FROM PRODUCTS TO SERVICES, HOW THE BIESSE GROUP IS CHANGING

Internationalisation, an openness to the outside world, a desire to experiment, and teamwork, are the characteristics that have always guided Biesse Group's growth strategy. Now, Roberto Selci, company CEO, tells us how the digital transformation process started by the company some time ago has opened up new paths and possibilities.

COVER INTERVIEW by Ruggero Vota

About ROBERTO SELCI

Born in Pesaro in 1960, he joined Biesse at the age of 30, starting with a training programme in the sales/marketing area. After a period in Asia, he launched a project to set up the Singapore branch. He worked for extended periods in the international branches, in particular Biesse America, gaining a wealth of experience in direct sales, marketing, service organisation and management, and having filled the role of Sales Director of Biesse Spa, in 1995 he became General Manager. Throughout these years, he has maintained a strong focus on the Group's commercial expansion and internationalisation with projects to set up international branches, in particular in France, UK, Canada, Spain and Germany. Today, Roberto Selci is the Group's Chief Executive Officer and leads by promoting a process of innovation and digital transformation, supported by a highly qualified team of managers and professionals.

The Pesaro-based Biesse Group is an Italian group of excellence that is not very well known outside its sector, but today it is one of the leading global players in the market for processing machinery for a range of materials including wood, glass, metal and stone. It supplies manufacturers of furniture, door/window frames and components for the construction, shipbuilding and aerospace industries. Today, this pocket multinational with its roots in manufacturing is ready to expand with a new generation of services thanks to digital technology.

Its ambition is to solve customers' productivity, production and logistics problems, with the aim of becoming true outsourcers, able to entirely manage even the most complex factories.

We talked about this vision, and how digital technology is changing the company, with Roberto Selci, Chief Executive Officer of the Biesse Group.

Can you briefly outline the Biesse Group's history for us?

We were founded in 1969 to design, build and distribute woodworking machines. Thanks to our innovative ideas, we revolutionised the furniture market with solutions that at the time set new technological standards in the sector. In just a few years, the company became an integral and driving part of the Italian furniture market and conquered the entire national territory.

When I joined the company, I immediately grasped the importance of travelling and getting to know the various local branches so I could understand the added value of each one. At the same time, I realised

that the key to helping Biesse grow was internationalisation, which would introduce the world to the excellent services provided by our company, already recognised in Pesaro and the rest of Italy. So, I spent long periods abroad, opening the first international branch in Charlotte in the United States in 1989, and immediately after that, opening a branch in Singapore. The extensive internationalisation process that took place during those years really put the Biesse brand on the world's stage.

The Group's history has been marked by ambitious choices, partnerships and investment in research that has enabled us to develop cutting-edge machinery. This is a story driven by my father Giancarlo's foresight, he founded the company and now I have the honour of continuing his work and developing the Biesse Group's potential.

I do this by making sure I am surrounded by talented people with strategic skills and a high level of excellence, and by acquiring highly technological specialised companies, increasing the company's knowledge and technology.

Our listing on the Italian Stock Exchange in 2001 was a fundamental step in our history. The Group became a pocket multinational, allowing us to consolidate our governance and continue to grow and stand out in the Italian industrial landscape. Today, Biesse Group is a multinational leader in the technology for processing wood, glass, stone, plastic and metal. It designs, manufactures and distributes machines, integrated systems and software for manufacturers of furniture, door/window frames and components for the construction, shipbuilding and aerospace industries. It operates through 12 industrial sites, 39 branches, 300 agents and selected dealers, exporting 85% of its production, and at the end of 2019 it achieved a turnover of 706 million euros. Today, it has about 4,200 employees worldwide, of which about 46% are abroad.

We are a global company and I can tell you that a large part of the world's languages is spoken in our organisation. We have a direct presence in India, China, France, Spain, UK, Australia, USA, Indonesia, Russia and many other countries and indirectly we cover the entire world.

What is the competitive context for Biesse Group today, what is its market positioning and its expansion strategy?

