

Bpacks, turning agricultural and wood waste into packaging materials

As part of our quick founder questions series – or QFQs – we spoke to Mikhail Skalkin, cofounder and CEO of Bpacks about finding purpose and creating the world’s first bark-based packaging technology.

Temps de lecture : minute

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I am a passionate coffee enthusiast, and during the pandemic, I was spending a lot of time at home, like most people were. Because most of the world was shut down, I decided to go to my country house, and that gave me time and space to think. I love brewing my coffee, something I do in a very particular way, and while I did that, I often pondered about the fate of leftover coffee grounds. Almost daily, I asked myself: What could be done with these for a greater purpose? Can they be put to work for something good?

Finding an answer to these questions led me to embark on a quest to find more information and see if there was something I could do. I initiated a global patent examination to investigate the potential applications of coffee grounds. Although no compelling patents were found, I connected with an individual who was experimenting with bark. Engaging in conversation with him, I came to the realisation that bark held greater potential than coffee grounds. This intrigued me, and I thought that this discovery could be applied to packaging, in order to make it more sustainable. So after that, I started experimenting. My intention was to find a packaging solution that was entirely made out of sustainable

materials, but it is not as easy as it seems. Hence, I tried various combinations, involving components such as peanuts, nettles, and nutshells and many others. I pivoted from one combination to another until I found one that worked, and that's how the product we have at Bpacks was born.

Tell me about the business - what it is, what it aims to achieve, who you work with, how you reach customers and so on?

We develop the world's first bark-based packaging technology, which will seamlessly replace plastic materials. This means that plastic production lines do not need to be readjusted. Our packaging solution is 100% home compostable, and 75% of materials are sourced from production waste. Additionally, we use pre-owned equipment when it makes economic sense.

Our team addresses the problem of integrating bio-packaging into existing plastic production streams, as most of the current solutions in the market can't be integrated that easily. The European Union's *policy directives* have mandated the transition to biodegradable packaging within the next five years, meaning that the \$384B global plastic packaging market will have to evolve to more sustainable solutions. Our technology helps firms make this transition smoothly.

We can produce both ready-to-use bio packages and bio-based pellets for big manufacturers. Of course, our priority is to integrate our technology into current production lines. However, to establish our full-line packaging production, we will need larger capital expenditures. This is part of the second stage of our strategic development.

Our bark-based technology can replace rigid plastic packaging in myriad

industries, such as beauty, domestic households, food, etc. Some of our main prospective customers are in the food industry, and as an added feature, our package offers a high antibacterial index, which comes thanks to bark's natural properties.

We're aware that single-use plastic food packaging is a major contributor to the global waste problem, and are eager to change that. For example, companies like Nestlé, PepsiCo, and Mars have already committed to having fully recyclable, reusable, or compostable packaging for 2025. So there is a huge opportunity because what we are doing is completely aligned with the current agenda of major organisations. We're 100% committed to the circular economy, and proof of it is that our main raw material is bark, which is a by-product of wood production.

How has the business evolved since its launch?

We registered the company in the UK in 2022, and opened our R&D centre in October 2023 in Serbia. It's a 300-square-metre laboratory, where we are constantly innovating and testing our hypotheses. As mentioned, we are fully committed to sustainable development and CO2 reduction.

After I successfully exited my consulting business, I invited Lev Bolshakov — who has a proven record in corporate finance and startup valuations — to join me, and together we established Bpacks. We then added a third co-founder, Nikolay Semenov, who is a Ph.D., researcher, engineer, and expert in polymer materials science. With him on board, we raised our first angel investment, and since then, we have also welcomed our new Head of Innovation, Aleksandra Nešić, Ph.D., who has extensive experience obtaining and characterising active substances from plants and organic materials.

Our tests show great results, and we see a lot of interest from the scientific community, which has led to *Bpacks* being backed by a strong advisory board of international scientists.

Tell us about the working culture at Bpacks

I believe that the working culture should match the company's values and transmit them at every level. As a part of the sustainable transition, we are committed to reducing CO2 at every stage of our work. You might laugh about this, but we have an internal rule to remind each other to turn off the lights.

Another important aspect to mention is how we work. Our startup is a small team, therefore, unlike big corporations with extended structures, we have no resources to rely on except our own team. For example, in some corporations, the employee has three days to respond, and we can't yank them. But in a startup, it doesn't work like that. After three days, an issue might be not relevant anymore, so the response can be considered late. This also means that we have a rule not to attack each other when something doesn't meet our deadline, but instead, to support one another and help keep everything up to date.

