THOMAS HURNI, CORINNA RUTSCHI, AND JENS DIBBERN
INSTITUTE OF INFORMATION SYSTEMS - INFORMATION ENGINEERING

Swiss Software Industry Survey 2019

Current State, Emerging Trends, and Long-term developments in the Swiss Software Industry

A Study of the University of Bern on behalf of ICTswitzerland

Swiss Software Industry Survey

Corinna Rutschi

Dr. Thomas Hurni

Prof. Dr. Jens Dibbern

Preface

The fifth edition of the Swiss Software Industry Survey (SSIS), the most extensive study of its kind in Switzerland, provides you with comprehensive information about the current state, emerging trends, and long-term developments of the Swiss software industry.

As in previous years, our goal was to be as close as possible to the Swiss software industry and the people who shape it. To this end, we conducted a workshop with representatives of the Swiss software industry and used their feedback to optimize our questionnaire. The highly valuable feedback from this workshop, however, not only helped us to optimize the SSIS as a whole but also served as valuable input for the design of this year's two special topics. The first of these two special topics focuses on the productivity of the Swiss software industry, thus on a central aspect in an increasingly competitive environment. Here we show what measures Swiss software companies are taking to increase their productivity. Besides, we illustrate what changes Swiss software companies expect to see in the sources of their revenues over the next three years. The second special topic focuses on public tenders. Here we show the reasons why Swiss software companies participate in public tenders or explicitly refrain from doing so. We also illustrate the importance of public tenders for individual subindustries and the major regions of Switzerland.

This year, we again improved our SSIS benchmarking website to provide a unique service to our participants. The SSIS benchmarking website has become central to our value proposition, as it delivers actionable information for participating companies. As an additional incentive, we were able to offer participating companies, which shared all key figures with us, a voucher for a free job advertisement on ictjobs.ch. We thank our partner inside-it.ch for this opportunity.

The SSIS would not be possible without the long-term support of our partners, in particular, ICTswitzerland, the principal of the study, and Sieber & Partners. We want to thank ICTswitzerland, Sieber & Partners, and all other partners for their continued support.

Finally, we would like to thank Thomas Huber for his many years of commitment to the SSIS. Thomas Huber was appointed Assistant Professor at the ESSEC Business School in Paris. Corinna Rutschi joined the SSIS team this year and therewith completes our team.

We hope you enjoy reading this report!

Corinna Rutschi

Dr. Thomas Hurni

Prof. Jens Dibbern

Preface

Executive Summary

2018 was a successful year for the Swiss software industry. The industry-wide revenue per employee rose from CHF 221'098.4 in 2017 to CHF 225'498.9 in 2018 and the industry-wide EBIT margin from 6.7% in 2017 to 8.2% in 2018. Due to these positive developments, Swiss software companies are more optimistic about the future. Both the expected growth of revenues (i.e., 9.5% in 2019 and 11.3% in 2020) and employees (i.e., 11.6% for 2019 and 14.9% for 2020) is higher than in the previous year. Also, software companies are trying to become more productive through process optimization and employee development.

Growing EBIT Margins and Revenues per Employee

The EBIT margin of the Swiss software industry improved by 1.5 percentage points compared to the previous year and now amounts to 8.2%.This growing EBIT margin is reflected in the increase in revenues per employee from CHF 221'098.4 in 2017 to CHF 225'498.9 in 2018. These positive developments result in a more optimistic outlook for 2019 and 2020: For this year, a growth in revenues of 9.5% and an increase in the number of employees of 11.6% are expected.

Shift Towards Cloud

Swiss software companies expect cloud solutions to gain in importance by 2021. The share of cloud solutions in industry sales is expected to rise from 7.5% today to 11.5% in 2021. According to expectations, this increase will be at the expense of the development of custom software. Here a reduction of 5.2 percentage points in the share of industry revenue is expected by 2021. This development indicates that the industry will increasingly focus on more scalable products and services.

Productivity: Do Things Better

Swiss software companies find themselves in an increasingly international competitive environment. To survive in this environment, they invest in productivity-enhancing measures. By far the most important measures concern existing processes that are optimized, agilitized, automatized and/or digitalized. Besides, Swiss software companies also invest heavily in the development of their workforce and infrastructure, in adapting their product and service portfolios, and in improving their knowledge management.

Public Tenders

The Swiss software industry generates about 17% of its revenue from contracts awarded in compliance with WTO rules. Such contracts are particularly relevant for software companies from the Espace Mittelland and for consulting companies. The most important reason why Swiss software companies explicitly refrain from participating in WTO-compliant tenders is the high cost in relation to the expected return. The most important reason for participation is the attractiveness of such contracts.
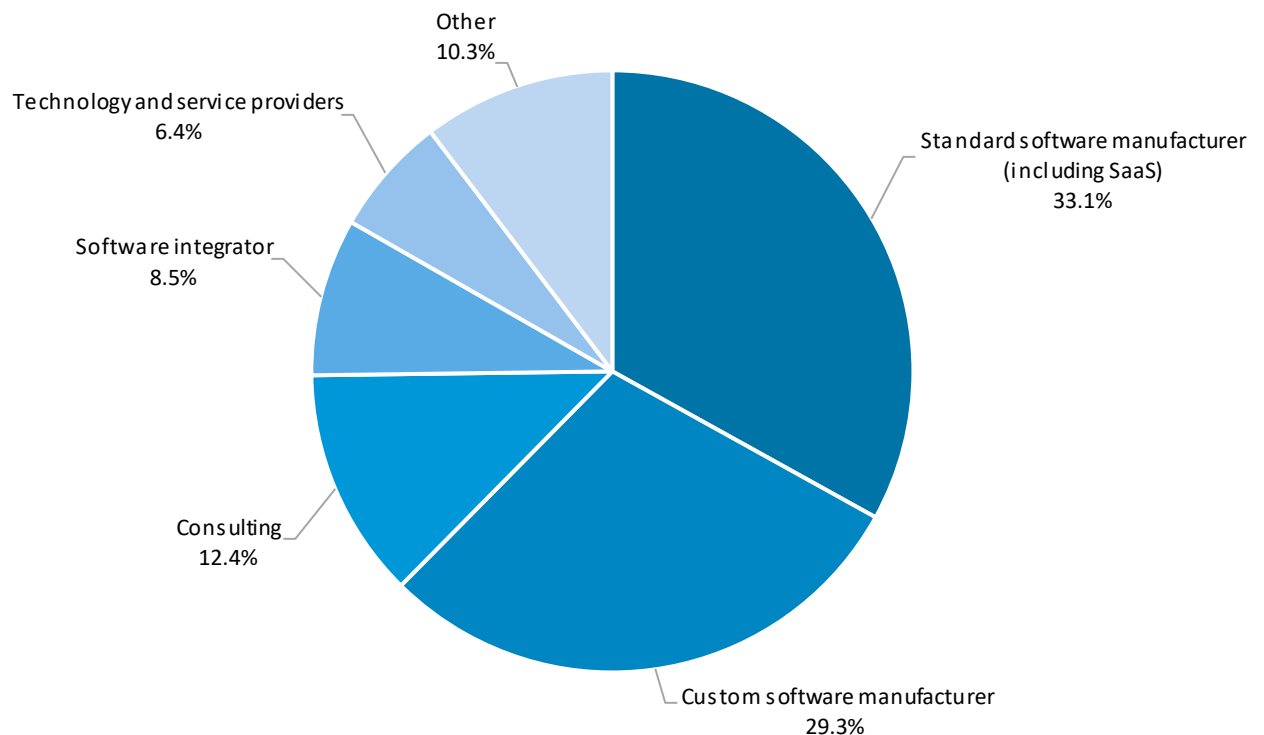
Spotlight on

Revenue, Profitability & Future Growth

Distribution of Participating Companies

Figure 1: Number of companies per subindustry as percentage of total responses

Source: SSIS 2019   N = 484

Sample, Projection Method, and Industry Revenue

As in previous years, custom software manufacturers and standard software manufacturers dominate our sample. Both subindustries account for about one third of the answers. Consulting companies (12.4%), software integrators (8.5%), and technology and service providers (6.4%) follow at some distance (see Figure 1).
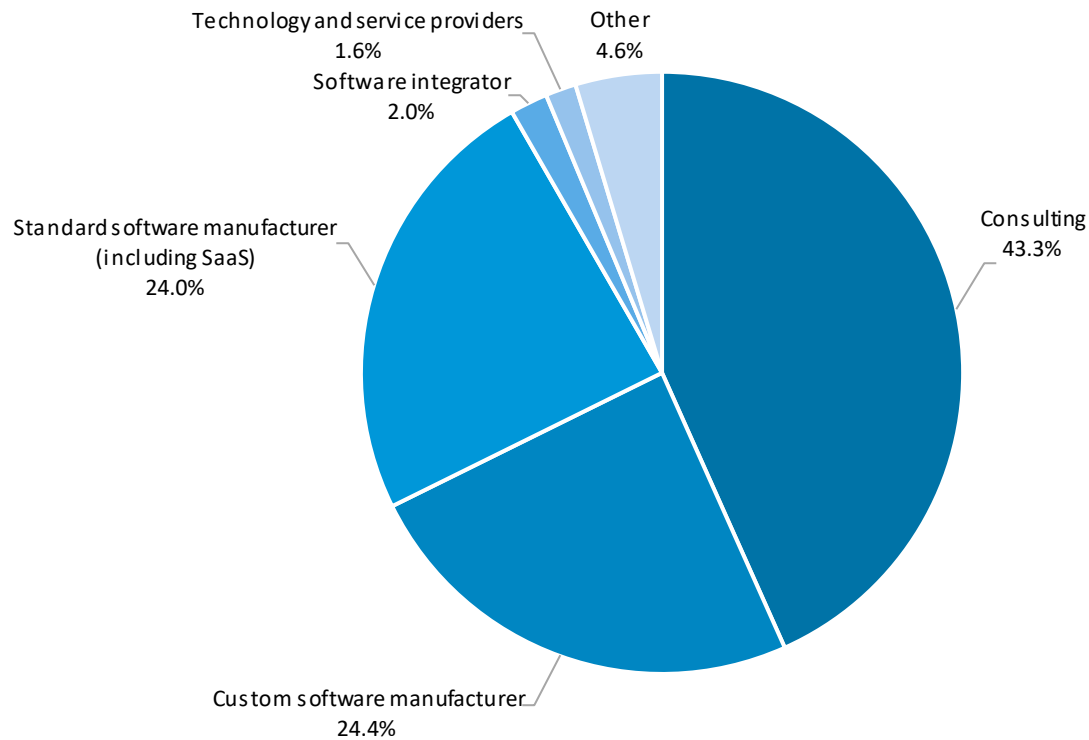
To make valid statements about the Swiss software industry as a whole, we post-stratified our sample. This statistical procedure compares our sample with the software industry as a whole by taking into account official statistics on regions, subindustries, company sizes, and revenues. If this procedure finds that individual participating companies are under-represented in our sample, then it assigns them higher weights to adjust for biases. The advantage of this procedure is that statements about the industry as a whole become more reliable. Moreover, the SSIS 2019 is backward compatible as we have applied the same statistical procedure to the samples of the SSIS in 2017 and 2018. The figures in this report are therefore comparable to those in the previous two reports.

Figure 2 shows that consulting companies are the main contributors to industry revenue (43.3%), followed by manufacturers of custom software (24.4%) and standard software (24.0%). Together, these three subindustries account for more than 90.0% of the industry revenue.

Given that software companies usually operate in a wide variety of fields, i.e., consulting companies do not only 'consult' but also create revenue through other activities such as custom software development or software integration. Figure 3 considers this diversity by showing the revenues by activity. Here, consulting (22.6%), standard (23.5%) and custom software manufacturing (32.2%) contribute most significantly to the industry revenue. Interestingly, Figure 3 shows that across all companies, more than 50.0% of the industry revenue is created through the development of software (standard and custom).

