

HSG Spin-Off Barometer 2022

Presentation of the results of the annual survey among HSG Spin-Offs

Introduction to HSG Spin-Off Barometer 2022

Building and promoting the entrepreneurial community at the University of St.Gallen.

- **Startup@HSG** builds and promotes the entrepreneurial community at the University of St.Gallen and functions as the first contact point for (aspiring) entrepreneurs.
- As part of our activities, we have awarded the **HSG Spin-Off Label** to 171 startups (“HSG Spin-Offs”) since 2017. Throughout the whole year, we accept applications from high-potential founders and startups that fulfill the selection criteria:
 - **HSG Origin:** The product/service and at least one co-founder have an HSG background.
 - **Innovation & Sustainability:** The product/service is innovative and sustainable.
 - **Founder team:** The founder demonstrate a strong entrepreneurial mindset and behaviour.
 - **Activity:** The company or startup is active for at least 12 months.
 - **Scalability:** The business model shows strong growth potential.
 - **Benefit for Switzerland:** The Swiss economy is likely to benefit if the company is successful.
- Each year, we conduct the **HSG Spin-Off Barometer**, i.e., a comprehensive survey among all HSG Spin-Offs, to track trends and developments in the HSG Startup Ecosystem. In 2022, among many other topics, we focus on the quality of St.Gallen as a startup location for founders.

HSG Spin-Off Headquarters in the World

The HSG Spin-Off community reaches far beyond Switzerland and the DACH region.

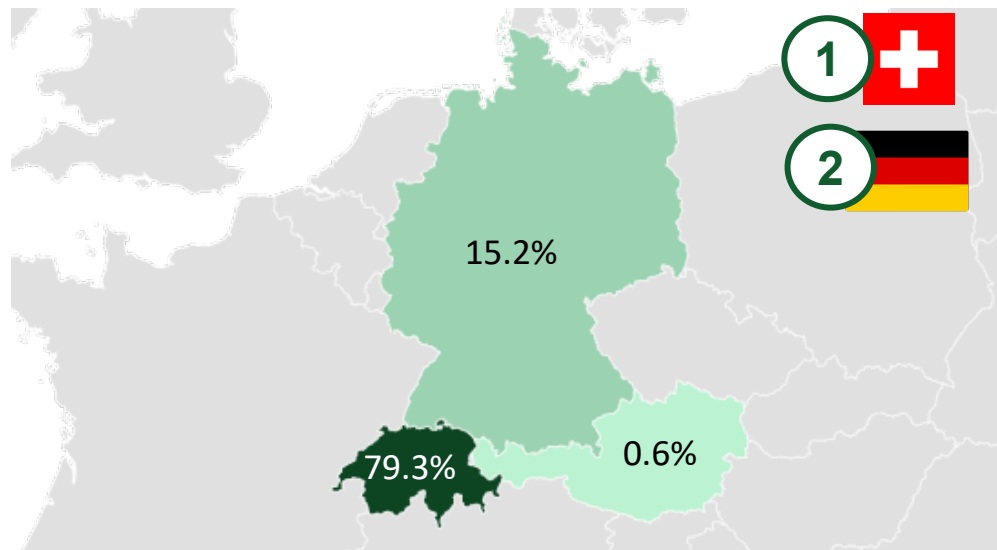


Figure 1: Locations in DACH region (N=165)

All HSG Spin-Offs have established their headquarters or a main administrative office in **Switzerland (131)**, **Germany (25)**, or **Austria (1)**. This is also their main area of operation.

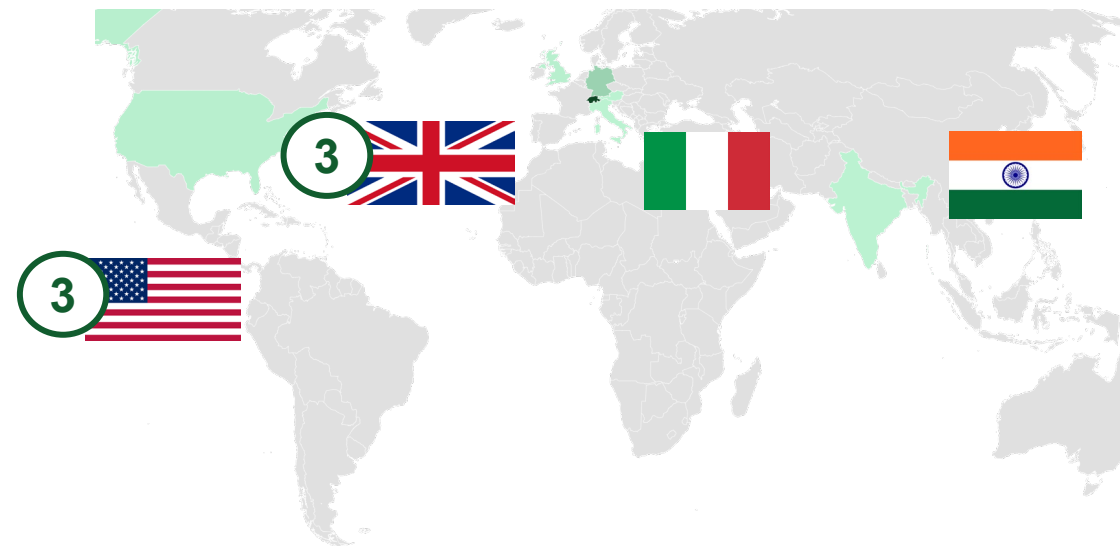


Figure 2: Locations in the world (N=165)

Several HSG Spin-Offs have set up their headquarters outside the DACH region, esp. in the **United Kingdom (2)**, **United States (2)**, **Italy (1)**, and **India (1)**.

HSG Spin-Off Headquarters in Switzerland

The HSG Spin-Offs community clusters in the cantons of Zurich and St.Gallen.

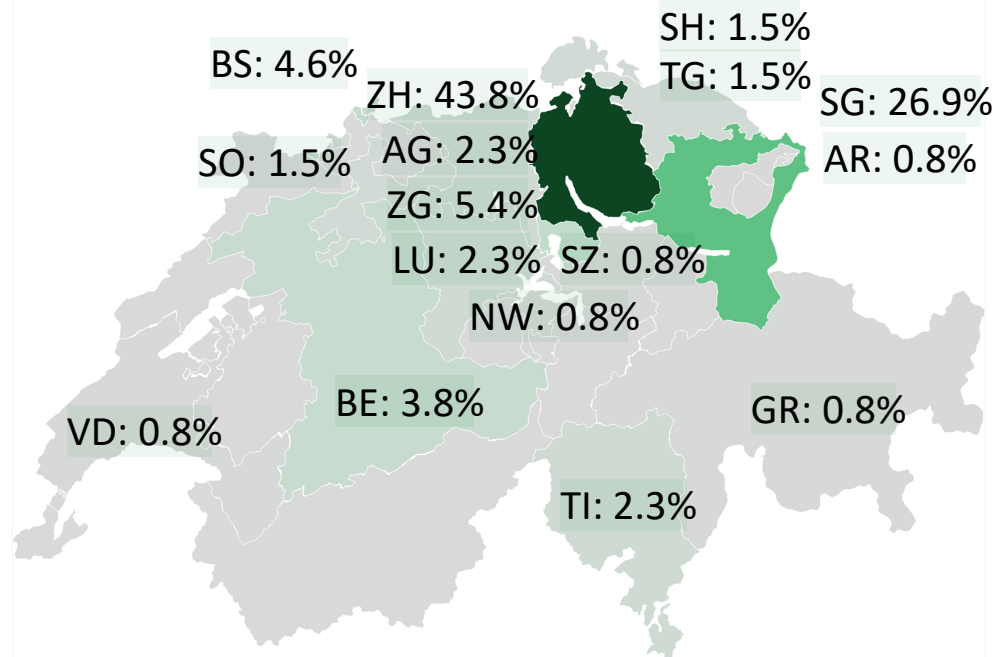
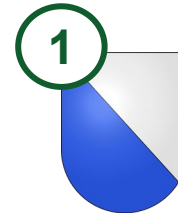


Figure 3: Headquarters in Switzerland (N=130)

Powered by Bing
© GeoNames, Microsoft, TomTom



Zurich Canton (44%) attracts by far most HSG Spin-Offs across all industries. Known for its startup ecosystem, *Zurich-City* (29%) is the largest hub for HSG Spin-Offs in Switzerland. *Winterthur* (2%) is another noteworthy location. For example, Planted Foods AG is based in Kempththal, ZH.

planted.