Additionally, out-of-office activities are very important and part of our culture. All in all, we really care about our team, and our intention is to build a working culture that makes people proud of working for Bpacks, because they can grow personally, professionally, and know that they have a team that has got their back. As the CEO, I actively invest in any kind of out-of-office activities that help reduce my team's daily stress levels.

And of course, we are focused on building a diverse team. I always evaluate employees based on what they can bring to the team, and I believe in hiring more women. We've got a few candidates now, and all of

them are good, so we anticipate some of them will be joining us pretty soon.

How are you funded?

Our first investments were from a group of private investors, and we have also invested a substantial part of our capital.

Today, we are closing a new round of funding, and are applying for grants to bolster our R&D initiatives.

What has been your biggest challenge so far and how have you overcome this?

Contrary to what many people might think, it's not that hard to create the formula or fix the equipment bag when compared to the fundraising process. Fundraising, particularly in today's economy and challenging venture capital landscape, can take up to a year. It also involves plenty of cold outreach, warm pitches, and has low conversion rates. At the same time, you must be the CEO and stay on top of the business strategy, provide leadership, and hire new talents. So balancing both things is a very strenuous endeavour.

Another challenge is the cultural differences that prevail across various countries. Since we are an international startup, we work all over Europe, and we have to take into account not only the peculiarities of each country—and of its public and private sectors—but also the cultural specifics when it comes to scaling our business.

There are complexities in product development too, for sure, but we love that and it is a source of inspiration and adrenaline.

How does Bpacks answer an unmet need?

The packaging industry is transitioning to more sustainable, affordable, and scalable alternatives than plastic packaging. Also, consumers are increasingly concerned about the environmental impact of their purchases, and this includes packaging. Several studies show that consumers are ready to overpay for a bio-based package and would prefer their favourite brands to use recycled or biodegradable packages.

Bpacks, unlike other players in the market, uses bark to produce its pellets. Just imagine, bark production levels are between 300 and 400 million m³ annually, and yet, no one uses it as a valuable resource; instead, they either simply discard it or burn it. The involvement in creating any new valuable products from bark is extremely low. We solve this problem for the timber industry, and also, for many related industries that face the issue of wood waste.

Then, there is the regulatory question. As I was saying, the new directives in the EU are mandating a transition to eco-packaging. And for this transition to take place in the right way, there needs to be an effective solution. Our product answers that need and bridges the gap for companies to integrate sustainable packaging into their value chain.

What's in store for the future?

Looking towards the future, our intention is to keep the lab for new development and testing and separately plan to run lines for commercial scale production. What we foresee is that this will be used for pilot programs, so we can show customers the uses and applicabilities of our pellets. Also, we have the intention of franchising our technology, which will enable us to replace plastic pellets worldwide with the help of global partners, and position ourselves as leaders in sustainable packaging production.

What one piece of advice would you give other founders or future founders?

Believe in yourself and your ideas, this is the most important thing. Ignore the haters and move forward.

Building a startup is not easy. You start with an idea that, at first, everyone likes. But during the execution, you face mainly challenges. It starts to take all of your time, and requires you to work 24/7. At some point everyone starts to get really tired, lose motivation and sooner or later everyone starts to doubt that your idea will work. And this is why you must continue. This is a critical stage, one in which you need to keep on believing in your product, your team and yourself.

Like every company at some point in time, we have faced negative feedback, so it is important not to give up whenever there is a failure, but to see what you can learn from those moments, gain experience and keep refining your product.

If you look at any company, it didn't start the way it is now. If you see, for example, Airbnb, or Meta, it is the result of decades of iterations and experiments. Many of them worked and many of them didn't. The same is true with the formula we have for Bpacks. So don't be afraid to keep trying and pivoting. Eventually, if you believe in it enough, you will have the version of your product or service that you dream about.

And finally, a more personal question! What's your daily routine and the rules you're living by at the moment?

As we are an early-stage startup, sometimes my agenda clashes and my routine is changing. But I do have a few habits that I try to follow. I prefer

to allocate time for breakfast and start the day off well, without rush. Some people choose to skip it, but for me, I believe that the morning is the most productive time of the day, so it's important to get the right physical support. I accompany my breakfast with a cup of freshly brewed coffee, as a coffee enthusiast, I can't miss that. Also, every night, I dedicate 30-60 minutes to reading fiction books. And, very importantly, during the weekend I spend time with my family, since they are a critical part of my support system.

Mikhail Skalkin is the co-founder and CEO of *Bpacks*.

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