Distribution of Revenue per Subindustry

Figure 2: Revenue per subindustry as percentage of industry revenue

Technology and service providers
1.6%

Other
4.6%

Software integrator
2.0%

Standard software manufacturer
(including SaaS)
24.0%

Consulting
43.3%

Custom software manufacturer
24.4%
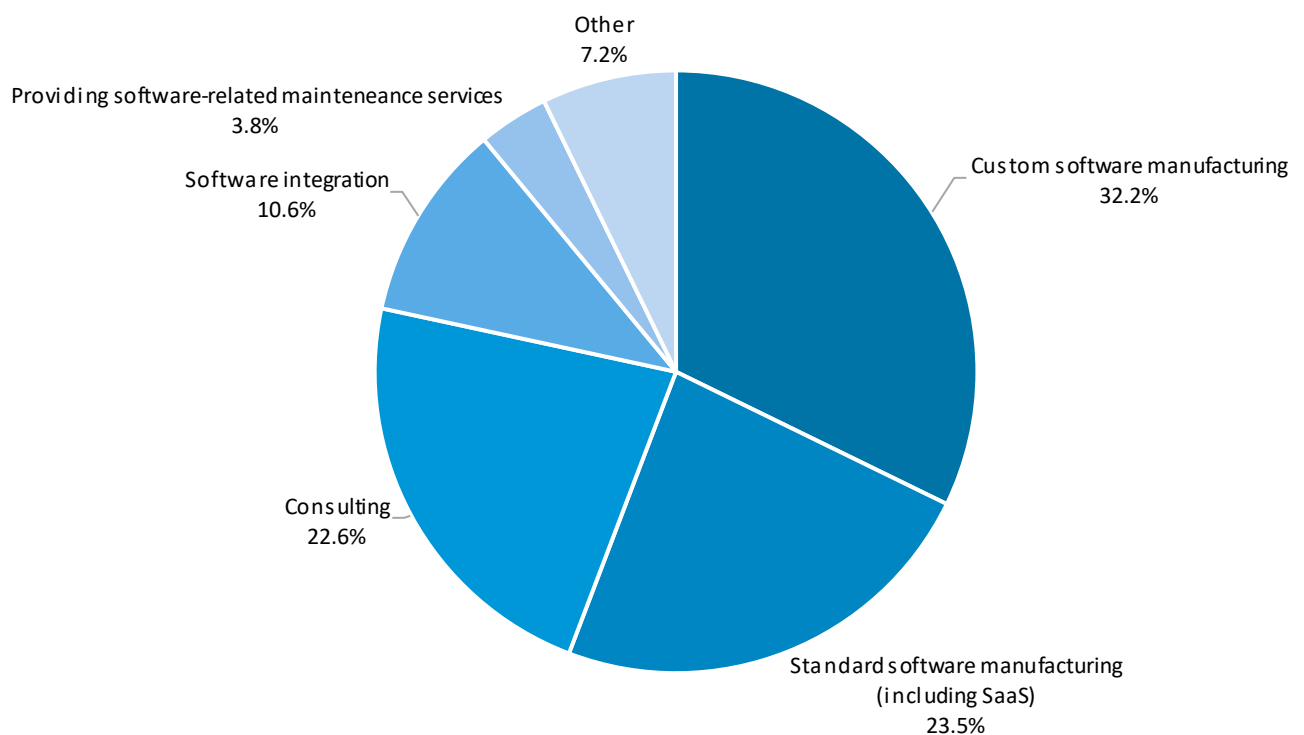
Source: SSIS 2019

N = 191

Distribution of Revenue per Activity

Figure 3: Revenue per field of activity as percentage of industry revenue

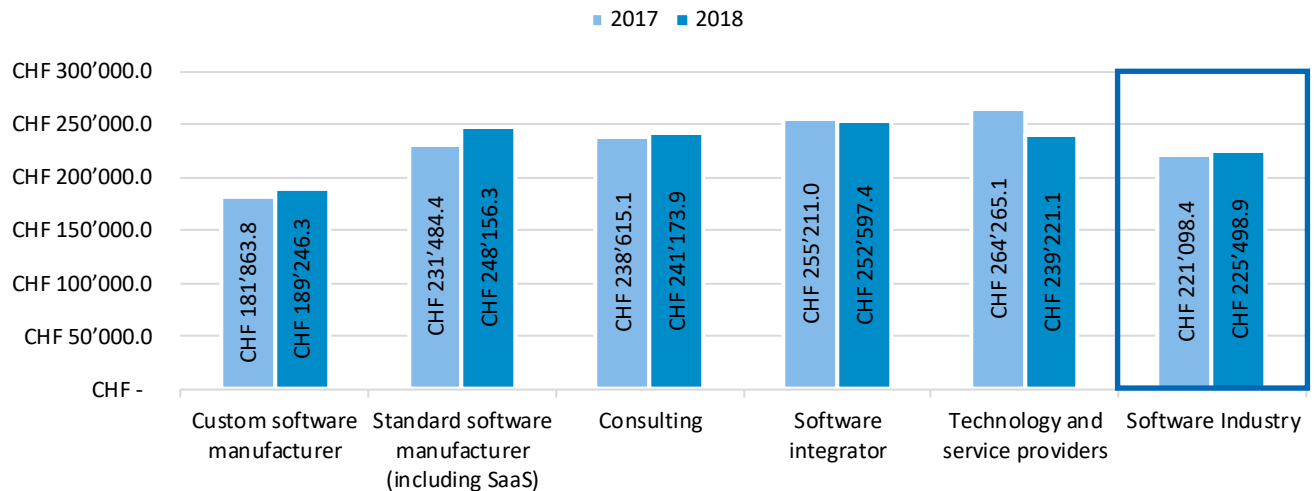Other
7.2%

Providing software-related mainteneance services
3.8%

Software integration
10.6%

Custom software manufacturing
32.2%

Consulting
22.6%

Standard software manufacturing
(including SaaS)
23.5%

Source: SSIS 2019

N = 191

Revenue per Employee

Figure 4: Average revenue per employee

■ 2017 ■ 2018

| | CHF 181'863.8 | CHF 189'246.3 | CHF 231'484.4 | CHF 248'156.3 | CHF 238'615.1 | CHF 241'173.9 | CHF 255'211.0 | CHF 252'597.4 | CHF 264'265.1 | CHF 239'221.1 | CHF 221'098.4 | CHF 225'498.9 |

Custom software manufacturer · Standard software manufacturer (including SaaS) · Consulting · Software integrator · Technology and service providers · Software Industry

Source: SSIS 2019   N = 190

Higher Revenues per Employee

Figure 4 shows the revenue per employee in 2018 compared to 2017. Overall, the revenue per employee increased slightly to CHF 225'498.9 in 2018 compared to CHF 221'098.4 in 2017. As in previous years, manufacturers of custom software generated the lowest revenue per employee (CHF 189'246.3), followed by technology and service providers (CHF 239'221.1), consulting companies (CHF 241'173.9), standard software manufacturers (CHF 248'156.3), and software integrators (CHF 252'597.4).

Figure 5 shows the distribution of employees. It mirrors the distribution of revenues, i.e., consulting companies (33.6%), custom software manufacturers (31.5%), and standard software manufacturers (25.5%) account for more than 90.0% of the industry's employees.

Distribution of Employees

Figure 5: Number of employees per subindustry as percentage of total employees

Technology and service providers 1.9%
Software integrator 2.6%
Other 4.9%
Consulting 33.6%
Standard software manufacturer (including SaaS) 25.5%
Custom software manufacturer 31.5%
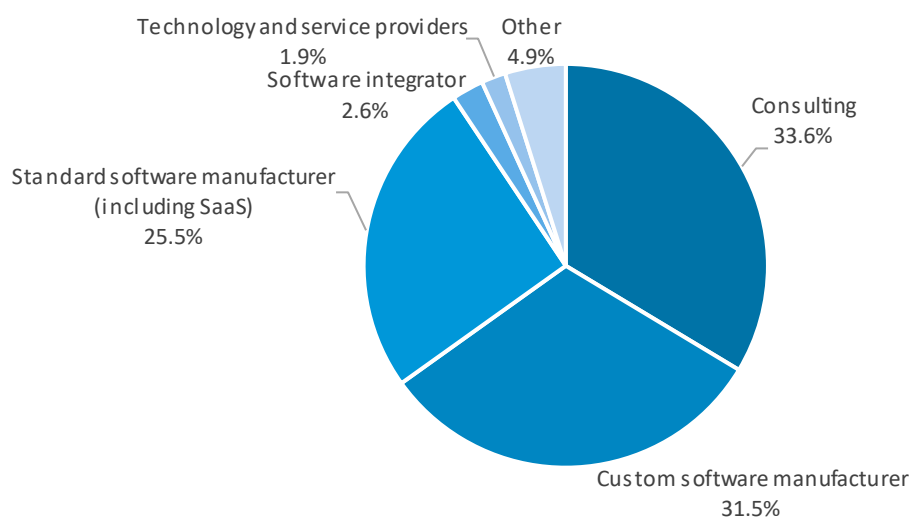
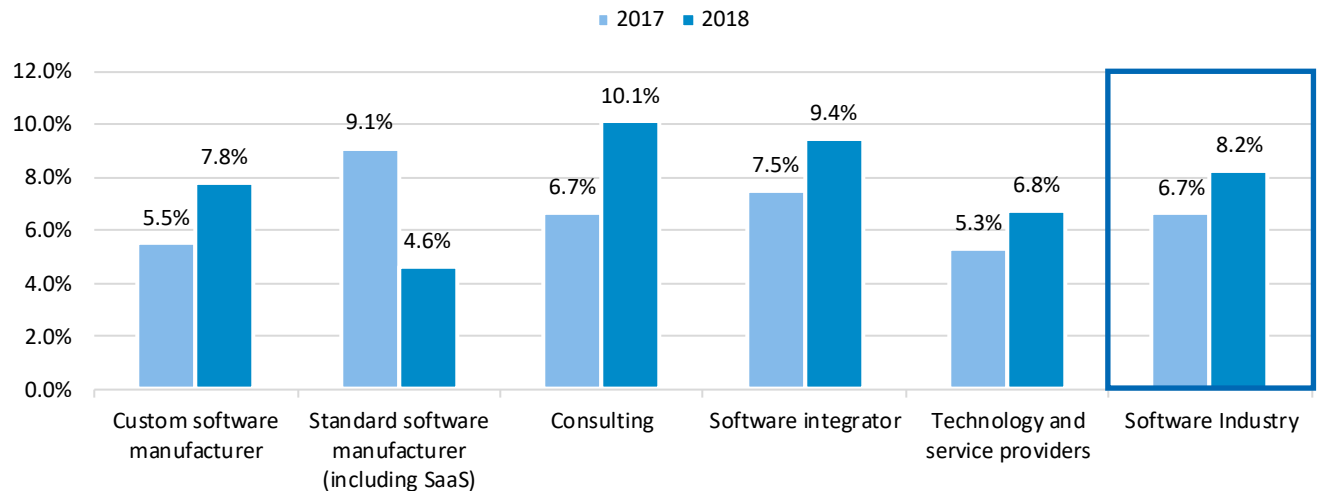Source: SSIS 2019   N = 191

EBIT Margins in the Swiss Software Industry

Figure 6: EBIT margins by subindustries

■ 2017 ■ 2018

Source: SSIS 2019   N = 171

Increasing EBIT Margins

Figure 6 shows the EBIT margins of the subindustries with an industry-wide increase from 6.7% in 2017 to 8.2% in 2018. This upward trend applies to all subindustries, with the exception of standard software manufacturers, which generated a lower margin (from 9.1% in 2017 to 4.8% in 2018).

Figure 7 shows the EBIT margins by activities. This figure reflects broadly the same pattern as Figure 6: compared to the previous year, profitability has increased overall. Again, this increase is shown in almost all activities, except for standard software manufacturing and software integration, which have both decreased in profitability.

