Role of AI in transforming how tax authorities work 1/43/24

Senior Consultant, Tax, PwC Latvia

Elizabete Lizete Lapsina

Manager, Tax, PwC Latvia

Matiss Auzins

The rapid evolution of artificial intelligence (AI) and machine-learning technology has led to their increased use in tax administration across Europe and in Latvia. The adoption of AI has proved to be particularly effective, helping tax authorities prevent tax discrepancies and fraud, improve taxpayer experience and increase the effectiveness of internal processes. This article explores various recent examples of how AI is used to improve tax administration and boost tax revenues in Latvia and elsewhere in Europe.

How AI is used in tax administration in Latvia

Latvia is keeping up to date with practices in other European countries integrating various AI tools to optimise tax administration. As a recent example we can mention Latvia's new taxpayer rating system (we have written about its significance and functioning on MindLink). From a technical perspective, the rating system uses the rules of SAP HANA Rule Framework and WebIntelligence reports, which can be tailored with appropriate access rights and expertise of State Revenue Service (SRS) officers. The rating system is based on the SRS collective expertise and can be adapted in the long-term to ensure that automated taxpayer segmentation data is prepared.

Similar to our Baltic neighbours and other European countries, the SRS website has been using 'Toms' since 2020, a virtual assistant who advises taxpayers on general tax matters and whose expertise grows with each question asked.

In addition to these tools, the SRS is using a machine-learning algorithm capable of identifying businesses that pay cash-in-hand wages with almost 90% accuracy. This is based on its analysis, for instance, of wages reported to the SRS, the Central Statistical Office's data and the financial indicators of businesses. This method has mostly been tested in manufacturing, trade, transport and construction, and finds that 37% of businesses in these sectors pay cash in hand, affecting almost a quarter of workers.

How AI is used in tax administration – examples in other European countries

Several European countries have had considerable success using AI in tax administration to identify and prevent tax fraud more effectively.

Austria

The use of AI helped Austria increase its tax revenues by EUR 185 million in 2023. The Finance Ministry's Centre for Forecast Analytics Competence used AI and machine-learning algorithms to check 34 million cases and select 375,000 suspicious cases for an in-depth examination, allowing it to optimise its tax audits. Using machine-learning algorithms, the centre can analyse large data volumes and make risk assessments in real time to identify discrepancies and possible breaches. AI is also being used to monitor and assess businesses from the date of registration to detect suspicious transactions or tax discrepancies early on.

Poland

Poland has had AI and a machine-learning model in place since 2017, used in fighting VAT fraud by analysing large taxpayer datasets to identify suspicious transactions. The STIR model helps the Polish tax authority assess taxpayer risk levels and liabilities and send automatic and tailored reminders inviting taxpayers to pay their taxes on time. STIR passes the data to the tax authority, which can block a business's bank accounts if there is suspicion of VAT fraud. These measures to secure tax compliance have helped Poland reduce its VAT gap of EUR 6.6 billion in 2017 to EUR 1.7 billion in 2021.

Italy

Italy is a leader in using AI to detect tax breaches. Its VeRa algorithm helps the Italian tax authority compare financial data, including tax returns and bank accounts, identify taxpayer risk levels and make high-risk taxpayers explain any discrepancies detected. Using AI algorithms to compare financial data helped Italy identify more than a million high-risk cases and prevent fraud worth EUR 6.8 million in 2022.

Romania

According to the European Commission's data for 2021, Romania has one of the largest VAT gaps. To reduce it, the Romanian tax authority uses machine-learning algorithms in processing large data volumes and assessing risks, while AI systems are used for data consolidation to build a taxpayer's financial profile, with robotic solutions for systems automation improving the accuracy of tax audits. According to the available information, the use of AI pushed Romanian VAT revenues up by about 1% in 2023.

Conclusions

The use of AI in tax administration has opened up countless opportunities for more efficient and accurate data processing and analysis. Systems automation using AI helps tax authorities process large data volumes quickly and accurately. The integration of AI and machine-learning models into tax administration can also operate outside basic data analytics as an efficient tool in identifying key trends to detect tax discrepancies or breaches in a faster and more efficient manner. This allows taxpayers and tax authorities to save time and money, as well as driving the transparency and reliability of the process itself, allowing faster and more accurate identification and prevention of possible tax discrepancies and breaches.

We can see from the examples in other countries that AI is becoming an indispensable tool in tax administration, likely to offer unprecedented opportunities for making tax administration more efficient and enhancing transparency and fair business competition in the future. These changes will make businesses focus on their own tax risk management processes to improve their reputation and tax compliance.