems in production have been linked using Visual Shop Floor so that we can now follow all inspection data in real time. We have defined First Pass Yields and intervention limits. If an intervention is necessary, it appears live on the screen," explains Lukas Höller-Strasser.



Fig. 2: © NetQM, Visual Shop Floor in practice

| Solunio: Case study NetQM



Cross-border integration

NetQM's headquarter is located in Puch near Hallein in the province of Salzburg. The production plant with over 400 employees, on the other hand, is in Bosnia and Herzegovina. Thanks to Visual Shop Floor, data exchange and communication clearly also succeed across borders, for example in complaint management: "In the case of complaints, a complaint report is created at headquarters. As soon as

the complaint is accepted, the employees in the production plant in Bosnia and Herzegovina can easily access this report including photos and documentation."

Visual Shop Floor also guarantees uniform standards and efficient handling of workflows, for example in the creation of articles in the ERP system or in the maintenance and support of the entire IT infrastructure.

"We can now immediately see which processes still need to be completed for an item entry. In the event of server or computer problems or upcoming updates, the responsible employees know immediately what needs to be done and where."

Visual Shop Floor as a central player in QM

The possibilities to merge and visualize data bring great added value for NetQM: "Visual Shop Floor is an important support for the respective department managers and provides recommendations for action for each item we produce. Currently, we use the software mainly in quality management to define where improvements should be implemented. For example, we meet once a month for optimization workshops where we take a close look at a specific product article Visual Shop Floor became the central player in this process and is now our basis for optimisation steps."



Fig. 3: Illustration Solunio: Shop Floor Meeting with Visual Shop Floor





Fig. 4: © NetQM, Visual Shop Floor in practice, Dashboard

Extensions planned

Visual Shop Floor is a modular and therefore open system. It can be adapted to the needs of the company at any time or extended by functions. NetQM also wants to use these possibilities for itself: "In a next step, we want to connect the machines to Visual Shop Floor so that the data is not only taken from our ERP system, but also directly at the machines and evaluated. Since production runs on the machines via many automated processes, this will give us an even

faster and more accurate basis for our decisions," explains Lukas Höller-Strasser.

NetQM has enjoyed double-digit growth figures for years, but these are also associated with certain challenges. The company also wants to master these challenges with the software *Visual Shop Floor*. For example, warehouse logistics is confronted with increasing material volumes and product diversity. To support the warehouse,

it has already been equipped with devices for mobile data collection. In the future, Visual Shop Floor will also support the logistics staff: "We will place screens in the warehouse where Visual Shop Floor will show us the incoming and outgoing deliveries per day. This will make it easier to keep track of incoming and outgoing deliveries."



Smooth collaboration

The introduction and implementation of a comprehensive software can be time-consu- and the cooperation with our IT ming and nerve-racking for a company. How was the cooperation with Solunio? "Without exaggeration: It was a pleasure to work with Solunio and the implementation went smoothly. In my experience so far, even unusually well. There were never any problems and if something didn't work, Solunio solved it in the shortest time.

That is by no means a matter of course in this field. The training team was also really cool," says Lukas Höller-Strasser.

In the end, this solution convinced us because it brings together and visualizes the scattered data via simple interfaces from the systems like a data octopus.



Project Manager, Network Quality Management (NetQM)



ABOUT US

Solunio Ltd, founded in 2013 and based in Bruneck, South Tyrol, bundled extensive experience from software development and industry into the *Visual Shop Floor* software in 2015.

The comprehensive and end-to-end platform for shop floor management contains flexible tools for data manage-

ment, creating transparency, organizing collaboration and optimizing processes. This enables companies to unlock the potential of digitization to improve production and logistics processes.

Visual Shop Floor is used daily by well-known top industrial companies at a total of **90 locations worldwide.** These include globally active groups in various sectors of industry such as Alupress, Intercable, GKN Powder Metallurgy, TDK-Electronics and Plansee.



Matthias Unterberger and Paul Leiter Founders of Solunio



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