St.Gallen Canton (27%) represents the second-largest hub for HSG Spin-Offs, esp. for Software, FinTech, Fashion and Consulting. *St.Gallen-City* stands out (24%). Abtwil, Arbon, Rapperswil are home to at least two HSG Spin-Offs. For example, OnlineDoctor AG is incorporated in St.Gallen.

Online Doctor



Other popular cantons for HSG Spin-Offs are **Zug (5%)** for FinTech and Software, **Basel-City (5%)** for BioTech, HealthTech and FoodTech, and **Berne (4%)**.

Selected HSG Spin-Offs – Survey Sample 2022

The HSG Spin-Off Barometer presents the survey results from the following 37 HSG Spin-Offs:



Figure 4: Overview of Survey Sample (HSG Spin-Offs) (N=37)

Team Size at Founding

Most HSG Spin-Offs were founded by teams (83%) rather than solopreneurs (17%).

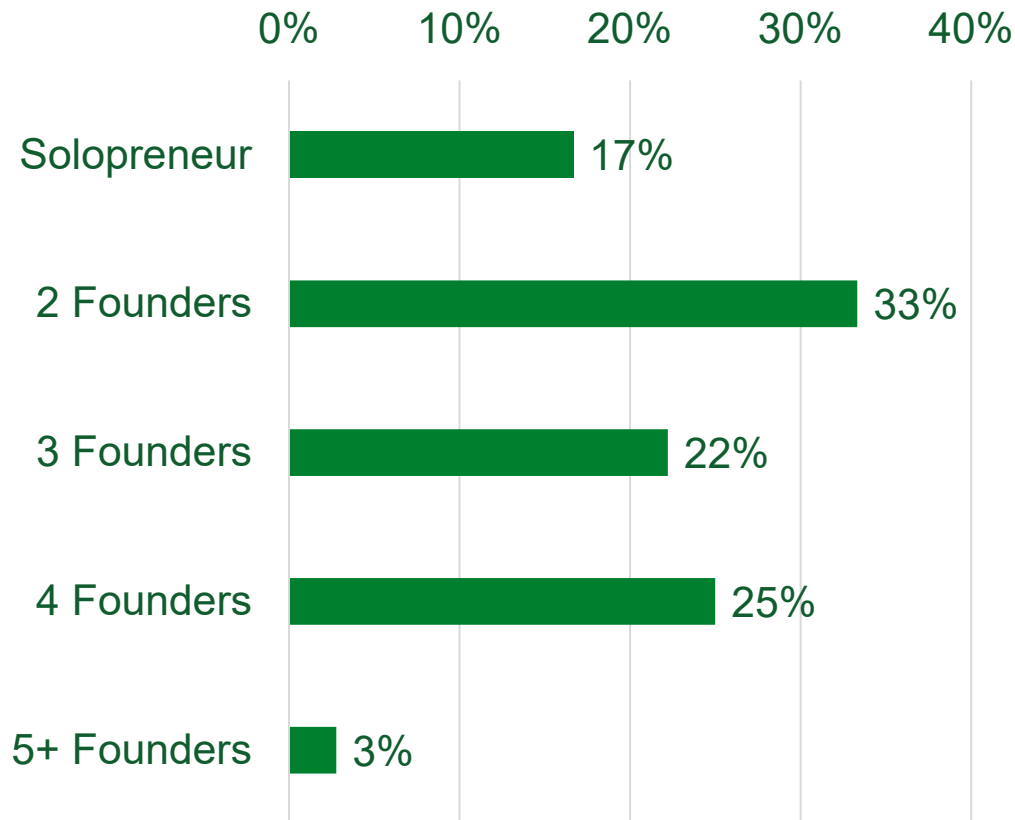


Figure 5: Team Size at Founding (N=37)

The typical HSG Spin-Off is founded by **founding teams of 2 to 4 people** (80%). According to research, this is the ideal team size for most startups.

Hardly any HSG Spin-Offs are founded by **large founding teams of 5+ people** (3%). According to research, such large teams are more prone to team conflicts.

Some HSG Spin-Offs are founded by **solopreneurs** (17%). Especially serial entrepreneurs with extensive work experience likely are successful solopreneurs.

Job Creation & Employees

A tiny group of the best HSG Spin-Offs have created the lion's share (>95%) of 10'000 jobs.

HSG Spin-Offs have been an **impressive job engine** for Switzerland. We can extrapolate from our data that all HSG Spin-Offs, in total, have created far more than **6'000 jobs¹**.

While the typical **HSG Spin-Off** creates only **23 jobs** (=sample median), some exceptional HSG Spin-Offs create hundreds of jobs. For example:

wefox	1'600 jobs
N26	1'500 jobs
yokoy	260 jobs
planted.	190 jobs

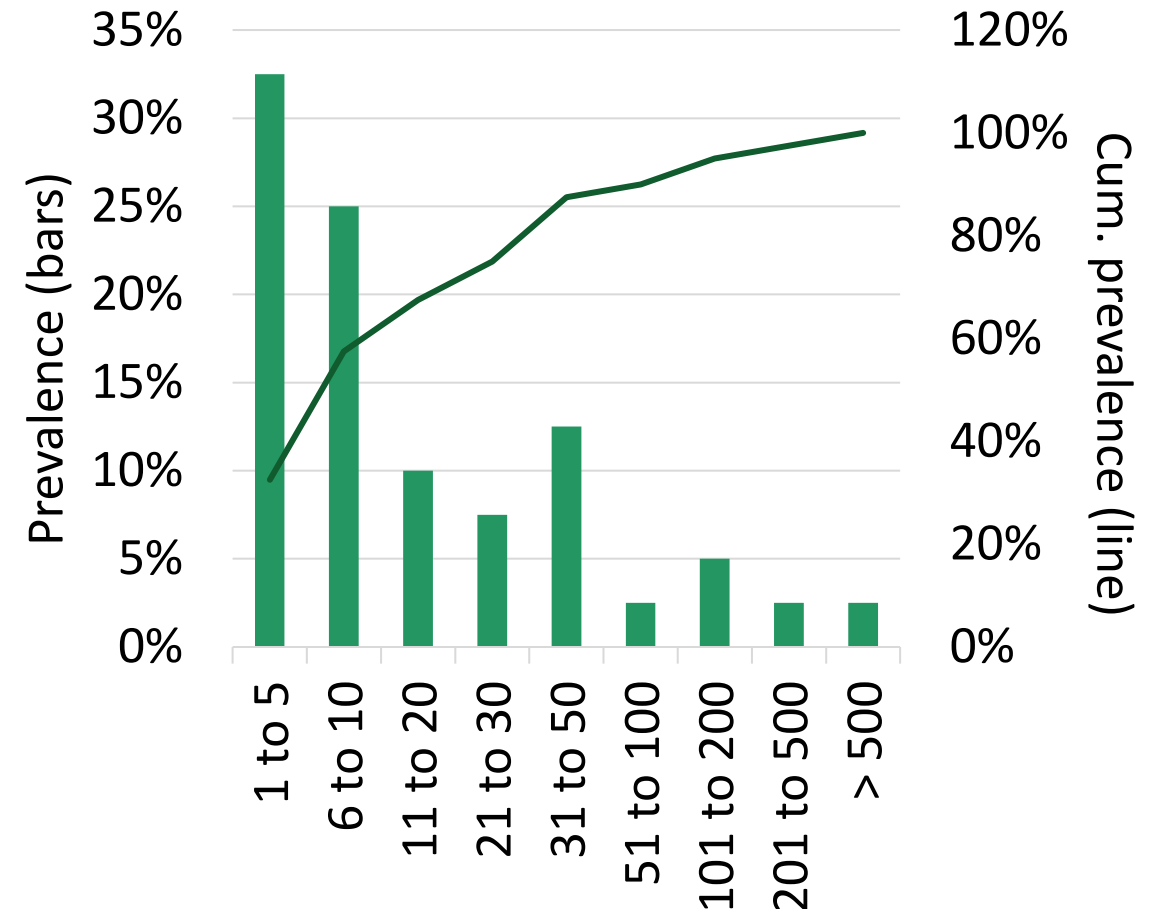


Figure 6: Jobs created (N=37)

Legal Forms

All HSG Spin-Offs are incorporated as AG/SA (70%) or GmbH/Sarl (24%), no unincorporated businesses.

