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Swiss International Entrepreneurship Survey

Internationalization behavior of Swiss SMEs



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Preface

In the last few years, especially in countries with a small domestic market, the internationalization of SMEs has acquired an enhanced politico-economic dimension and has been noticed in the media. Expansion abroad is seen as a basic strategic option for SMEs in order to obtain competitive advantage. However, because the SME landscape is so heterogeneous and its internationalization behavior so varied, it is difficult to measure success or to identify success factors. To enable SME decision-makers to exert a more targeted influence on their internationalization behavior and thus obtain more efficient and effective support from authorized representatives of public and private internationalization support organizations, the current conditions must first of all be examined from a different perspective.

The current situation in the global economy, together with further upward revaluation of the Swiss Franc, is increasingly becoming a huge challenge for companies involved in export, in particular for small firms.

A weighty advantage for Swiss firms is that, thanks to the strong Swiss Franc, raw materials and semi-finished goods can be imported comparatively cost-effectively and inflation in many countries is higher than in Switzerland. So, it is not surprising that Swiss industrial firms use "natural hedging", i.e. they try to produce where their customers are located, in order to harmonize income and costs in terms of currency.

Differentiation in the types of internationalization is important in order to generate further awareness of international behavior. For example, young, globally-active Swiss companies are major innovation drivers and developers offering interesting employment to a highly qualified workforce. Or medium-sized companies, which are present on international markets as established suppliers are successful in more traditional sectors. Alternatively, SMEs are successfully expanding their international reach and are tapping into new markets by continually innovating.

Like the global corporations, all these medium-sized enterprises form part of the spectrum of internationally active companies.

On the other hand, the attitudes and views of the entrepreneurs with regard to internationalization are interesting and could provide insightful indications as to which framework conditions need to be created in the future, in order to increase success on foreign markets.

This report is based on a comprehensive survey on internationalization among Swiss SMEs. Following initial studies in 2007, 2010, 2013, 2016 and 2019, this investigation provides information for the sixth time regarding the facts on "International Entrepreneurship" in Switzerland in conjunction with insights into the entrepreneurial visions in small and medium-sized enterprises. On the one hand, Switzerland's entrepreneurial potential is certainly optimistic, while on the other, this study shows clearly that improvements are needed at various levels, for

instance, in order to provide companies with better support in their internationalization endeavors. The study focuses on the entrepreneur and their management team because internationalization can only be achieved effectively and efficiently with a top management team.

We hope that as many SMEs, managers, professors and internationalization support teams as possible discover ideas, impetus and stimuli to strengthen the ability of Swiss SMEs to compete on the world market on the basis of innovations and entrepreneurial spirit.

Prof. Rico Baldegger

Executive Summary

This study investigates the status of internationalization behavior in Swiss SMEs and identifies new trends. By means of two databases from HEG–FR, based on previous SIES studies, and addresses from Dun & Bradstreet, a multilingual questionnaire was sent to decision-makers at SMEs engaged in export activities. Thanks to the considerable interest in the topic, a large number of companies have waived anonymity.

Central to the study is the entrepreneur who has a global vision and who knows that various characteristics from each of the members of the management team are needed at each stage of the company life cycle. This is why it is indispensable to identify in good time which skills are needed for the current situation, in order to act appropriately and to acquire any skills that may be lacking. There is no doubt that the key to successful internationalization is the entrepreneur and the management team. The international experience of the entrepreneur or the team is of vital importance. This study demonstrates yet again the well-known influence of international experience; it is strongly recommended that a management team with international experience be put together for any planned venture across borders.

The importance of international experience can hardly be overestimated and influences not only the speed of internationalization, but also overwhelmingly its success.

The study illustrates the relevance of adequate preparation for the internationalization process and of a strategy based on company competences. From the example of other companies, which pursue the path of positioning themselves as innovators in the international value chain, decision-makers can see how they are able to capture or defend competitive advantages on foreign markets. The results suggest that entrepreneurs and SME managers invest less in tangible assets than in sectors, which can immediately generate competitive advantages. In addition to research and development, this includes, for example, employees' creativity and skill in focusing on and working towards solutions. The practical examples show the diversity of internationalization methods used by SMEs and make it clear to the managers that successful internationalization does not necessarily culminate in the export of certain market services, but that internationalization can similarly be achieved through occupying a specific position in the global value chain.

Key Learnings

1 The wide variety in internationalization

There is a marked variation in the degree of internationalization from strongly global SMEs to slightly international SMEs. The strongly global SMEs are active in more than 7 regions in the world with two or three different market strategies and are more proactive, with an appetite for innovation and risk-taking in their strategy of markedly entrepreneurial orientation.

2 Diversity in market development strategies and preference for a "multi-channel strategy"

Export and direct investment are the best ways to assess market development methods. The more diverse the market cultivation strategies applied by the SMEs, the more satisfied the SMEs are overall with the strategies they have applied.

3 Current focus: Western and Southern Europe and North America

Internationalized Swiss SMEs are on average active in 11.2 countries outside Switzerland. Overseas markets for Swiss SMEs are most frequently located in the countries of Western and Southern Europe, followed by North America. Together with Eastern Asia (including China, South Korea and Japan) and the Middle East, Eastern Europe lies in the middle range.

4 Future investment in North America and South-east Asia

Decision-makers in the SMEs are planning to expand activities in North America and South-east Asia in particular in the next 3 years. However, the market in Western and Southern Europe will not be neglected and China is constantly in their sights.

5 Micro-enterprises are less digitized and plan activities abroad more carefully

On average micro-enterprises earn 13.3% of their total turnover on foreign markets and are significantly less well digitized than the larger SMEs. Micro-enterprises are clearly planning the expansion of their foreign business for the next 3 years more carefully and show a deeper average entrepreneurial orientation with respect to aggression towards competitors, innovative strength, and proactive market behavior.

6 Export support: networks - Trade Fairs

The expansion and maintenance of networks and specific, customized information processing and market analyses are in demand. Presence at trade fairs is still the alpha and omega of foreign trade for many SMEs. Expansion of the digital offer from the Confederation and the official export service providers is not sought. Services, which are of use for the introduction and maintenance of international networks are of interest, in order to achieve firm, efficient cooperation between the various actors.

7 The degree of digitization depends on the entrepreneur and the management team

The overall degree of digitization for a Swiss SME entering the international market is not significantly linked to the size of the SME, the age of the firm, or its degree of internationalization (i.e. its distribution over various countries and regions in the world). It is more likely that the degree to which certain firms are digitalized can be traced to the respective senior management's attitude to the topic of digital transformation.

8 e-commerce has gained significant importance as a market development strategy

On average the international micro-enterprises use e-commerce somewhat more often than small and medium-sized enterprises; however, the latter assess the success of this sales channel as significantly higher. Micro-enterprises see their e-commerce business as less successful, even in comparison with direct export. In small and medium-sized enterprises, e-commerce sits on a par with export as one of the most popular and most successful sales tools on the foreign markets.

Background and Aims of the Study

This report is based on two large-scale surveys, conducted in mid-2022 and 2023. In an initial step, export-oriented SMEs, which have already participated in previous SIES (Swiss International Entrepreneurship Survey) studies, were contacted in writing. This was supplemented by a mailing by Economiesuisse to its sub-associations in cooperation with the State Secretariat for Economic Affairs (SECO). In a second step, Dun & Bradstreet Schweiz identified SMEs involved in internationalization from a sample of more than 100,000 Swiss companies and contacted them by mail. This random sample represents a significant cross-section of internationally active SMEs with experience on foreign markets. The study therefore included 476 export-oriented Swiss SMEs.

The study investigated the status of the internationalization behavior of Swiss SMEs and pointed out trends. The aim of this study is to investigate in detail the internationalization behavior of small and medium-sized Swiss enterprises already operating abroad, in order to obtain information on the internationalization process and on the factors influencing successful internationalization.

The study concentrated specifically on the following sub-targets:

- Snapshots of the international orientation of SMEs operating internationally
- Survey on the planned changes in the SMEs' international orientation: from which regions in the world are they likely to withdraw, where are they planning to expand, and where are they more likely to try to keep their operating business up and running as well as possible?
- Identification of the export industry's most relevant concerns or requirements from the Confederation's Export Promotion Department.
- Investigation of market cultivation strategies including e-commerce and measurement of their success.
- Generation of increased awareness of digitization and entrepreneurial orientations in the export industry.

In addition, specific change in the degree of digitization in these companies was measured. A slight increase since 2019 in the degree of digitization was recorded; this can be traced in particular to a stronger involvement of the customer in the business process. In addition, the data on entrepreneurial orientation (EO) collected on the companies show that this contributes to a significant extent to international orientation (measured on pro rata foreign turnover) and the growth of the company (measured on the number of full-time employees). Together with the degree of digitization, entrepreneurial orientation was identified as a significant predictor of corporate success.

