

Cosylab's solutions have been integrated into some of the most important international scientific projects, for example CERN and ITER.

IT Sector

# Slovenian IT Companies Among the Best in the World

Slovenian information technology companies can contend in terms of quality with some of the biggest names in the business – and often collaborate with them. Even the most unsophisticated companies realised, at some point during the pandemic, that unless they modernised their IT structure processes and infrastructure, they would no longer be able to compete.

Jerneja Srebot

Today, Slovenia has a large number of well-established companies that are engaged, either independently or within professional groupings, in helping to identify digital needs and requirements, and designing effective digital strategies and digital transformation action plans.

#### International presence comes naturally

In the opinion of many, the biggest advantages that Slovenian IT companies have are wide knowledge, high quality criteria and the fact that they are well-established within international business flows. **Tone Stanovnik, Director of the Špica company**, believes that Slovenia's size is also one of the industry's strong points, as the ambition to export is something companies start with from the outset. Moreover, small, lean countries are better able to adapt quickly and nimbly.

Today, Slovenia has a large number of well-established companies that are engaged, either independently or within professional groupings, in helping to identify digital needs and requirements, and designing effective digital strategies and digital transformation action plans. At the same time, digital transformation has also accelerated the arrival of

innovative providers of advanced digital solutions capable of developing products and services with high value added.

"The countries of South-Eastern (SE) Europe have, through history, seen large volumes of migration and been used to institutional forms of cooperation," say the company **Netica**. "The former historical, cultural and linguistic connections between Slovenia and the countries of South-Eastern Europe keep the feeling of closeness alive, and are also a competitive advantage for those Slovenian companies that operate in the region."

# Slovenia's strength lies not in numbers but in quality

Many people stress the advanced knowledge that Slovenian IT companies possess, from state-of-

the-art financial tools (e.g. Blockchain) to the latest research into the development of online and mobile apps and the optimisation of work and production processes within enterprises and corporations. Another considerable advantage lies in the fact that they can compete on price with other Western European countries.

That said, as the **Žein** company point out, Slovenian companies cannot compete when it comes to economies of scale: "Other IT companies, those from the most developed countries as well as from SE Europe, can employ 100,000 specialists or more. This means that it is theoretically impossible for companies in Slovenia to compete in the general development of ICT services." They highlight niche competence centres as one area of opportunity, where the unique combination of the EU accession timetable and the technological maturity of Slovenian companies can produce strong competence centres and lead to numerically stronger organisations. "Slovenia is developing a good example of this in the field of artificial intelligence competence centres, where it is becoming a visible global player."

#### Changing the mindset is the biggest challenge

The basic trend in IT remains the continuation of digital transformation and, within that, the effective use of ever-greater volumes of data. Cloud solutions are proving to be key to this process, while the Internet of Things continues to offer solutions that enable us to integrate, interconnect and obtain data from all the devices around us. Spica also point out that more recent developments have also impacted the dynamics of the market. "The recent Covid-19 waves have further accelerated this process and placed us overnight in an economy in which new competitors that do not have a 30-year history or tradition behind them are growing quickly on the back of new technologies," says their director.

Experts note that we still lack depth of understanding when it comes to digital transition. This mental leap has proved to be an extremely difficult one for most of us to make - until external circumstances, such as a pandemic, intervene.

#### Non-standardised terminology is a problem

Even the most unsophisticated companies realised, at some point during the pandemic, that unless they modernised their IT structure processes and infrastructure, they would no longer be able to compete. At Netica, they have noticed that the majority of companies are faced with similar data challenges regardless of the industry or the geographical area of operations. "The number of data resources that appear incompatible is increasing. The automation of data flows remains incomplete, as data management is still largely performed manually – which requires additional resources, prolongs analysis time and increases the chance of errors."

Non-standardised terminology is a problem and one that makes it difficult to search databases: information can remain hidden, and data and knowledge exchange poor and incomplete. All these factors further prolong the process, make it more expensive, and compromise the success of research, quality control and new product development.

Keen to resolve these challenges, Netica have developed NETILAB, an automated data management and analytic software that speeds up digital transformation and increases operational productivity. It is used by the development centres of a number of global pharmaceutical giants, in Slovenia and abroad, and the company are confidently looking towards the markets of SE Europe, the Middle East and the Pacific.

#### Role of large companies has changed

As far as international integration is concerned, Špica emphasise the importance of keeping a constant eye on the moves being made by the big players, especially in the US and Asia, as they tend to come to Europe after a short delay. The roles of many large companies have changed over time, which has allowed them to stay afloat. "Microsoft is a good example of a traditional IT company which, despite its history and tradition, managed to trim its sails and catch the wind of the new technologies. In addition to doing our own thing, we have therefore also opted for a tactic of 'standing on the shoulders of giants'," explains company director Tone Stanovnik. Since it became a Microsoft Partner of the Year in 2020, Špica has offered its time-management services to customers around the world via Microsoft.

The company have focused their export drive on SE Europe since the very beginning, and now have a well-developed network of own companies in all the capital cities of the former Yugoslavia. In recent times they have noticed that rapid integration of this region with Europe has restarted, which should definitely improve the economic situation. At the same time, a significant amount of production is moving back to the south-eastern edge of Europe from China, which reduces logistical risks and the risk of supply chain crises.