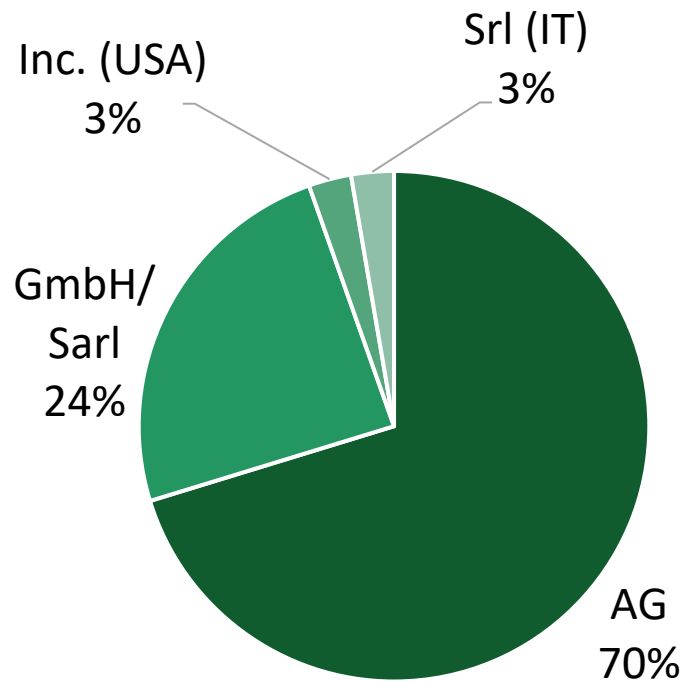


Figure 7: Legal Forms

Fully incorporated legal entities dominate the HSG Startup Ecosystem due to limited liability, (potential for) external investors, and (potential for) external management.

Public limited companies (70%) such as AG/SA and their foreign equivalents (e.g., *US Inc.*) are most prevalent due to shareholder anonymity and manageable minimum capital contribution (e.g., partial liberation of shares). This is the most popular corporate entity for **scalable business models**.

Private limited companies (24%) such as *GmbH/Sarl* and their foreign equivalents (e.g., *Italian Srl*) are another popular option for companies without plans to raise venture capital due to the lower minimum capital contribution and simpler company representation.

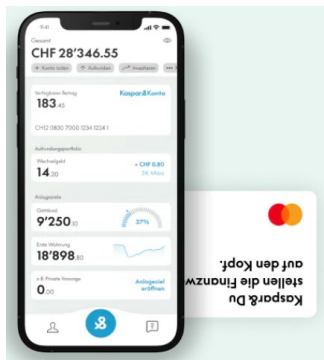
Unincorporated businesses such as sole proprietorships and unlimited/partially limited partnerships (KIG, KmG, KAG) do not qualify for the HSG Spin-Off Label. Similarly, associations and cooperatives are mostly not ideal due to lack of profit orientation.

Industry Focus

FinTech, Software, Retail & Consumers are the most common industries among HSG Spin-Offs.

Most HSG Spin-Offs are active in **FinTech & InsurTech**, **Software**, **Retail & Consumers**, **FoodTech & Agriculture**, **Mobility** (see Figure 8). This spectrum of industry focus reflects the high ambition and potential for **growth and scaling** among HSG founders. It also illustrates how HSG Spin-Offs leverage the traditional competencies from teaching and research at the University of St.Gallen to build and grow their ventures.

The best HSG Spin-Offs combine an **innovative technology** with a **scalable business model**, for example, Kaspar&.



Kaspar&

Kaspar& is a FinTech, founded in St.Gallen in 2020, that provides an AI-based automated investment manager for micro-investments.

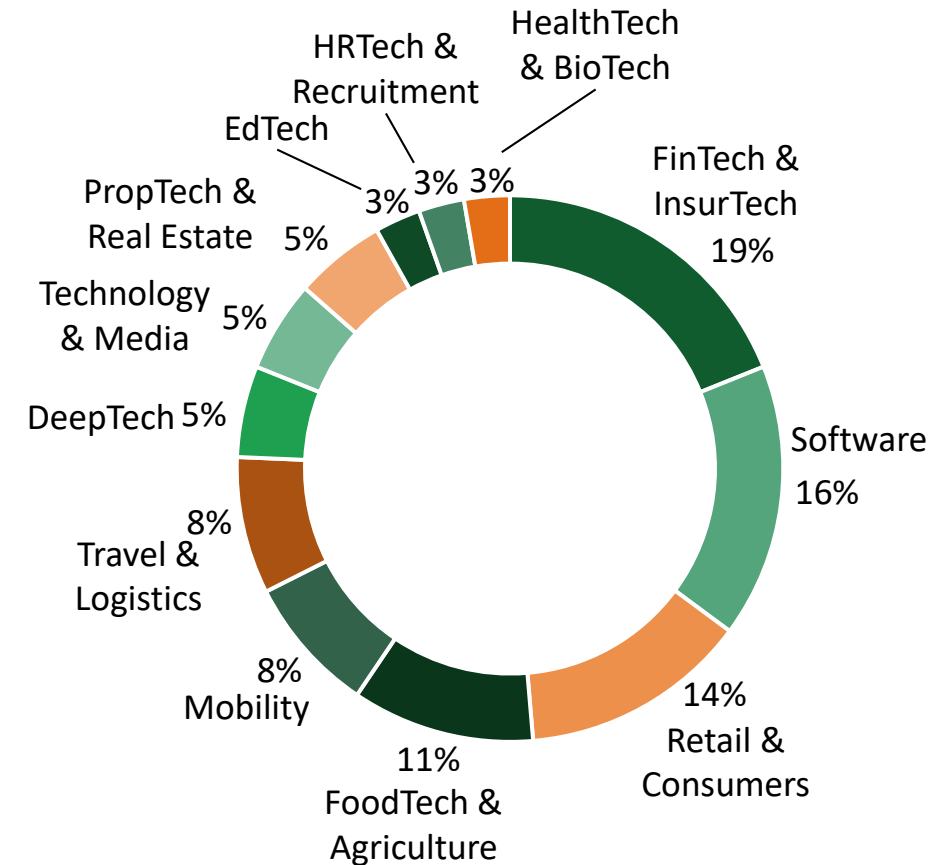


Figure 8: Industries in the HSG Startup Ecosystem

Business Activities

The most prominent business activities of HSG Spin-Offs by jobs/employees are presented below.



Figure 9: Business Activities of HSG Spin-Offs by number of employees/jobs

Note: A larger font size indicates a business activity by a HSG Spin-Off with more jobs/employees.

Sustainable Development Goals

HSG Spin-Off make an effort to work towards at least one United Nation's Sustainable Development Goal.

