Role of artificial intelligence in detecting fraud in e-invoicing systems 3/47/24

Senior Consultant, Tax Reporting, Accounting and Strategy, PwC Latvia
Artis Vizbelis

Senior Manager, Tax Reporting, Accounting and Strategy, PwC Latvia
Juris Boiko

The integration of e-invoicing into your finance function can significantly improve its efficiency and accuracy. However, this digital development brings with it some new risks, particularly in the area of fraud. The growing role of technology in financial transactions causes organisations to strengthen their security systems and focus on modern fraud detection solutions. In this area, artificial intelligence (AI) has become a crucial tool that provides organisations with advanced methods for detecting, preventing and minimising fraud. In this article we explore how AI can detect fraud in e-invoicing systems and how organisations can benefit in practice.

What is fraud in e-invoicing systems?

E-invoicing, which automates the exchange of invoices between suppliers and customers, streamlines processes, cuts costs and improves accuracy. However, the increased adoption of e-invoicing makes fraud more possible. Fraud in e-invoicing systems can take a variety of forms:

- Fraud with invoices – fraudsters create fake invoices to abuse organisations, often posing as legitimate suppliers or using similar corporate names to mislead companies and obtain funds.
- Double invoicing – fraudsters present the same invoice multiple times, so duplicated payments are made.
- Taking over access to an organisation's email – cyber criminals gain access to a company's email accounts to send fake invoices or to change payment instructions and divert funds.
- Phishing attacks – fraudsters use fake email messages to prompt employees to provide sensitive information or to click on malicious links.

Using AI technology to detect fraud

AI and machine-learning technologies have become a key assistant in detecting fraud in e-invoicing systems. AI-led fraud detection systems use machine-learning algorithms, data analytics and pattern recognition to identify anomalies and fraudulent activities in real time. For example, AI algorithms can analyse your historical invoice data to determine the models and norms for legitimate transactions. By constantly monitoring your incoming invoices, these systems can detect deviations, such as unusually large amounts or atypical payment terms. AI technology is also able to improve itself constantly by learning from the new data and fraud cases already detected, thus making the system increasingly effective.

Advantages of AI-led fraud detection

AI-led fraud detection offers a number of advantages compared to manual checks:

- Enhanced accuracy – AI algorithms are able to analyse large volumes of data quickly and accurately to identify anomalies and potential fraud schemes, thus reducing the risk of fraudulent activity.
- Cost savings – preventing fraud before it takes place can help organisations avoid substantial financial losses.
- Improved security – AI solutions strengthen general security measures, making it difficult for fraudsters to take advantage of vulnerabilities.
- Scalability – AI systems can easily adapt to growing volumes of data and transactions.
- Constant learning – machine-learning models are constantly improving by learning from new data and detected fraud attempts.
- 24/7 supervision – AI technology operates without interruption, providing constant system supervision and responding to any suspicious activity.

How organisations can benefit

Adopting AI-led fraud detection can help you significantly improve your financial management processes and safeguard against fraudsters. AI technology can also help you save time and resources, as well as minimising financial loss and reputational risk. And using AI solutions can help you improve your competitive edge and adapt to today's digital environment.

Challenges and solutions

While AI technology offers many advantages, adopting it for fraud detection might pose some challenges. A key challenge is false positive results when your AI system wrongly flags legitimate invoices as suspicious. This can lead to a waste of time and resources in conducting unnecessary investigations. The risk can be particularly heightened if your AI models are inaccurately trained or lack human supervision when it comes to checking flagged invoices. To mitigate this risk, it's essential that you carefully train your AI model and provide human supervision, which will help you verify any suspicious invoices.

Future prospects

Despite AI's huge potential, it's important to remember that it's a tool, not a substitute for human expertise. The future of preventing e-invoice fraud probably lies in a collaborative approach. AI will carry out most of the data analytics and anomaly detection work, with people providing supervision and judgement in more complex cases. This approach will allow you to make the most of AI capabilities, securing high accuracy and effectiveness in fraud detection, while retaining human engagement in the decision-making process.

Key takeaways

AI-led fraud detection systems is a future solution when it comes to boosting the security of your e-invoicing systems. These systems help you protect against fraud attempts, improve security and ensure efficient financial management. Putting AI solutions in place can help you take preventive measures and be one step ahead of fraudsters, while improving your internal processes and becoming more competitive in the digital age.