EBIT Margins per Activity

Figure 7: EBIT margins per activity

■ 2017 ■ 2018
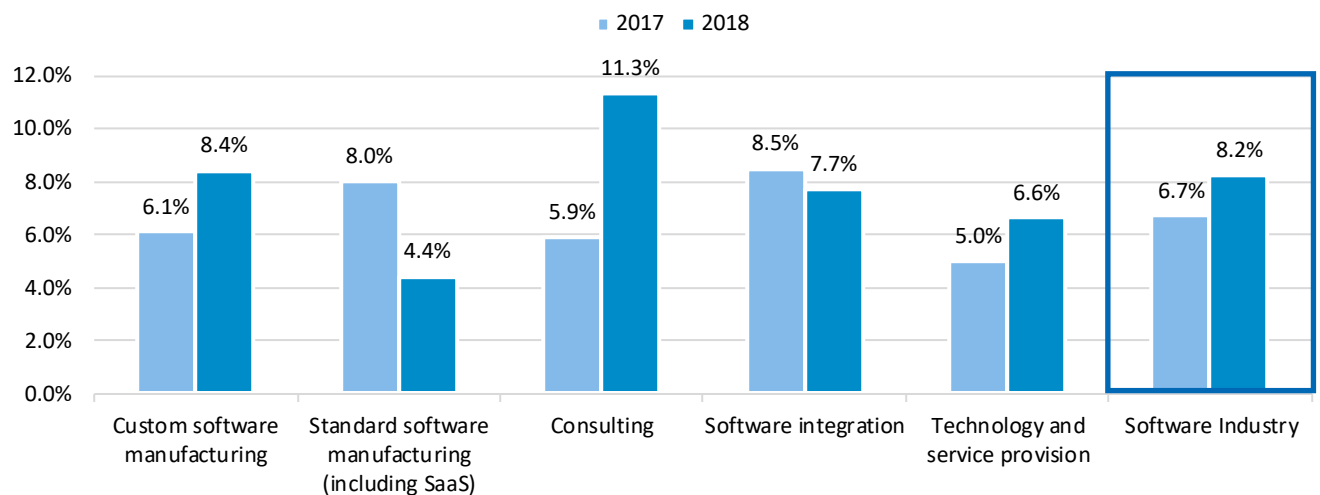
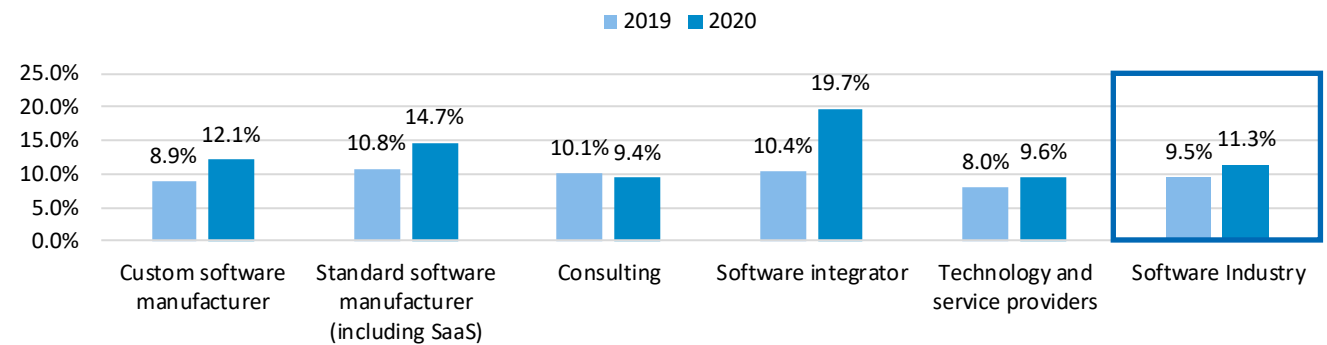Source: SSIS 2019   N = 171

Expected Growth in Revenue

Figure 8: Expected year-over-year revenue growth for 2019 and 2020

Source: SSIS 2019   N = 189

Optimistic Growth Expectations

Figure 8 shows the positive revenue expectations of the Swiss software industry. Compared to the moderate expectations of the previous year, Swiss software companies now expect a growth of 9.5% in 2019 and even 11.3% in the following year. In 2019, standard software manufacturers expect the highest revenue growth

(10.8%), followed by software integrators (10.4%), consulting firms (10.1%), custom software manufacturers (8.9%), and technology and service providers (8.0%). Overall, this leads to the assumption that the Swiss software industry is optimistic about the future.

Research and Development Investments

Figure 9: R&D investments in 2017 and 2018 as percentage of revenue
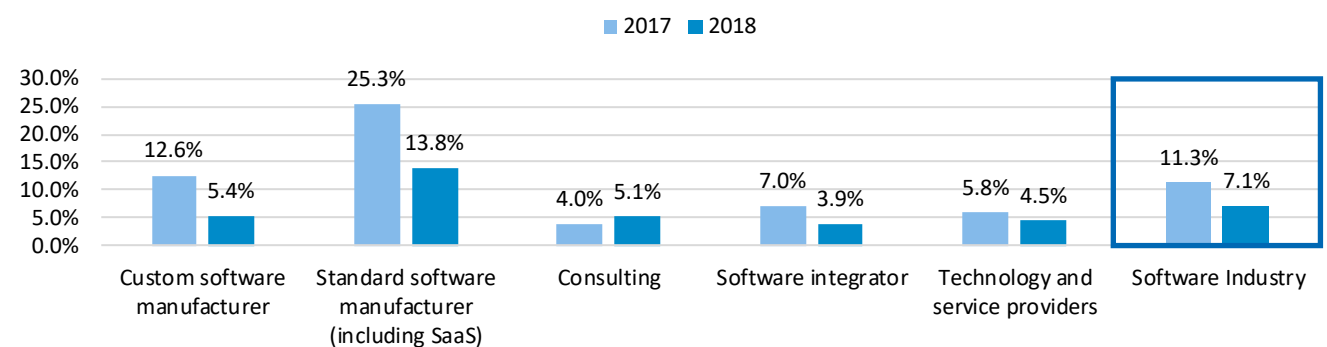
Source: SSIS 2019   N = 177

Lower R&D Investments

Across all subindustries, Swiss software companies have invested less of their revenues in research and development (see Figure 9) compared to the previous year. R&D expenses thus fell to the level of 2016.

As in prior years, manufacturers of standard software have invested the most in R&D (13.8%), while all other

subindustries invested less than 6.0%. More specifically, manufacturers of custom software spent 5.4%, consulting firms 5.1%, technology and service providers 4.5%, and software integrators 3.9% of their revenues in R&D.

Employee Growth Prospects

Figure 10: Expected year over year growth of workforce for 2019 and 2020
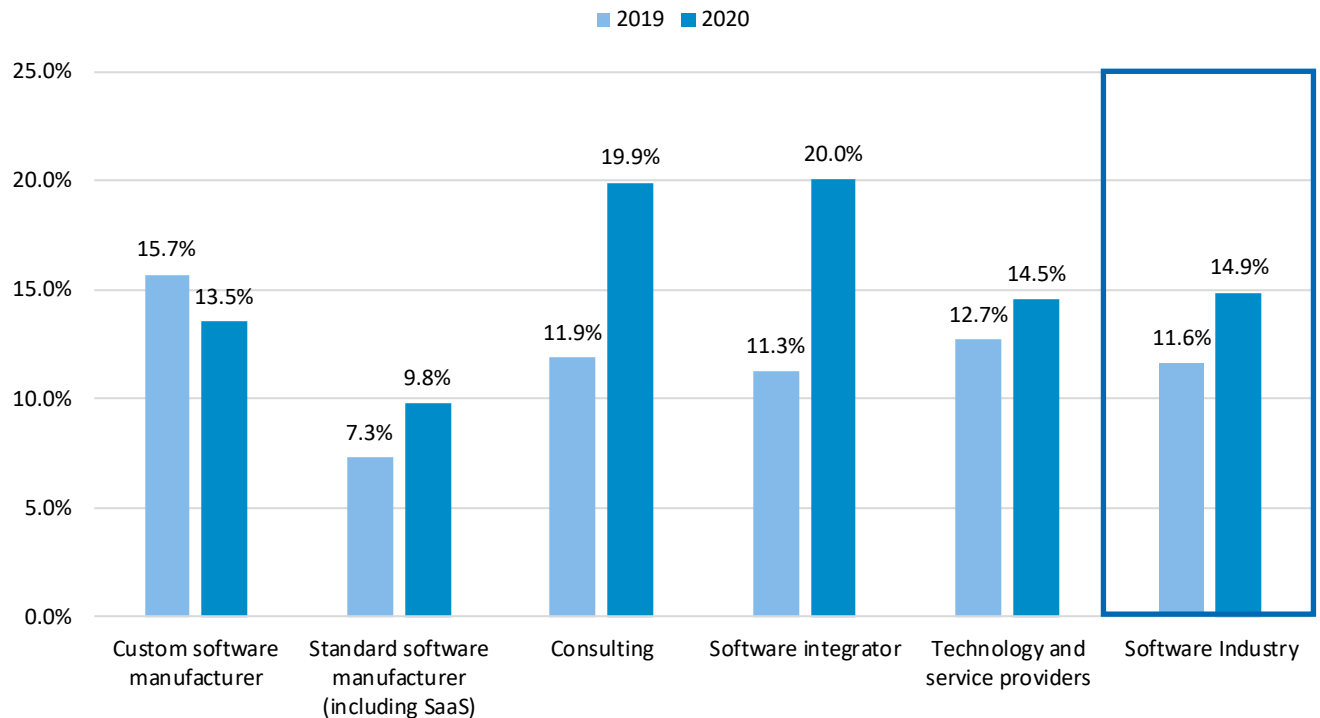
Source: SSIS 2019   N = 191

Expected employee growth of

11.6%

in 2019

Expected Employee Growth Reflects Expected Revenue Growth

Figure 10 shows the employee growth expectations of the Swiss software industry. Interestingly, the overall employee growth expectations (11.6% for 2019 and 14.9% for 2020) reflect the revenue growth expectations (9.9% for 2019 and 11.3% for 2020), i.e., high increases in expected revenue mirror similarly high increases in the workforce.

For 2019, the Swiss software industry expects to hire 11.6% additional employees, and 13.6% in 2020.

No subindustry plans to reduce their workforce in the upcoming two years. In 2019, manufacturers of custom software plan the steepest increases in their workforce (15.7%), followed by technology and service providers (12.7%), consulting companies (11.9%), software inte-

grators (11.3%), and standard software manufacturers (7.3%). In 2020, software integrators (20.0%) and consulting companies (19.9%) plan the steepest increases in their workforce. However, given the small number of responses within these subindustries, these high values are not as robust as those for the industry as a whole. Besides, technology and service providers expect an increase of 14.5%, custom software manufacturers of 13.5% and standard software manufacturers of 9.8% in their workforce.
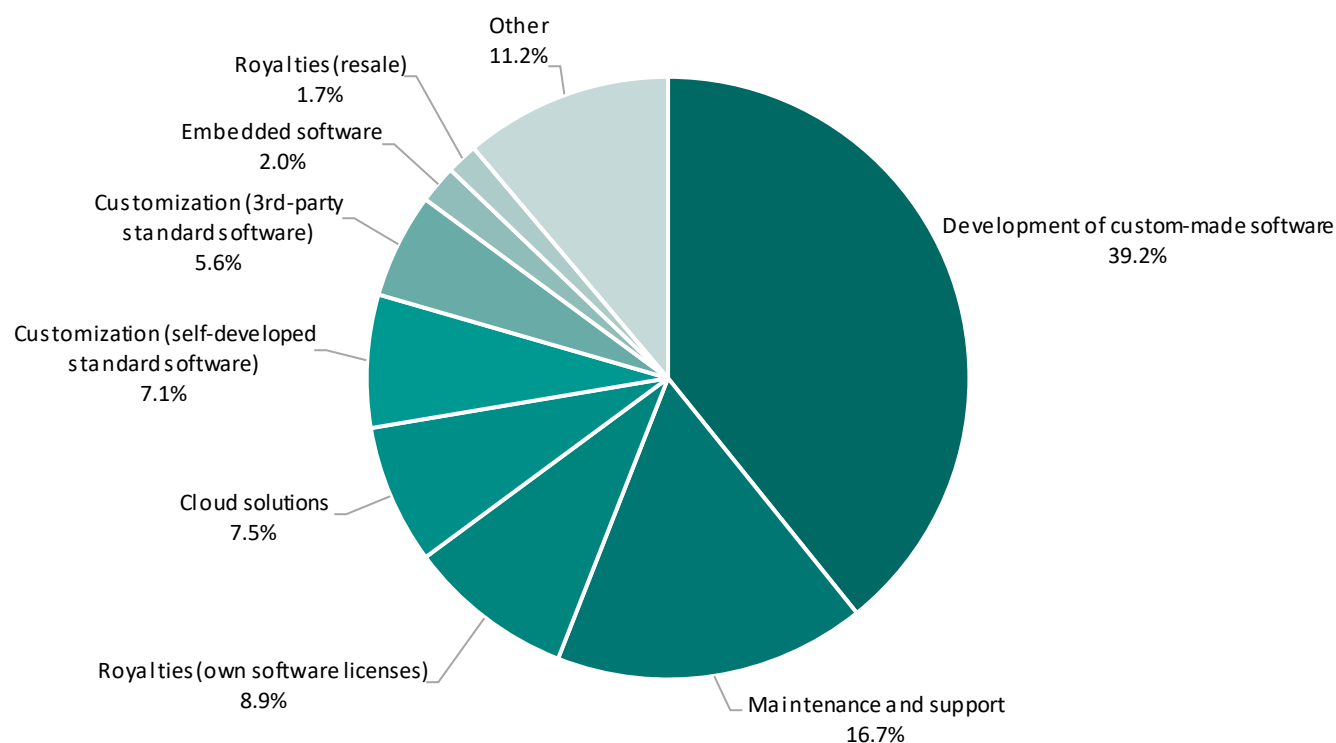
Spotlight on

Sources of Revenue

Sources of Revenue

Figure 11: Revenue from different revenue sources as percentage of industry revenue

Source: SSIS 2019   N = 178

From the industry revenue

7.5%

are generated through cloud solutions

Sources of Revenue

Figure 11 shows the sources of revenue of Swiss software companies in 2018. With a share of 39.2%, the most crucial source of revenue for Swiss software companies in 2018 was the development of custom-made software, followed by maintenance and support (16.7%). Together, with the revenues from the two customization categories (i.e., customization of self-developed standard software (7.1%) and third-party standard software (5.6%)), the development of custom-made software and maintenance and support account for almost three-fourths of the revenue. This underlines the importance of custom software solutions in Switzerland. At the same time, it is evident that the Swiss software industry offers only a minimal range of scalable standard software and incurs license fees for it (8.9%). Interestingly, revenues from cloud solutions (7.5%) be-

came more critical compared to 2017 (5.0%).