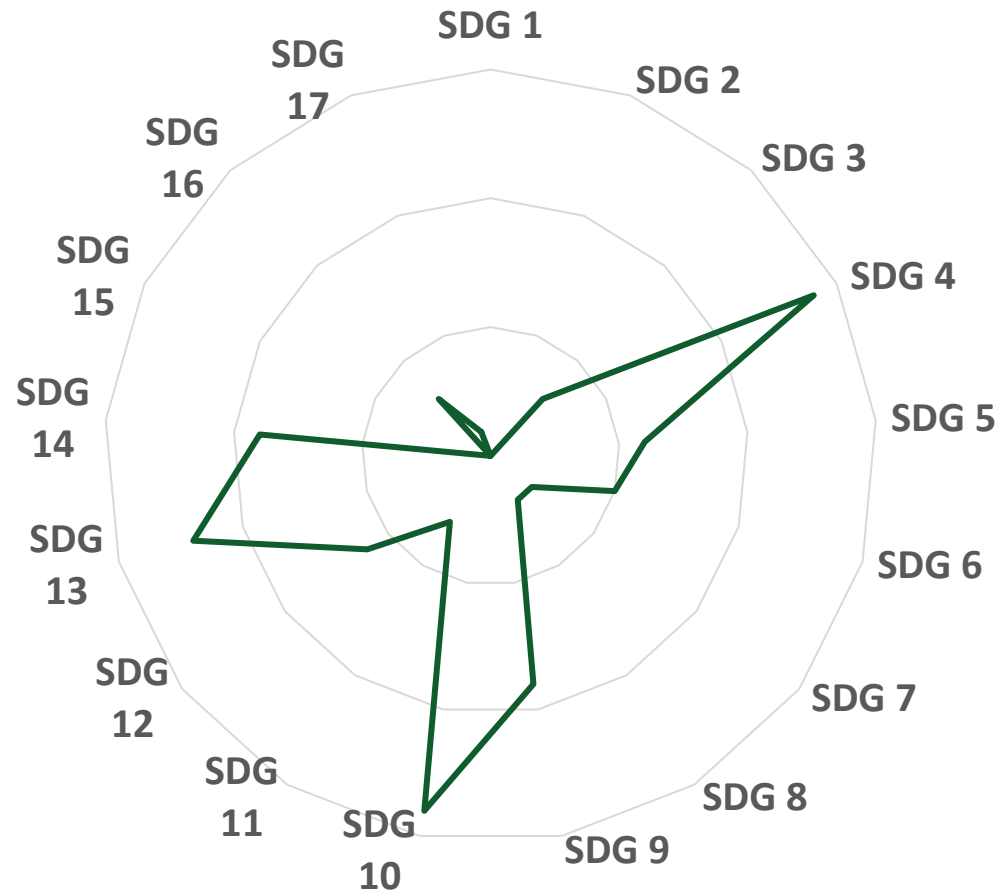


Figure 10: Importance of SDGs

HSG founders are very aware of sustainability challenges. Most HSG Spin-Offs (78%) address at least one SDG with their value proposition, especially **Climate Action**, **Quality Education**, and **Reduced Inequalities**.



Planted Foods AG tackles climate action with plant-based protein made of 100% animal-product-free ingredients without additives.

planted.

Sustainability Performance Metrics

Several HSG Spin-Offs have formulated their own KPIs for sustainability impact.



Figure 11: Sustainability KPIs in Use

Note: This illustration shows which KPIs or quantifiable goals HSG Spin-Offs use to measure, track, and steer their sustainability performance.

We asked the HSG Spin-Offs if they had plans to improve their sustainability impact and which KPIs they used.

More than half (51%) of all HSG Spin-Offs reported they had plans to improve sustainability impact – and provided 19 KPIs (on the left).



“We started a program three years ago to have 100 trees protected and 10 trees planted for every additional million that is invested with IndexInvestor AG. We strive to use as little resources as possible to reach our goals. We drive Tesla cars.”

Markets for Operations

HSG Spin-Offs carry out their business activities globally with a strong focus on the DACH region

Most HSG Spin-Offs operate globally with business activities across all continents through **cooperations, trading partnerships, and/or subsidiaries.**

The DACH Region is the key region for operations, including Switzerland (95%), Germany (65%), and Austria (41%).

Other European Countries (38%) are also well-addressed.

Several HSG Spin-Offs even internationalize by setting up operations in America, Asia, Australia, and/or Africa.

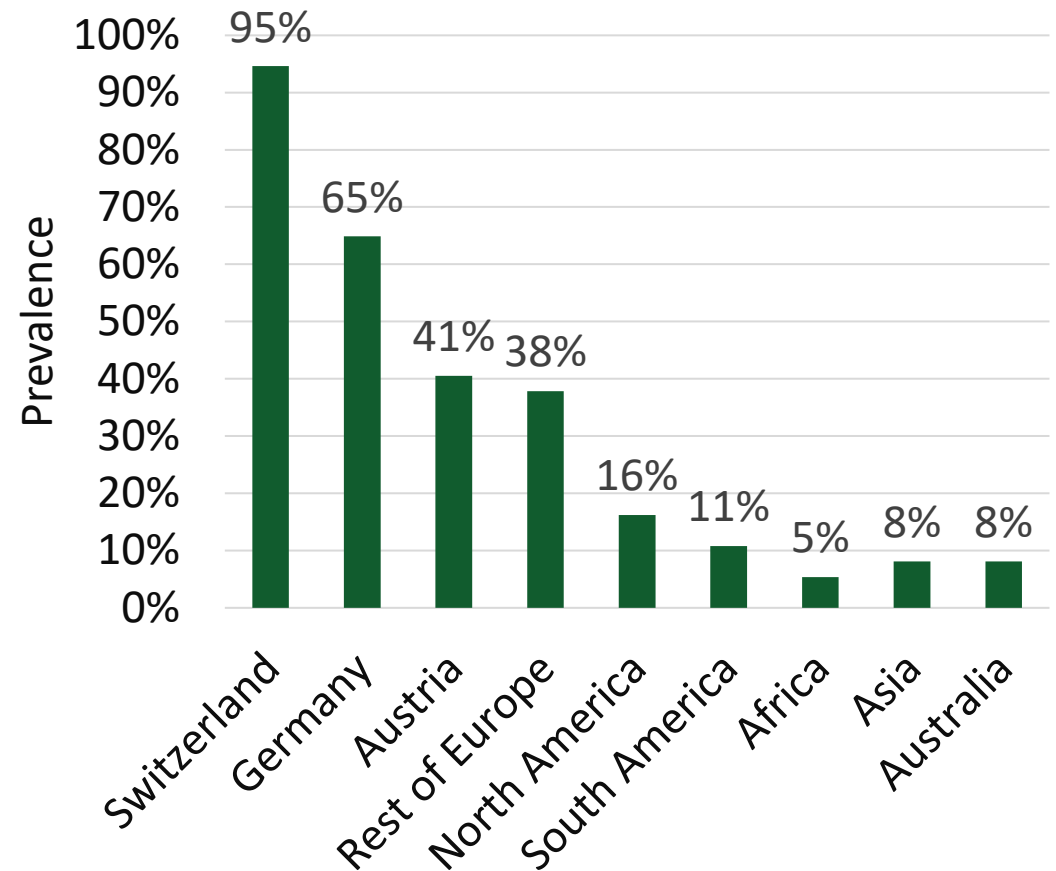


Figure 12: Business Activities across the World

Sales Revenues & Scaling Up

All HSG Spin-Offs have grown or at least maintained their sales revenue within the last year.

A lot of HSG Spin-Offs have **high sales revenues**. In 2022, more than half of HSG Spin-Offs (52%) had sales revenues above 500'000 CHF p.a. This shows how successful HSG Spin-Offs are in finding product-market fit with their innovative products and services.

The best HSG Spin-Offs are scaling up fast. From 2021 to 2022, all HSG Spin-Offs have grown or at least maintained their sales revenue:

- **Extremely fast growth:** 1 HSG Spin-Off, i.e., RoomPriceGenie, drastically increased its sales revenues in 2022.
- **Fast growth:** 12 HSG Spin-Offs moved up one revenue band.
- **Slow or no growth:** 16 HSG Spin-Offs remained in the same revenue band.
- **Decline:** No HSG Spin-Offs moved lost significant revenues.