SECTION 1

International orientation of the companies

Swiss SMEs throughout the world

Swiss SMEs involved in internationalization are on average active in 11.2 countries outside Switzerland, although the range in the number of countries varies greatly. Around half of the international SMEs surveyed are active in only 1 - 5 countries. The other half, however, are active in up to 60-70 countries. An average of 3.5 of the number of regions in the world show variation. One-half (56.1%) is active on the foreign markets either in one (43.9%) or in two (12.1%) regions of the world; the other half (43.9%) trade on the foreign markets in between 4 and 14 regions of the world. This average has hardly altered since we began taking our measurements over 15 years ago.

The most common foreign markets for Swiss SMEs are in Western and Southern Europe, followed by North America. Eastern Europe, together with East Asia (including China, South Korea and Japan) and the Middle East, lie in the mid-range. Countries in South Asia, Latin America and Australia/Oceania and similarly the whole continent of Africa, are less frequently served by Swiss SMEs.

It is not only in the number of countries traded with, but also in the separate regions, that practically no changes have been perceived in the last 15 years. If we look only at the business activity per continent, as did the studies from 2007 to 2013, America (mainly through North America) is still more important for Swiss SMEs than Asia. On the other hand, the whole continent of Asia includes the very diverse regions of the Middle East up to China and North-east Asia, in which respectively approximately one fifth of all international SMEs are active. In 2009, in other words, almost 15 years ago, in Oceania also (mainly New Zealand and Australia) the rate of active SMEs was 21%, almost the same number as today. Since 2016 the SMES have been questioned more precisely on their business activity in the different regions of the world. Even then, North America, was just behind Western Europe at around 35% and around one fifth of SMEs involved in international trade were already active in China and/or South-east Asia (ASEAN). Only the region around Russia and Central Asia has become less significant for Swiss SMEs due to the war in Ukraine.

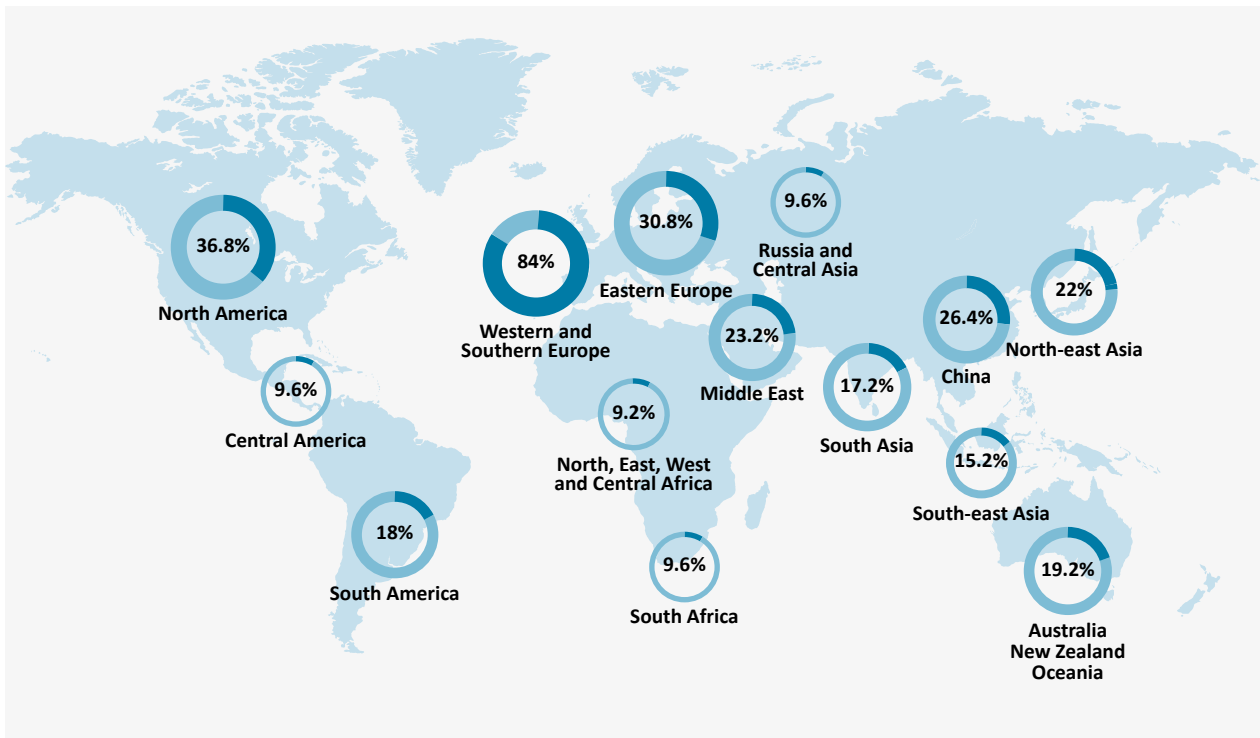


Figure 1: Presence of Swiss SMEs in the separate regions of the world (export, e-commerce, agents/partners and FDI)

Figure 1 shows the 14 regions of the world and their relative importance for Swiss SMEs involved in internationalization. The percentage rate stands for the relative number of Swiss SMEs involved in internationalization, which trade with these regions of the world with one or more methods such as export, e-commerce, commercial agent or direct investment (FDI). The length of the dark blue bar and the thickness of the circle accordingly reflect this percentage. Western and Southern Europe has the highest figures, not only in terms of presence, but also in terms of the proportion of turnover generated in the sales markets of the individual regions of the world. For many of the SMEs active there, these markets contribute significantly to their overall turnover: 28% of the SMEs surveyed indicate that they earn more than one half of their turnover in Western and Southern Europe.

In all the other regions of the world, even in Eastern Europe and North America, not even 10% of the SMEs active there earn a significant part of their turnover from these markets. Thus, the markets outside Western Europe are indeed significant for most SMEs, but more in the sense of a geographical differentiation strategy, for strategic positioning against major stakeholders, or to develop future growth markets. In the rarest cases, they represent the major source of income for Swiss SMEs.

International or global orientation?

The orientation of Swiss SMEs towards their foreign markets can vary to a marked degree. Some companies restrict themselves to export activities across the national borders into neighboring countries, whereas other companies extend their foreign business over several continents. By means of specific values, a cluster analysis identified the SMEs surveyed and differentiated them one from another with respect to the geographical distribution of their foreign business.

This resulted in the formation of two groups, the slightly internationalized SMEs, which are active in from one to a maximum of five countries and in from one to two regions of the world and the strongly global SMEs, which are active in more than 10 countries and in a minimum of four regions of the world. Around 44% of our random sample comprises slightly internationalized SMEs, while 27% of the SMEs surveyed belong to the strongly internationalized SME category.

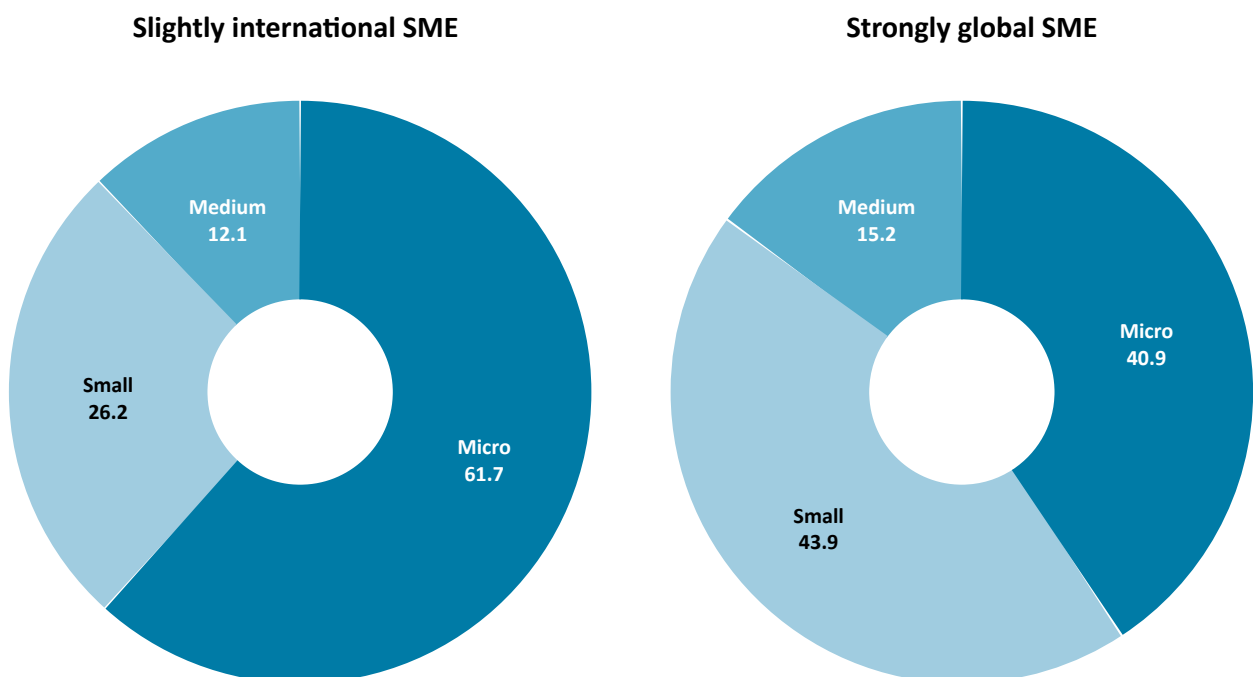


Figure 2: Distribution of SME by size within the two types of internationalization

As in Figure 2, both micro-enterprises with fewer than 10 employees and also small and medium-sized companies with between 10 and 49, to 50 and 249 employees, are shown. In contrast to the micro-enterprises, the slightly larger small companies are represented somewhat more frequently among the strongly global SMEs. However, if you look at the strongly global orientation of more than 10 countries in four and more regions of the world, the relatively large number of 40.9% of micro-enterprises is nevertheless to be observed in this sample.

