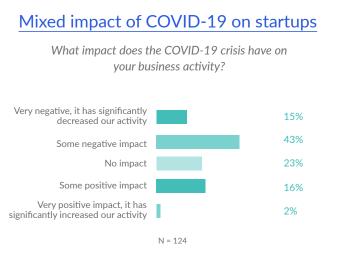
SWISS INNOVATION ENVIRONMENT & ENERGY MONITOR

COVID-19 and beyond Results of the 2021 survey amongst Swiss energy and environment startups

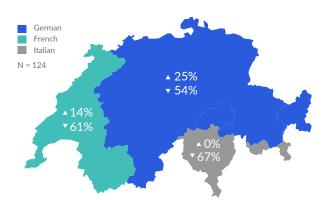
In May 2021, 126 Swiss energy and environment startups answered a survey about their experiences during the COVID-19 crisis, their work organization and internationalization. This Sheet summarizes the results to highlight the current situation in this specific startup ecosystem.

1/5 - COVID-19 Impact on Startups I



About a quarter of the startups experienced no impact from the crisis, while more than half experienced some negative impact, and the remainder did gain some positive benefit for their business.

Positive & negative impacts of COVID-19 differ by language-region

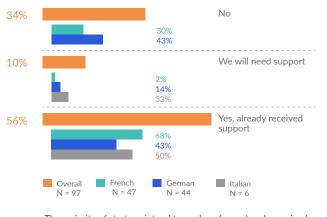


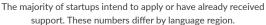
The map shows what percent of startups experienced positive effects (arrow up) and negative effects (arrow down). The option "No impact" does not differ much per region and is not shown.

Support

Two-thirds have need for COVID-19 support

In order to survive the COVID-19 crisis, have you received or applied for support, or think that you will need support in the near future?

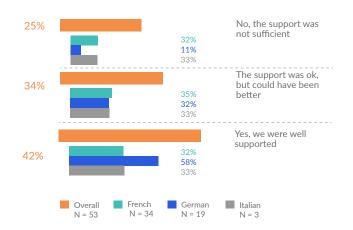






For almost 80% the support was sufficient.

Were the received support measures sufficient for your startup?



Not all startups felt sufficiently supported to manage the crisis. While in the German speaking part of Switzerland almost 60% of the startups felt well supported this was only the case for about 30% in the rest of Switzerland.

Analysis based on a survey amongst 126 startups from the innovation-monitor database carried out in May 2021. The startups were founded between 2001 and 2021. The Swiss energy and environment monitor database contains 740 companies and is maintained by the Institute of Innovation and Entrepreneurship at the ZHAW and eqlosion.

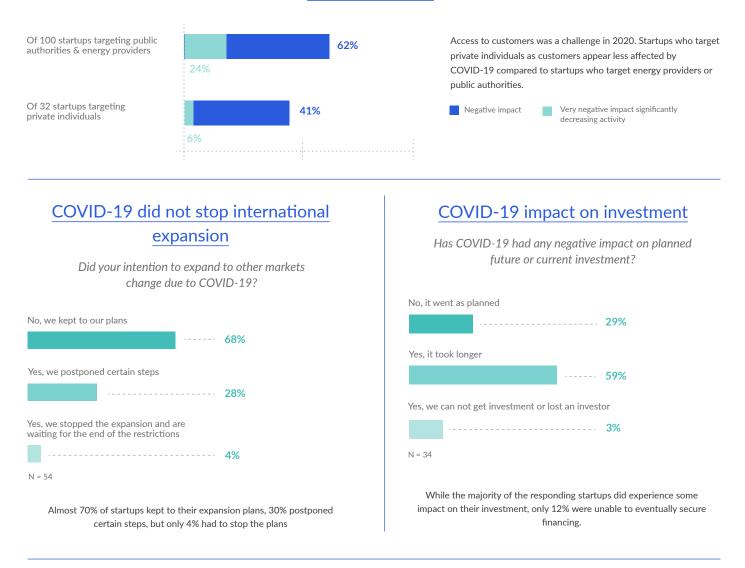


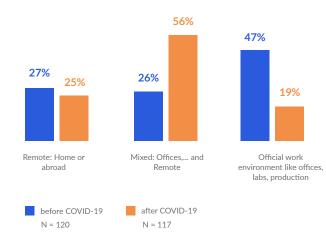


2/5 -COVID-19 Impact on Startups II

Startups experienced challenges accessing different

customer groups





COVID-19 changed the work organisation of the startups

Before the crisis almost 50% of startups worked mainly in offices, labs or production sites, compared to 27% which worked mainly remote.

During the crisis (not displayed in graph), this changed significantly for the almost 90 startups that use offices, labs or production cites 27% kept working as before, while 56% work a lot more online, but still use the former locations and only 14% switched to remote work only.

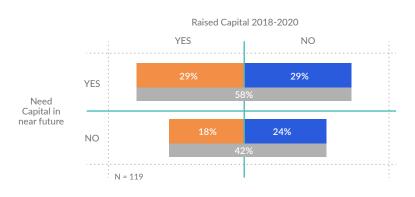
After the COVID-19 crisis only 19% of startups plan to work mainly at their official work environment, while over 50% want to be more flexible and work together in different forms. The number that will work only remotely stayed quite constant at about 1/4 of the startups.

We also asked the startups whether they use co-working spaces, which about 16% do (not displayed in graph).

