

Stevanato Group partners with Microsoft: Cloud Computing and Remote Assistance to meet the challenges of the Pharmaceutical Industry

State-of-the-art technologies enable a comprehensive digital transformation process in support of international growth for the Padua-based Group, now also involved in the production of glass primary packaging for drugs and the various potential vaccines to fight COVID-19, vaccine inspection equipment and plastic components for diagnostic testing.

Thanks to mixed reality, it is already possible to complete virtual audits of the quality, health and safety system, and remote factory acceptance tests (FATs) on inspection equipment for the pharmaceutical industry to overcome the limitations of travel and assure continuity during the pandemic. Also being developed is the integration of AI into inspection equipment, thanks to which pharmaceutical companies will be able to reduce waste and guarantee enhanced integrity for its drug and vaccine containers.

Padua, December 16, 2020 – **Stevanato Group** strengthens its collaboration with **Microsoft Italy** in support of its growth program through the use of new technologies to meet the challenges the pharmaceutical industry is currently experiencing as a result of the pandemic. The Group, which has over **4,200 employees and 14 production facilities in 9 countries**, is playing a key role in the production of plastic components for **diagnostic tests and glass primary packaging for drugs**. It provides packaging and syringes for the major **international anti-COVID-19 vaccine programs being developed, as well as pharmaceutical inspection equipment**. **Cloud Computing** is, thus, strategic for **business continuity** during this delicate phase in which Stevanato Group has never ceased production, with the goal of providing support to the pharmaceutical industry.

Stevanato Group's constant growth is sustained by an extensive digital transformation plan which also includes the development of a series of applications which, leveraging **Microsoft Mixed Reality** technologies, are designed to respond to the current needs of the pharmaceutical sector. For example, a **Virtual Audit** plan was launched, thanks to which the Stevanato Group quality teams wear the **Microsoft HoloLens2** holographic headset with integrated **Dynamics Remote Assist**. This allows them to move throughout the installation to show customers in remote connection all processes, including production phases and lab testing. This also makes it possible to perform a **remote quality system audit** to ascertain that the installation complies with required standards and customer needs without requiring an interruption in the pharmaceutical supply chain, which is even more strategic during the pandemic. In addition, the HoloLens headset also makes it possible to perform the **Virtual FAT (Factory Acceptance Test)** — the final pre-delivery inspection that assures the

remotely connected customer that the equipment is functioning properly. While wearing the headset, a technician can demonstrate machine components, start it up and share documentation. **Remote acceptance of equipment for the inspection of drugs and vaccines being developed** makes it possible to accelerate delivery to pharmaceutical companies, a factor that is critical in this period when the company has to manage large volumes on a short time frame.

The new frontier of Stevanato Group digital transformation process also includes the development of **Artificial Intelligence** to improve the performance of inspection systems and detection of defective glass containers filled with a range of drugs. In fact, a project designed to make **inspection equipment supplied by the Group even more intelligent** was launched in recent months, and it will be completed by 2021. Artificial Intelligence will be an additional ally of Stevanato Group in guaranteeing maximum quality to the pharmaceutical industry, by reducing potential errors and quickly detecting defective products along the production line. The integrity of these containers is essential and, thanks to Microsoft AI integrated into Stevanato Group inspection equipment, pharmaceutical companies will be able to make use of reliable algorithms to identify any defects even more easily and guarantee the highest standards of drug and vaccine conformity. **False positives can be reduced by 10-fold, also decreasing container production waste, and detection rate can be improved by 5%.**

These projects are part of the broader Digital Transformation plan of Stevanato Group, which is aimed to the completion of the **New Digital Ecosystem** by 2022. Within this context, the Group has worked side-by-side with Microsoft, focusing on a 360° Cloud approach. Over the last two years, **Microsoft 365** cloud platform for productivity and security was adopted, utilizing **Teams** for **collaboration**, the New Digital Architecture on **Microsoft Azure** cloud was extended with advantages in terms of **scalability and computing capacity**, and **Microsoft Dynamics 365** cloud platform was implemented to provide a **unified picture of customers and sales processes** across all business lines. An integral part of the new digital ecosystem will also be the **Data Strategy** focused on **Azure Synapse** platform, the analysis service that combines data warehousing features with **Big Data analysis**, making it possible to carry out queries on a large scale, while providing analysis with unparalleled rapidity — **up to 14 times faster** — and detailed information for Business Intelligence and Machine Learning. All this with the guarantee of maximum **security and privacy**, which is a strategic factor when working with the pharmaceutical companies involved in drug patents and research projects, such as those for the new anti-COVID-19 vaccine.