Today, our market is made up of large global groups, such as Biesse Group, and a flood of regional or solely local operators. The first group is basically made up of six companies, all European - two Italian companies and the others German and Austrian - together controlling approximately 50% of the world market. The other 50% is shared between much smaller, but nonetheless aggressive and ambitious, producers including various Chinese companies.

In our industry, over time, large companies have become even larger across all sectors. Very few medium-sized companies have managed to double or triple their turnover. Biesse Group has managed to achieve extensive growth, gaining a significant market share, because we have been able to look to the world, with almost half of our collaborators based outside Italy. The costs of this are very high, the logistics 'demanding' and there are numerous challenges to be faced.

Someone said that over the next twenty years, the changes that we will see in industry will have a far greater reach than those that have taken place over the last three hundred years. We can play a part in this, and it is our intention to do so. The need to invest in distribution and to learn about other worlds, to open up to new experiences and opportunities: this is the foundation of my creed. A certain ability to do business also passes through cultural influences, leading to new challenges that are transformed into new growth opportunities.

The fact that we are now present across the globe helps us view markets, products and needs with an international perspective. All this provides us with a rich cultural heritage, which is what our people need to anticipate needs and turn them into challenges, allowing seemingly distant areas and markets to influence one another.

The technology we develop is the outcome of nearly 50 years of experience and it helped to change our production processes, allowing us to accept the maximum number of requests possible while maintaining high quality standards, customised products, and reliable and fast delivery, while at the same time we are able to meet the requests of even the most demanding architects and most highly automated industries. We rely on our sales and technical staff in our branches around the world, who are able to provide customer support both before and after sales, thanks to a network that is unique in the sector. We also pay special attention to ease of use, ergonomics, and the reduction of noise, dust and fume emissions. A high degree of integration between mechanical, electronic and software components means that our systems are smart and collaborative and can quarantee autonomous operations without requiring the operators' constant presence. Our customers are the real protagonists of the experimental process.

Their needs and demands provide us with new technical and design challenges that help us personalise, update and continuously improve the machines and the tools developed by the Group.

Thanks to the integrated systems and One Company processes we put in place a few years ago, we have been able to grow and now we can look to new areas that open up significant space for future growth.

What do you mean by the One Company model and where do you see the potential for Biesse Group's new growth?

By One Company model we mean extending business processes out from the centre to the periphery to the most distant branches with an end-to-end perspective. From product development to the actual production and then the distribution to customers. These are the main processes, but we aim for standardisation with common rules for all our processes. Digital technology in this area is the enabling factor for this vision, it serves to build a common language for the whole company, overcoming differences such as age, levels of awareness, etc. that are found in a global and complex company like ours. But of course this is not just a technological challenge, above all it is a cultural challenge.

We need to make sure we have the right approach to diversity in place. It is one thing talking to an Asian customer and another altogether working with an American customer. Our branches are the cultural key to doing business locally in the most strategic markets, while the aim of One Company is to lead to a standardisation of processes with common rules that each company must apply, though still safeguarding its own specificities.

I see the extent of our future growth in our ability to solve our customers' productivity, production and logistics problems.

We have been investing in digital technology for many years and our experience today is much wider than that of the vast majority of our customers.

In this sense, we believe we can help them when they are dealing with the innovation issues of our age. We can put ourselves forward as consultants for their digital transformation. So, from this point of view, our offer will be completed with a new range of services that will grow over time and complement our products.

As a Group we have invested heavily in the transition to the digital world and will continue to do so. We have created new skills and acquired tools following a precise vision and with a strong strategy, but we must deal with a rapidly evolving context.

What difficulties did you face during lockdown, how are you reacting and what are your predictions for the coming months and 2021?

The health emergency has accelerated processes that were already underway in the industrial world, primarily in the digitisation of factories.

Advanced technologies, smart-working, video-assistance and remote demo sessions have allowed us to continue to be operational and stay in touch with our customers, both from a sales and technical point of view, allowing us to maintain our usual relationships with them.

Today, we increasingly need to guarantee the safety of our collaborators, employees, customers, suppliers and all those who interact with our company. For the future, safety is certainly a priority, as is digitalisation and building a cohesive team.

