From student to global market leader

In 2009 Kees van Bochove was a student with entrepreneurial ambitions. Today, not quite seven years later, he is the CEO of The Hyve, a global market leader in open source applications for the pharmaceutical industry. According to Van Bochove, it was Utrechtlnc, the incubator for student startups at De Uithof, that helped him on his way.



Kees van Bochove

"Even as a kid I was fascinated by open source software – software that is available to everybody. When the Internet makes sharing information so easy, why wouldn't you? After obtaining my Bachelor's degree in Computer Science and a Master's in Bioinformatics, I worked at several organisations, including the Netherlands Bioinformatics Centre. There, we developed open source software to process research data, but, to my amazement, the results of our work often just ended up on the shelf, gathering dust.

"That wasn't so remarkable in itself. When you are developing software in an academic context, it is essentially a tool to achieve some other goal. Once you have proved that the algorithm you have developed works, you move on to the next challenge. For companies, it is different. Say a company wants to develop new medications. It could really benefit from university-designed software, yet in those days they would never get to see our work.

BRIDGE

Was there some way to bridge these two worlds, Van Bochove wondered? "It took some time before I had crystallised the best way to approach it, but now that is precisely what we are doing at The Hyve. On the face of it, you might think: How hard could it be? Just dust off that useful software and pass it on to businesses. But it is not quite that simple. "In many cases, the software in question is poorly documented, not extensible and difficult to do maintenance on. And that is only logical; we're talking about software

made by a lone university user to achieve results in a single specific study. Consequently, this type of software doesn't meet the stringent criteria that pharmaceutical companies apply to their programs. Making academic open source applications business-proof, as it were, requires some serious conversion. And that has been our speciality at The Hyve for several years now.

"We offer companies several open source platforms, for which we provide the support. If customers don't know precisely which software is best suited to their needs, we help them figure it out. However, in many cases they will already be running a program and just want us to add certain functionalities or load a university-published dataset. Technically, they may be able to do it themselves, but it is much more efficient to outsource the job to specialised outfits like ours."

SECRECY

From a small startup, The Hyve has grown to become a company with worldwide operations, employing a workforce of 30, with offices in Utrecht and Boston. When asked about the secret to its success, Van Bochove considers for a moment. "I think it is mostly down to the fact that we showed customers what open source could do for them. Our main customers, international pharmaceutical giants like Janssen, GSK and Pfizer, are inherently wary of open source. They are risk-averse companies and very much focused on protecting their business secrets. Open source doesn't really fit into that picture.

But with pre-competitive software, there is no need for secrecy, because business secrets don't factor into it at all.

"To give an example, at the moment we are building an open source cancer database containing all the information compiled by The Cancer Genome Atlas (TCGA). This is a publicly accessible dataset from the USA, funded by the NIH, that everyone can download via the Internet. There is nothing

confidential about it, and yet, until recently in situations like this, companies would all go and develop their own databases, purely out of habit. Now we are developing it as an open source, and everyone can benefit. So if a company like Pfizer pays us for this job, and Merck or Sanofi for the next, then in the end they all get what they need at a fraction of what it used to cost them."

Another major benefit, according to Van Bochove, is that open source gives the big



Employees of The Hyve

pharma companies an easy avenue into the academic world. "Recently, we set up an open source community in which pharma researchers can collaborate on joint projects with scientists at Harvard, Imperial College and the NKI, to name a few. Terrific, isn't it? But when you are operating on the axiom that your company has to do everything possible to protect its work, it would never even occur to you to go about it this way. Basically, we are doing a bit of disruptive innovation in the traditional world of pharma, among other things through publicprivate partnerships such as CTMM TraIT. And they work. To be honest, I think many people, myself included, have been surprised at just how well they work."

MUTUAL CONTACTS

Van Bochove developed his concept – through the usual trial and error - at UtrechtInc, a business incubator jointly operated by Utrecht University and HU University of Applied Sciences Utrecht. Connecting with fellow entrepreneurs was immensely valuable, he emphasises. "When you are just starting out, you've got all sorts of practical questions: How do I get customers? How do I go international? How does a management buy-in work? I got lots of useful input from fellow business owners on these and similar issues at the seminars organised by UtrechtInc. The recommendations made by the UtrechtInc team were also incredibly helpful. Not that I always followed them, but they did force me to think about the way I was doing things."

Van Bochove is driven by a strong sense of idealism. This is attested by not only his dedication to open source ('I am sure I could have set up a more lucrative concept, but this is something I believe in'), but also the new business model that he is at this very moment introducing at The Hyve.

HOLACRACY

"We started out as a small company with a completely flat organisational structure – everyone discussing everything together. However, when you reach 30 staff members, that structure doesn't work anymore. Now we have split the organisation into project teams, each led by a manager. But because I wanted to avoid a traditional, hierarchical structure where everyone is just blindly following the boss's orders, we opted instead for a holacracy, an organisational structure midway between a total hierarchy and full democracy."

"We have clustered the company into divisions like delivery, sales, and human resources. Circles, we call them. Everybody who has a certain job or role within one of these circles holds full responsibility for the way he carries out that job. No one else can dictate to him, not even me, the CEO. Each circle relies on a structured governance process to shape its own roles and policy, and everyone can propose changes to the organisation or management, or raise objections to other people's proposals. "Holacracy, in short, offers a large measure of self-empowerment. In particular, it stimulates people to put forward their ideas and prevents situations where the ideas of people 'lower' down in the organisation never get a chance. A holacracy gives everyone in the company the opportunity to influence the way things are done, and that is a very good fit for the type of people who work here. We are still working on rolling out this structure at The Hyve, but I expect it will be fantastic."

"When the internet makes sharing so easy, why wouldn't you?"