If we now look at the revenue sources of standard and individual software manufacturers separately, the picture is quite different. For manufacturers of standard software (see Figure 12), maintenance and support (37.8%), royalties from own software licenses (27.5%), and customization of self-developed standard software (14.1%) account for more than three-fourths of the revenue. Revenues from cloud solutions grew in importance since 2017 and now account for 13.8% (compared to 6.2% in 2017).

For custom software manufacturers (see Figure 13), the development of custom software is the largest source of revenue (59.1%). Together with revenues from maintenance and support (11.2%), the development of custom software accounts for almost three fourths.

Sources of Revenue for Manufacturers of Standard Software

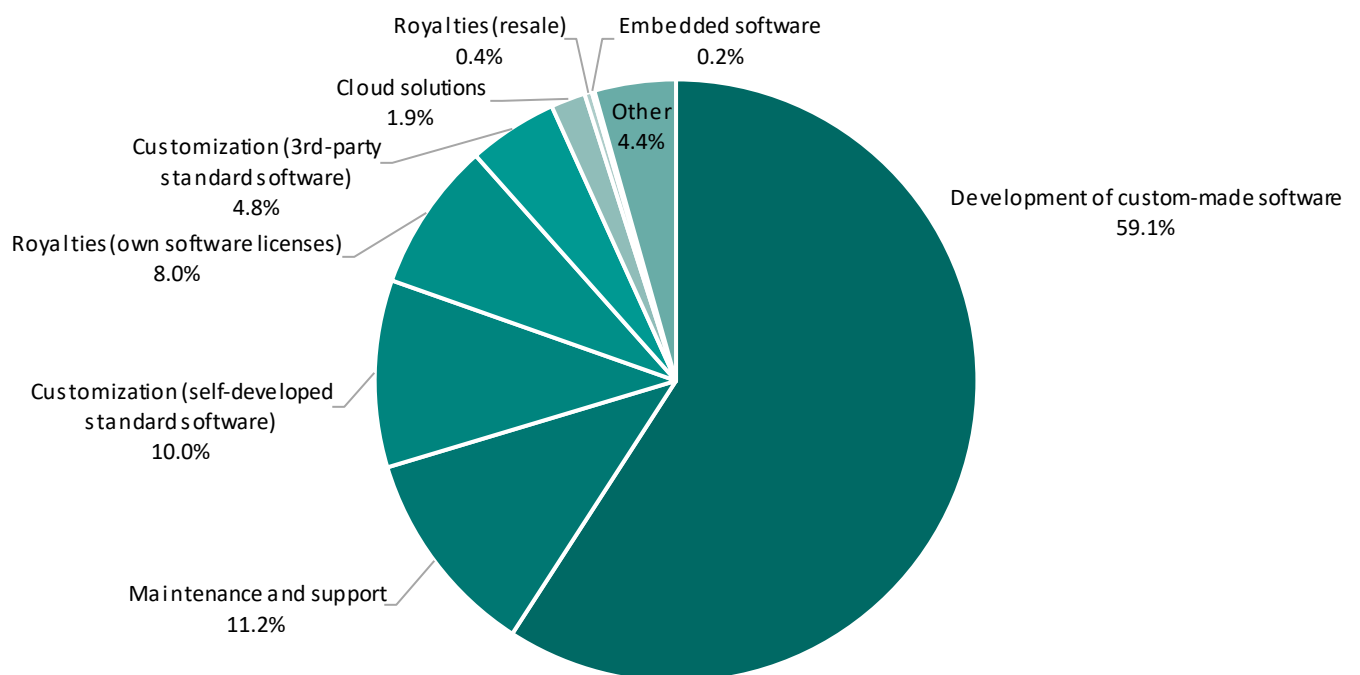Figure 12: Revenue from different revenue sources as percentage of standard software manufacturer revenue

Royalties (resale)
0.8%

Embedded software
0.3%

Other
1.9%

Customization (3rd-party standard software)
1.5%

Development of custom-made software
2.1%

Cloud solutions
13.8%

Maintenance and support
37.8%

Customization (self-developed standard software)
14.1%

Royalties (own software licenses)
27.5%
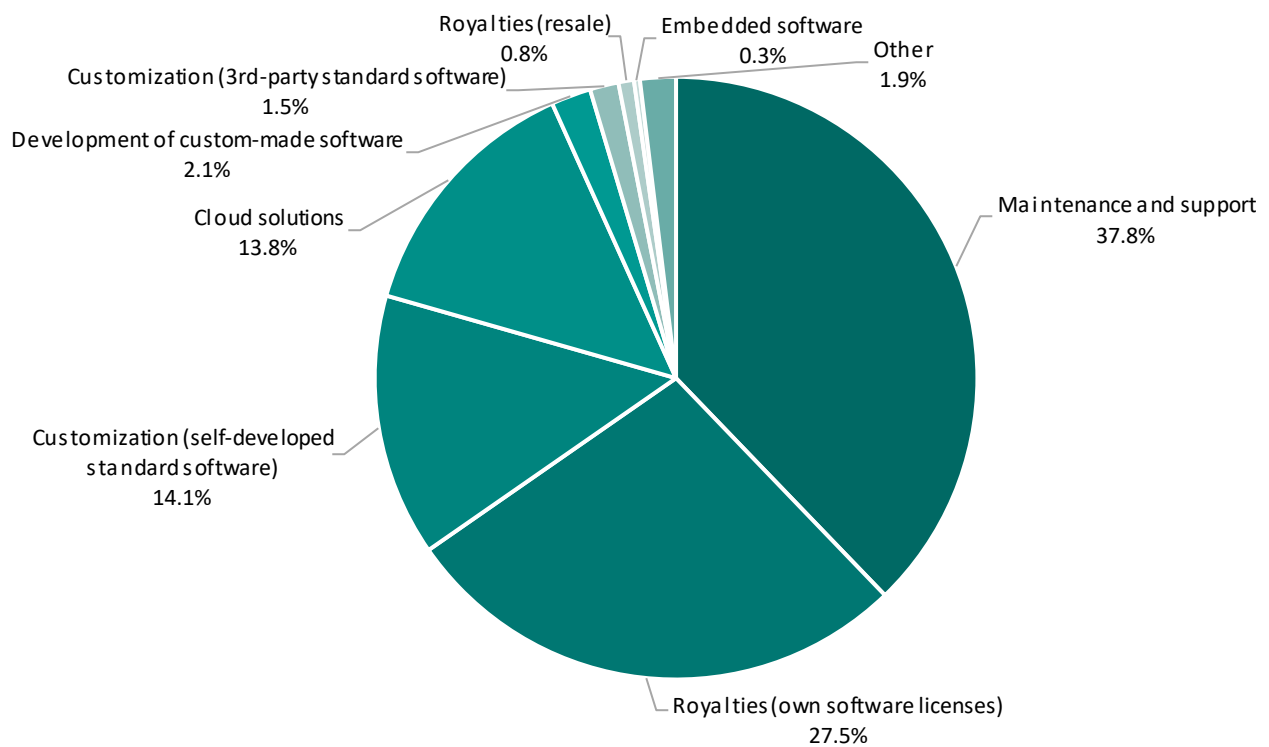
Source: SSIS 2019

N = 51

Sources of Revenue for Manufacturers of Custom Software

Figure 13: Revenue from different revenue sources as percentage of custom software manufacturer revenue

Royalties (resale)
0.4%

Embedded software
0.2%

Cloud solutions
1.9%

Other
4.4%

Customization (3rd-party standard software)
4.8%

Royalties (own software licenses)
8.0%

Development of custom-made software
59.1%

Customization (self-developed standard software)
10.0%

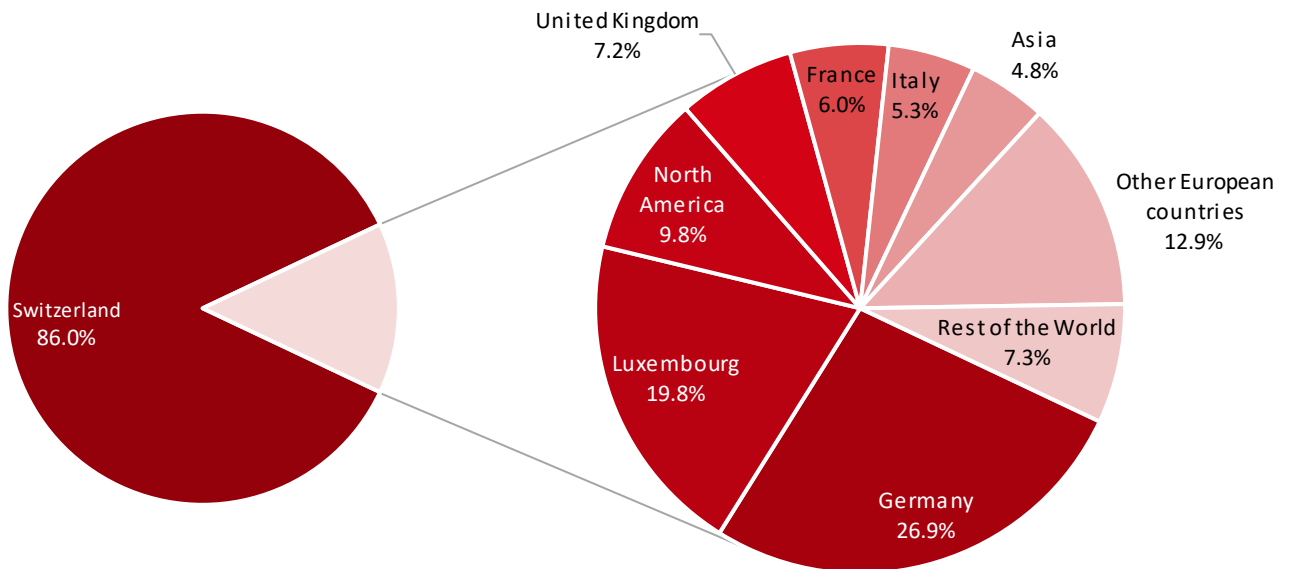Maintenance and support
11.2%

Source: SSIS 2019

N = 61

Spotlight on

Internationalization & Sourcing

Degree of Internationalization and Target Markets

Figure 14: Distribution of international revenue

Increasing Internationalization of Swiss Software Companies

Figure 14 shows the degree of internationalization and the target markets in 2018. Compared to 2017, the percentage of revenue Swiss software companies generated abroad decreased to 14.0%. This is a sharp decrease of 11.0 percentage points compared to 2017.

Like in prior years, Germany remains the most important export market (26.9%). Compared to 2017, however, this is a decrease of 9.8 percentage points and thus one possible explanation for the overall decline. The second most important international market in 2018 was Luxembourg, with 19.8%, followed by North

America (9.8%), the United Kingdom (7.2%), and the neighbouring countries France (6.0%) and Italy (5.3%).

Figure 15 shows the employee growth prospects abroad. With 10.6% for 2019 and 13.5% for 2020, these growth prospects are lower than the growth prospects in Switzerland (11.6% for 2019 and 14.9% for 2020).