On average, the strongly global SMEs transact their foreign business in 7.76 regions of the world, using two to three different methods, such as export, e-commerce, business partners and direct investment. While the two clusters do not differ materially one from the other with respect to their degree of digitization and the perceived industrial dynamics, conversely a difference with respect to their corporate behavior and the resulting relative performance can be observed.

As was clarified in Figure 3, the strongly global SMEs are clearly more proactive and have a greater appetite for innovation and risk in their strategic orientation measured by the "Entrepreneurial Orientation" concept. Measured by their respectively strongest competitors, the strongly global SMEs reported to us a stronger relative performance on average (4.71 on a scale of 1 to 5) than those SMEs involved only slightly in international activities (4.5 on the same scale).

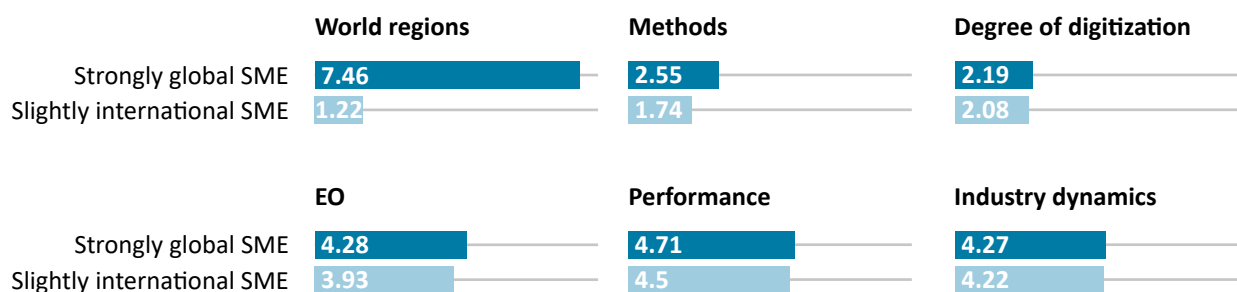


Figure 3: Comparison of diverse variables for both types of internationalization

Together with the geographical distribution of foreign markets and the increasing number of foreign markets, the proportion of total turnover earned abroad is also increasing. As in Figure 4 below, it can be seen that slightly less than ¼ of

the total turnover of strongly global SMEs on average is achieved abroad (74.08%), whereas this key figure is reduced to around one quarter (25.13%) for the SMEs with business activities in 1 to 5 foreign markets.



Figure 4: Foreign turnover in % of the total turnover for both types of internationalization

Together with a clearly higher foreign turnover, the material difference between the two clusters consists of the fact that the strongly global SMEs start the internationalization process significantly earlier. On average they do so less than 4 years after the incorporation of the company (3.96), whereas the slightly international SMEs take twice as long, namely 7.68 years, until their initial expansion into foreign markets. Figure 5 also shows that the global SMEs not only use more methods (2.55 methods according to Figure 3), but they also report higher success on average in their implementation. If we now look at both groups' expansion plans for the next three years, it becomes clear that, on the

scale of 1 to 16 calculated by us, the strongly global SMEs intend in the next few years to develop their international orientation to a clearly stronger extent than the slightly international SMEs. The point of departure for this issue was the regions of the world already with trading relations and the question of any planned cutbacks, restructuring or expansion of the business activities within the next three years in the respective regions. On average, the strongly global SMEs achieve a value of 4.84, while this figure reaches only 1.08 for the slightly international SMEs. Accordingly, a clearly more negative scenario for the future with respect to their internationalization becomes visible.

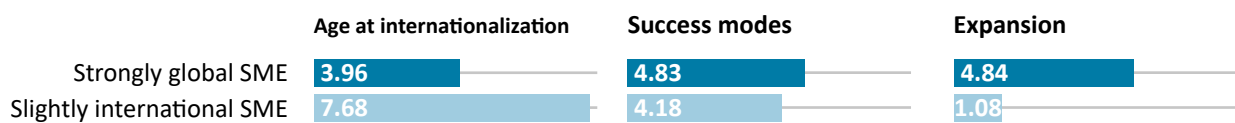


Figure 5: Comparison of the age on internationalization, the success of the methods and the expansion plans of both types of internationalization

Micro-enterprises with global orientation

It is worth noting the many micro-enterprises with fewer than 10 employees, which are strongly international or even globally active. Just under half of all the micro-enterprises surveyed, that is, companies with a company size of fewer than 10 employees, are active in more than 10 countries and more than 3 regions of the world in spite of their small size. These micro-enterprises focus on their skills and frequently outsource a major part of the activities in their value creation process to partner firms.

In the last few years there has been a marked increase in the registration of such firms. At present, in the current survey a good third (35.7%) of the sample of all the micro-enterprises surveyed comprise such global players. Just under half of these global micro-enterprises were founded only in the last 15 years. They are either in trade, the manufacturing sector, in ICT or provide consultancy services and on average make a turnover of between 1 and CHF 5 million.

	"Global" micro-SME	Total micro-SME	Total SME
<i>Definition</i>	<i>1-9 employees 10+ countries 3+ world regions</i>	<i>1-9 employees</i>	<i>1-249 employees</i>
Mean values:			
Employees	3.93	3.83	22.40
Countries	23.00	8.96	11.12
World regions (min. 1 – max. 17)	7.25	3.21	3.46
Number of methods (export, e-commerce, partner, FDI, min. 1 – max. 4)	2.41	2.04	2.14
Relative performance (min. 1 – max. 5)	4.55	4.47	4.62
Foreign turnover in %	73.80	43.32	45.35
Degree of digitization (min. 1 – max. 4)	2.00	1.93	2.10
Entrepreneurial orientation (min. 1 – max. 7)	3.88	3.85	4.14
Planned expansion (min. 1 – max. 16)	3.42	1.80	2.52

Table 1: Global SMEs in comparison with micro-SMEs and all SMEs in the random sample

There is scarcely any difference between these companies and the other micro-enterprises with respect to their strategic orientation towards behavior, which is as entrepreneurial as possible, and their degree of digitization. However, these companies take the initial step into the foreign markets significantly earlier. In fact, this happens on average a mere 2 years after the incorporation of the company, whereas for the average micro-enterprise, this step takes more than twice as long, namely almost 5 years. In view of the already marked international orientation of these firms, it is not surprising that they also intend to expand their future international business significantly more robustly.

Future foreign expansion: expansion or reduction?

As has already been seen in the previous chapter, as well as taking stock of the foreign markets in which they are currently active, the SMEs surveyed were also asked about their intentions concerning expansion or reduction of their business activity. For this, the managing directors had to state whether they were looking at reduction or expansion of the activity in the respective regions of the world or whether they intended to allow the activity to continue at a constant level. In addition, we gave them the opportunity to tell us about any possible intentions for restructuring, which would result in neither expansion nor in reduction.

Most expansion in business activities is planned in North America, South-east Asia and the Middle East¹. In the case of the latter, however, some SMEs are also engaged in significantly reducing their business activities; thus, the mean value there is not quite so high as in North America and South-east Asia. Also, more than half of the SMEs have planned lesser or greater expansion for the coming three years in the heavily traded Western and Southern European market. In the markets in China and North-east Asia and also in Latin America and Oceania most SMEs active there are concerned about maintaining their business activities and currently have no plans to expand their activities further in these markets.

¹By virtue of the timing of the study, the expansion plans in the Middle East should be regarded with caution. The current war in the Middle East will most certainly influence the perspectives for expansion plans.