“Stevanato Group has been enjoying double-digit growth for at least ten years, and an unparalleled ally in this growth process have been the new technologies. The Group’s Digital Transformation process is centered on the creation of the New Digital Ecosystem which we intend completing by the end of 2022. It is a plan in which high-tech platforms not only provide support for new growth, but they will also enable the free circulation of information, intelligence, as well as real social energy within the company. Within this context, the collaboration with Microsoft is showing itself to be strategic, as proven by the new projects that involve the integration of Artificial Intelligence in the inspection equipment we provide to the pharmaceutical industry and the use of Mixed Reality for Virtual Audit and remote assistance on equipment used for inspection and detection of defective glass containers and

drug integrity, including the vaccines currently being developed,” said **Nicola Gianese, I-Digital Director at Stevanato Group**.

“Solutions such as Microsoft HoloLens mixed reality headset have allowed our customer companies to perform remote inspections of our equipment. This has provided indispensable support during periods of lockdown, but it also is a real competitive advantage. Companies are increasingly asking us to be able to do these remote operations to save time and travel costs. The AI benefits are also interesting, thanks to which the inspection equipment we provide to pharmaceutical companies will be increasingly ‘smart’. Using a range of modules in the Azure ecosystem and Microsoft Machine Learning and AI features, we have been able to reduce false positives up to 10-fold and, as a consequence, production waste, as well as to improve the detection rate by 5%,” noted **Luca Vallati, Vision System Manager at Stevanato Group**.

“We are proud to be working with Stevanato Group, an example of Italian excellence, which for over 70 years has been world leader in the production of glass primary packaging for the pharmaceutical sector. Their comprehensive digital transformation project demonstrates the value of 360° Cloud Computing, from enabling a new way of working to offering IT architecture equipped with ambient intelligence and benefiting from an integrated view on processes and customers. Thanks to new technologies, in this delicate phase for the pharmaceutical sector, the Group has maintained the continuity of its business while, at the same time, pursuing a transformation process that makes use of digital services enhanced by Artificial Intelligence, Mixed Reality and Big Data. This has allowed the Group to meet the challenges of the pandemic in a rapid and flexible way, while focusing particular attention on security and privacy. Today, Stevanato Group plays a fundamental role in guaranteeing production in support of the pharmaceutical industry, while providing glass primary packaging for drugs and vaccines being developed, as well as drug inspection equipment. Thanks to technological innovation, the challenge for the future will be to increasingly simplify the lives of patients and make treatment more accessible, even from home, to meet global health challenges,” stated **Federico Suria, Director, Commercial Enterprise Division at Microsoft Italy**.

Stevanato Group

Established in 1949, Stevanato Group is the world’s largest, privately-owned designer and producer of glass primary packaging for the pharmaceutical industry. From its outset, the Group has developed its own glass converting technology to ensure the highest standards of quality. The Group comprises a wide set of capabilities dedicated to serving the biopharmaceutical and diagnostic industries: from glass containers with its historical brand Ompi, to high-precision plastic diagnostic and medical components, to contract manufacturing for drug delivery devices, to vision inspection systems, assembly, and packaging equipment. The Group also provides analytical and testing services to study container closure integrity and integration into drug delivery devices, streamlining the drug development process. Thanks to its unique approach as a one-stop-shop, Stevanato Group can offer an unprecedented set of solutions to biopharma companies for a faster time to market and a reduced total cost of ownership.

For more information please visit www.stevanatogroup.com

Microsoft

Microsoft enables organizations to realize their digital transformation projects with new innovation scenarios, such as Cloud Computing and Artificial Intelligence. The company's mission is to support people and organizations worldwide to achieve more, thanks to technology and digital. More information on Microsoft is available on the website

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