Growth of Headcounts Abroad

Figure 15: Percentage of growth in headcounts of employees in Switzerland and abroad
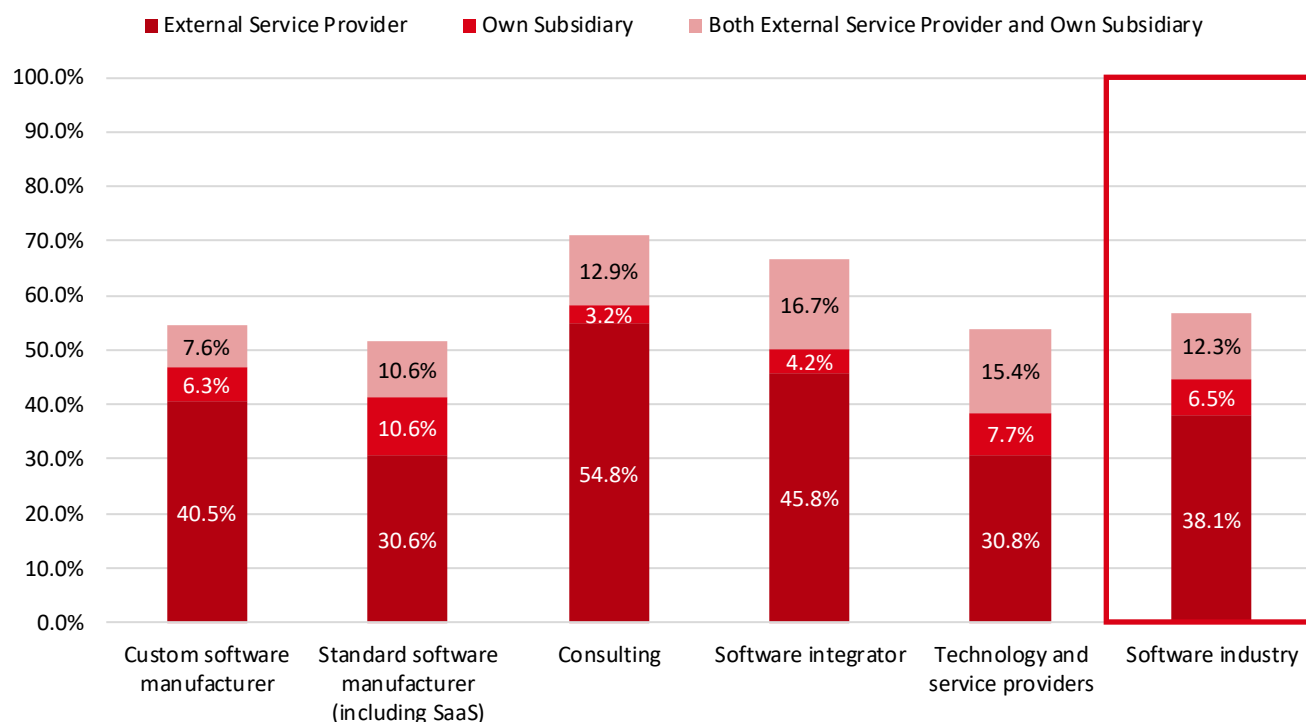
Outsourcing Yes—No

Figure 16: Percentage of companies that outsource by subindustries

■ External Service Provider   ■ Own Subsidiary   ■ Both External Service Provider and Own Subsidiary

Source: SSIS 2019   N = 260

Among consulting companies

54.8%

do source products and/or services from external service providers

Outsourcing in the Swiss Software Industry

Sourcing, the development, improvement, and operation of IT products and/or services through external service providers and/or own subsidiaries, remains vital for Swiss software companies. Figure 16 shows the propensity to source products or services from external service providers, own subsidiaries, or both external service providers and own subsidiaries in 2018.

Our results show that the propensity to outsource is the highest among consulting firms (54.8%), followed by software integrators (45.8%), custom software manufacturers (40.5%), technology and service providers (30.8%), and standard software manufacturers (30.6%).
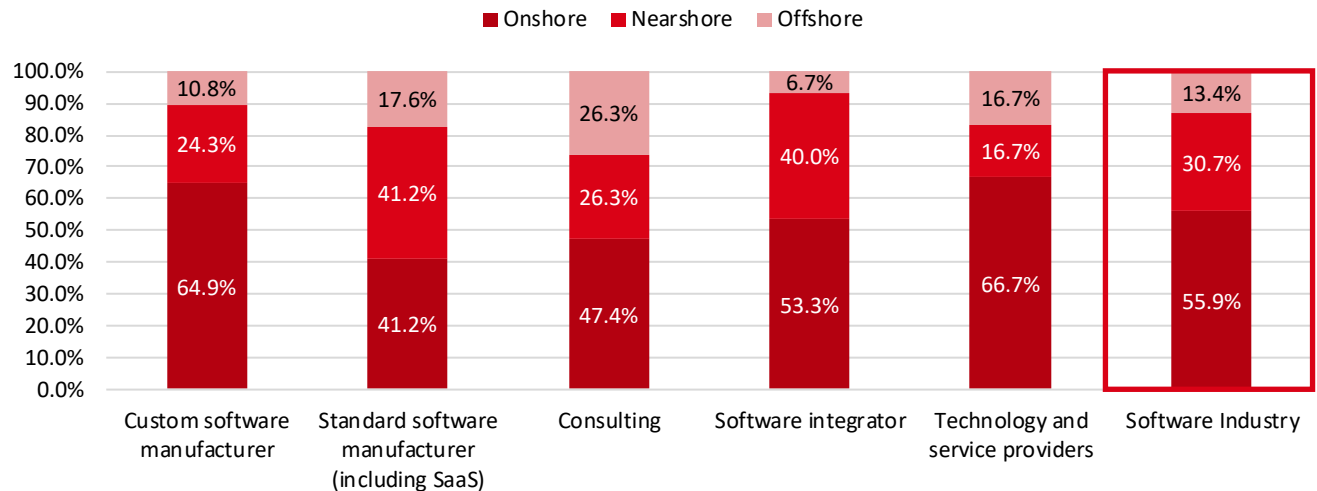
Interestingly, the propensity to source services and/or products from own subsidiaries is the highest among

standard software manufacturers (10.6%). So while standard software manufacturers are comparably reluctant to source from external service providers, they are relatively often doing so from their subsidiaries. The second-highest propensity to source services and/or products from own subsidiaries had technology and service providers (7.7%), followed by custom software manufacturers (6.3%), software integrators (4.2%), and consulting companies (3.2%).

When it comes to sourcing from both external service providers and own subsidiaries, software integrators had the highest propensity (16.7%), followed by technology and service providers (15.4%), consulting companies (12.9%), standard software manufacturers (10.6%), and custom software manufacturers (7.6%).

Sourcing Locations for External Service Providers

Figure 17: Percentage of onshoring, nearshoring, and offshoring from external service providers

Onshore **Nearshore** **Offshore**

	Custom software manufacturer	Standard software manufacturer (including SaaS)	Consulting	Software integrator	Technology and service providers	Software Industry
Offshore	10.8%	17.6%	26.3%	6.7%	16.7%	13.4%
Nearshore	24.3%	41.2%	26.3%	40.0%	16.7%	30.7%
Onshore	64.9%	41.2%	47.4%	53.3%	66.7%	55.9%

Source: SSIS 2019
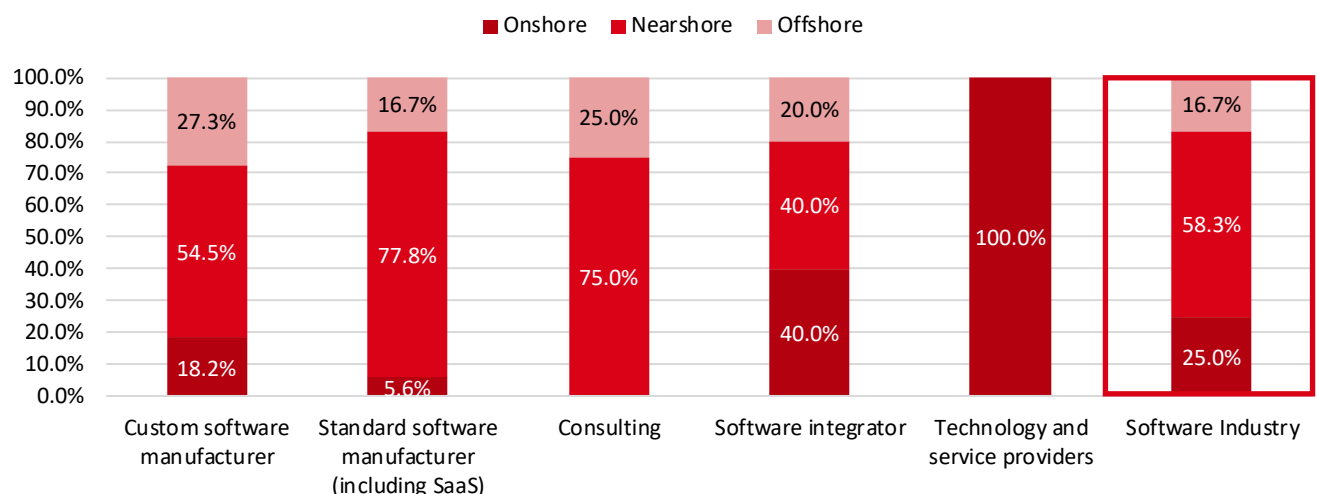
N = 127

Locations of Outsourced Activities

Figure 17 shows the sourcing locations for external service providers in 2018. Interestingly, consulting companies (26.3%) had the highest propensity to source products and/or services from offshore locations (i.e., more than 3000km from Switzerland), while standard software manufacturers (41.2%) and software integrators (40.0%) focused on nearshore providers within a radius of 3000km. Eventually, technology and service providers (66.7%) relied predominantly on Swiss service provid-

ers.

Figure 18 shows the locations of subsidiaries of Swiss software companies in 2018. Here, 27.3% of the custom software manufacturers, 25.0% of consulting companies, 20.0% of the software integrators, and 16.7% of the standard software manufacturers had subsidiaries in distant locations (i.e., more than 3000km from Switzerland). Interestingly, most Swiss software companies

Locations of own subsidiaries

Figure 18: Percentage of onshoring, nearshoring, and offshoring from internal service providers

Onshore **Nearshore** **Offshore**

	Custom software manufacturer	Standard software manufacturer (including SaaS)	Consulting	Software integrator	Technology and service providers	Software Industry
Offshore	27.3%	16.7%	25.0%	20.0%		16.7%
Nearshore	54.5%	77.8%	75.0%	40.0%		58.3%
Onshore	18.2%	5.6%		40.0%	100.0%	25.0%

Source: SSIS 2019

N = 48

Spotlight on

Productivity

Named Measures to Enhance Productivity

Figure 19: Measures to increase productivity in proportion to their naming

Source: SSIS 2019   N =

Productivity-enhancing measures in the Swiss software industry

Figure 19 shows the measures taken by Swiss software companies in 2018 to enhance their productivity. Most of the enhancement measures concerned existing processes, including the optimization, agilization, automation, and digitalization of business processes. Swiss software companies have also invested heavily in upskilling their staff through trainings and new employees,

streamlining their product and service portfolios through standardizations and cloud solutions, using the latest technologies, improving their knowledge management, and promoting employee loyalty.

Figure 20 shows the measures Swiss Software companies consider efficient to enhance productivity.

