SEO-friendly elements:

- ➔ *Formatting short paragraphs, headers, subheads and bullets,*
- ➔ *Images/ graphics to expand the content,*
- ➔ *Keyphrase usage four to six times in the body of the article (case study, Estonia, innovation, technology)*
- ➔ *Related phrases use these throughout the article (IT, tech, digital skills, software, programming, innovative, etc.)*
- ➔ *Length 800+ words for building SEO*
- ➔ *Link from the post to a web page and another article*

Case Study Estonia: Tiny country with a big heart for innovation

What does a gadget-like miniature camera from a James Bond movie has in common with Skype messenger? Well, both originated in Estonia!

Walter Zapp, inventor of the camera from the spy movie, was living in this country. And the Tallinn programmers invented the popular Skype.

How is it that small Estonia is keeping pace with much larger countries in the industry of new technology?

Source: The Estonian technologies changing the world (visitestonia.com)

Ready for the technological revolution?

The Economist published in 2018 a report (The Automation Readiness Index: Who is ready for the coming wave of automation?) that compared the readiness of countries around the world for the coming technological revolution. The Automation Readiness Index takes into account three basic areas:

- innovation - supported directly or indirectly through research and development,
- education that helps people use new technologies better,
- labor market that utilizes the opportunities of a highly automated economy.

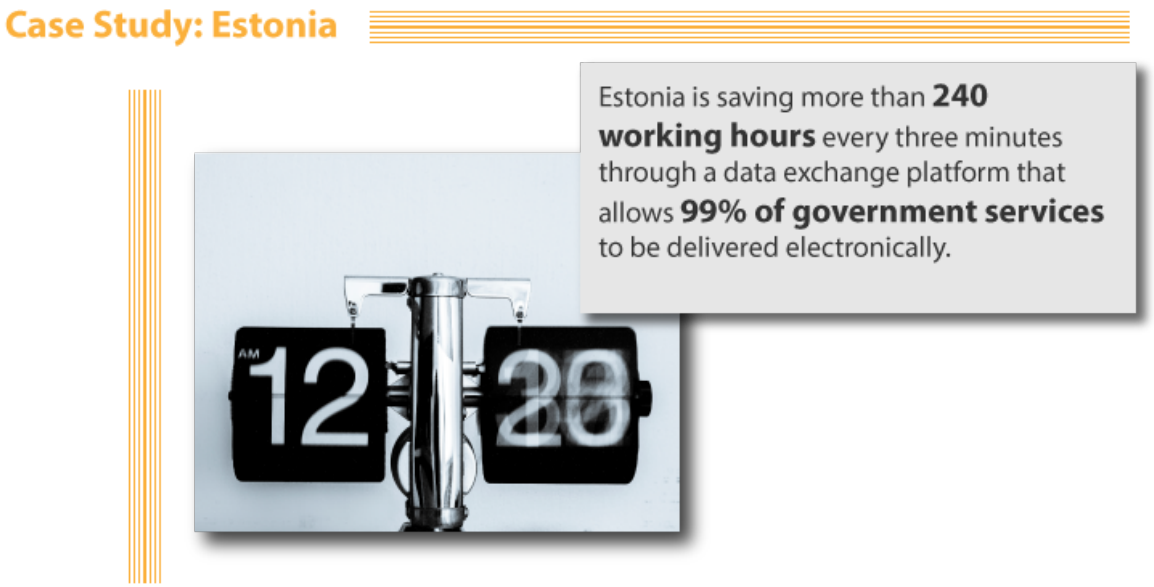
Why these categories? Because they support the transition from a traditional economic model toward intelligent systems and process automation.

Estonia ranks in the top 10 countries for automation readiness, coming in just behind such tech powers as South Korea, Germany, Singapore, Japan and Canada. How is it possible? Let's see!

Innovation over the divisions

In Estonia, the promoter of innovative activities was and remains the state. And it's not limited to the public sector.

It all started with the creation of a secure data-sharing platform between state agencies in the early 2000s. As a result, the Estonians sign documents, vote in elections and do taxes online.