The important thing is to remain in step with the times. Companies stay dynamic and current thanks to the people who work for them, who bring ideas and new methods to the table. We must be able to adapt quickly to new scenarios, which we are now required to understand, analyse and deal with.

The team we have built has enabled us to react well to this period, we are faced with completely new dynamics that no one could have ever imagined, we must gather all the skills we have in the company and look for yet untravelled paths to reach our goal. The results we achieved in the first half of 2020 can still be considered satisfactory, albeit down compared to the previous year, but still higher than our expectations. Despite going through a phase of extreme uncertainty, with limited visibility even in the short term, we believe it is important to strengthen our culture of rigour and the strategic choices increasingly focussed on long-term sustainability.

Our vision of the future is centred on the assets that have ensured the success of our company over recent years. Software solutions, new services and IoT platforms will increasingly simplify and rationalise work management, optimising technology performance and productivity. At the same time, product innovation, through investment in research & development, will continue to produce new solutions, both in the wood and glass & stone sectors and in the advanced materials and ceramic sectors, where we have excellent growth margins.

It is also through these investments that we will emerge even stronger from this current phase of uncertainty.

What relationship does Biesse Group have with innovation in general and with digital innovation in

particular?

Innovation is at the heart of our vision, and is summed up in the keyword 'Thinkforward', a stimulus to look ahead and anticipate the future by setting new standards to support technological innovation and digital transformation. As I always like to point out, we are experiencing a real revolution, an industrial transition "from iron to digitalisation" and we must continue to manage this in order to continue growing. We are on the verge of a new world that will certainly bring benefits. Before we used to focus our attention on "iron", we used to think of machines, and only later we turned to PLSc and software. Today, the exact opposite is true. Now, we select the software, an approach to working suited to the results we want to achieve, and only after do we begin to think about machines. All this requires us to be very flexible, skilled and at the same time extremely determined, so that we can seize these new opportunities, sticking to our course regardless of the size of the boat that we are steering.

In the digital factory of tomorrow, each process is standardised, each component is tracked and identifiable. To allow us to get to this point in our vision, we set things in motion a long time ago. In 2007, we introduced the Kaizen methodology to our production sites, aimed at continuous improvement along the entire value chain, from the factory to suppliers to end customers. We promote a lean culture and a lean approach throughout the value chain in order to ensure that everybody is motivated and that process flows are streamlined, steady and in line with market requests. Some years ago, we put in place a PLM platform, a process innovation project that is part of the company's digital transformation process, to improve product lifecycle. This software can integrate data, processes and company systems, to provide efficient and effective information management throughout product lifecycle, from design and production to assistance.

What do you mean by the digital factory of the future and when will it be fully realised?

With the digital factory of the future we want to make a qualitative leap, first in our own organisation and then by transferring our knowledge to customers through the growth of the services I mentioned earlier. The digital factory will be an interconnected environment working under the One Company logic, allowing us to pinpoint the location of every production component to ensure it arrives in the right place at the right time. To achieve this we have already been investing several tens of millions of euros over time. After having put the PLM in place, we are now working on other different development fronts, and we are also studying organisational models, data structure models, KPIs and much more. The plan is to start from the technical office, bringing together the management of all the components in order to work on an extended supply chain, connecting all our plants and fully integrating with suppliers. In this scenario, quality, reliability and data security are the foundations of the project. I would be very happy to begin production with this complex digital factory model, fully integrating us and our suppliers, between 2024 and 2025. But the goal is to go even further. In other words, ensuring that Biesse Group becomes an important player capable of designing, building and managing the digital factories of the future for our customers.

We no longer want to supply our customers with just machines, but with entire production plants instead, and we must have the skills to manage them. Working on putting this in place in our own factories is a "good training ground" for what we will then offer our customers.

Certainly, not an insignificant change...

We have changed our business model, moving from a company that produces technological solutions to one that also provides services. This paradigm shift has brought about a significant organisational transformation. We create and share innovation by planning, developing and distributing integrated solutions and advanced services to help our customers produce more, better and in greater safety, supporting them as they achieve excellence and success. We try and foster an entrepreneurial culture and share it with others at every level, first and foremost bringing innovation to the way we work, not just to products, but also to our own continuous search for excellence, as we help our customers remain competitive.

