

# How to turn a niche idea into a thriving start-up

Taina uses machine learning to help companies comply with tax rules



Tech founder: Maria Scott, a former tax lawyer, has found that not being a software developer has been an advantage © Anna Gordon/FT

“I love tax.” It is not a phrase you often hear, but Maria Scott, a former tax lawyer, found she had a penchant for the subject while studying law at Kent university.

It is her passion for and expertise in this field that led her to quit her job at JPMorgan and start both her [regtech](#) — or regulatory technology — company, Taina Technologies, and an executive MBA at the London campus of the University of Chicago Booth School of Business.

Taina is developing software that would allow banks to process the tax forms to meet compliance regulations in seconds, rather than the varying amounts of time it can take humans, depending on how au fait they are

with the necessary manuals.

[The foreign account tax compliance rules](#) in the US, and the [common reporting standard](#) elsewhere, are sets of rules designed to prevent tax evasion on income and assets. The software would enable computers to read and validate the forms required to meet these rules in any format, including handwritten.

In January the FT reported that banks such as [JPMorgan and HSBC](#) have doubled the number of people they employ to handle compliance and regulation. This costs the banking industry \$270bn a year and accounts for 10 per cent of operating costs.

“People really do want to comply, but there are cost pressures,” says Ms Scott. “Compliance is growing and everyone thinks tax transparency is good.”

To help solve the problem, she decided to start a business and tackle an EMBA. It seems demanding, but Ms Scott, 40, talks up the EMBA because “it makes sure I’ve got the right idea”.

“As a lawyer, I am very specialised in one particular thing, but I lacked the right business skills. The EMBA is giving me the tools I need — it is the perfect boot camp. Chicago has also taught me to focus on one thing, do it really well and not broaden too soon.”

When Ms Scott, who grew up in the Soviet Union, embarked on her EMBA in 2015 she had not even started her business. “I just had an understanding of a problem that needed solving.”

Things began to come together last August, when she went to Booth’s campus in Chicago to do the Build a New Venture elective. This helped shape an idea that could be “sellable to clients, investors, partners and so on”.

#### **How Taina’s technology works**

The product is made up of a validation tool and handwriting reader. The validation tool is built by

taking a set of tax rules such as FACTA and going through them as a human would to create a “decision tree”. This is then put into a spread sheet and coded.

The handwriting reader is developed through machine learning to recognise different types of handwriting. The more handwriting it sees, the better it becomes. “Like a person, who gets better with experience,” says Ms Scott.

The reader will also learn to recognise how different nationalities may write English. A Chinese person for example may write English in a different way to an American.

As a non-tech founder, Ms Scott debated whether developing this kind of product was the right thing to do. But she found that not being a software developer was an advantage. “It does not matter what the solution is, what is the need? I started with the need and developed a solution to meet this.”

A mentor that she met through Chicago Booth offered “invaluable advice”, suggesting she start with an advisory board with the best possible experts on what she needed to come up with her product. “The tax regulations, the science [such as handwriting recognition] and the technology — I needed to have these bases covered with the best people,” Ms Scott says.

This advisory board then helped recruit the teams within their relevant expertise, scrutinising CVs and carrying out interviews. “We can’t afford 50 or 100 people, so every hire is extremely important.”

Getting a new business off the ground, especially one so reliant on niche expertise, is not easy. “The research and development side took a lot of research,” she says. Her start-up is “attacking a very narrow field”, so finding the right talent was very difficult. “I looked for them all over the world.”

Eventually she found some of them in a spin-off from a European university, from which three R&D staff are seconded. In terms of permanent staff, Taina has a full-time vice-president of engineering, a chief machine learning scientist, a full stack developer and a part-time project manager.

Ms Scott’s business recently won Booth’s Global New Venture Challenge, a competition run by the University of Chicago’s Polsky Centre for Entrepreneurship and Innovation. Ms Scott and her Taina pitching team

competed against multiple teams across all three Booth campuses in Chicago, London and Hong Kong and secured a \$15,000 prize.

“It feels amazing to win the challenge. There was so much scrutiny with lots of experts coming at you from different angles,” she says. “Do you understand your problem; do you understand your customer; are you really building the right solution; are you confident you can take this to market; how well do you understand your competition? . . . They’re all really good questions. So you end up producing a much sharper proposition.”

Winning the competition means it will be “easier to attract people”, she says. Finding, attracting and holding on to talent can be a challenge for start-ups. “We’re competing with big institutions and companies such as Google,” Ms Scott adds, saying that winning the competition may help to attract investors.

Investment is another issue with which entrepreneurs must grapple: how has Ms Scott raised the cash to get the company up and running? “Right now my husband and I are still self-funding.”

Then Taina intends to open up to friends and family, at which point some members of the GNVC team, mentors and members of the advisory board will also invest. “That will see us through our proof of concept, our first pilots, by which point we will have commitments from clients.” Then Taina will be ready for professional investors.

Taina, which has an office in the Canary Wharf-based accelerator Level 39, is already into the first pilot of its product with a large financial institution, which she is unable to name. Soon the company will have enough data to prove whether the product is doing what it should be. And if parts of it are not operating correctly, it can be finessed accordingly.

What about the competition? Ms Scott ponders. “We like to think of them more as our future buyers or partners.” Potential partners, she believes, could be the big four accounting companies — PwC, EY, Deloitte and

KPMG. “They have clients that need this product.”

Ms Scott highlights that, in principle, these companies could build the same product, but believes this is unlikely. “It is easier if everyone focuses on what they’re best at: we’re best at this narrow solution and they’re best at serving their clients and having this large footprint in financial services.”

Though she is ambitious, [start-ups more often fail than succeed](#), so at what point would she give up? “That is a very good question. We would call it quits if . . . regulatory compliance was to go away,” she says, rendering the product completely redundant. “But given where [the industry is] that is hard to imagine.”

Ms Scott says the big question would be “do we have enough runway to change direction?”. Though the software is potentially adaptable to other industries, such as healthcare, insurance or accountancy, “that would be a significant pivot”.