Source: [Estonia's data exchange lets you pay your taxes in five minutes (apolitical.co)]

But the platform itself supports more than just the government and public sector. It can be used by entrepreneurs and companies to do business with each other. It ensures secure data transfer. After the lesson from the 2007 hacking attack, security systems were strengthened and NATO transferred a Digital Security Center to Tallinn.

Additionally, the Estonian government financially supports new technologies. According to the OECD report, between 2014 and 2020 a huge amount of support has been directed to businesses for innovative programs ($155 million), entrepreneurship support ($87 million) and innovative start-ups ($12. 7 million).

There is another element that has contributed to the success: the innovation-friendly atmosphere created by the politicians in Estonia. Over the divisions, those in power have set their sights on creating e-Estonia, a country that has embedded a culture of innovation in its DNA and has been following this path since the fall of communism in 1990.

The politicians and citizens themselves are not afraid to take risks and test new solutions. And they do not have complexes in this regard against large countries, which generally have more resources of people and money.

Case Study: Estonia

Source: Estonia's digital transformation: Mission mystique and the hiding hand (ucl.ac.uk)

Tech-savvy from kindergarten

In the ranking of educational policies that support automation readiness, Estonia ranks second, surpassed only by South Korea. Such a good result is no mistake.

Scientific centers specializing in new technologies, such as the Institute of Cybernetics, were established in Estonia back in Soviet times. Estonia was a pioneer in technology and software development in the early 1980s.

Shortly after the fall of communism, talented employees of research centers were employed in companies, mostly with Scandinavian capital and in the telecommunications industry.

On top of that, political leaders have set their sights on rapid technological development and a break from the past. This resulted in the development of a modern economy that "absorbed" educated workers.

In 2011, Estonia became the first country to introduce HTML coding to elementary schools. A year later, the government launched the ProgeTigers program for students and teachers with the following goals:

- raise interest in technology,
- strengthen technology skills,
- develop digital competencies.

In practice, this means using tablets with coding games, robots and selected animation apps as early as kindergarten. In the later stages of education, knowledge of cybersecurity is added to courses in computer science, programming languages, 3D graphics and robotics.

Case Study: Estonia

The Progetiger program has reached **85% of schools and 44% of kindergartens** in Estonia in five years. Over 830,000 Euros -worth of equipment has been supplied to 446 schools and kindergartens for teaching robotics, programming, 3D modelling and multimedia, and **more than 4,100 teachers** have participated in Progetiger trainings.

Source: Digital Frontrunners Spotlight: Estonia | Nesta

Technical skills, computational thinking, and how artificial intelligence works are priorities. Schools are designed not to impart knowledge, but to teach how to use it. With this attitude, Estonia is laying the foundations for a modern, digital society.

Choose IT in the job market

Employment flexibility and matching employees' skills to the needs of the changing job market are other elements of success. Estonia did its homework and made changes to the labor laws in 2009. They allowed more freedom to enter employment contracts, select forms of employment and reduce the notice period.

Besides labor market regulations, the modern economy is forcing a change in thinking and education. Matching workers' skills to new jobs is the key problem to solve.

Private companies and the public sector offer several opportunities to gain or improve digital skills, including the ProgeTigers program mentioned earlier.

For workers who want to change careers or their further education, one of the more well-known initiatives is Vali IT! (*eng. Choose IT!*), an opportunity to learn IT skills and work in the new technology sector.

Against all odds

The story of Estonia's development in recent decades looks like a fairy tale - it shows that the bigger can do more, but the smaller can do better. Recently, the country has seen a slowdown in development.

The problems with an aging population emerged. The innovation and development are limited to big cities like Tallinn and Tartu, and the province is not keeping up. Added to this, the level of public services (health, education) is not satisfactory, despite their digitization.

But Estonia is still fighting for its future. As the Government Chief Information Officer of Estonia, Siim Sikkut, said in a recent interview:

"(...) the core of CIO or transformation leader or digital leader is to define and deliver the transformation journey. Essentially, we have to manage the change, not only the tech part."