SCALE-UP
A flagship activity of the canton of Vaud
DRIVER OF GROWTH FOR NEW COMPANIES

The canton of Vaud’s many and varied strengths have allowed a large number of startups to establish themselves and flourish. To such an extent that several of them have become “scale-ups”.

From startup to scale-up
The canton of Vaud has launched the first scale-up support program in Switzerland. Technological and innovative companies with an annual job growth of at least 20% over at least three consecutive years and which have at least 15 employees can benefit from Scale-Up Vaud certification. This certification aims to recognize their achievements and support their growth.

To date, 30 companies (among which 25 have the 2019 label) have joined the initiative and benefit from this certification introduced by Innovaud, the partner of the economic development agency which promotes innovative companies. These scale-ups benefit from targeted access to various partners (platin, Alliance, S-GE and CVCI), that help to strengthen and develop their activities; a key component of the program involves meetings with other scale-ups to pool knowledge and share best practices. A further objective of the program is to engage with large companies and multinationals taking part in the project, with the main aim of increasing the marketing and sales opportunities for their products and services.

SCALE-UP
Startups pass over to the category of scale-ups when the challenge they face is no longer to find a viable business model, but to grow with the ambition of becoming the leader in their global market.

9.2
is the average age in years of these high-growth companies.

“In recent years, the SPEI has provided us with financial support as part of our sales and marketing activities abroad. For example, we obtained funding for the international events in which we participated and presented our solutions. This has allowed us to expand into new markets and to get Scale Up Vaud certification.”

MINE FORNEROD
Spokesperson for NetGuardians

Source: scale-up-vaud.ch
AN IDEAL ENVIRONMENT FOR INVESTING

Located in the heart of Europe, Switzerland never ceases to amaze with its diversity and prosperity. Its political system is based on direct democracy and consensus, giving rise to productive stability that greatly benefits the economy. The country regularly ranks among the most competitive in the world.

Vaud, the largest of the French-speaking cantons, is also the most populated, with more than 800,000 inhabitants. An illustration of its openness is that nearly a third of its population hails from abroad. A significant proportion of these people are highly qualified and were attracted by the working conditions and excellence of the region’s institutions.

There are some 50,000 companies in the canton, mainly operating in the service sector, but they also lead the way in technology sectors with high added value such as precision instruments, medical equipment and information technology.
A MULTITUDE OF AREAS OF INNOVATION

The canton of Vaud excels in a wide variety of cutting-edge sectors, ranging from energy efficiency to cybersecurity and neurotechnologies.

Energy efficiency
There are a number of companies active in the energy field in the canton of Vaud. Vaud is home to 61 such companies according to CleantechAlps, the organization that promotes the cleantech sector in Western Switzerland. Green Motion is one of the stand-outs, offering smart charging solutions for electric vehicles.

Cybersecurity
The canton of Vaud is also active in the cybersecurity sector, particularly in the area of FinTech. NetGuardians, for example, has developed world-renowned fraud prevention and risk mitigation solutions. Today the company is active in some 15 countries.

Neurotech
The canton of Vaud is specialized in the field of neurotechnology, which encompasses all areas that influence the way in which the brain and its higher functions are understood. The example of MindMaze, a scale-up from the EPFL, is a perfect illustration. The company has developed a virtual reality headset for stroke victims. Recently, it has joined the "unicorn" club, referring to companies valued at over a billion US dollars.

Drones
The drone sector, which has been experiencing global expansion for several years, has become a specialty of the canton of Vaud. Flyability – a spin-off from the École Polytechnique Fédérale (EPFL) – won the "Drones for Good Award" in Dubai in 2015, a competition with a million US dollars in prize money. Other companies, such as senseFly, Pix4D and Gamaya, are also thriving in this sector.

Digital health
The canton of Vaud is also a pioneer in the field of digital, or e-health. SOPHiA GENETICS is a leader in data-driven medicine which has developed artificial intelligence that analyzes genomic data shared by various user hospitals. It is particularly active in innovations to treat cancer.