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3/5 - Financial situation of Startups

Need of capital versus success in raising it



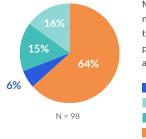
Half the startups raised over 1 M CHF between 2018-2020

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10M+ CHF	L	6% 10%	survey 2021 (2018-2020) N = 50
5M - 10M CHF		10% 6%	survey 2020 (2017-2019)
3M - 5M CHF		6% 6%	N = 51
1M - 3M CHF		27% 14%	
500K - 1M CHF		14% 10%	
100K - 500K CHF		29% 28%	
50K - 100K CHF		6% 14%	
Less than 50K CHF	L	2% 12%	

In last years survey more startups stated to raise small investments under 100k CHF, while this year almost 50% of startups said that they were able to raise over 1M CHF in the last three years. Alltogether the total investment in the asked startups is estimated to be over 100M CHF.

Most startups are not profitable



Most startups are not profitable, yet. These numbers have risen only very slightly in the last three years, so no visible COVID-19 effect on profitability. Only 6 startups stated that they are no longer profitable.

We were, but are not any more Yes, already for a while Yes, recently (~ 1 year) No 58% of startups need capital in the near future and 42% don't. Of both fraction about half have been able to secure funding in the last three years. So almost 30% of startups have problems to find funding, whereas 24% don't even need it. Of the startups that don't need funding and have not raised money recently (NO/NO) almost 70% are profitable.

We also asked startups in which years they raised capital (not displayed in graph). Of the 56 startup that raised capital, 20% have even been able to raise money in all three past years. Further 30% raised in two out of three years.

Most startups have a low turnover

What was your approximate turnover (sales) in 2020?



Most startups have a turnover of less than CHF 500k. One-third are even below 50k CHF. The share of profitable startups increases with higher turnover.

Comparing financial needs in the last years shows a similar picture





When comparing the fiancial need to reach the next phase of development in the 2019, 2020 and 2021 surveys, we find that the need is relatively constant apart from an outlier value in 2020 and a slight increase in the need of investment above 1M CHF.

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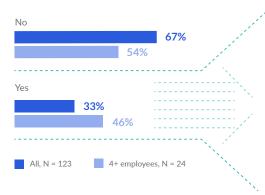
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4/5 -Business development, organization & internationalization

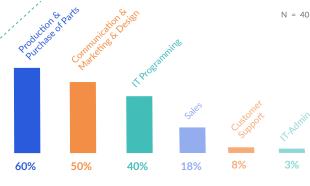
One-third have business operation outside of Switzerland

Are parts of your business operation located outside of Switzerland? (e.g. production in China, call center in India, sales in Germany or programming in Ukraine)





Which parts of your value chain / activities are located outside of Switzerland?



As expected, production and procurement of parts occurs outside of Switzerland. However a surprising amount of marketing and design is also from other countries.

Most startups tap into foreign markets

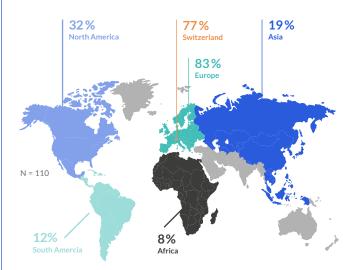
Considering your growth towards internationalisation, where is your company currently in terms of selling your products in markets outside of Switzerland?



While most startups have their value chain within Switzerland, they are still looking outwards to sell their products. 60% are already involved in international markets and 30% want to in the future. Only 10% will stay focused on the Swiss market.

Most startups focus on Europe

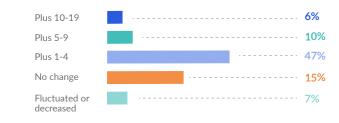
Which geographical regions are your target markets in the next three years?



While most of the startups focus on Switzerland and Europe equally, North America is the next largest focus.

How did your team size change in the last three years considering the status at the end of 2020? (increase / decrease in number of employees in Switzerland)

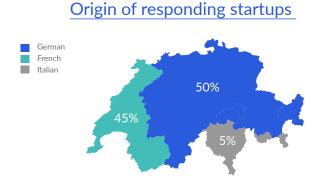




Half of the startups grew slightly (plus 1-4 employees) in the last years and only 5% by more than 10 people. While almost a third did not grow, 7% had problems and even had to reduce their workforce.

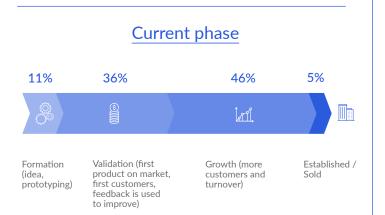
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5/5 - Characteristics of the startups that participated N = 126



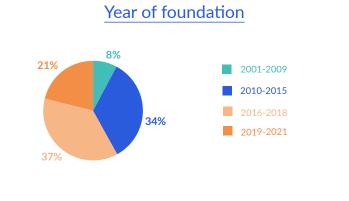
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Of the 639 invited startups 126 responded via CEO or founder. We were able to attract about the same number of startups from German-speaking Switzerland as from French-speaking Switzerland. Unfortunately, few start-ups from Ticino participated, which is why the numbers for the Italian speaking part of Switzerland must be interpreted with caution.

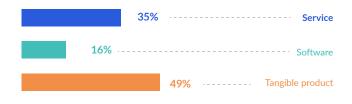


Area of activity

Energy usage, efficiency & prosumption	 27%
Energy production, distribution & storage	 21%
Food, farming or forestry	 10%
Natural resources, material efficiency or recycling	 <mark>9</mark> %
Transport & mobility	 8%
Finance, insurance, IT or data amalysis	 7%
Industrial process & manufacture (technology)	 <mark>6%</mark>
Construction & buildings	 4%
Environment, sustainability, climate & hazard prevention	 5%
Other	 5%







About half the startups have a tangible product, like a drone, solar panel or a sensor. About 16% focus mainly on software development, while 35% sell services which certainly often also requires software.

Number of employees



Most startups are very small, half have less than 4 employees.

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