

Working in technological factories



What does doing 4.0 business really mean? Which are the pillar concepts of this new paradigm? And how should the Italian companies, that are protagonists of the fourth industrial revolution invest? Mr. Nicola Scarlatelli, Samec's General Manager, gives us the answers to all these questions, since he had the chance, during the last few years, to have a very clear idea of what a Factory 4.0 is and of every single interconnected to it.

by ELISA MARANZANA



From

the recent research of the “Digital Transformation Academy and Startup Intelligence Observers” carried out by the Polytechnic University of Milan revealed that during 2018 more than one out of three Italian companies (meaning the 36%) will increase investments in digital technologies, with an estimated growth between 1,8% and 1,9%. Credit is given to phase two of the Government's Plan, the so called Enterprise 4.0, maybe. But there are also those who assert that if a company wants to grow up by investing in new technologies and moving towards the factory of the future, it does it anyway. Whether a Government provides subsidies for it or not. Nicola Scarlatelli certainly thinks so. He is Samec's General Manager, a Turin's productive reality that designs and manufactures modular components and systems for sheet metal handling on transfer presses and robotized interpress lines since more than 40 years. Samec believes and invests in new technologies long time before we started talking about the fourth industrial revolution.



**Nicola Scarlatelli,
Samec's General
Manager**

Samec's statement upon the centrality of the human resources during inMec Turin: entrepreneurial reunion focused on the challenges of the industry 4.0 organized by the CDO.

DOING 4.0 BUSINESS TODAY

"Nobody has a documented history from which it comes out a well-defined guideline about how to do 4.0 Business", says Scarlatelli. "This is a term that refers more to a way of thinking rather than a set of fixed rules. It is actually in these years that every productive reality is testing on its own the things that need to be done concretely".

But Samec truly believes into the factory of the future and the necessity that leads it to invest in this direction arises from two very specific considerations. "The first one – highlights Scarlatelli – is linked to one of the main typical problems of a small company like ours, namely the knowledge transmission: the knowledge that only some people have is likely to be lost if this person leaves the company. The second one concerns the product's value, that around the Seventies was based mostly on the physical production and minimally on the pre- and post-production activities. In the early two-thousands, the physical production started to cover a low value of the product, while what stays upstream and downstream in the production process has gained enormous importance. This means that what generates value doesn't come out from the new technologies but rather from the integration of each phase of the process".

Therefore, according to Nicola Scarlatelli, in front of a production that - thanks to the new technologies - costs and will continue costing lesser, concepts like knowledge, know-how, creativity and customer service is gaining increasingly value. Thus the 4.0 Companies have to work in this direction, by starting with a communication improvement within the entire company organization, where

communication doesn't mean only the exchange of information, but also knowledge sharing and spreading. "I recently read a sentence that impressed me a lot and which I fully agree with", adds Scarlatelli. "The idea of a 4.0 Enterprise is not based upon the technologies that a factory has, but upon working in technological factories, because the decisive factor will always be represented by persons."





FROM THEORY TO PRACTICE

But for Samec how does the practical concept of Industry 4.0 is being put into effect? "First of all – answers us Scarlatelli – we are trying, on the one hand, to improve the systems employed for the activities that stay upstream in the production process and, on the other hand, to improve the professionalism of the human resources involved. In the past, for example, we had great difficulties in tracing the data, because they were mainly into the designers heads, and this is why we

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integrated a PDM software that allows us to store the data in a very advanced database, so that it is easier for everyone trace them up, read up and view every detail related to that project, from the client's inquiry to the proposed solutions and so on".

Samec's 4.0 investments aren't only referred to the designing/project data, but also to the logistics and time-to-market. "We have optimized the raw material management with a vertical warehouse BI.MAG.560 that has 28 drawers with a 2.000 kg capacity, distributed on two towers for an overall capacity of 56.000 kg, with a supervision software that is integrated and interconnected with our management software, in order to ease once more the information exchange. This way, for instance, the management software is constantly updated upon the availability or not of the raw material for being able to act accordingly. At the same time, over the past two years, we have purchased two new automatic vertical warehouses with CoPilot touch screen control panels and WMS interconnected software with the entire company structure (added to a former manual one already existing in the company), for an improved management o the finished products. We added a fifth vertical automatic and interconnected warehouse – a ROTO-POINT with 468 compartments and SPS software for the complete traceability and management of the toolings/machinery equipment". Finally, with reference to the production technologies, the latest investments made by Samec covered a TO3D printer micro 40 with remote control and monitoring for the fast prototyping and a CNC turning unit Biglia B565 YS with 12 rotary tools, main spindle with C axis, Y axis, sub-spindle with C axis fedded by an automatic bar loader X-FILES-S 365 for the construction of a new product line that will be launched on the market during 2018.

Samec designs and manufactures modular components and systems for sheet metal handling on transfer presses and robotized interpress lines.



*Every year
Samec invests
10/15% of its
total turnover
in new
technologies.*



TOWARDS THE FUTURE

The investment policy regarding the new technologies has always been part of Samec's growth strategy and, in economic terms, is the equivalent of almost 10% of the annual turnover. A percentage that, in the last two years, has reached the 15%. And it was exactly this same policy that avoided crisis moments for Samec, even during the darkest moments. "We have always paid specific attention to our client's needs – says Scarlatelli – and it is precisely the attempt of answering to these special needs that lead us to constantly renew ourselves". Investing in new technologies is very important for a positive growth policy, but often happens that the natural and physiological resistance in front of the changes, typical of the human nature, might act as a brake, unless the leadership manages to involve and guide the employees during every evolutionary step. "The most sensitive persons tend by nature to look kindly upon these choices ", explains us the General

Manager of the company from Turin, "even if they are aware of the fact that it won't be easy to do. The average age of the people who works in Samec today is 32/33 years and the educational level is definitely higher compared to the past. My impression is that these persons have a lot of confidence in the decisions taken by the direction, also because we have always tried to involve them as much as possible in company's decision-making process and transformation". In conclusion: "For me it is really very important the fact that there has to be a future for Samec. Flexibility, passion, imagination, participation, responsibility, motivation, integration and teamwork are the discontinuity and the continuity with the past".



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