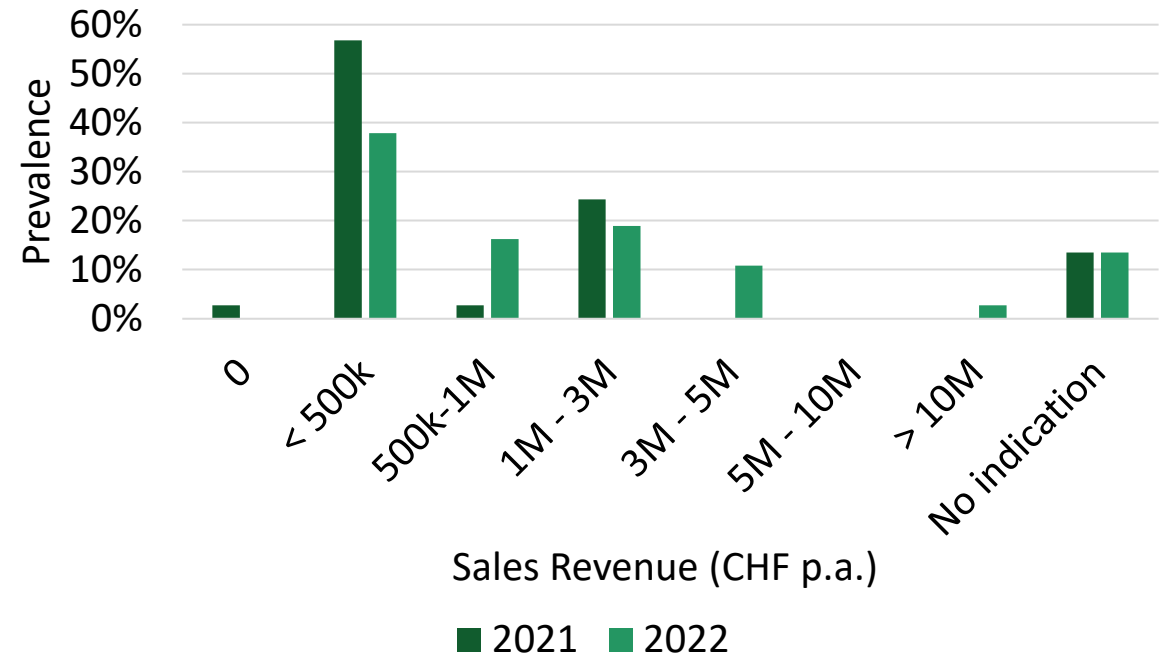


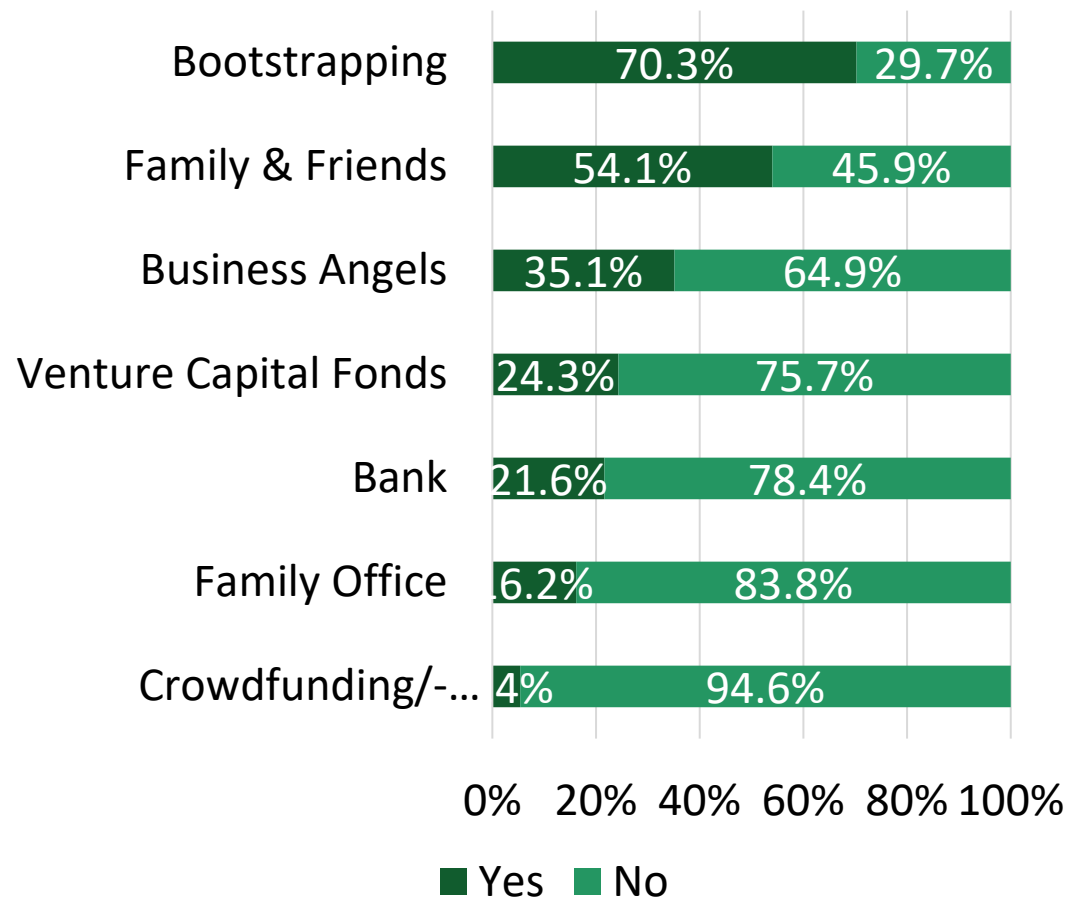
Figure 13: Sales Revenue by HSG Spin-Offs in 2021 & 2022



With its dynamic pricing software for hotel rooms, RoomPriceGenie has grown its sales revenues impressively between 2021 and 2022!

Funding Sources

While most HSG Spin-Offs are bootstrapped, approximately a quarter acquires VC funding.



The most popular funding sources for HSG Spin-Offs encompass **bootstrapping** (70%), **family & friends** (54%), and **business angels** (35%). A lot of HSG Spin-Offs are entirely **self-financed** (46%). Even more HSG Spin-Offs (54%) have **retained all equity** (i.e., no BA, VC, FO).

Many HSG Spin-Offs have managed to acquire funding from **institutional investors**, especially VCs (24%), but also banks (22%). The VC funding enables the most ambitious HSG Spin-Offs to scale up fast, once they have validated product-market fit.

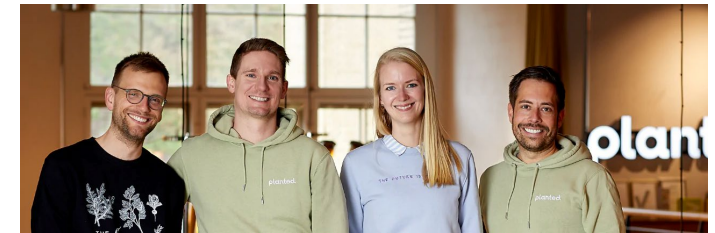
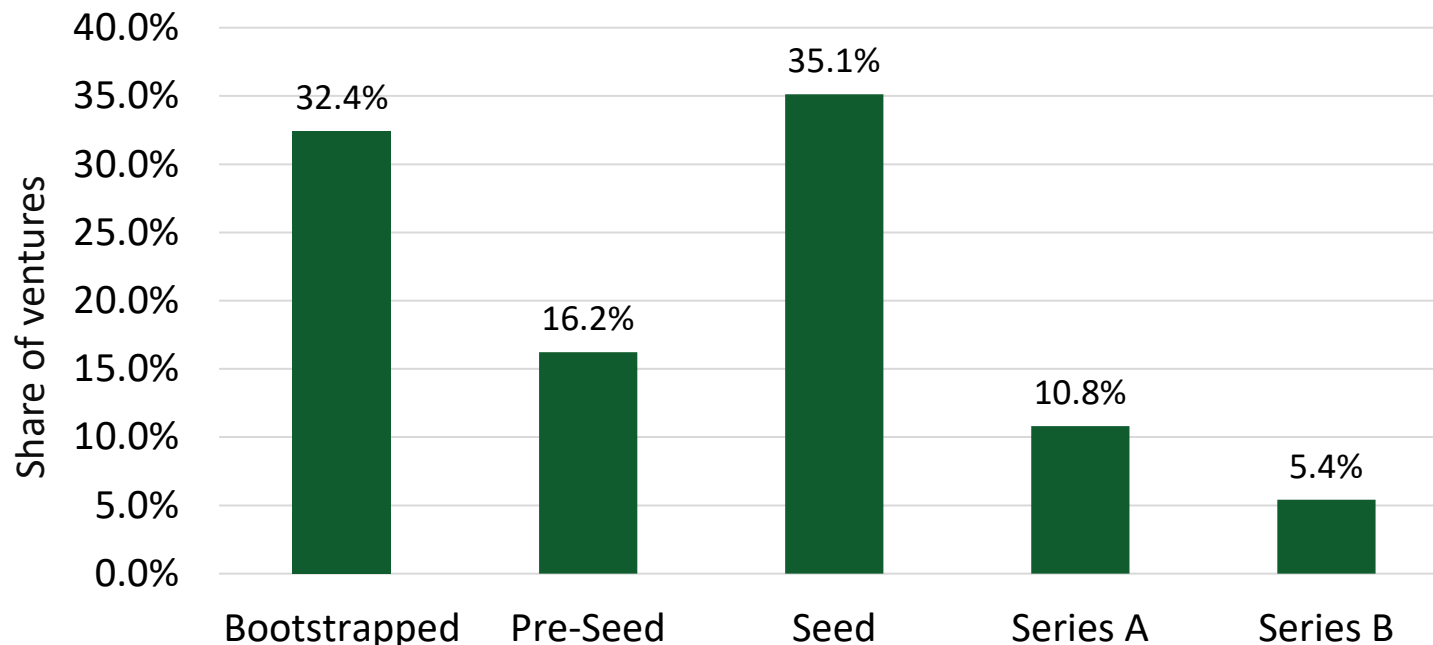
Crowdfunding/-investing (4%) play a minor role for HSG Spin-Offs, possibly due to the prevalence of less suitable business models (e.g., B2B) and the high reputational risk if the HSG Spin-Off fails to achieve its funding goal.