Effectiveness of Productivity-Enhancing Measures

Figure 20: Which productivity-enhancing measures do Swiss software companies consider efficient?
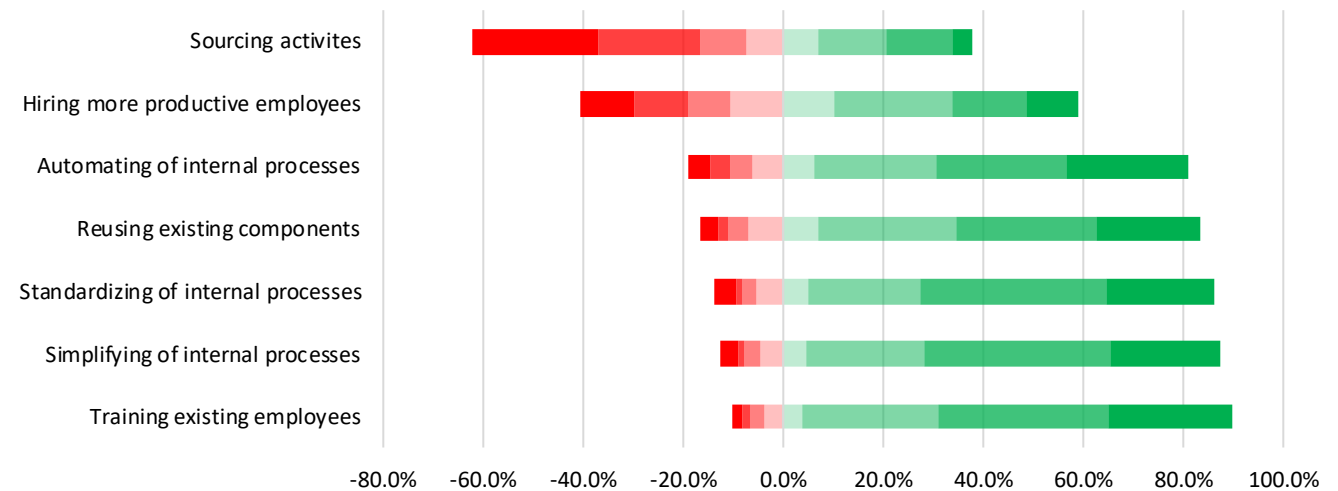
Source: SSIS 2019   N = 200

Expected Changes in the Sources of Their Revenues

Figure 21 shows the revenue sources in 2018 compared with the revenue sources expected by Swiss software companies in 2021. Interestingly, Swiss software companies expect a significant shift in revenues from the development of custom-made software (from 39.2% in 2018 to 34.0% in 2021) to cloud solutions (from 7.5% in 2018 to 11.5% in 2021), and maintenance and support (from 16.7% in 2018 to 18.7% in 2021).

Figure 22 shows the same diagram for standard software manufacturers. Here, revenues from cloud solutions increase from 13.8% to 21.4% while, revenues from royalties decrease from 27.5% to 23.1% .
Figure 23 shows the same diagram for custom software manufacturers. Here, revenues from cloud solutions increase from 1.9% to 7.1%, while revenues from custom-made software decrease from 59.1% to 49.8%.

Shifts in Sources of Revenue until 2021

Figure 21: Revenue sources in 2018 compared to revenue sources in 2021
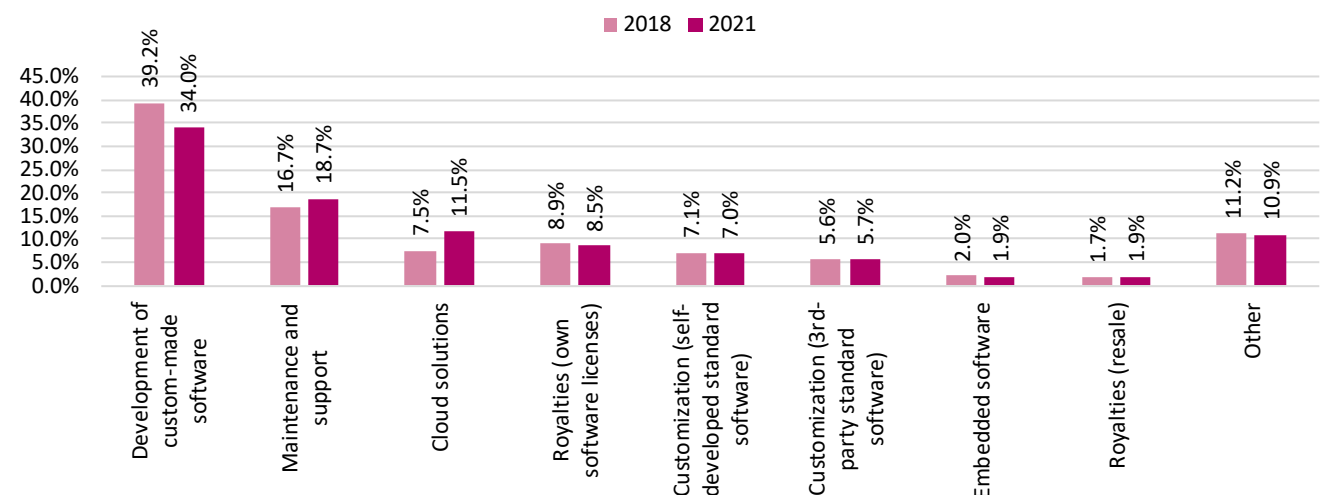
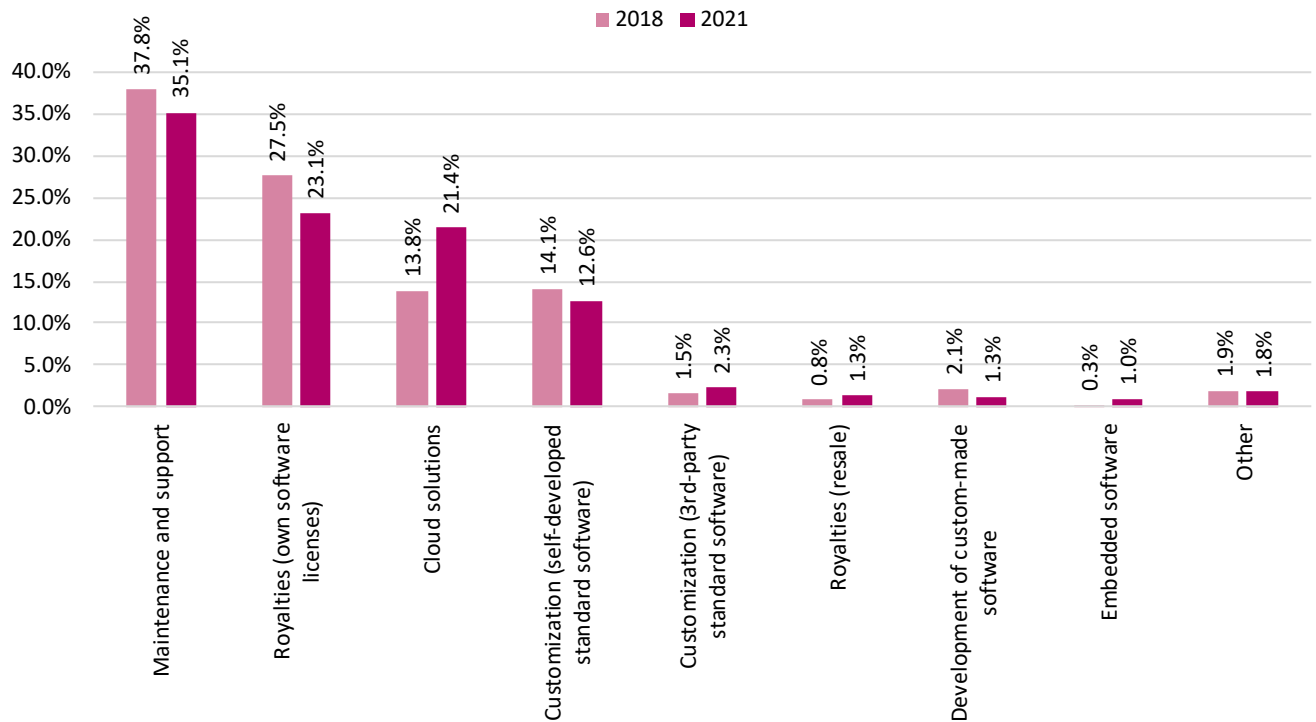Source: SSIS 2019   N = 178

Shifts in Sources of Revenue until 2021 for Standard Software Manufacturers

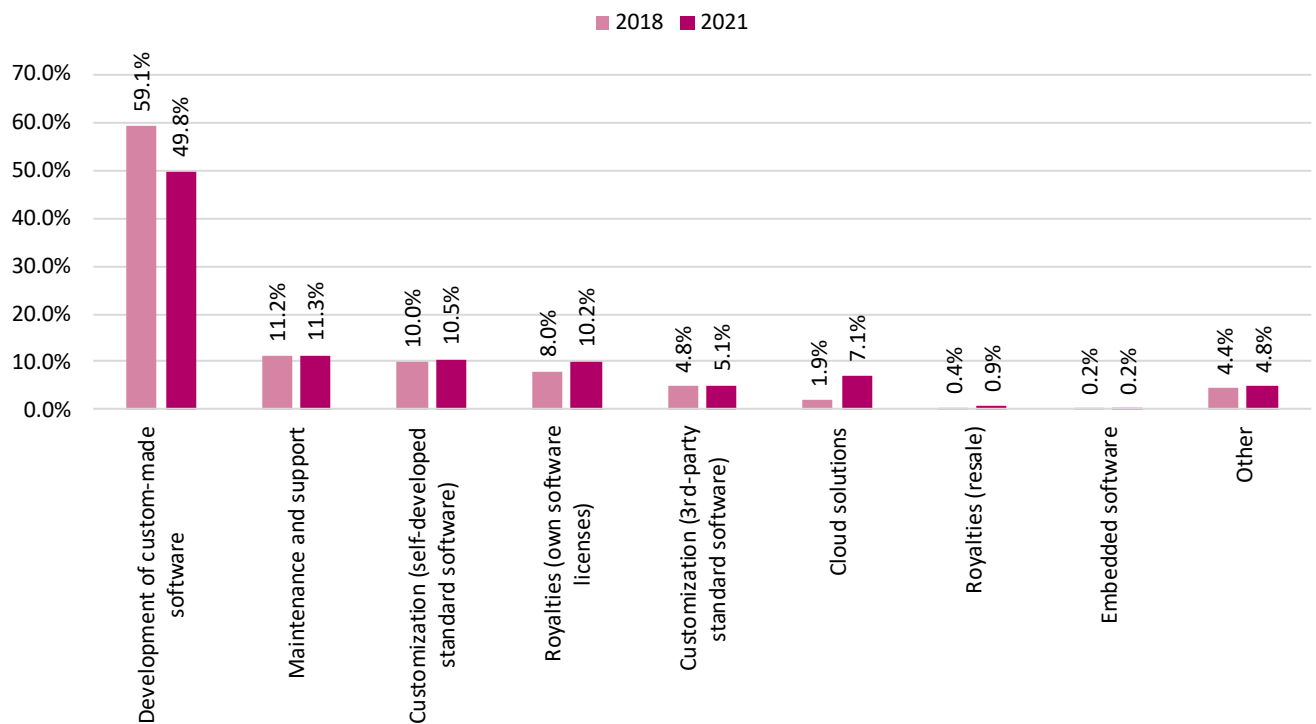Figure 22: Revenue sources of standard software manufacturers in 2018 compared to revenue sources in 2021

Source: SSIS 2019

N = 51

Shifts in Sources of Revenue until 2021 for Custom Software Manufacturers

Figure 23: Revenue sources of custom software manufacturers in 2018 compared to revenue sources in 2021
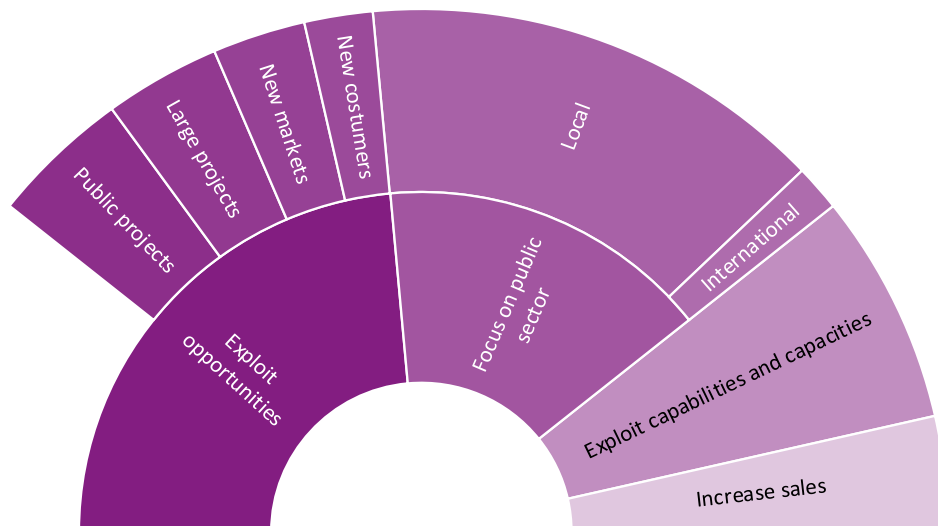

Source: SSIS 2019

N = 61

Spotlight on
Public Tenders

Reasons <u>for</u> Participating in WTO Tenders

Figure 24: Reasons for participation in WTO tenders in proportion to their naming

WTO Tenders and the Swiss Software Industry Survey

Figure 24 shows the reasons why Swiss software companies participate in public tenders. Here, the most important reason for participation is the exploitation of opportunities through attractive public projects, large projects, new markets, or new customers. The second most important reason was the specific orientation on the public sector, followed by the ability to use free capabilities and capacities, and to increase sales.

