

## Information Security of the Modern Office – Issues and Novel Solutions

*Moscow, August 13, 2024. – Information Agency “Business-Inform” and the Association of Quality Consumables Manufacturers and Suppliers held the Conference dedicated to the issues of providing information security in Russian IT-companies*

Information Agency “Business-Inform” and the Association of Quality Consumables Manufacturers and Suppliers (AQCMS) on the August 13th, this year, held the Conference “Information Security of the Modern Office – Issues and Novel Solutions”. During the Conference the most actual issues of the provision of information security in modern offices, trade-rooms, and warehouses, their possible solutions and recommendations on their practical implementation were reviewed. The Conference saw participation by the representatives of 86 Russian businesses and organizations. The sponsors of the Conference were the companies: DaLZ (Moscow), CUHDO (Moscow), INKOTEK (Moscow), BUSINESS-INFORM Group.

During the Conference 5 reports were heard:

- **“Issues of the Provision of Information Security in Modern Offices, Trade-Rooms, and Warehouses and Their Possible Solutions”** (the speaker — Stanislav Malinskiy, Russian University of Transport)

**The Report Theses:** Information security of a business, its organization and practical implementation; new legislative requirements of 2022-2024 and responsibility for their enforcement; personal data, their processing and storage; organizing the security of premises and of the inside regime; actual control and access management systems; special requirements and recommendations on technical protection of confidential information and the features of their implementation in IT-companies.

- **“Password and Passwordless Authentication – the Ways and Issues of Implementation”** (the speaker — Stanislav Malinskiy, Russian University of Transport)

**The Report Theses:** Password-based authentication and its vulnerabilities; the most popular ways of “revealing” passwords: the brute-force attack, phishing, key-loggers; two-factor and multi-factor authentication, the advantages and issues of implementation; SIM-swapping-attack, directed at substitution of the sim-card; passwordless authentication and the issues of its implementation; FIDO Alliance and its standardized protocols: FIDO UAF, FIDO U2F, FIDO2; FIDO-solutions in the modern browsers and operational systems; the issues of passwordless authentication in modern offices and their solutions.

- **“Smart Reader of Vehicle Number Plates at Checkpoints”** (the speaker – Alexander Safronov, Russian University of Transport)

**The Report Theses:** Actual control and access management systems; vehicle entry/exit control and the features of its implementation; smart reader of vehicle number plates, the features of hardware-software complex and its implementation; database of vehicle numbers: the structure and features of functionality; the complex of technical means of the smart reader; variants of implementation of the smart reader of vehicle number plates in resolving various issues of providing security of the modern IT-company.

- **“Smart Manuscript Form Analyzer for the Service Organization”** (the speaker – Alexandra Beniy, Russian University of Transport)

**The Report Theses:** Standard form manuscript-documents in service organizations and their infilling features; the task of automatization of manuscript documents processing and solution variants; artificial neural networks and their usage for the tasks of processing automatization; using artificial neural networks in recognition of handwritten digits; using artificial neural networks in recognition of handwriting; using artificial neural networks in segmentation of manuscript documents; legal requirements towards processing of standard form manuscript-documents; automatization of the examination protocol processing on the basis of smart manuscript form analyzer.

- **“Face Recognition Smart System and the Features of its Implementation”** (the speaker – Valentina SamoiloVA, Russian University of Transport)

**The Report Theses:** Actual control and access management systems and their features; the task of fragmental face-recognition with the use of artificial neural networks; informative face zones and their

analysis; the characteristic spots and distances for informative face zones; the features of teaching multi-layered perceptrons fragmental face recognition; smart system for face-recognition and the features of its implementation within a modern IT-company.

The participants of the Conference discussed together with the speakers the provided solutions and the perspectives of their implementation.

As a nice surprise for all the Conference participants came the new issue of BUSINESS-INFORM Review magazine (issue #43, 2024) and its appendix "Testing and Quality" (July 2024).