Figure 14: Funding Sources

Funding Rounds

HSG Spin-Offs succeed in raising growth capital from Pre-Seed throughout Series B (and further).

Two thirds of HSG Spin-Offs (67.6%) have raised capital from **venture capitalists, business angels, and family offices** in **financing rounds** ranging from **Pre-Seed, Seed, Series A, up to Series B**. The rest (32.4%) is, so far, entirely bootstrapped.



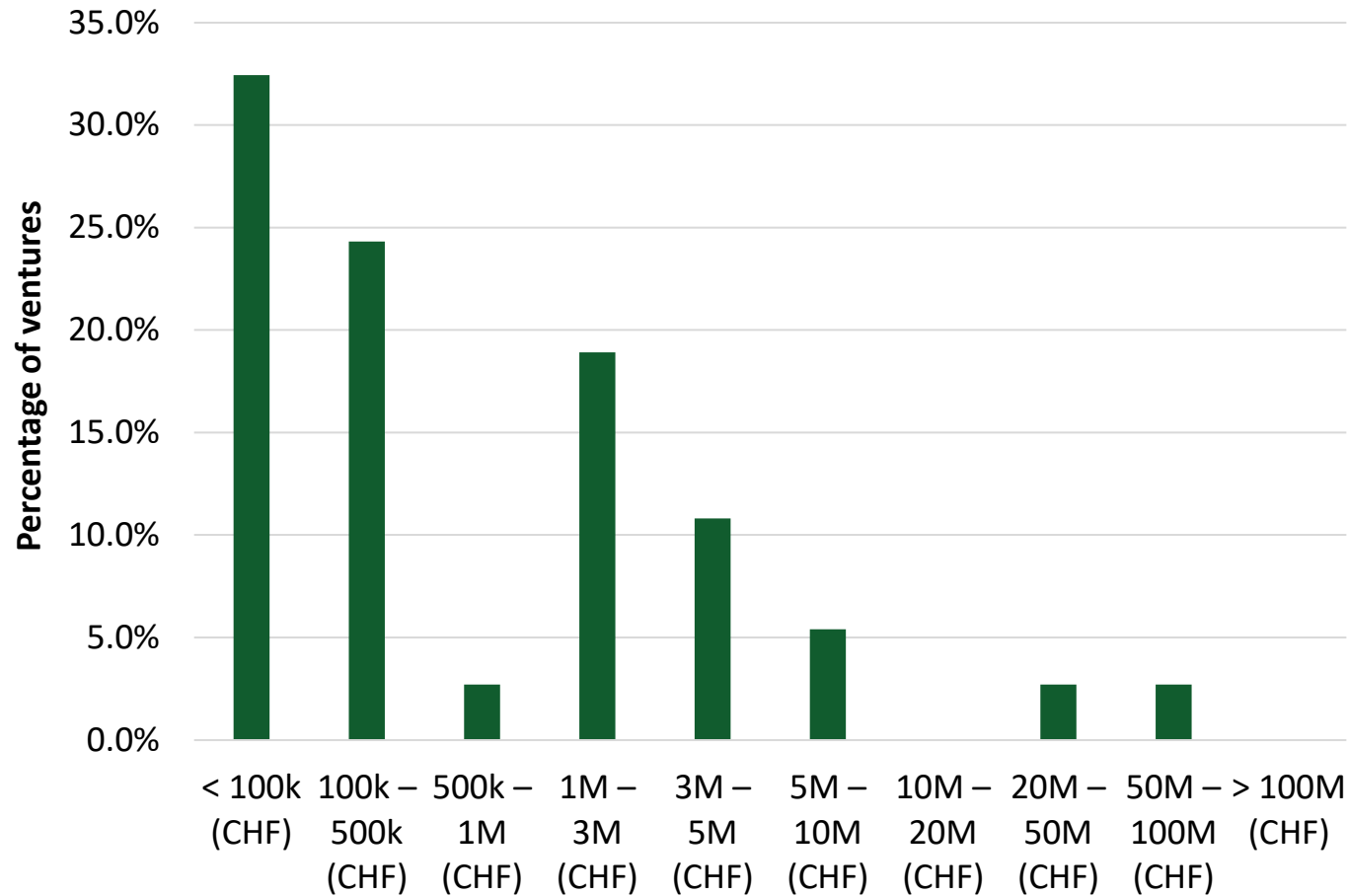
In their latest Series B funding round, Planted Foods AG raised CHF 70 million at a pre-money valuation of CHF 72 million in September 2022.

planted.

Figure 15: Highest Funding Round (Pre-Seed throughout Series B), or Bootstrapping

Funds Raised

The most exceptional HSG Spin-Offs have raised funding well above CHF 100 millions.



wefox

Wefox has raised CHF 1.14 billion
(up to series D).

planted.

Planted has raised CHF 110 million
(up to series B).

yokoy

Yokoy has raised CHF 97 million
(up to Series B).

Figure 16: Funding Raised by HSG Spin-Offs

Key Criteria for Startup Location

HSG Spin-Offs choose their location based on Founder's Life, Customers, Innovation, etc.