Figure 25 shows the reasons why Swiss software companies do not participate in public tenders. The most important reason for non-participation is the time and effort small companies can hardly bear, the lack of capacity, and the low success rate. The second most important reason was a different orientation or simply a lack of awareness.

Reasons <u>Against</u> Participation in WTO Tenders

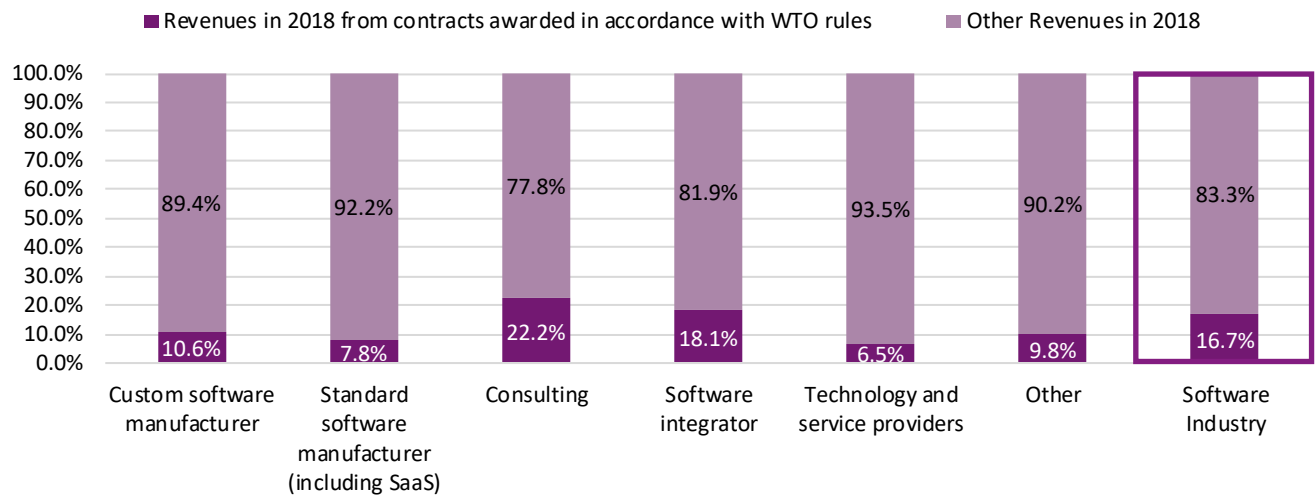Figure 25: Reasons against participation in WTO tenders in proportion to their naming
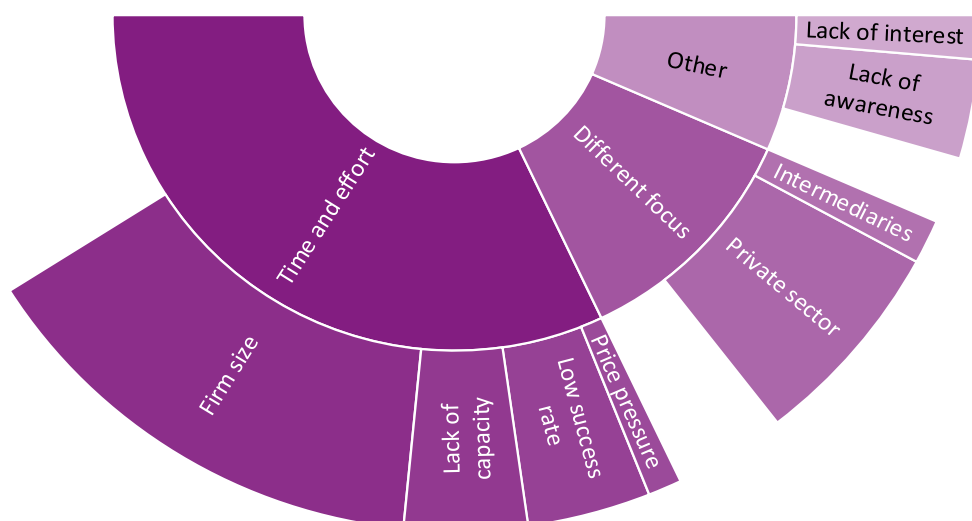
WTO-Compliant Revenues in the Subindustries

Figure 26: Percentage of revenues in 2018 in the individual subindustries from contracts awarded under WTO rules

Source: SSIS 2019   N = 72

Revenues from Contracts Awarded in Accordance with WTO Rules

Figure 26 shows the percentage of revenues in 2018 of Swiss software companies from contracts awarded under WTO rules. On average Swiss software companies generate among 16.7% of the revenues form contracts awarded under WTO. This source of revenue is most important for consulting companies (22.2%) and software integrators (18.1%).

Figure 27 shows the percentage of revenues in 2018 in the major regions of Switzerland from contracts awarded under WTO rules. Revenues form contracts awarded under WTO rules are most important for the Espace Mittelland (31.9%), followed by Zurich (16.6%), eastern Switzerland (15.7%), northern Switzerland (8.9%), and the lake Geneva region (0.9%).

WTO-Compliant Revenues in the Major Regions of Switzerland

Figure 27: Percentage of revenues in 2018 in the major regions of Switzerland from contracts awarded under WTO rules
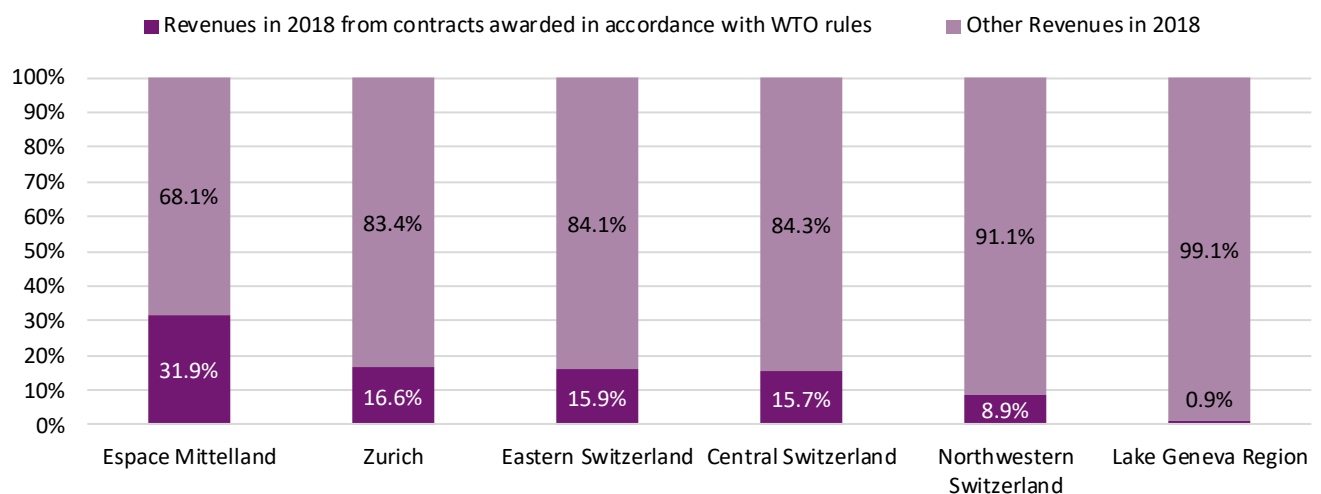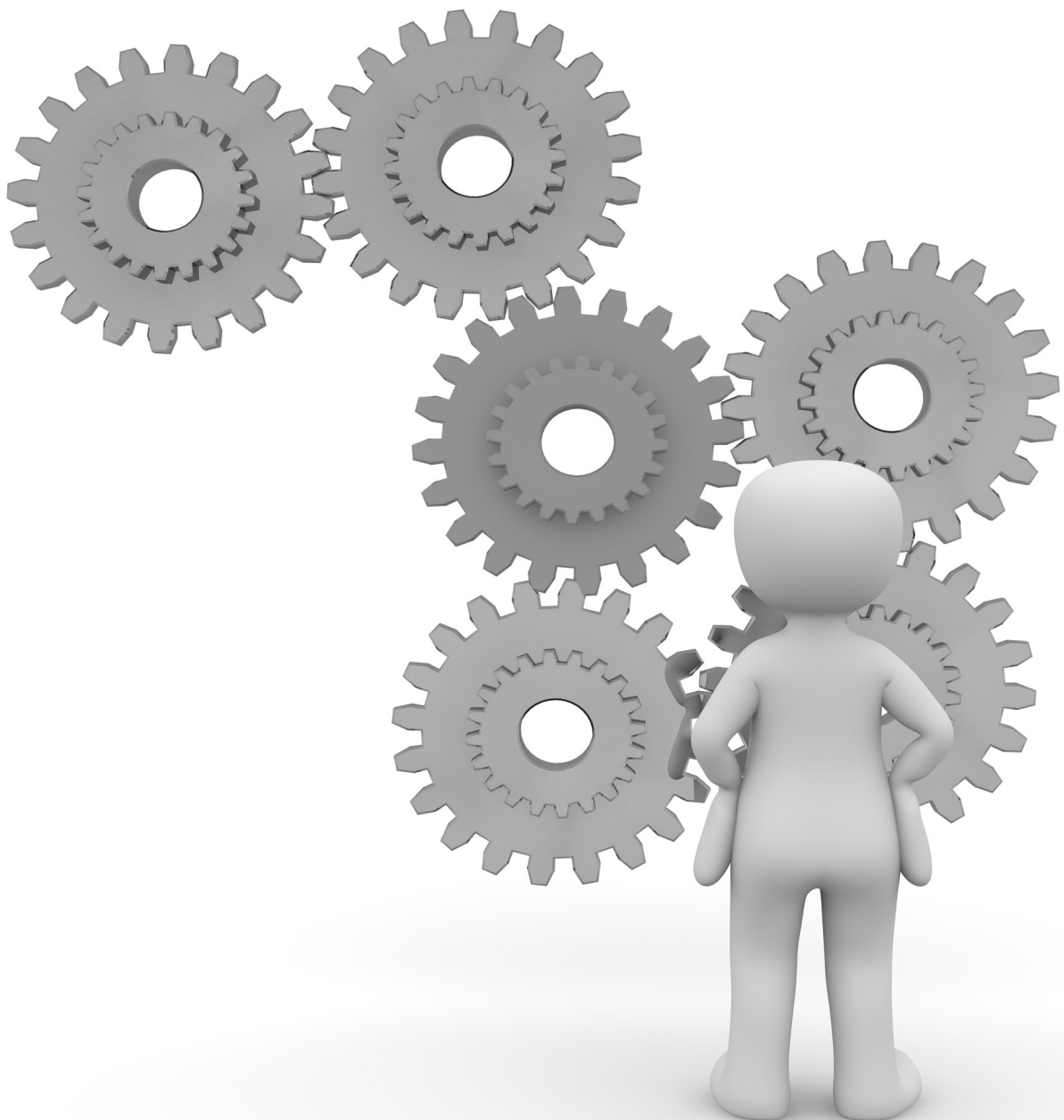