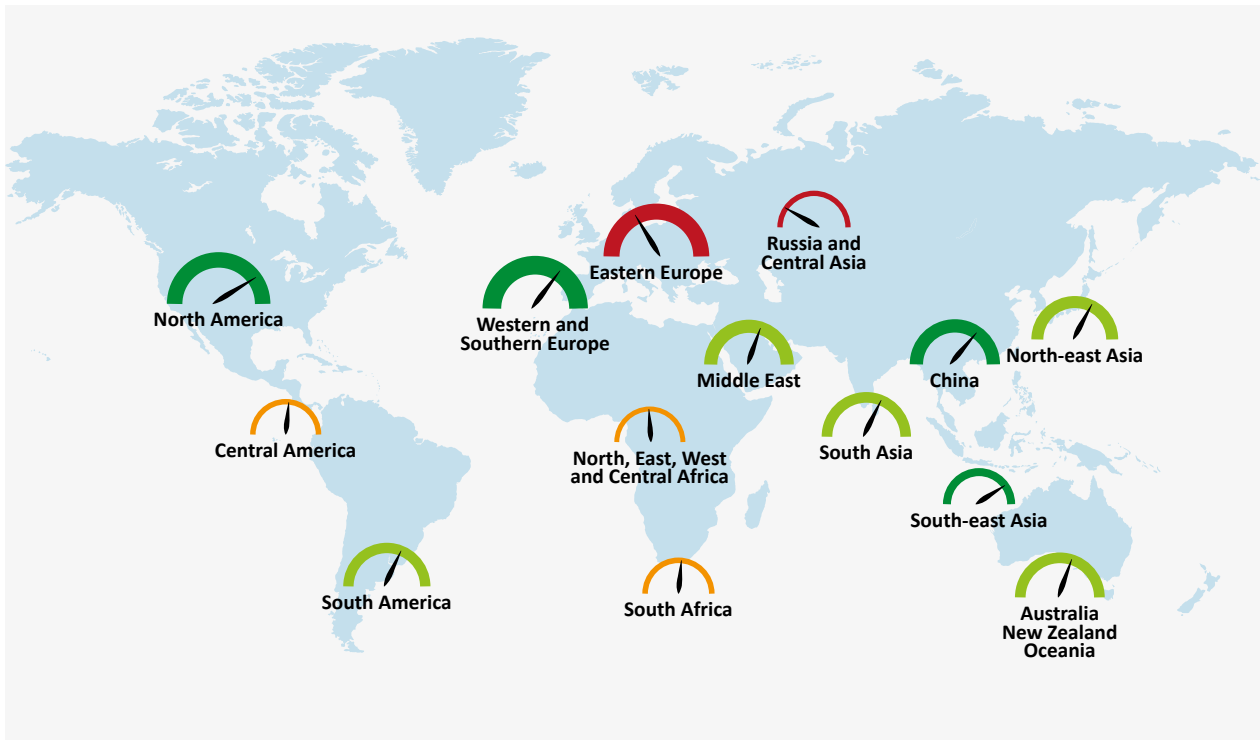


Figure 6: Changes planned by SMEs in the next 3 years in the individual regions of the world

Currently, it is not only Russia and Central Asia which are currently affected by withdrawal processes by the Swiss SMEs active there, but also the entire area of Eastern Europe.

Slightly fewer than 17% of the SMEs active there are planning either to reduce their presence in the countries of Eastern Europe or even to withdraw from this market completely.

SECTION 2

**Implementing
internationalization**

Market development strategies

One in every three internationally active SMEs restricts its trade on international markets to exports and e-commerce. These SMEs are, however, on average active in very few countries and are seldom active in more than two to three regions of the world. However, the basic tendency is: the more strongly internationalized an SME, the more market cultivation strategies it has to bear in mind.

Different regions of the world require different entry strategies. Geographical distances, which need to be overcome with good logistics, are just

as decisive here as the respective institutional rules and framework conditions for foreign firms in the target market. Whereas Australia and New Zealand, which are geographically distant, but culturally similar, are developed to more than 60% with export and e-commerce, the very challenging markets in China and North-east Asia (Japan, South Korea, etc.) frequently require SMEs to make direct investment (FDI) in branch offices or joint ventures or at least to involve commercial agents.

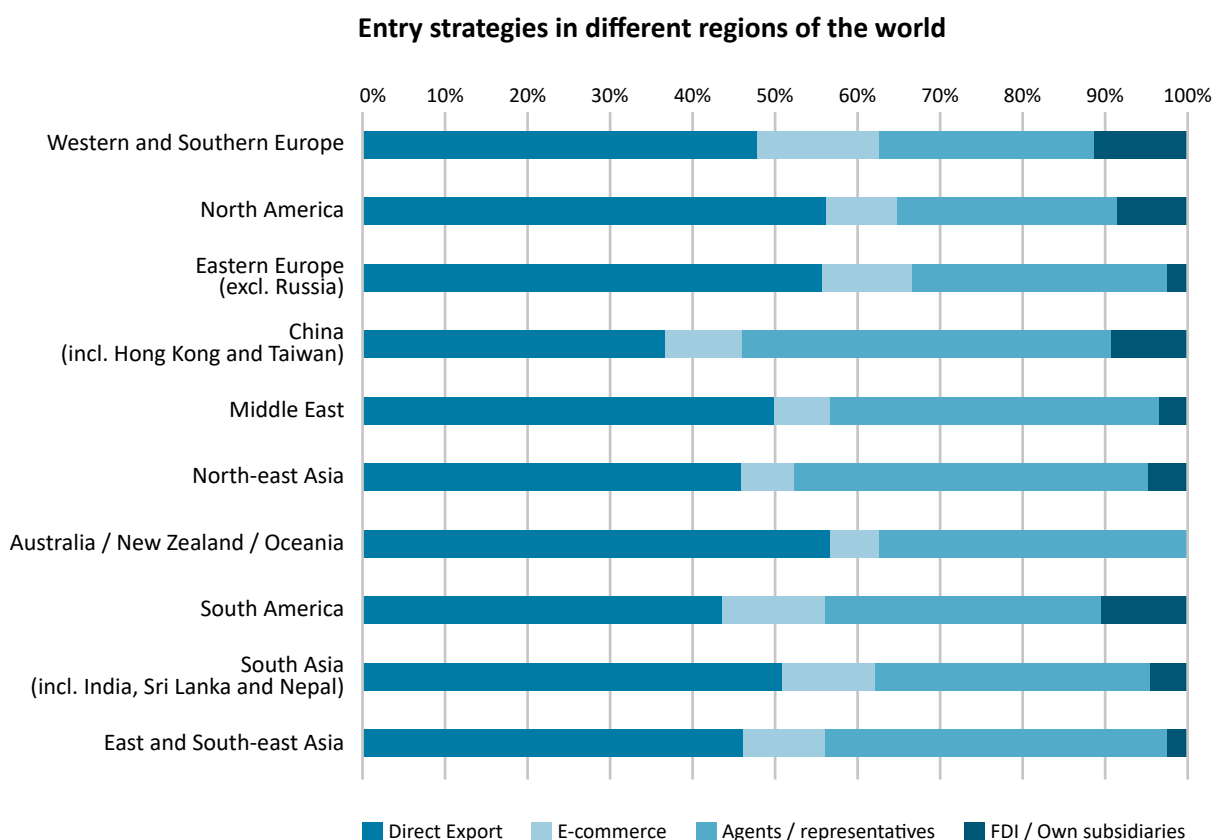


Figure 7: Entry strategies classified by frequency and per region of the world

In the past few years, e-commerce as a market cultivation strategy has greatly increased. Even in the 2019 study, e-commerce was applied by a few SMEs, mainly in trade, as a market development method in Western Europe. In the meantime, e-commerce is applied increasingly frequently outside Europe, for instance in North America, and is seen by an ever-increasing number of sectors as a market development tool to be taken seriously. This also poses huge challenges to the SMEs, for success through e-commerce is described by many SMEs as not very satisfactory. Cooperation with foreign commercial agents is a similar case.

Export and direct investment are the best-rated market development methods. No wonder, for these methods allow the major share of control of the sales process to be kept within the firm. The more diverse the market cultivation strategies applied by the SMEs, the more the SMEs report to us that they find the results of the strategies applied satisfactory. These so-called "multi-channel-strategies" are used by start-ups in particular, which become internationally active immediately at the start of their activity and at very high speed (known as international new ventures).