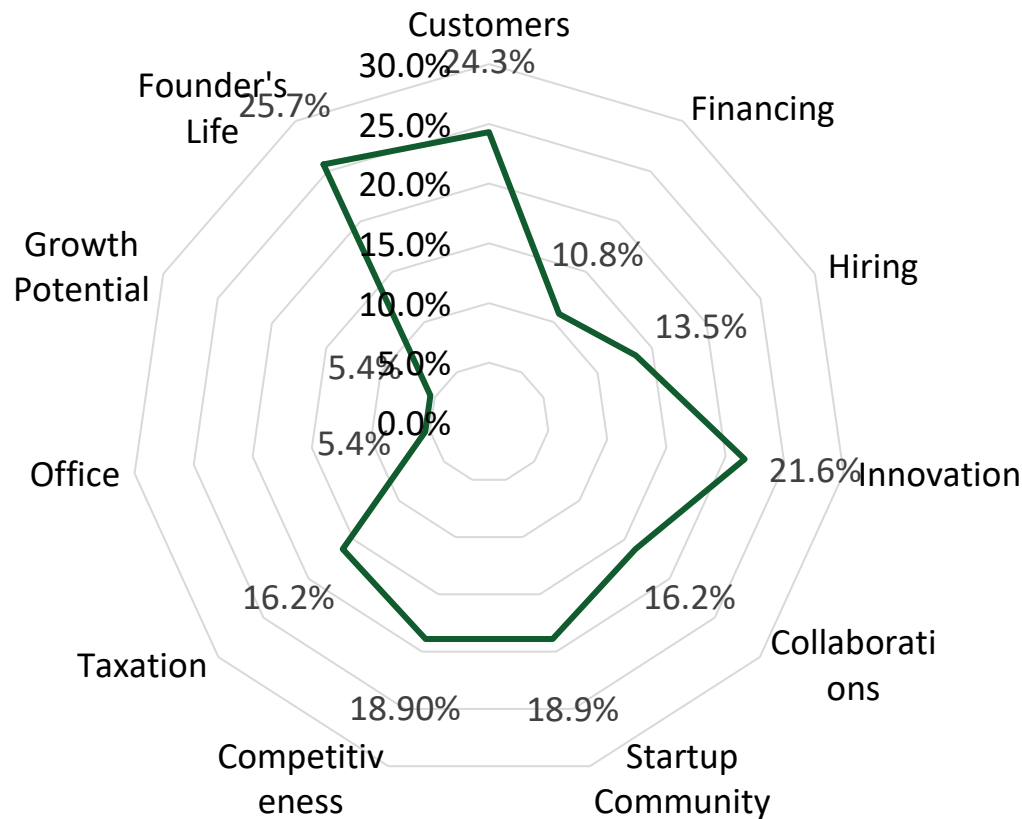


Figure 17: Key Location Criteria by HSG Spin-Offs

HSG Spin-Offs apply **two types of location criteria**:

First, HSG Spin-Offs use **broad criteria**, such as **Infrastructure** (65%) and **Political & Legal Situation** (29%). While these criteria matter greatly to HSG Spin-Offs, they fail to explain the variance in startup locations,

Second, HSG Spin-Offs use **specific criteria** that enable/enhance their business and determine the actual location:

- **Founder's Life** (26%) is the top location criterion, as founders use their identity, knowledge and network to build their startup.
- **Customers** (24%) are important to obtain feedback, enable learning, and validate the value hypothesis (i.e., product-market fit).
- HSG founders seek out locations that enhance **Innovation** (22%) where they can access makerspaces, labs, workshops, etc.
- HSG founders choose locations based on **Startup Community** (19%), **Competitiveness** (19%) and **Taxation** (16%) rather than **Hiring** (14%) and **Financing** (11%), which they consider independent from their location.

Detailed Criteria for Startup Location

HSG Spin-Offs choose locations based on infrastructure, quality of life, political & legal conditions, etc.

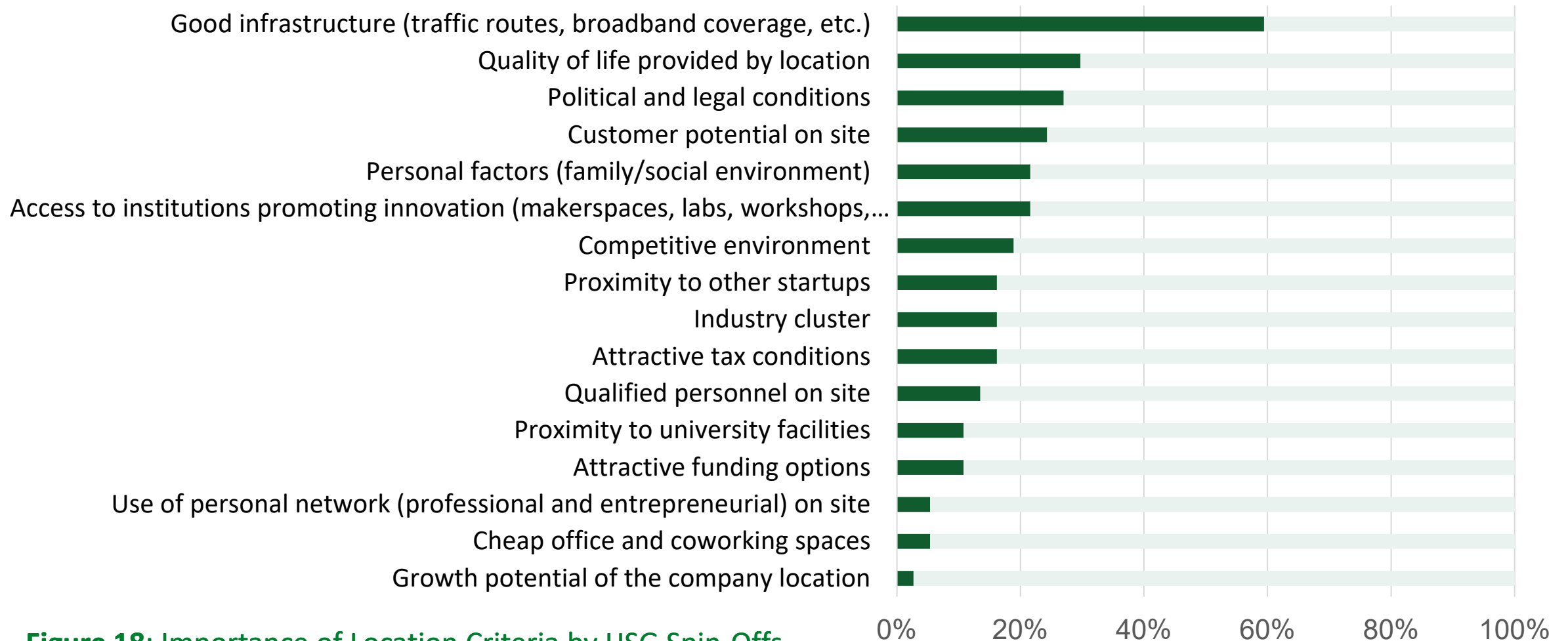


Figure 18: Importance of Location Criteria by HSG Spin-Offs

Evaluation: St.Gallen as a Startup Location

While St.Gallen (canton) has lost many HSG Spin-Offs to Zurich, it can compete on certain factors.

St.Gallen attracts and retains HSG Spin-Offs due to:

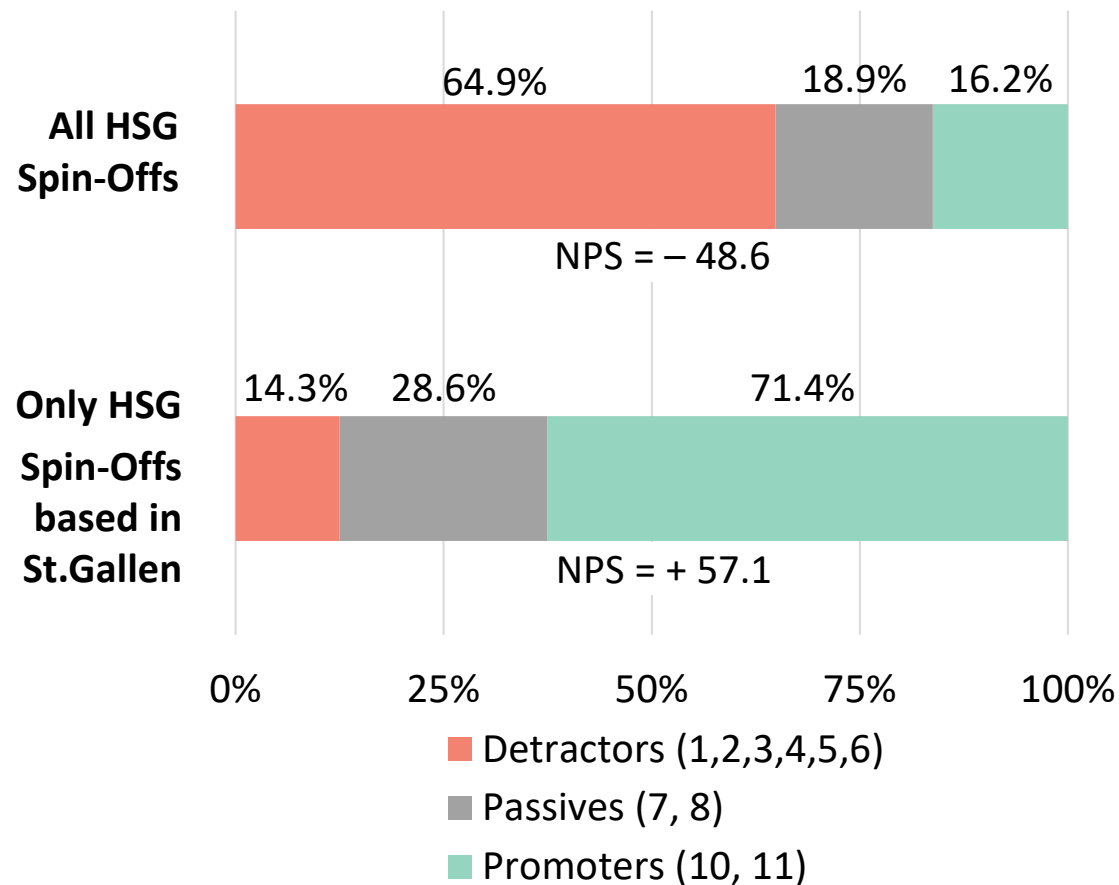
1. Excellent infrastructure (e.g., university, traffic)
2. Great quality of life (e.g., affordable rents)
3. Thriving startup community (e.g., vibrant ecosystem)
4. Innovation (e.g., access to makerspaces, labs, workshops)

