

A young German entrepreneur brings a box factory back to life thanks to a model based on re-shoring and digital die-cutting with Elitron Kombo TAV

From broker to box maker, there's a bit of Italy in the digital fairy tale of Bags 'N Boxes

by Lorenzo Villa, Italia Publishers



The small town of Waldbüttelbrunn is just outside Wurzburg, a short distance from the legendary Koenig & Bauer, in the heart of a district where some of the most successful online printing and packaging companies are located. That's why, when we learned of the existence of Bags 'N Boxes, its special location and its predilection for Made in Italy technology, we decided to investigate. If the sober building that houses the company does not reveal much, it is a colourful Fiat 500 in the parking lot to herald a very special corporate mood. Entering the large open space, we are welcomed by a young and refined environment, with a number of Mac workstations worthy of a communication agency, and furnishings of Italian design. Soon, on his Vespa, the young and sunny Johannes Albert, founder of the company, arrives. No preliminaries are needed, and just a few jokes (technological jokes, of course) allow to understand that we are faced with a champion. A free thinker genuinely passionate about his daily raw material: corrugated cardboard.



From bankruptcy to success

The history of Bags 'N Boxes is not the usual story of a family business which is preparing for yet another generational change. Rather, it is the last chapter in the saga of a box factory with a consolidated business that, after generations of unchanged (and immutable) activity, brings books to court. And the first chapter in the history of a company, and a work group, that meet not the usual serial buyer, but an unexpected angel investor completely unfamiliar with boxes, punches, creasing



Johannes Albert, owner of Bags n' Boxes

matrix and glueing. It is 2013 when Johannes Albert takes over the company and rolls up his sleeves to redefine the business model and design the company's future. From the bank-ruptcy, the new owner takes over not only a small museum of "vintage" machinery branded Bahmuller, Bobst and Lamina Systems, but about thirty salaries to be paid. In addition to a fairly heterogeneous pool of direct customers, not very virtuous and in need of heavy skimming. Five years later, the old dusty box company is no longer even in the shade, the unprofitable orders cut, the team halved and the fleet of machines completely redefined. All to the benefit of turnover and margins, which are now above average.

From "serial" boxes to digital tailor-made



Johannes's intuition for lifting the company's fate and leading its newco to success stems from an in-depth analysis of customer needs and the awareness that the world of packaging is changing, inevitably moving towards on-demand production and a just-in-time model. To this, the founder of B'NB adds an ingredient he knows very well, online sales. This is how bagsnboxes.de was born, which is not proposed as yet another online printing portal or a sterile showcase site, but a professional

platform for the purchase of fully customized corrugated boxes, in low, medium and high volumes. A model that requires Bags 'N Boxes to equip itself with tools capable of meeting the promise of efficiency and customization made to customers. The revolution began with the adoption of the first digital platforms, a Mimaki JFX-1631 and a Xanté Excelagraphix 4800



for the production of small, fully customised batches, flanked by a Mimaki CFL-605RT flatbed cutting system. The gap between the small digital units and the ultra-productive traditional die-cutting and creasing lines, however, remains unbridgeable and creates a problem of competitiveness.

Automated digital cutting is the key

The B'NB team begins a tight scouting process among the most innovative and performing digital technologies, visiting the most innovative trade fairs, manufacturers and end-users in Europe. "It was clear to us that part of the solution would go from the adoption of a digital cutting and creasing system, but we struggled to identify a suitable platform for our needs - explains Johannes Albert - if many ma-



chines made us shine with speed and precision, none convinced us with the degree of automation. Until we came across Elitron". The strong pulverisation of orders, combined with the need to combine short, medium and high runs, convinced the German box factory of the goodness of Italian technology. With the adoption of Kombo TAV, the prepress department of B'NB prepares the work during the day, then the machine completes the orders unattended even on two or more shifts. If digital cutting benefits from the advantages of the absence of physical dies and the zeroing of setup times and costs, the execution of the most complex cutting and creasing paths can turn into a bottleneck. "The great autonomy and reliability of Kombo TAV allow us to carry out most of the work without the operator, especially on thin materials, where the duration of the blades is longer and the unloading through Elitron AiroPanel is 100% reliable, with a perfect grip and release of the blank material, even without bridges. With a stack height of 1,5 metres, using a 7 mm double flute, we have an autonomy of 220 sheets, but with thinner materials we reach 500-600 sheets - explains Johannes Albert - So the machine has all the material needed to work unattended 6-7 hours, from 11 pm until 8 am, when we find the orders ready to be delivered".