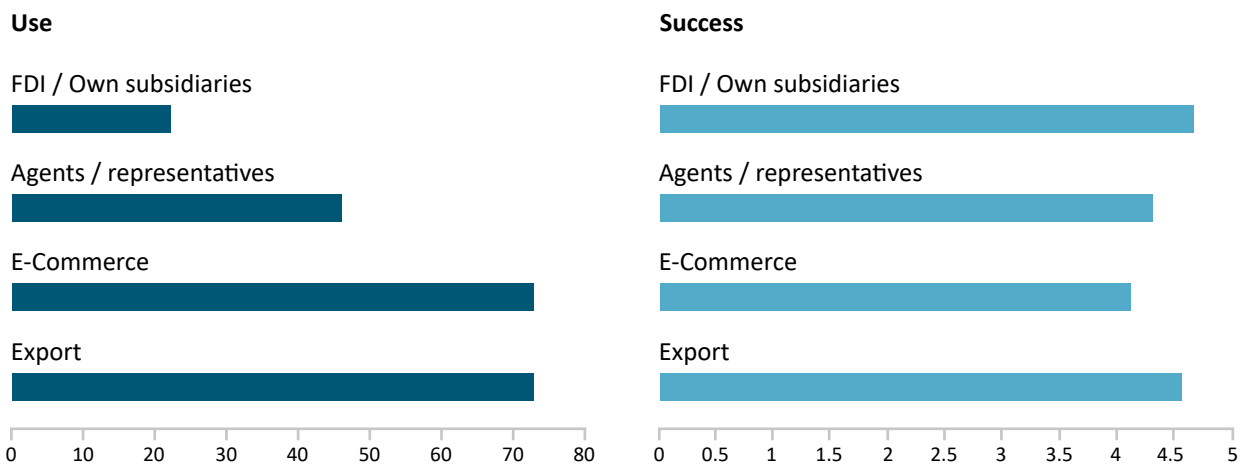


Figure 8: Frequency of use and success of the individual market cultivation strategies

Export support

In the exploration of the most important requests and requirements from the export industry for export promotion from the Confederation, as part of a SECO mandate at the end of 2022, our test sample showed that the nearby foreign markets in Western Europe not only carry the highest pro rata turnover, but this is also where export support is most keenly sought from the Confederation.

Even the neighboring countries of Germany and France are among the answers given most often to a question on specific countries in which the SMEs would like more export support from the Confederation. Outside Europe this requirement exists mainly in North America (the USA and to a lesser extent, Canada), as well as in China.

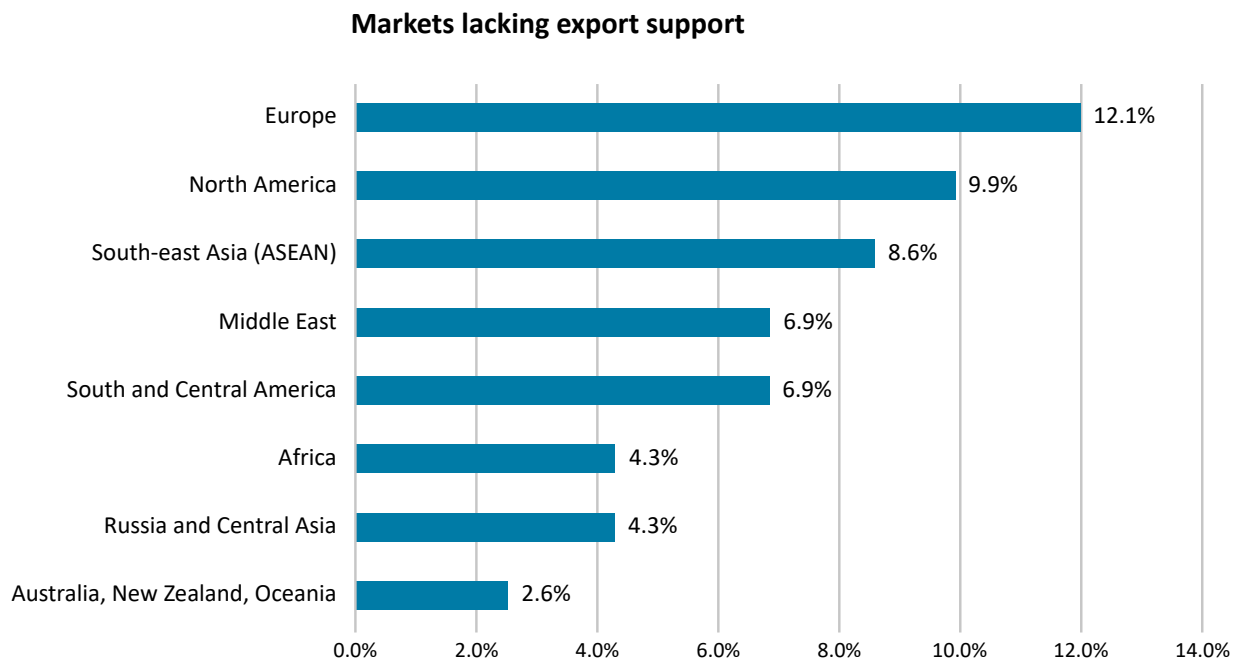


Figure 9: Markets lacking export support

In terms of the type of support, the services relating to the expansion and maintenance of networks, as well as specific, customized information processing and market analyses are considered the most valuable by the SMEs. Presence at trade fairs is still the alpha and omega of foreign trade for many SMEs. Despite, or perhaps even because of the interruption of many trade fairs and restricted travel due to the Covid pandemic in recent years, SMEs have frequently made use of trade fair-related services.

However, very few SMEs would like the federal government and public export service providers to expand their digital offer. The existing digital offer seems to satisfy the requirements of the Swiss export industry in this respect. In the light of this feedback, it is advisable for the export industry to focus more on services which serve to introduce and expand the international networks and to rely on strong and efficient cooperation between the various actors, for example, in the area of attendance at trade fairs.

Use of various support services

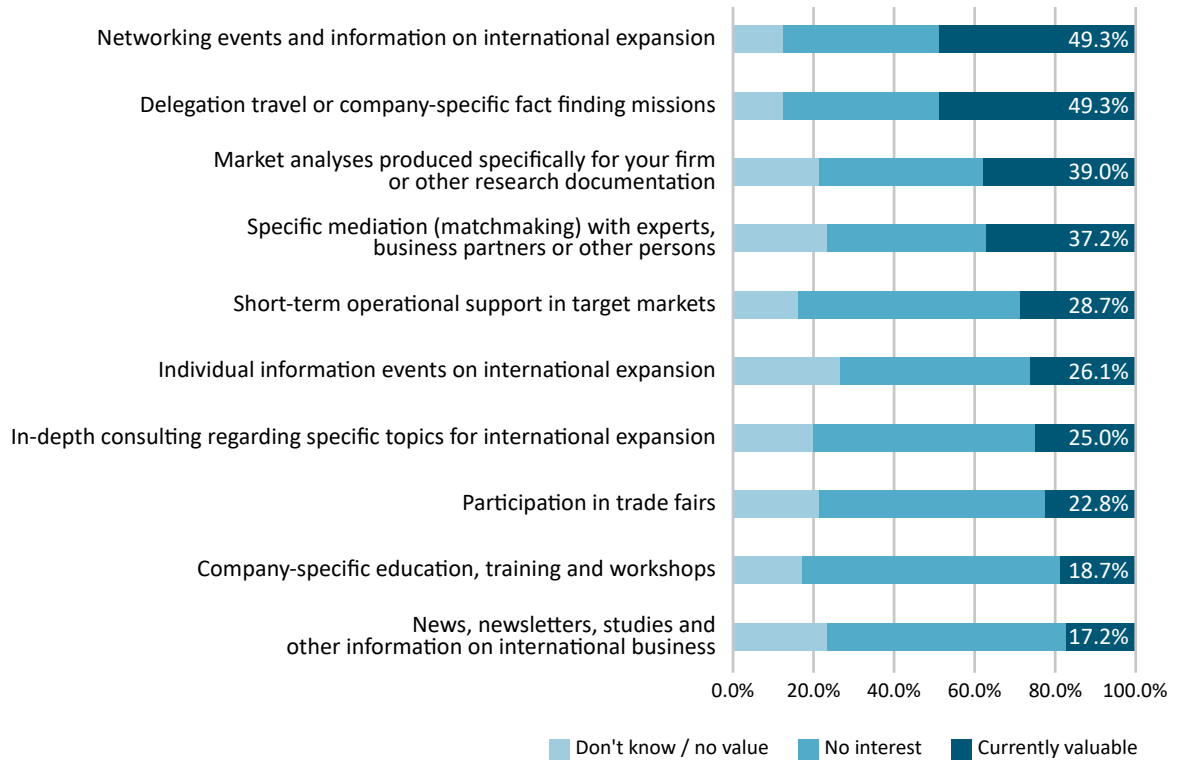


Figure 10: Use of various support services by SMEs entering international trade

Together with the banks and the private companies and business and legal consultants, the state-funded export promotion body, Switzerland Global Enterprise (S-GE), plays an important role in the support of Swiss companies entering the international market and is valued by the majority as useful or very useful. The cantonal Chambers of Commerce and the industrial associations are also extremely useful.

A large majority, more than 80%, of the companies surveyed expressed positive opinions on cooperation with the individual organizations. Thus, most of the companies also feel that their requests to the relevant offices are passed on if the organization approached is unable to give further assistance.