St.Gallen loses HSG Spin-Offs to Zurich (and elsewhere) due to:

1. Personal factors (e.g., family/friends elsewhere, more opportunities elsewhere)
2. Unfavorable taxation (e.g., high taxes for individuals, high taxes for ESOPs)
3. Distance to industry clusters (e.g., CryptoValley, BioTech, FoodTech, DeepTech, AI&ML)
4. Difficulty to attract qualified personnel (e.g., attracting IT talents in AI/ML,)

Evaluation: Net Promoter Score of St.Gallen

St.Gallen-based Spin-Offs are much more likely to recommend St.Gallen (canton).



We asked all HSG Spin-Offs, irrespective of where they set up their headquarters, whether they would recommend St.Gallen (canton) to other founders:

- Among all HSG Spin-Offs, detractors (64.9%) by far outnumber promoters (16.2%) of St.Gallen, resulting in a negative Net Promoter Score (NPS) of -48.5.
- However, among HSG SpinOffs that are based in St.Gallen, promoters (71.4%) conversely outnumber detractors (14.3%), resulting in a positive NPS of +57.1.

To some extent, this polarization arises from self-selection bias (i.e., founders who like St.Gallen tend to set up their headquarters in St.Gallens, while others don't). Beyond this, most HSG Spin-Offs outside St.Gallen appear rather unaware of the benefits St.Gallen provides to startups/founders.

Figure 19: Net Promoter Score for St.Gallen (canton)

Evaluation: Existing Support Services

HSG Spin-Offs frequently use the services from Startup@HSG, Innosuisse and Startfeld.

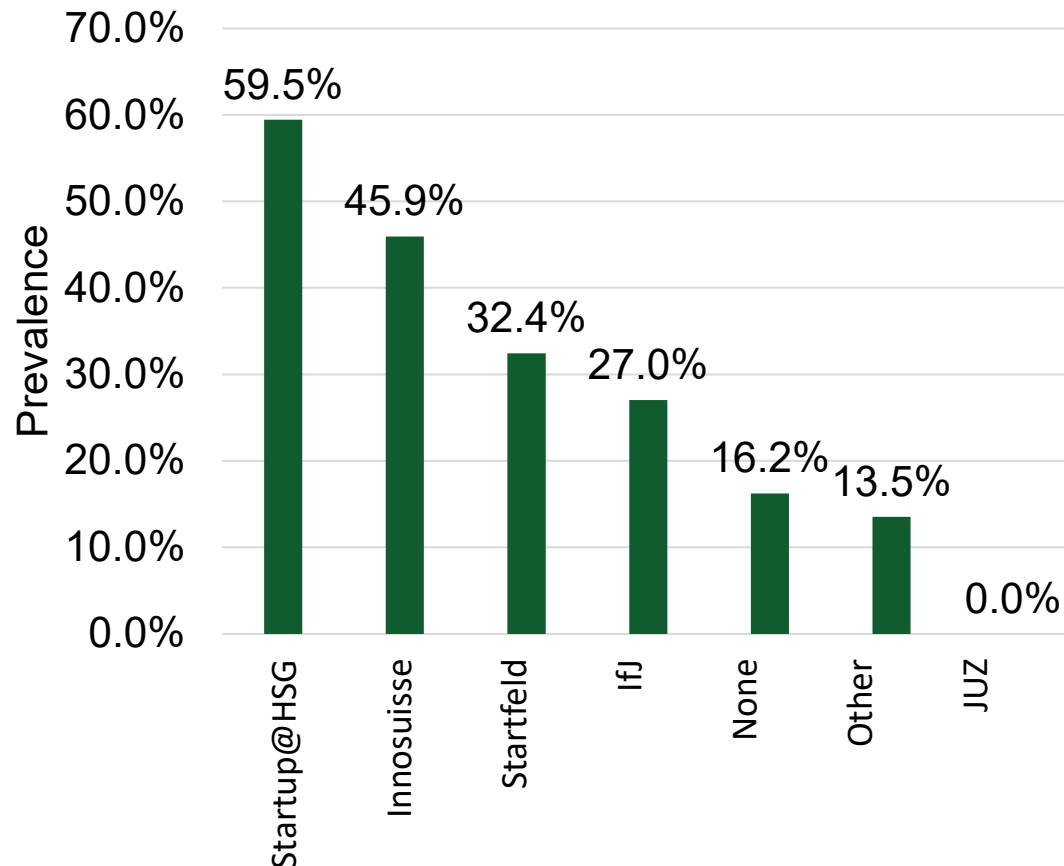


Figure 20: Most Used Support Services

HSG Spin-Offs benefit from abundant support services:

- **Startup@HSG** (60%) is the most used support services provider for HSG Spin-Offs.
- **Innosuisse** (46%) provides well-received support services to HSG Spin-Offs that complement our offerings, especially Innovation Booster, Swiss Accelerator, and Startup Coaching.
- **Startfeld** (32%) plays a major role for HSG Spin-Offs within Eastern Switzerland, esp. in SG/AI/AR.
- **IfJ** (27%) also supports HSG Spin-Offs.
- **None** (16%) - Some HSG Spin-Offs do not use any support services.
- **Other** (14%) - HSG Spin-Offs report they have received valuable support from **Venture Kick**, **Swiss EdTech Collider**, and **Technopark Luzern**.

Ideas: New Support Services & Unfulfilled Needs

HSG Spin-Offs report an unfulfilled need for further support services and measures.

HSG Spin-Offs have abundant ideas for further support:

- Network of family offices
- Targeted investor introduction program
- Directory of startup advisors and mentors
- HSG alumni network for founders with regular events
- Startup Service Desk for ad-hoc help
- Trainings for employees in startups
- Digital government
- Public founder salary



Thank you!



Stefan Gahrens

Research Associate
at the Chair of
Entrepreneurship
Institute of Technology
Management

Stefan.gahrens@unisg.ch
Dufourstrasse 40a (ZIG)
9000 St. Gallen



Diego Probst

Head of Startup@HSG
Institute of Technology
Management

Diego.probst@unisg.ch
Dufourstrasse 40a (ZIG)
9000 St. Gallen



Prof. Dietmar Grichnik

Head of the Chair of
Entrepreneurship
Institute of Technology
Management

Dietmar.grichnik@unisg.ch
Dufourstrasse 40a (ZIG)
9000 St. Gallen

For further information on HSG Spin-Offs, you can access the previous years' HSG Spin-Off Barometers and search the HSG Spin-Off database at www.startuphsg.ch or reach out to the authors.