To do this we have opened ourselves up to the world because we know we cannot achieve everything on our own. Opening up our company boundaries is a good way to broaden the horizons of how we think. The process of digital transformation we are currently experiencing involves change at all levels, and it is only by seizing every opportunity that this revolution offers that we can continue to be innovators. The most recent innovation in this area was the launch of Open-I, our Innovation Lab.

Can you tell us about this latest initiative?

Biesse Group Open-I aims to be an accelerator of new ideas and start-ups of excellence, creating a stimulating and dynamic environment in which to build relationships with the academic world, universities and institutional research centres, and with other accelerators, venture capitalists and other companies, all of which will further develop the Group's innovation ecosystem. To do this we will set up two reference points, one in Italy and one in Israel. In Israel, we will develop a collaboration with the AdlerInlight Technology Observatory, an organisation created to bring together industry and innovation on the Italian territory, and in Italy with Manifaktura, a company with expertise in the implementation of Open Innovation initiatives and the management of innovation projects in the manufacturing sector. We have found fertile ground for innovation in Israel, not least, as we know, in the area of cyber security, which is a fundamental factor for all our future developments. On this front, we have already developed some interesting projects with Israeli start-ups that have very innovative approaches.

In your opinion, what do you think are the most interesting topical digital technologies for the future of Biesse Group's business?

We believe in the potential offered by Industry 4.0 and are making significant investments toward the creation of products and services that will help the manufacturing world evolve and grow. We are moving from mass production to mass personalisation. Our solutions to build an automated and interconnected production system confirm and further strengthen the bond between individuals and robots, also by demonstrating how people can benefit from their use, validating their work and making production more efficient. The use of robotic systems in factories guarantees maximum production efficiency and helps simplify processes.

The digital revolution has led to a momentous change based on the technological innovation that involves production systems, businesses, the market, and the relations between these areas and humans. Software and management processes come together in real time and, with the new technologies, a firm's competitiveness depends increasingly on production speed and flexibility. IT systems are at the service of this revolution, guaranteeing optimisation, monitoring of operations, data tracing and the correct management of the production sequences. In this scenario, however, people must be able to take a qualitative leap and make the best use of the tools that come out of this fourth industrial revolution. They must be able to harmoniously integrate new digital technologies and new managerial approaches with traditional technologies and ways of doing business, maintaining the specificities of individual production centres and at the same time meeting the new levels of productivity and flexibility demanded by the market.

What digital projects have you worked on recently and which ones do you intend to tackle in the coming months?

In recent years, our most innovative project has been IoT SOPHIA, a digital platform that enables customers to access an extensive range of services to simplify and rationalise their work management process. The platform allows for the real time transmission of information and data to customers and the company about the technologies in use, optimising the performance and productivity of machines and systems. The data collected enables to analyse in detail the production process and machine functions, detecting malfunctions, assisting customers in maintenance operations, ordering replacement parts in less time and ultimately preventing faults (for more information about this project see the box on page 22).

What value do you expect to gain from digital technology and how will this contribute to your business goals?

We are at the dawn of a new horizon, a new world that will no doubt bring a host of benefits. In the past we only sold machines, today, we are focussing on selling increasingly integrated systems, that is, entire production plants, where individual components interact with each other while continuing to exchange data, and this is set to transform our business. With IoT SOPHIA we have paved the way for the 'servitisation' of our products, we want to transfer our technological excellence to our customers, which thanks to the standardisation of processes is at a much higher quality level than in the past. In terms of our machines, we must also be able to guarantee production 24 hours a day; this is possible by putting in place complex logistics processes to support them, which never stop, and this is achievable only by exploiting the potential of data collected along the supply chain. But we need to be aware that as customers discover the potential of data they will become much more demanding, asking increasingly more of us, from remote diagnostics to the predictive maintenance of their machines and much more, and we need to be ready to meet this new demands. Digital technology will therefore enable us to generate new turnover from new services for customers, which was practically non-existent before loT

SOPHIA if we exclude spare parts, but it will also raise our level of automation and increase our competitiveness.