460 million
the sum raised by Vaud startups in 2016, putting the canton in first place in the Swiss Venture Capital Report (CHF). The majority of startups in Vaud that raised these funds came from the EPFL or HEIG-VD.
A CONCENTRATION OF TECHNOLOGIES

Industry in the canton of Vaud can count on the region’s academic and research institutes. This exchange works both ways: companies benefit from the latest advances in technology and young people in training are given practical cases that often allow them to find a job after their studies.

With the École Polytechnique Fédérale de Lausanne (EPFL), the University of Lausanne (UNIL), the University Hospital of Lausanne (CHUV) and the School of Engineering and Management Vaud (HEIG-VD), the canton of Vaud enjoys a significant concentration of academic and research institutions. These offer multidisciplinary scientific skills, a pool of talent and technological platforms available to businesses. This concentration of knowledge and advanced expertise goes a long way to explaining the emergence and development of a large number of startups, some of which are rapidly evolving and justifying the designation of scale-up. Academic institutions either have or are in contact with technological and scientific parks (the EPFL Innovation Park for the École Polytechnique in Lausanne and the Y-PARC for the HEIG-VD), providing new companies with a location and infrastructure to start their operations while benefiting from the proximity to the institutions from which they emerged (see “Network of Supporting Partners” on p. 9).

In the higher education institutions, two bodies specifically dedicated to companies enable the acceleration and support of the development of startups that come from within their walls:

At the EPFL, the Vice-Presidency for Innovation (VPI) is the interface of the higher education institution with industry. In particular, it is in charge of the management of the EPFL Innovation Park.

The VPI works with both startups and large companies, providing technology transfer and supporting the academic institute’s transdisciplinary research projects.

The VPI covers a dozen centers as well as technological areas covered by the EPFL that accelerate innovation and the development of startups in the region.

Source: Swiss Venture Capital Report 2017
Source: WIPO Global Innovation Index 2019

At the HEIG-VD, STarmac covers the various initiatives of the higher education institution seeking to support innovation and the spirit of entrepreneurship (training, coaching, prizes and awards, and links with organizations which support innovation in the region). It is a privileged space for exchange and emulation for university students from their third year onwards, assistants, graduates and employees who want to share, put to the test and hone their desire for innovation and their passion for entrepreneurship.

The body has fashioned itself as a kind of pre-incubator, providing infrastructure for project leaders, awarding the InnoGrant prize each year, offering a Business Validation support program and connecting researchers with the relevant partners.

On an international scale, Switzerland is right at the top in terms of innovation. This position can be explained primarily by the quality of its research institutions.
VAUD SCALE-UPS

There are currently 25 certified scale-ups in the canton of Vaud. Here is a brief presentation of them.

**Abionic**
Abionic designs and markets a new generation of diagnostic tools for sepsis, allergies and anemia. It has been developing its nanotechnology at the EPFL since 2010.
abionic.com

**Beqom**
Founded in 2009, Beqom is a global provider of compensation management software. Its cloud-based total compensation platform is used globally across all industry sectors by over 100 large companies such as Microsoft and Vodafone.
beqom.com

**Bestmile**
This Swiss company is developing highly scalable and distributed cloud technology which aims to fully exploit the potential of driverless vehicles. Founded in 2014, BestMile now has offices in London and San Francisco in addition to its Lausanne site.
bestmile.com

**BlueBotics**
Bluebotics is a spin-off of the Autonomous Systems Lab, EPFL. Founded in 2001 with the mission of marketing innovative and promising mobile robotics technologies, the company is active in two segments: Industrial automation and service robotics.
bluebotics.com

**DEPsys**
This scale-up, which was founded at the HEIG-VD and is based in Puidoux, has developed a solution for the management of a low-voltage power grid in the form of a “real-time” scalable control platform.
depsys.ch

**ecoRobotix**
The company develops the next generation of weeding robots for sustainable agriculture that require low energy and that reduce the negative ecological impact of modern agriculture, while keeping costs competitive.
ecorobotix.com

**eSMART Technologies**
This spin-off from the EPFL develops smart connected solutions for interiors, allowing everyone to manage their energy consumption.
myesmart.com

**Flyability**
This drone company specializes in the inspection of complex environments (hard-to-reach places and enclosed areas). The scale-up was founded in 2014 and is based in downtown Lausanne.
flyability.com

“I grew up and started my career here, so I have a very strong attachment to the canton of Vaud. When the time came to set up my own company in 2009, the canton provided everything I needed to get started: a large number of potential public and private customers, a talent pool for employees and a network of subcontractors allowing us to meet the vast majority of our needs.”