Towards greater automation

What makes the Bags 'N Boxes workflow more efficient is the particular management of the processes, which further enhances the Elitron digital cutting platform. Everything is based on B'NB's proprietary software infrastructure, inspired by the most advanced web-to-print models, but based on a proprietary management system and Esko software modules. These allow the automatic grouping of the processes, based on the type and thickness of the material, placing on the same sheet more than one compatible job in terms of format and quantity. "The customer only has to choose the type of box, the size, the material and the number of pieces - concludes Albert - at which point the software defines when it will be produced and delivered. By relieving our operators of their responsibility, and always guaranteeing the best price and the lowest waste". The idea of complete automation, the outlook for growth in volumes and the concrete hypothesis of adding a second or third unit to the first Kombo TAV are among the reasons that led B'NB to order the Elitron system in the version already prepared for the installation of roller conveyors. These modules will allow the automated handling of sheets and stacks of raw materials and semi-finished products between the company's production departments.





Interview with Johannes Albert, Founder and CEO of Bags 'N Boxes

How was Bags 'N Boxes born, and what is your personal background?

I started the company in 2013, with no experience in converting. I was already selling shopping bags for big retail and luxury brands, but I was relying on contractors. The opportunity came about by chance when I came across an old box factory in difficulty, now in its fifth generation. I had always wanted to make packaging and, when the company went bankrupt, I called and went to visit them. Finally, I bought them.

Did you have it in your blood?

I confess. When I was a child, my parents had an offset printing company, but they sold it because they were old, and I was too young to run it. That's why I promised myself I would stay away from printing.



But instead...

I followed my instinct and five and a half years ago I started to produce boxes with the few and old equipment acquired by the bankruptcy. Although the corrugated boxes market was very technical and the average print runs were declining, I was sure that the company had a



future. But only on condition that we change the business model. Starting with the customers. The company I bought served 100% of the industrial companies, producing standard boxes. Nothing luxury or specialist. To date, we have about 500 customers, very different from each other. A mix of agencies, graphic designers, brand owners, retailers, manufacturing companies.

How did you change course?

Packaging printing is experiencing the crisis and the transformation that commercial printing underwent twenty years ago. In the corrugated, there are old-fashioned companies, which produce large volumes with their slotters, die cutters and case makers. Many are evolving, but tend to do so starting with production. Or maybe opening an online store. Well, I believe that production is not the first, but the last point.

What do you mean by that?

In the past, the most important thing was to produce. If a box factory had 100 employees, 90 were in production and 10 in the office. Today everything has changed. You no longer have 20 customers with large quantities, but 500 with small quantities. Yet the work behind a job of 100 pieces and a job of 100,000 is the same. So you should reverse the balance, with 90 people in the office and 10 in production.



With which production model?

It is essential to reduce human intervention and automate. Buyers must be able to calculate price, quantity and have automatic proofing systems based on PDF. Production must work almost automatically, and hardware technologies must adapt to this paradigm. That's why we introduced Kombo TAV.



What is the most promising market segment?

We intend to enter more and more into low volume luxury, where digital production can make a real difference.

Customization is seen by many as the next revolution in packaging...



At the moment there is no explicit demand. Maybe because in Germany functionality and price are still prevailing over aesthetics, but, in fact, our typical customer mainly asks for small quantities with the same layout and the same quality as the big ones, only faster. Here too, however, I believe that process automation and scalability are the key. In the field of

digital printing, we are carrying out an in-depth investigation into which solution to adopt, while in converting, Elitron technology is already mature to combine volume with high levels of customization.

Is digital in corrugated, then, a marked path?

Digital is the real game changer, not just for machinery, but rather in terms of customer service. In our case, if before we were just traders, digital has given us the opportunity to produce internally. This means for the customer the benefit of having a product in the right time, at the right price, customized and ordered in the quantity actually needed.