S-GE services by use by SME

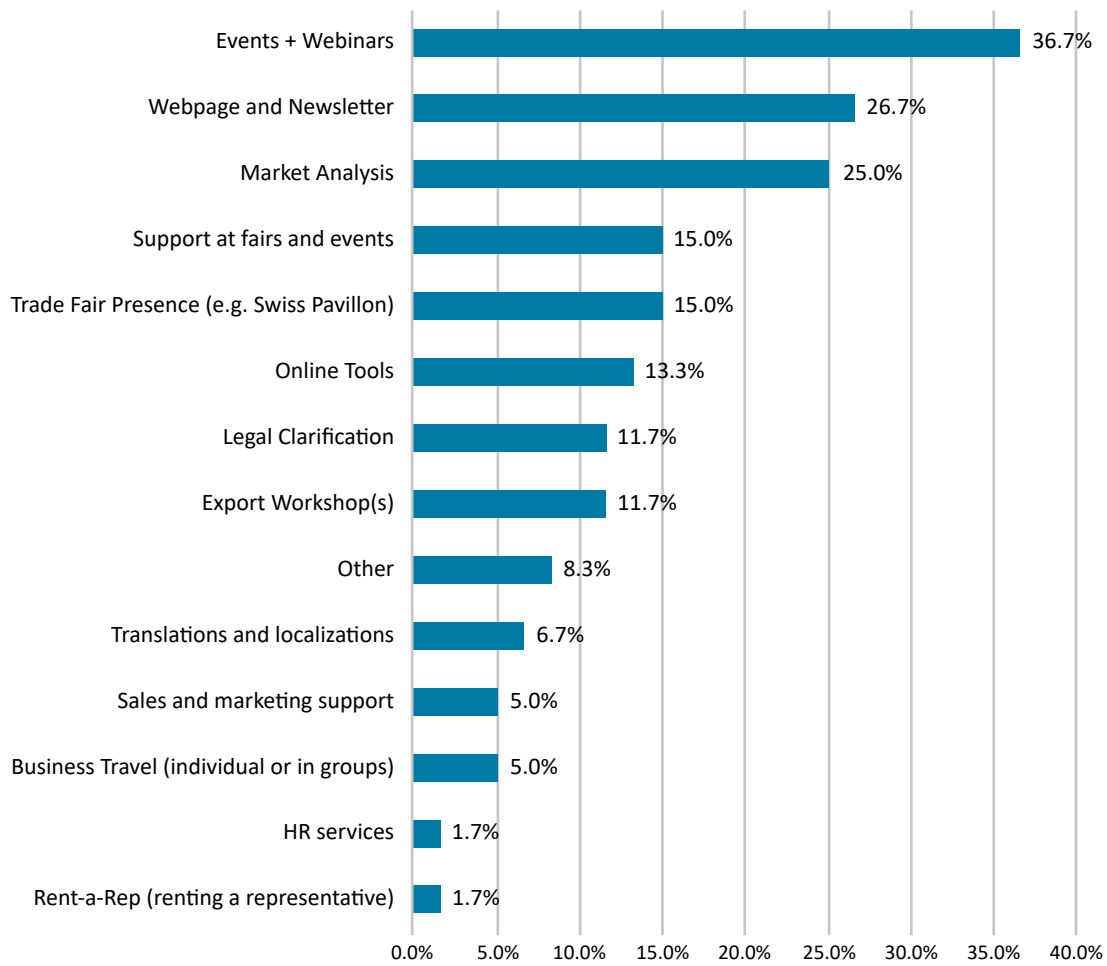


Figure 11: S-GE services according to their use by SMEs

SECTION 3

Digital Transformation

E-commerce as an international sales channel

The importance of digital transformation for internationally active SMEs has increased greatly in the past few years, in particular since the outbreak of the Covid pandemic. It not only alters internal processes and business models; it also plays an increasingly important role in strategies for entry into foreign markets. By reason of the manageable costs and its flexibility for SMEs, direct export is still used most frequently for cultivating foreign markets. Against this background, however, it goes without saying that e-commerce is becoming an increasingly central sales channel.

Both the micro-enterprises with fewer than 10 employees and also 70% on average of the remaining SMEs use e-commerce as a sales channel. Conversely, the micro-enterprises assess the success of their e-commerce business as relatively low and in particular, significantly lower than their export business. In the case of the remaining SMEs, e-commerce is on a par with export and is among the most popular and most successful sales tools on foreign markets. It seems as though the larger SMEs work more successfully with e-commerce than the micro-enterprises.

The figure below shows the self-assessed success of e-commerce as a function of the frequency of use of e-commerce. The international micro-enterprises use e-commerce on average somewhat more frequently than the small and medium-sized enterprises; however, the latter assess the success of this sales channel as significantly higher.

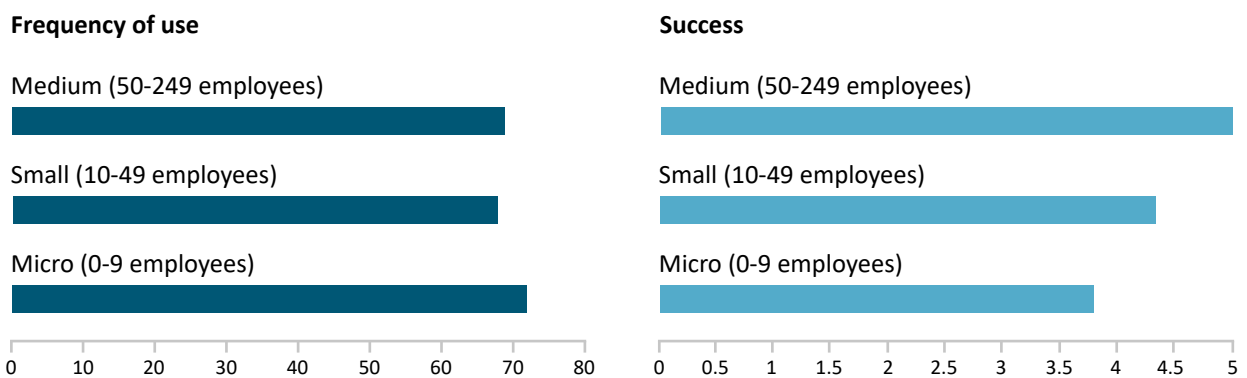


Figure 12: Frequency and success of e-commerce for micro, small and medium-sized enterprises

Degree of digitization

However, digital transformation includes more than merely sales services. Based on the assessment scale produced by PwC Schweiz, Google Switzerland and Digitalswitzerland to investigate the degree of digitization (Greif, Kühnis & Warnking, 2016) we estimate the degree of digitization of internationally active SMEs using the corporate sectors of sales, customer involvement, infrastructure and processes, as well as corporate culture.

The SMEs assess their degree of digitization by means of self-assessment. For all factors, the SMEs had to select the most appropriate of four statements, in which the degree of digitization was assessed in each case with a score of 1 to 4. The statements cover the most relevant business sectors and were deliberately formulated to be non-judgmental.

PEOPLE AND CULTURE

1 Digitization scarcely plays any role for the employees.	2 Care is taken to ensure that employees use digital instruments.	3 We encourage our employees with training sessions and experts from the digitization sector.	4 We make digital skills a factor in the recruitment of our employees and in this manner we promote innovation.
---------------------------------------------------------------------	-----------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------

CUSTOMER INVOLVEMENT

1 Customers can give standardized feedback through digital channels.	2 Customer feedback is automatically prepared and analyzed.	3 Customers are individually involved in digitization.	4 Customers are digitally connected to all business processes.
--------------------------------------------------------------------------------	-----------------------------------------------------------------------	------------------------------------------------------------------	--------------------------------------------------------------------------

DIGITAL SALES

1 We have one standardized website for sales.	2 Our online sales are supplemented by accompanying measures and digital services.	3 We provide customers with individualized offers based on big data.	4 We have fundamentally altered our business model with digitization.
---------------------------------------------------------	----------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------	---------------------------------------------------------------------------------

PROCESSES AND INFRASTRUCTURE

1 Our digital internal processes are to some extent rudimentarily digital, to some extent, manual.	2 Internal processes are digital and to some extent, inter-connected.	3 The internal processes are digital, and most of them are inter-connected.	4 All our processes are on one single digital platform.
--------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	-------------------------------------------------------------------

Table 2: Assessment scale for the calculation of the degree of digitization

The average degree of digitization of international SMEs is around 2.9 and is quite low. As shown by the figure below, internal processes and infrastructure are significantly more strongly digitized than customer involvement and customer sales. The figure also shows, however, that internal procedures are usually significantly easier for the SMEs to digitize than interfaces with external contact groups, such as

customers. The degree of digitization, however, varies dramatically between the different size categories of SMEs. Especially in the case of the micro-enterprises with fewer than 10 employees at a value of 1.93, the figure is at its lowest, while in the small and medium-sized enterprises, with 2.24 and 2.35 respectively, the figure lies above the overall average.