FRANÇOIS RANDIN
CEO of Green Motion
MindMaze
MindMaze is a spin-off from the EPFL that was launched in 2011. It is now the first unicorn in Switzerland, i.e. a company worth more than a billion US dollars. Its recipe for success consists of technology which facilitates and accelerates the rehabilitation of stroke victims by means of virtual reality. The tool, called MindMotionPRO, combines neural sensors, cameras and computer-generated images. It allows the patient to follow a series of exercises and see their movements reproduced on the screen by an avatar, and thus correct them. Performance is displayed as a score, just like in a video game. In addition to approximately 70 employees in Switzerland, MindMaze has a sales office in Germany and the UK. It plans to expand gradually to the USA.

MindMaze was given awards by Venture Kick and Venture Leaders in 2010, and Innogrants in 2011, followed by a further award from the IMD business school the following year. It was also the beneficiary of a seed loan from the Foundation for Technological Innovation (FIT). “All this financial support has stimulated our growth,” observes CFO Pierre-Emmanuel Meyer. “All in all we have received a lot of help from Switzerland, especially from the canton of Vaud.” On top of this, there was CHF 100,000 granted by the SPEI. “This has allowed us to make investments in terms of training, building our prototype and taking part in exhibitions abroad.”

Frontiers
Frontiers is an award-winning open science platform and leading open access scholarly publisher. Its mission is to make research results openly available to the world, thereby accelerating scientific and technological innovation, societal progress and economic growth.

Gait Up
Established in Renens, the Gait Up startup develops and markets connected devices for the world of sports, which also allows the company to study the gait of elderly people to prevent potential falls.

Gamaya
Founded in 2015, the smart farming startup is developing an imaging system that can provide information about the condition and composition of soil by using a tiny hyperspectral camera mounted on a drone.

Green Motion
Founded in 2009 in Bussigny, Green Motion develops charging infrastructures for electric vehicles. The company has quickly become the Swiss leader in the field and is now expanding its operations into China.

Kandou Bus
Kandou Bus, EPFL spin-off founded in 2011 is a semiconductor company. Its objective is to enhance the communication between chips, to help them cope with larger amounts of data, in a quicker way, and using less energy.

Lunaphore
Lunaphore specializes in diagnostics and develops tumor analysis platforms based on microfluidic technology.

Nanolive
Nanolive has developed a disruptive technology which allows users to explore instantly the inside of a living cell in 3D without the need for any labeling or other invasive methods.
### SPOTME
Founded in 2000 by two EPFL Alumni, SpotMe is the leading software solution of enterprise engagement platform with a focus on live events, virtual meetings, and engagement workspaces.

With mobile-first solutions that spark new ideas, SpotMe inspires participants to foster collaboration, drive strategic alignment and supports organizations to solve meaningful business challenges through events and perpetual engagement workspaces. To date, SpotMe software has served more than 5 million users worldwide. More than 200 organizations rely on SpotMe to create change with transformative events and drive perpetual engagement with employees, customers, and partners.

With more than 140 staff worldwide, SpotMe is headquartered in Switzerland and has offices in Europe, North America, and Asia-Pacific.

