Sadik Hafizovic describes how the company he co-founded, Zurich Instruments, has adapted since entering the quantum-computing market.

**What was your career like before you started Zurich Instruments?**
I had always wanted to start a company. Even as a child, I wanted to do stuff bigger than what I could do by myself, working in a team. I also liked the idea of running a business and being responsible for the financial side. When I was an undergraduate I financed my studies by running a one-person business providing computer expertise to companies, and that gave me some exposure to different business styles. I saw some companies where the atmosphere was horrible, and others where I thought, wow, it would be cool to build an environment like this.

I came to Switzerland to do my PhD at ETH Zurich, and I worked closely with Flavio Heer, who is now our chief technology officer. For our PhD research, we developed CMOS-based chips that interfaced with biological neurons. To complement our research, we used lock-in amplifiers to perform impedance spectroscopy on single cells, and we saw things about the instruments that could have been done better. The amplifiers were using digital technology, but they were closely mimicking their analogue predecessors: with one instrument, you could work at only one frequency at a time. We wanted eight frequencies simultaneously, so we had to stack up eight instruments. It was awkward, and we knew how with digital signal processing you could put all of that in one box. We defined a task for a student summer project, which led to a proof-of-principle device, then another student worked on it for his diploma thesis and brought it to the next level. At that point, I thought, “We can do this.”

**How did the company get started?**
Initially, Flavio wasn’t sure about the idea of starting a company to make lock-in amplifiers, because it doesn’t require secret knowhow or patented technology. But our PhDs were coming to an end, and I kept hammering at him, and he was looking for jobs and not finding anything appealing, so at some point he said, “Let’s give it two years.”

We also have a third co-founder, Beat Hofstetter, who comes from a very different background. He went to art school and is a designer by training. He’s also a very good programmer and when he did a diploma thesis at ETH, I was one of his supervisors. When he learned that we were starting a company, he immediately wanted to join. Today he is responsible for our entire corporate design.

**Who else did you bring in to help you?**
None of us had much business experience, and our management experience was limited to leading sub-groups in a university research environment. So the first person we hired, Stephan Koch, was very complimentary in that respect. Stephan has an MBA, and his knowledge of marketing and sales has been indispensable. Hiring him was the best decision ever, and I have to say we were fortunate. We started the company in 2008, the year of the financial crisis, when lots of companies in Zurich were shutting down. Without that, Stephan probably wouldn’t have been looking for a job, and he definitely wouldn’t have been looking for a job at a new company run by three guys just out of school. But he came in and wrote our user manual, fixed our price list, devised an advertising strategy, and worked out which trade shows we should attend. Having that emphasis on marketing really helped us grow, and we would not have achieved that without him.

**How did you get funding?**
Initially, we thought we needed investors, so we talked to business angels and to a bank, but because we started selling our product so early we decided to do without. I’m happy about that today. We probably could have developed faster if we’d had investors, but we’re growing at 25–30% a year now and I feel this is adequate. I have American friends who tell me I’m wasting my time, that I need to mount a bigger “engine” to grow the company, but I’m happy with it how it is, and so are the people around me.

We were also quite successful in winning business competitions, which gave us about 300 000 Swiss francs (£239 000) in cash,