Is your aim to become 'outsourcers' of your customers' production management?

That is exactly what we are working towards and we will certainly achieve it. However, I would also like to point out another 'intangible' benefit of digital technology. That is, that it has created a common language for everyone who works at Biesse, regardless of age, culture or where they come from. From now until 2025, those young people born at the turn of 2000 will begin to join the company and digital technology has always been part of the lives of these new colleagues. Having a common language all over the world is essential in preventing the creation of new communication and misunderstanding barriers, and to connect new colleagues in their twenties with those in their sixties like me.

Who is specifically responsible for digital innovation in your organisation?

This change in perspective we have talked about, brought about by ever increasing digitisation, spans the entire company, with several key figures more active in this change than others. The IT, Innovation, Service, Product, Marketing and Sales teams are certainly involved, but also all the departments considered more 'traditional' will, as time goes by, find themselves increasingly managing issues related to digital innovation. The CIO of Biesse Group, Giovanni Bellucci, is the person responsible for the digital transformation of the company and its business. I told Giovanni that in three years' time, Biesse Group needs to be considered one of the best and most digitised Italian companies. But obviously, creating a new role does not automatically bring innovation to the company. Innovation is also a process that has to be enabled because it involves all sectors of the company, as I just said. This is possible when the company's IT expert becomes a business consultant, and not just a technology expert.

Today, unlike in the past, for a manufacturing company like Biesse Group, IT systems must also be involved in our product innovation. The added value that the IT services can bring is indisputable and we must offer this knowledge and experience, including in the development of new technologies, to customers.

How will you manage the change brought about by your digital initiatives with employees, partners, agents and customers?

All digital initiatives impact our main stakeholders, which include our customers, suppliers, partners, employees and others. Technology offers solutions to manage interactions and remote support. Each one of them will experience this cultural change and will be able to take advantage of the opportunities offered by digitisation. Being digital is no longer an option, it is now a necessity. In particular, digital initiatives will change how we interact with customers, it will make it easier and will also facilitate their way of working. As I mentioned, the global health emergency caused by Covid-19 has accelerated the innovation processes that were already underway in the industrial world, primarily the digitisation of factories. The many solutions we are developing as a company to provide "virtual" live demo sessions of our machines, to offer webinars covering topics that are of interest for our customers, to set up virtual trade fairs and even arrange remote installation and testing sessions, will not disappear once the emergency is over.

This wealth of consolidated assets and resources will provide an addition to, rather than a replacement of, approaches that call for a physical presence at the customer's premises. The latest project to unite the physical and digital world in a new format will be our new 'Inside In Action' initiative from 5 to 30 October. This hybrid, digital and live event will be a chance to discover all the technological innovations designed by the Group in a completely new way. With this new format, Biesse Group will present the latest solutions launched on the market both at the Pesaro Campus and on the innovative Digital Arena platform. Inside in Action will be social, communicational, occupational and relational thanks to the continuous interplay between the physical and digital realm, perfectly mirroring today's reality. It will be an 'onlife' event, where the real and the virtual meld into one. This, too, is an expression of how we adapt to change, exploiting the opportunities offered by digital technology and putting them at the service of our customers.

Inside In Action is a new initiative that lets us experiment with new ways of relating to the market, because we know that other innovative technological solutions are set to arrive over the next few years, putting in place new tools to support relationships between people. We can't even imagine them today, but when they arrive we will be ready to explore and trial them.

Covid has forced us to travel less and has resulted in all the usual trade fairs being cancelled. Of course, we will travel and take part in trade fairs again, but we can also put in place new ways to connect, allowing us to reshape our external activities. Inside in Action blends the traditional physical open house event

with digital technology, so we can continue supporting our supply chains in different ways, as well as gauge our customers' reactions.

What is the most important challenge for the future of Biesse Group?