[spotme.com](http://spotme.com)

### SOPHIA GENETICS
Focusing on “data-driven medicine”, SOPHiA GENETICS securely back up and analyzes the molecular information of patients to then help practitioners make a diagnosis and recommend a personalized treatment plan. This approach can be applied particularly to oncology and hereditary cancers, as well as cardiovascular, metabolic and pediatric diseases. Today, the company has 270 hospitals in its network, forming the largest clinical genomics community in the world. Thanks to the sharing of knowledge, “the result of the data analysis of a patient treated in a hospital in France can help with the diagnosis of a patient in Latin America, for example. It’s a genuine revolution,” says Jurgi Camblong, CEO and co-founder of the company.

In its early days, SOPHIA GENETICS received direct financial support from both the SPEI and the Foundation for Technological Innovation (FIT) – an initial loan of CHF 100,000 in 2011 followed by a second loan of CHF 500,000 at the end of 2013. “This contribution allowed us to recruit our CTO, then start developing our technology and carry out market research,” recalls Camblong.

[sophiagenetics.com](http://sophiagenetics.com)

### NetGuardians
NetGuardians was founded in 2007 and is based at the Y-PARC. It is a leading banking software company renowned for its unique approach to fraud detection and risk insurance solutions.

[netguardians.ch](http://netguardians.ch)

### Nexthink
This scale-up is a pioneer in the field of the exploitation of users’ analytical data for the optimization of computer security, company operations and projects. It has already earned the trust of over 800 companies worldwide.

[nexthink.com](http://nexthink.com)

### Objectis
Objectis is a company specializing in software innovation and supporting Swiss manufacturers in their digital transformation. A spin-off from the School of Management and of Engineering Vaud (HEIG-VD), it is based in the Y-PARC Innovation Park.

[objectis.com](http://objectis.com)

### Pix4D
This scale-up uses drones to photograph soil surfaces and to model spaces in 3D, with applications particularly for farmers (crop growth over long periods) and for the prevention of forest fires.

[pix4d.com](http://pix4d.com)

### QGel
This biotechnology company based at the EPFL Innovation Park is working on improved predictability of the effectiveness of drugs before their clinical phase by enabling cell culture that is *in vitro* (in the laboratory) under conditions corresponding to “*in vivo*” (in the human body), which greatly accelerates the development time.

[qgelbio.com](http://qgelbio.com)

### SWISSto12
Founded in 2011, SWISSto12 is at the forefront of the developing and commercialization of the 3D printing of aerospace antennas.

[swissto12.com](http://swissto12.com)
NETWORK OF SUPPORTING PARTNERS

The canton of Vaud is home to a number of organizations that support the development of promising companies.

Cautionnement romand
This organization supports all startup, development, recovery and succession of enterprise projects by financing machinery, tools, equipment, stocks and working capital. Cautionnement romand provides guarantees for a maximum duration of 10 years – depending on the project and not exceeding CHF 500,000.
cautionnementromand.ch

Economic Development – Canton of Vaud (DEV)
The DEV is the main contact for foreign companies seeking to set up business in the region. To fulfill its role, the DEV works with both private (banks, notaries, lawyers, etc.) and public partners (various government departments). It provides advice on administrative procedures and financing, and allows newly established companies to benefit from its vast network.
dev.ch

EUresearch
EUresearch is the Swiss network mandated by the State Secretariat for Education, Research and Innovation (SERI) to encourage, facilitate and support participation in European and international research programs, in particular Horizon 2020. With its headquarters in Berne and regional offices in each university and federal institute of technology, this network provides targeted information, practical advice and transnational partnerships relating to European research and innovation programs.
euresearch.ch

Innosuisse
Innosuisse is the federal agency responsible for promoting innovation and applied research. It co-finances market-oriented R&D projects jointly undertaken by companies and higher education institutions. It supports the creation and development of companies with high growth potential. Innosuisse also promotes the transfer of knowledge and technology between companies and institutions of higher education. Finally, the organization is committed to international R&D programs to facilitate the access and participation of Swiss partners.
innosuisse.ch