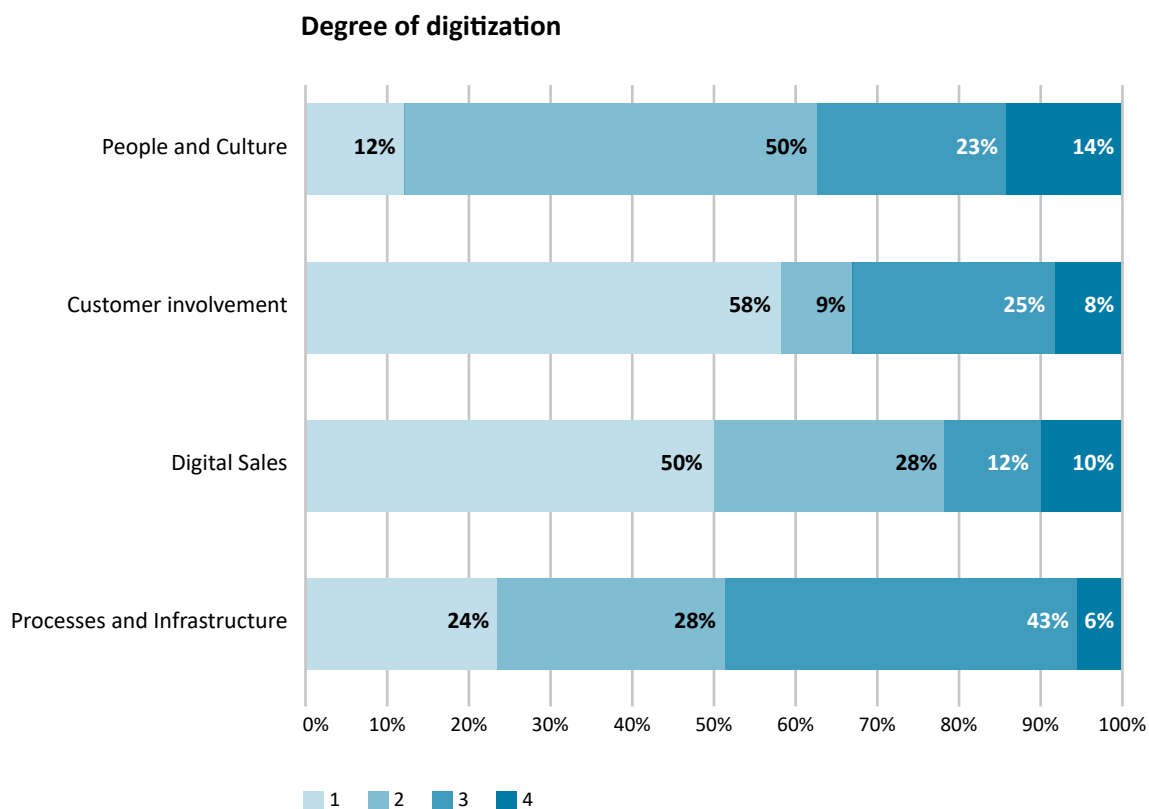


Figure 13: Degree of digitization of the SMEs surveyed by business sector

Development since 2019

Since we began our measurements in 2019, corporate culture and processes and infrastructure have become the most strongly digitized sectors in the internationally-active SMEs. According to these measurements, most SMEs take care to have efficient, inter-connected digital interfaces or even manage their entire ERP on one single cross-functional platform. Employees are deliberately recruited on the basis of their digital skills and then receive further training from experts.

However, the digital involvement of customers in the sales process is still a weak point in the case of digital transformation. However, even in these sectors, things are moving: this is the sector which has altered the most dramatically in a comparison of trends (see graph below) between 2019, or the year before the Covid crisis and 2023. Most SMEs have abandoned standardized company websites and interaction with customers through standardized channels and are now moving towards stronger digital customer involvement in business processes and towards increasingly more strongly individualized offers based on big data.

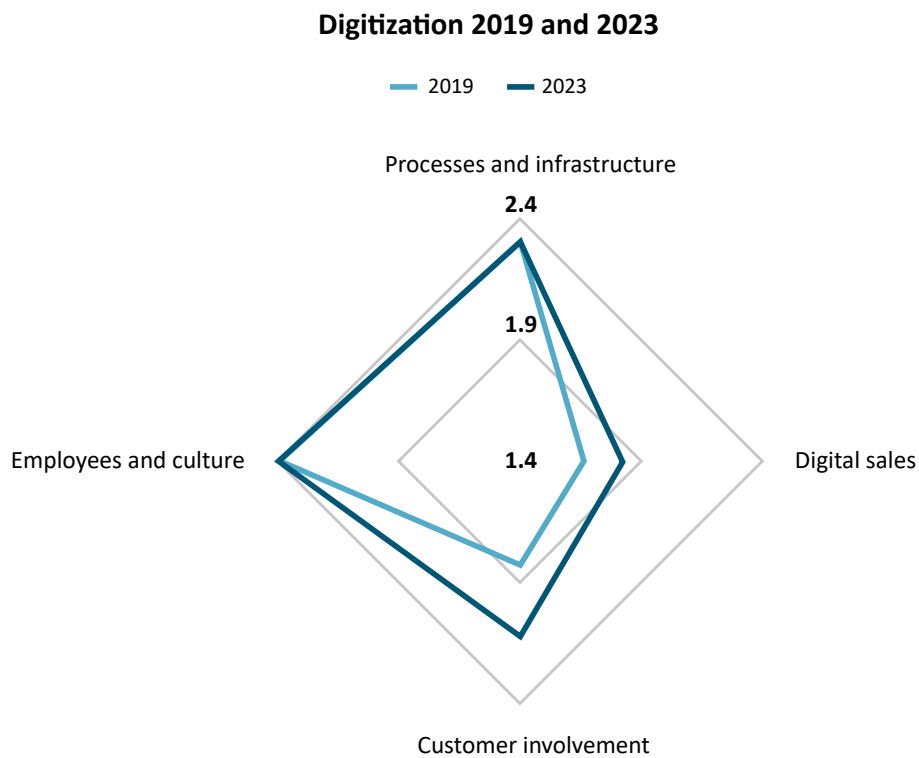


Figure 14: Digitization of SMEs divided into 4 dimensions for 2019 and 2023

According to our measurements, the overall degree of digitization of an internationally-active Swiss SME is not significantly connected with the size of the SME, the age of the firm, or its degree of internationalization (i.e. the distribution over various countries and regions of the world). The degree to which certain firms are digitalized seems rather to depend on the attitude of the respective senior management to the topic of digital transformation. There is no doubt that digital sales, for example, offer

internationally active SMEs new opportunities to develop foreign markets more efficiently. However, digital sales represent a huge challenge for these SMEs. Where there is increasing digitization of business models the question arises as to how the companies should organize direct export if digital sales are not developed appropriately. Should they outsource these services, or organize them with partners or key customers?

SECTION 4

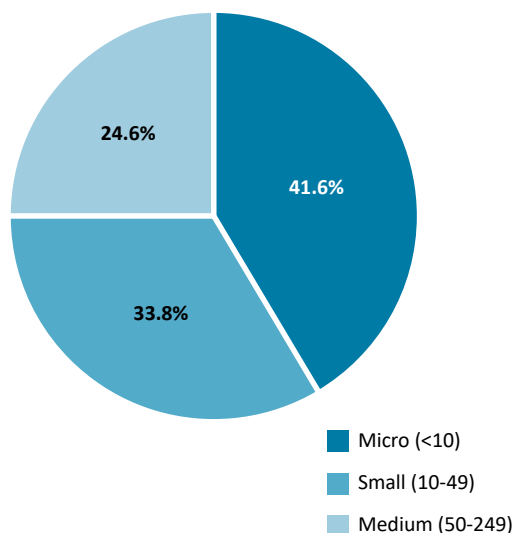
Portrait of the SME

Facts and Figures

This study refers to firms with their registered office in Switzerland and a minimum export of 5% of their total turnover. The random sample includes a good cross-section of the Swiss export industry, as is shown by a descriptive analysis of the companies by size, amount of turnover, and export intensity, measured on the geographical range of their foreign transactions and their proportion of the total turnover.

A classification of the companies into the size categories of the Federal Statistical Office (FSO)² shows a balanced distribution of the random sample across the three SME-size classes of micro, small and medium-sized companies. Micro-enterprises are slightly over-represented; however, this corresponds to the large population in terms of number of micro-enterprises.

Random sample by SME size categories
(n=476)



41.6% of the companies could be allocated to the category of micro-enterprises with one to 9 full-time equivalent employees (FTE), a further 33.8% are the small companies with between 10 and 49 FTEs, and 24.6% are medium-sized companies with 50 and 249 FTEs. On average the SMEs surveyed have 22 employees.