For us, understanding the evolution of customer engagement is a crucial challenge, looking at how ways of interacting are changing and therefore how we can gain customers and prospects in the future. These trends that already existed before Covid require us to rethink this area. And therefore, not only must we experiment with the new ways of interaction enabled by today's technological solutions, but above all be ready for those that are coming. Reviewing customer engagement is not just a technological issue, above all it is a question of reviewing how B2B relationships are also changing, by adopting the paradigms of the consumer world. We have to completely change the way we interact with customers from how we did in the past. Today, our customers already turn to the internet to look for production machines, in the same way a consumer looks for a new phone. We are heavily reliant on traditional B2B methods and therefore we must make huge changes.

What will Biesse look like in 2025?

The Group that I have in mind is a structure that is capable of moving forward on its own, and which does not depend on individuals but rather on the strength of a team. An organism that has a life of its own thanks to the teamwork which underpins it. Together, we have created a range of extremely well-defined tools, methods, processes and objectives, and within this framework, everyone knows what they have to do.

The digital transformation of Biesse Group

Giovanni Bellucci, CIO of Biesse Group

Biesse Group's IT services have implemented a raft of projects to enable the company's digital transformation. In this short interview, Giovanni Bellucci, the company's CIO, tells us about the most important ones.

How has Biesse Group's IT services given substance to the company's digital transformation?

Biesse Group has always been a particularly innovative company in terms of products, processes and work organisation. In recent years, we have launched an ambitious digital transformation programme with the primary aim of standardising processes and tools within the Group to build the One Company model. The underlying theme of all the initiatives was to rethink leaner and more efficient business processes and introduce technological solutions, not only to support processes but also to enable new business, such as the IoT SOPHIA project.

From an IT point of view, we have also always put forward and planned projects keeping in mind four fundamental principles: the customer is always at the centre of our solutions; processes and tools must enable the development of increasingly innovative and reliable products, solutions and services; the importance of the human factor inside the company and the integration of suppliers with our supply chain. With this in mind, we put in place a CRM platform in SaaS as a single environment for the management of all sales, marketing and service processes and this allowed us to achieve end-to-end management of customer relationships. This includes the product configuration and offer and services for planning our service interventions and the management of our field engineers. Our PLM allows over 900 users to interact with each other, including designers, buyers, service operators and all the other roles working in production units. We have also developed a portal which brings together all the information about the machines leaving our factories and this is available to dealers, branches and other company departments. Other projects have been aimed at HR, supplier integration and the adoption of 360° solutions for collaboration, which among other things allowed us to face the Covid emergency with no major impact on business activities, enabling remote working for over 2,000 employees.

How important is IoT SOPHIA within the digital transformation process?

IoT SOPHIA is our most innovative project. This digital platform enables customers to access an extensive range of services to streamline and rationalise their work management processes. The platform provides customers and the company with information and data from our machines in real time, allowing them to optimise plant performance and productivity. The data collected enables the production process and machine functions to be analysed in detail, detecting malfunctions, assisting customers in maintenance operations, ordering replacement parts in less time and ultimately preventing faults. In recent years, we have witnessed

significant shifts and changes driven by IT, the cloud and big data, artificial intelligence, which have all enabled Internet of Things solutions. IoT SOPHIA involves the application of all these innovative technologies and has contributed to diversifying the way the company does business, now, not only selling products but also services.

The platform is supported by a leading global cloud provider that has an IoT-focussed laaS and PaaS service offering. Here and also in all other areas, choosing to use the cloud was a significant accelerator in implementing all the solutions Biesse Group selected for its business.

What role did IT services play in the digital transformation process and what were the critical success factors?

IT services played a crucial role as an enabler of change and promoter of process innovation by launching strategic projects together with the business area, in which the company made significant investments. The implementation of the digital transformation plan led us to put in place several integrated best of breed platforms that enable us to manage the different business processes end to end. The skills within the IT organisation were a critical success factor. These included not only technological skills, but above all specific skills related to the various processes, which allowed us to stay in step with the business area and we became known as the IoT SOPHIA consultants after senior management backed our initiative, allowing us to invest in the development of IoT solutions that enable us to provide new value services for our customers. In many companies today, this is usually something the business area deals with.