Innovaud
As a gateway to innovation in the canton of Vaud, Innovaud supports and provides networking opportunities for start-ups and SMEs to develop solutions within the area of hosting, promotion, funding and/or coaching. Innovaud is firmly established in a vast network of partners, enabling it to redirect requests to the organizations most suited to the needs of each party. Innovaud launched the first scale-up support program in Switzerland.
innovaud.ch

jobs in Switzerland represented by scale-ups in early 2017, including 200 jobs created in the previous 12 months.
Office for Economic Affairs and Innovation (SPEI)
The SPEI supports companies established in the canton of Vaud, and more specifically those active in the sectors of industry and advanced technologies. It advises and informs entrepreneurs, particularly by putting them in touch with the appropriate organizations according to their specific needs. SPEI can also provide direct financial support. invest-vaud.swiss

Switzerland Global Enterprise (S-GE)
S-GE supports SMEs in their international business ventures, notably via the Swiss Business Hubs in 21 countries. On behalf of the Swiss Confederation and the cantons, S-GE helps Swiss companies to find new international markets, thus strengthening Switzerland’s economic position. s-ge.com

VAUD AND SWISS VENTURE CAPITAL FIRMS AND BUSINESS ANGELS

Venture capital
Aravis
BioMedPartners
Debiopharm Investment
Emerald Technology Ventures
Endeavour Vision
Global Life Science Ventures
KM Capital Partners
NEUW Ventures
Novartis Venture Funds
Polytech Ventures (venture capital funds)
Renaissance Foundation & capital
SVC for risk capital for SMEs
Valley Road Capital
VI Partners

Business angels
A3 Angels
Business Angels Suisse (BAS)
Go Beyond
StartAngels Network
VAUD INNOVATION PARKS

Specifically intended to host and support new companies in their development, the canton of Vaud’s seven technology parks each have their own special features. They are also founding members of Innovaud.

Biopôle
The Biopôle is an innovation park entirely dedicated to life sciences which was inaugurated in 2004. It is home to more than 50 companies and institutes – including several head offices of multinationals as well as innovative SMEs – representing more than 1,200 professionals. It also hosts more than 25 world-class research groups originating from the University Hospital of Lausanne (CHUV) and the University of Lausanne (UNIL), as well as the renowned Ludwig Institute for Cancer Research. The Abionic scale-up is also located here.
biopole.ch

EPFL Innovation Park
Located next to EPFL, the technological park of the same name hosts more than 160 companies, housed in 14 buildings, covering an area of 55,000 m². More than 2,000 researchers, engineers, scientists and administrative staff work here. BestMile, DomoSafety and Lunaphore have set up business at the Park.
epfl-innovation park.ch

Les Ateliers de Renens
This innovation park in western Lausanne is dedicated to the field of design and regularly takes on skilled graduates from the ECAL (École cantonale d’art de Lausanne), whilst remaining open to all specialties, enabling cross-disciplinary projects to emerge. The Renens Innovation Park has a MakerSpace and is home to MassChallenge Switzerland, the world’s largest startup accelerator that was created in Boston.
ateliersvdr.ch

swiss aeropole
Based in Payerne, this innovation park is entirely dedicated to the fields of aeronautics and aerospace. The park notably contributed to the success of the Solar Impulse and SolarStratos projects.
swissaeropole.com

Technopôle Ste-Croix
The Ste-Croix Technology Park is a national center of excellence in micro-welding and a reference center for additive manufacturing equipped with the latest technologies in digitization and 3D printing. With its international network, it provides opportunities for collaboration with leading qualified institutes in Europe and around the world.
technopole1450.ch

TecOrbe
The TecOrbe comprises over 7,000 m² of offices, laboratories and industrial halls intended for cleantech companies, whether they are active in environmental protection, sustainable development, renewable energies or the improvement of manufacturing processes. It also boasts an incubator dedicated to creating businesses and supporting them during their first phase of growth.
tecorbe.ch

Y-PARC
This technology park was created in 1991 in Yverdon-les-Bains and is the first of its kind in Switzerland. It is also one of the largest, covering an area of 50 hectares. Y-PARC provides a complete and varied infrastructure – with land for sale, premises to rent and a business incubator – and support services tailored to both startups and well-established businesses. The NetGuardians scale-up is located here.
y-parc.ch