Figure 15: Random sample by company size category

² Federal Statistical Office company size classes by activity:

<https://www.bfs.admin.ch/bfs/de/home/statistiken/industrie-dienstleistungen/unternehmen-beschaefigte/wirtschaftsstruktur-unternehmen/kmu.html>, accessed on 11.05.2022

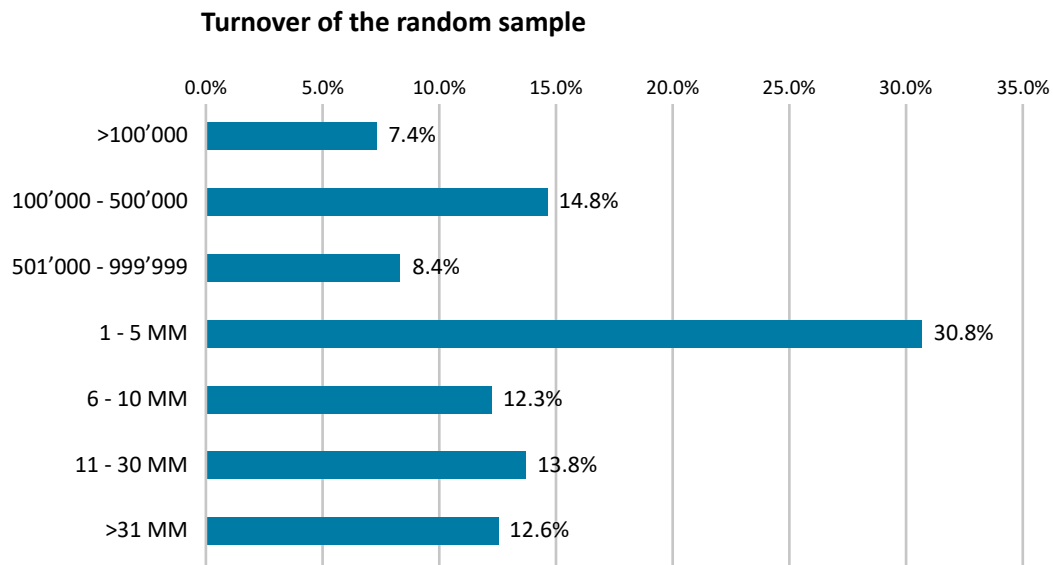


Figure 16: Random sample by turnover category

Most SMEs achieve a total turnover of between CHF 1 and 5 million. This corresponds to the most frequent turnover category for strongly internationalized micro-enterprises with up to 10 employees and to the average small enterprises with up to 49 employees. A more revealing picture is obtained from analysis by size category.

The *micro-enterprises* have on average 3.8 employees and are active in just under 9 countries. This comparatively high proportion of foreign markets for such small companies should, however, be noted because they are relatively widely distributed. The lowest quarter (or 25% quartile) of these micro-enterprises is active in a maximum of just 2 countries, whereas the top quarter (or 75% quartile) is active in more than 10 countries. On average micro-enterprises earn 43.3% of their total turnover on foreign markets. On average these micro-enterprises are less well digitized than the large SME sub-categories. Despite a comparatively high average geographical distribution of their foreign business, the micro-enterprises plan to expand their foreign business in the next 3 years significantly more carefully than the small and medium-sized SMEs. These significantly more modest expansion plans are underlined by a similarly deeper average entrepreneurial orientation with respect to the aggression of their competitors, innovative strength, and pro-active market behavior.

The *small enterprises* with up to 49 employees have on average 24.9 full-time equivalent employees and are active in 12.2 countries. However, this geographical distribution varies greatly from small enterprise to small enterprise. Whereas the lower quarter (or 25% quartile) is active in fewer than 4 countries and on average is active in one region of the world, the figures for the upper quarter (or 75% quartile) are more than 17 in four or more regions of the world. They earn 46% of their total turnover abroad, just slightly more than the micro-enterprises, but are significantly more digitalized and have stronger entrepreneurial orientation. The expansion behavior with respect to the next 3 trading years is strongest in this SME size category.

The *medium-sized enterprises* have on average 98.79 full-time equivalent employees and are on average active in "only" 16.56 countries. The high standard deviation of 21.884, however, already points to a wide distribution of the average value in the number of foreign markets. They also earn on average only 53.3% of their total turnover abroad; however, here also, the standard deviation of 32.55 points to a very wide distribution.

	SME sizes			Total SME
	Micro (1-9 employees)	Small (10-49 employees)	Medium (50-249 employees)	
Employees	3.83	20.96	98.79	22.40
Countries	8.96	12.18	16.50	11.12
World regions	3.21	3.67	3.65	3.46
Number of methods (export, e-commerce, FDI)	2.04	2.22	2.39	2.14
Relative performance	4.47	4.76	5.01	4.62
Foreign turnover	43.32	46.04	53.26	45.35
Degree of digitization	1.93	2.24	2.35	2.10
Entrepreneurial orientation	3.85	4.54	4.47	4.14
Planned expansion	1.80	4.08	2.30	2.52

Table 3: Fundamental variables with respect to the various SME size categories

The middle turnover category (median) of the medium-sized enterprises is between CHF 11 and 15 million. However in 2022, in the top quarter, measured by turnover, these medium-sized companies earned turnover of more than CHF 26 million. The upper quarter (75% percentile) of the medium-sized companies with the strongest international activity is active in more than 17 countries and earns over 80% of its turnover on foreign markets.

The sector distribution (Figure 17) shows that almost half of the SMEs surveyed are production companies (25.6%) and consultancy services (22.2%), followed by trading companies (18.0%) and SMEs in the ICT sector (13.1%).

The finance and insurance industry, the building industry, the real estate sector and agriculture play a subordinate role in this sample.

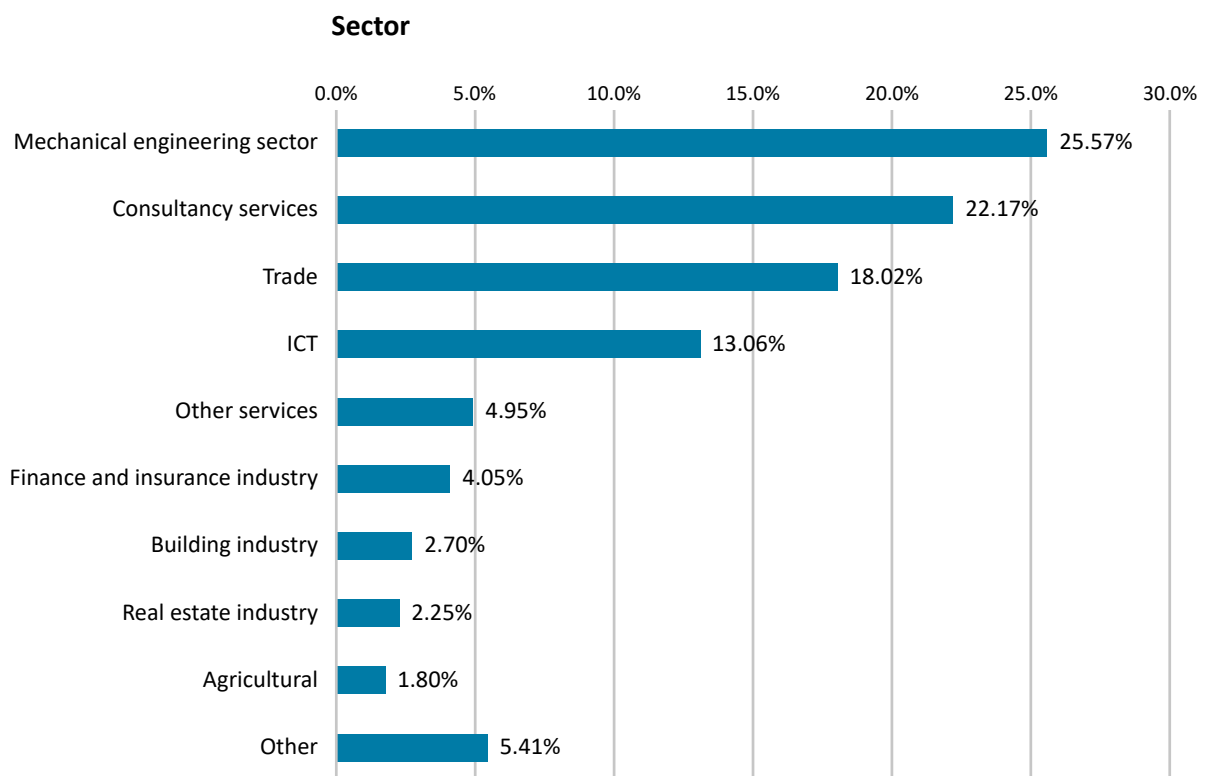


Figure 17: Sector distribution in the random sample

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