

Rose Dykins finds out why Amsterdam is placing beta thinking at the heart of its development

It's a Wednesday lunchtime, and rather than sitting hunched over my keyboard eating a wilted sandwich, I'm in a slightly different working environment. At THINK Academy in Amsterdam's Westergasfabriek Culture Park, staff, managers and guests are all making food together at a long table in the centre of an all-white studio, chatting as they pass around the hummus. Reminiscent of the 1999 makeover Steve Jobs gave

Pixar's offices to boost interaction, this seems a fitting arrangement for a social enterprise that promotes creative thinking and leadership. Is innovation something that can be taught? THINK Academy believes it can be fostered and harnessed by those with curious mindsets, purpose and passion. Although it is privately funded, THINK was launched as part of a government programme to make the Dutch capital's creative sector more cutting-edge.

Twice a year, THINK invites 500 entrepreneurs and "social change leaders" from across the globe to take part in its programme. This number is then whittled down to about 40 participants based on the strength of their proposed plans for their business. The average age of successful participants is 40, and they typically have about eight years of experience in their field.

"The programme's central promise is that we will support their growth plan," says Menno van Dijk, co-founder and managing director of THINK. "We don't invest any money; we give them leadership coaching, and we cement them as a group so that they start supporting each other. As part of each programme, we run a challenge with a topic that's relevant to society, and we invite external partners to work with us and come up with new enterprise concepts."

Previous challenge themes have included "Amsterdam as a sustainable destination" with KLM as a partner – this contributed to 167 electric taxis being inaugurated at Amsterdam Schiphol airport last year. Another THINK challenge addressed the issue of empty offices in the capital – 20 per cent of them were disused at the time, giving the impression of social disorder and neglect. The result was the launch of office space renewal company CTR+N. THINK recently opened academies in Vancouver and Lisbon, with Shanghai to follow soon.

Think smart

Such organisations are springing up like tulips across the capital. There's Amsterdam Smart City (amsterdamsmartcity.com), an initiative set up in 2009 to tackle urban issues in a sustainable way. Then there's Wibautstraat – otherwise known as the "Knowledge

Mile" – populated with universities, businesses and individuals that collaborate on development projects. There's also Creative City Lab (creativecommons.nl), established to "seek creative solutions to social and economic problems".

Spend a few days in Amsterdam and you will discover ingeniously repurposed buildings and off-the-wall art galleries. You will gain a sense of the gentle subversion that permeates the city, and how its culture of freedom makes a strong foundation for innovation.

"We've traditionally been a country that has explored new worlds, so that explorative mindset is part of our DNA," says Mark Vernooij, THINK's general manager. "And we've always welcomed strangers – it's a trait [you'll find] in pretty much any harbour city – you gain new



Above: Westergasfabriek Park
Right: Floating houses



BOOKING.COM Originally a Dutch start-up, the hotel booking site arranges 800,000 room nights per day on behalf of both leisure and business travellers. Established in 1996, it now operates 155 offices in 63 countries but maintains its global headquarters in the city where it all began. **booking.com**

DUTCH 3D PRINTING FIRMS The Netherlands is a global hub for 3D printing. Shapeways enables you to design a 3D-printable product online, which is then created and shipped directly to you. Ultimaker manufactures 3D printers for personal use, while 3D Hubs helps you to locate your nearest 3D printer – last year, it received US\$4.5 million investment for its global expansion plans. **shapeways.com; ultimaker.com; 3dhubs.com**

GUERRILLA GAMES A merger of three Dutch start-ups, this gaming studio was snapped up by Sony in 2005. *Killzone Shadow Fall* made more than US\$1 million and was a launch title for Playstation 4 last year. **guerrilla-games.com**

MICROPIA The world's first "microbe zoo" opened in Amsterdam in September. This cutting-edge museum demonstrates how essential microbes are for advances in the medical and energy sectors. **micropia.nl**

AMSTERDAM ARENA The 53,000-seat venue aims to be the most sustainable stadium in the world. An Amsterdam Smart City (ASC) development, it no longer uses fossil fuels as a power source.

VEHICLE2GRID Launched last year by ASC, this three-year pilot allows participants to store locally produced energy in their electric car battery and use it to power household appliances.

ENERGY ATLAS Another ASC project, this is a publicly available digital map of energy and gas consumption across the city, from large companies to individual homes.

WATERBUURT Dubbed the Water Quarter, this community of floating homes in the IJburg district was built in response to the city's housing shortage and rising sea levels. **rohmer.nl**

CITIZEN M The budget hotel brand is known for its efficient use of space and inventive room design. It has properties in London, Glasgow, New York and Paris, as well as Amsterdam and Rotterdam. **citizenm.com**

URBAN AGRICULTURE Creative City Lab transformed derelict football fields in Amsterdam Noord into a crowd-funded urban farm, with the aim of boosting the local economy. **creativecitylab.nl**



perspectives. We see that reflected in the number of regional and global headquarters here." Netflix, Uber, Nike and Canon are among the big brands with European HQs in Amsterdam, and the city became home to the continental head offices of 42 new companies last year.

One of THINK Academy's key beliefs is that participants need to remain in a "beta" state of thought to remain truly innovative. Vernooij explains: "The concept comes from technology, where you have a beta product – one that is not yet finished and awaiting feedback. It's the idea that you can always improve; it's about acknowledging that you can change your project tomorrow based on what you learnt from today."

New dimension

A five-minute ferry ride across the River IJ from Amsterdam Centraal brings you to Amsterdam Noord, the burgeoning creative district, where this kind of philosophy prevails. "I think Noord is going to be a very interesting part of the city," says Rob Veeger, general manager of Hotel de Roode Leeuw. "The metro line is being extended there, and should be complete in 2017."

A fine example of "beta" thinking is the 3D Print Canal House project by DUS Architects, which began in March last year in Noord. The structure is being gradually built from a bioplastic made from linseed oil that is printed in layers and manufactured by a specially designed Kamermaker printer the size of a shipping container. "The ambition is to ship [the machine] everywhere and send digital information to it. It could be an option for slums in Third World countries," says a spokesperson for the project. "The aim is to complete the canal house in two years' time but, as we build, we are really focusing on researching what kind of influence 3D printing can have."

While 3D-printed architecture has already been created (ten houses were printed in 24 hours last year in Suzhou), for Amsterdam, it's about learning from the process.

Stepping out on to the printing site, you see a series of prototype parts of the house that are to be slotted together. The older pieces have slightly imperfect ridged surfaces where the bioplastic has not set quickly enough and then slid over the layer below. But the newer pieces are smooth and precise, and the technique is clearly

becoming refined. An on-site exhibition chronicles the project's progress as it happens, as well as other experiments – including 3D-printed crockery made from potato starch.

The idea that 3D printing could be a catalyst for the next industrial revolution has been touted for some time now, but the Netherlands is finally starting to see results, with a number of well-respected global 3D printing firms emerging (such as 3D Hubs, Shapeways and Ultimaker). Rather than racing to the finishing line, Amsterdam is taking a stealth approach to establishing itself as a global frontier for innovative construction, by perfecting the process and learning as it goes. In other words, it's staying in "beta" mode.

■ Visit **holland.com; thnk.org**. 3D Printed Canal Houses is open Tues-Sat 11am-5pm; entry €2.50; **3dprintcanalhouse.com** Easyjet operates four daily flights from London Gatwick to Amsterdam and up to six daily flights from Luton; **easyjet.com**



Clockwise from above: Guerilla Games; Micropia; the 3D Print Canal House; Waterbuurt; Amsterdam Noord urban farm; Amsterdam Arena