## **Products and services tailored to SMEs**

**SETCCE** have steered the development of their business model into the specialised niche of digital transaction management (DTM), offering the market a set of advanced cloud services for the electronic preparation and signing of documents in business processes. In addition to servicing larger business systems, they also support ecosystems in which several companies work together – such as the car industry, which has a highly dispersed network of partners, from distributors, sellers and financial service providers to insurers, service networks and beyond.

They also specialise in 'one-stop shops', which they offer mainly to larger business systems that employ complex processes and need to control signature workflows at different sites with customers, partners or internally. They have therefore developed various digital tools that employ a variety of signing

Niche competence centres represent one area of opportunity. where the unique combination of the EU accession timetable and the technological maturity of Slovenian companies can produce strong competence centres and lead to numerically stronger organisations.

**Experts note that** we still lack depth of understanding when it comes to digital transition. This mental leap has proved to be an extremely difficult one for most of us to make - until external circumstances. such as a pandemic, intervene.

techniques, and are investing considerable effort in introducing signature tools into every business information system in a simple and user-friendly way.

SETCCE are interested in the markets of SE Europe because they lag behind the developed European markets by about five years in terms of digital transformation. The company have spied an opportunity in 'green fields', which are those markets that have only just embarked on their digital transformation journey. They are keen to hold onto their position as the largest provider of DTM services in the Adria region while expanding into the wider SE Europe area, and are also moving away from the classic approach to customers in digital marketing. "Alongside our new services, we have developed an on-boarding and accounting system, and are generally adapting our products and services to the SME segment, which will be the next to adopt DTM. So we don't approach expansion merely in terms of geography, but in terms of new industries and smaller business systems as well," say the company.

unsophisticated companies realised, at some point during the pandemic, that unless they modernised their IT structure processes and infrastructure, they would no longer be able to compete.

Even the most

#### **Competence centre established in Germany**

The Žejn company are mainly involved in automation and robotisation, and foster an organisational mindset that internalises the new reality of the marketplace. During the comprehensive overhaul of the company, they tried to automate as many processes as possible and transferred this mindset to its Munich-based competence centre, LegalTech, which was opened in 2017.

"We have automated 10,000 man-hours, often with the help of artificial intelligence, but more often without it (and often even with very simple technological solutions)," they explain. "This is time that the end-user would otherwise spend entering and copying data that is already known in advance."

Thanks to links with German universities, they employ Legal engineers within the LegalTech field at the competence centre, something that is not possible in the small Slovenian market. They have therefore been able to attract some of the biggest names, including German railways, telecoms companies and large international concerns from the US. "This is competence and knowledge that we are also actively and successfully exporting to SE Europe," say Žejn. "We don't have unlimited customers in this area, but the ones we do have highly value our work in the fields of law and legal ICT systems."

### Trying to make remote working easier

**XLAB** are also involved in automation. They provide services in the fields of artificial intelligence and machine learning, and also offer support to the full lifecycle of company data, from management, analysis and visualisation of results to the placement of the entire solution in the cloud.

They have identified the need for remote working as one of the key issues of today, and responded to this with the ISL Online software solution, which enables companies to work and be in contact with

customers remotely and, at the same time, take control of any device. "We are focusing our efforts chiefly on the development of our main services," they explain. "We are constantly improving and upgrading the functionalities of our ISL Online remote access solution, while our XLAB Steampunk brand has made us one of the leading companies in the area of IT automation using the Ansible tool."

XLAB work closely with the product team developing the Ansible tool: last year they launched the Quality Scanner for Ansible Playbooks, a tool that helps users write high-quality scripts, and are planning a major upgrade at the end of the summer.

The company have been building their international presence from outset, with a focus on developing their own products and services with high value added. Cooperation with some of the largest global companies and strong involvement in research activities enable XLAB to remain on top of trends in the field of modernisation. In the next few years, they intend to further consolidate their global presence as a specialist in IT automation.

## Proud to contribute to the development of treatment

Cosylab develop customised software solutions for the most complex systems, such as particle accelerators, large telescopes, fusion reactors, innovative medical devices and cancer treatment systems. "We are proud that our solutions have been integrated into some of the most important international scientific projects, for example CERN and ITER, and that they are being used by the largest producers of medical devices and by cancer treatment centres throughout the world, such as Varian and the Massachusetts General Hospital," say the company. They are currently developing AI-based solutions that will significantly improve and speed up cancer treatment, bring treatment costs down and make treatment accessible to a wider circle of patients around the world. They also help start-ups and innovators in the field of medical devices to plan, engineer and produce complex appliances.

The opportunities they see in SE Europe lie mainly in their cancer therapy solutions, which have been well-established in developed markets, such as the US, for some time. "Our OncologyOne package contains all the software required for the operation of irradiation devices, from LINACs to complex proton therapy systems and boron neutron capture therapy (BNCT)," they explain.

They expect digital transformation in the health sector in SE Europe to follow global trends, which presents opportunities to Cosylab and to other Slovenian companies providing such solutions, particularly since they are already present in the region.

In the field of IT automation, XLAB are one of the world's leading Red Hat Ansible experts, working closely with the product team responsible for developing the Ansible tool.