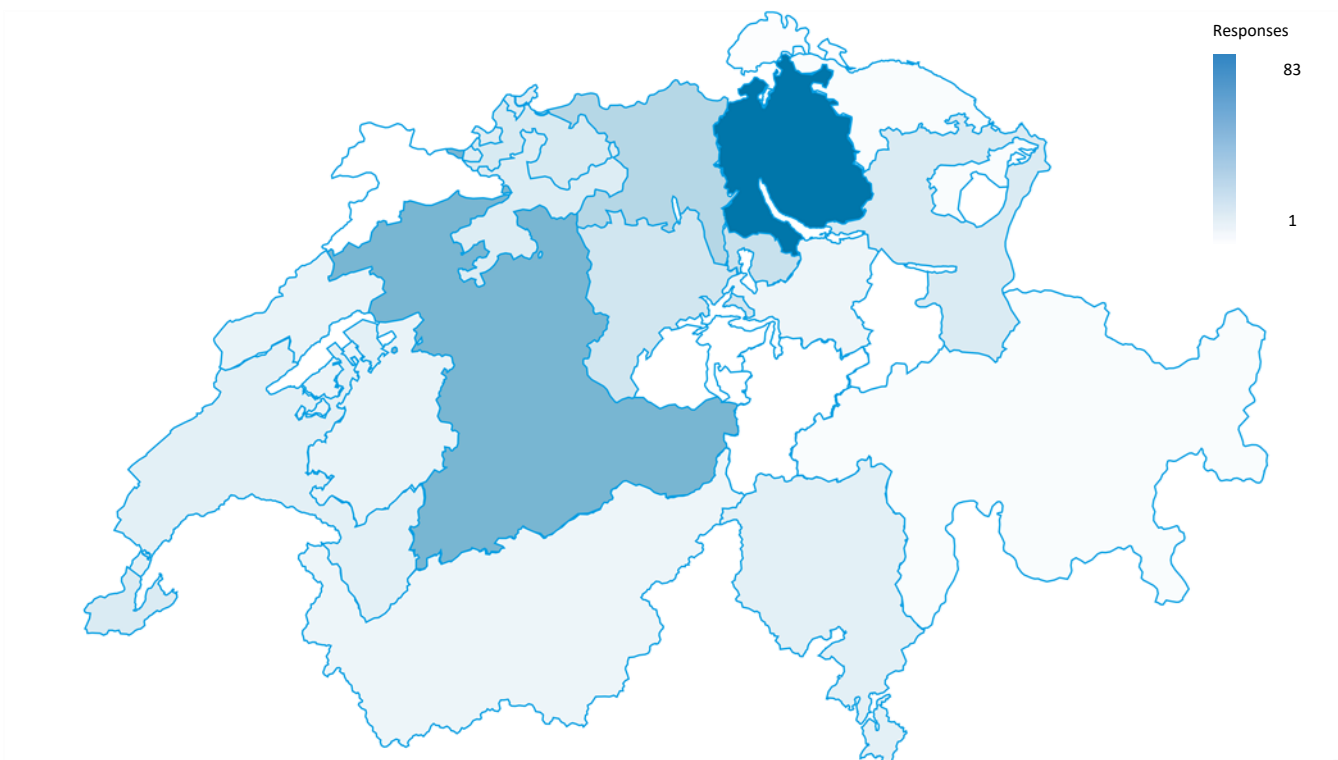Source: SSIS 2019   N = 72

Method and Official Statistics
About the SSIS

Geographical Distribution of the Participants in 2019

Figure 28: Participating companies per canton

Source: SSIS 2019

About the SSIS in 2019

This year we conducted the Swiss Software Industry Survey (SSIS) for the fifth time. With the fifth iteration, the SSIS managed to defend its pole position in terms of size, geographical reach, and methodological rigor:

Reach of the survey: The Swiss software industry survey aims to represent the entire Swiss software industry—rather than only a couple of large companies. Therefore, the SSIS…

♦ Builds on an extended and refined high-quality contact database with approximately 5'000 validated Swiss software companies

♦ Covers all Swiss language regions

♦ Covers 20 cantons (see Figure 28)

♦ Builds on a large sample size with 591 participants, 271 complete responses, and 191 post-stratified data points on revenue and profitability

Rigor of the survey: To meet highest research standards...

♦ … we developed, refined, and assessed new constructs by following state-of-the-art procedures for construct development

♦ … we relied on the extrapolation method developed for last year's SSIS, which builds on state-of-the-art econometrical procedures (post-stratification by region, subindustries, company size, and revenue)

Additional benefits for participating companies: All participants of the survey can compare their own performance against other companies using our benchmarking website. In addition, companies which participate regularly can now benchmark their performance over time (**www.softwareindustrysurvey.ch**).

Official Statistics - Employees and Added Value

Table 1: Distribution of Added Value in 2017 and distribution of Full-Time Equivalents in 2016 by industry

	Added Value	FTEs
Energy Supply, Water Supply, Waste Management	1.6%	1.1%
Construction	5.5%	8.5%
Manufacturing	19.1%	16.0%
Trade, Repair of Motor Vehicles & Motorcycles	14.3%	13.5%
Accommodation and Food Service Activities	1.7%	4.9%
IT and Other Information Services (NOGA 62, 63)	**2.4%**	**2.4%**
Financial Service Activities & Insurance	9.4%	3.9%
Public Administration	10.8%	4.3%
Education	0.6%	6.0%
Human Health & Social Work Activites	8.2%	13.1%
Transportation, Storage, Information & Communication	6.1%	6.7%
Real Estate, Professional, Scientific, Technical & Administrative Activities	18.1%	15.7%
Other Sectors	2.2%	3.9%
Total	**100%**	**100%**

Source: BESTA , Added Value 2016, FTEs 2016

The SSIS as Complement to Official Statistics

Data about the Swiss software industry is provided as part of official statistics nested in the broad categories of "Computer programming, consultancy and related activities" and "Information service activities" (NOGA codes 62 & 63).

The respective data on added value (i.e., revenue) and number of employees from Swiss Statistics emphasize the major importance of the Helvetic Information Technology and Information Services sector. With more than 20 billion Swiss francs it adds roughly 2.4% to the Swiss GDP (see Table 1) and employs almost 2.4% of all jobholders in Switzerland (see Table 1), and is one of the strongest growing sectors. Figures 29 and 30 show the official employee statistics.

Official statistics provide reliable information about the size and growth of the overall IT sector. However, they do not draw a very detailed picture about the Swiss software industry.

Therefore, the SSIS positions itself as a complementary study that enriches official statistics. Compatibility with official statistics is ensured by focusing on two NOGA codes (62, 63). Yet, we provide a richer picture of what is going on within these codes. Specifically, the report enables the following additional insights:

♦ Trend analysis of key performance indicators incl. EBIT, R&D expenditure, employee growth, and revenue growth

♦ Indicators on profitability and R&D investments

♦ Analyses along practically relevant categories (standard vs. custom software, maintenance vs. testing, etc.).
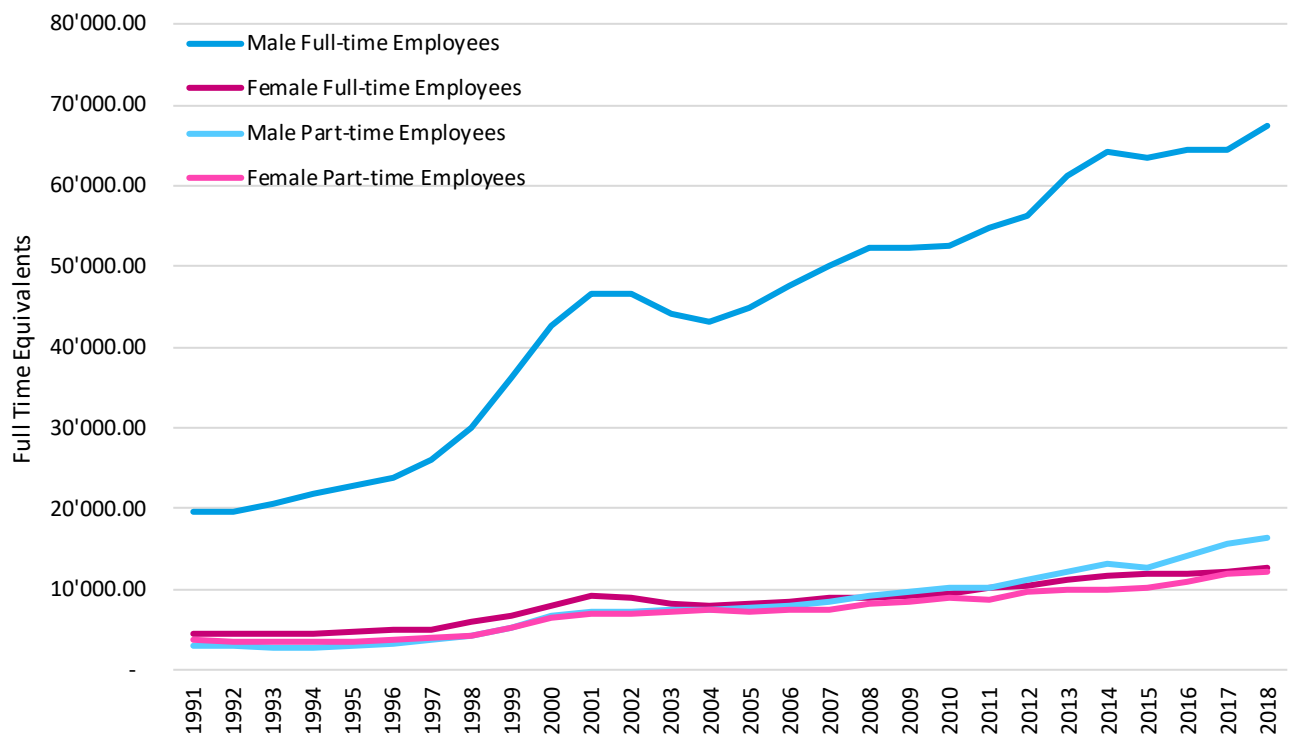
Employees in the Swiss ICT Sector

Figure 29: Number of FTEs in NOGA 62 & 63 from 1991-2018
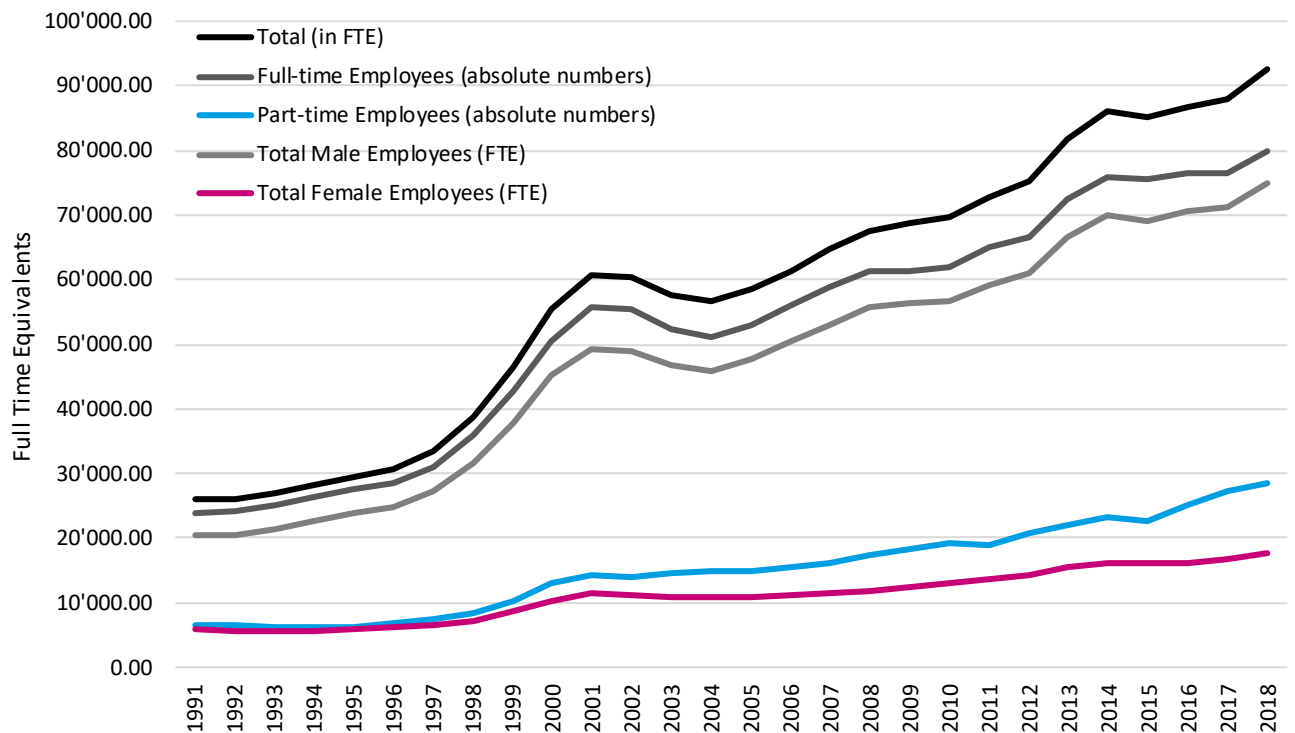
Source: BESTA 2019

Part-Time Employees in the Swiss ICT Sector

Figure 30: Number of FTEs and Part-Time Employees in NOGA 62 & 63 from 1991 - 2018

Source: BESTA 2019