



ADRIA FINTECH JOURNAL | No 1 | Q4 2023

Dr. Miodrag Džodžo

All about finance tech

Logate: Pioneering
Solutions for the Banking
and Telecom Industry

ESG training for banking sector



## logate



Years in industry

+08

employees

20+

million user accounts managed through Logate software 200+

satisfied clients

logate.com

## All about finance tech.

#### Welcome to Adria Fintech Journal!

At Adria Fintech Journal, we bring you the latest insights and developments in the dynamic world of technology in finance. Our magazine is dedicated to executives in the financial industry across the beautiful South East Europe region. We strive to inspire and empower decision-makers like you to embrace innovation and leverage cutting-edge solutions to propel your organizations forward. As you dive into each issue, you'll discover a carefully curated blend of topics that bridge the realms of finance and technology. We explore emerging fintech trends, share captivating case studies, and highlight success stories that showcase the transformative power of innovation.

Tech changes play a significant role in shaping the banking landscape, and we keep you informed about the latest developments to ensure you stay ahead of the curve. Our expert interviews provide unique insights from industry leaders, while product reviews help you navigate the vast array of fintech solutions available, enabling you to make informed decisions for your organization.

In addition to the thought-provoking articles and valuable analysis, we bring you news highlights, upcoming fintech events, and announcements, all meticulously curated to provide a comprehensive overview. As you embark on this exciting journey with us, we invite you to explore the possibilities that arise at the intersection of finance and technology. Join us in navigating the ever-evolving landscape, as we embark on a notable adventure together.

Get ready to be inspired, informed, and empowered with each issue of Adria Fintech Journal. Welcome aboard!

With regards, Adria Fintech Journal Editorial Board

#### ADRIA FINTECH JOURNAL | Issue no.1 | Year 1 | Q4 2023

A Quarterly Magazine Informing Professionals in the Finance Industry Publisher: ANOA d.o.o. Strumička 84, 11000 Beograd

www.adriafintechjournal.com

Chief editor: Marija Dželajlija Džodžo

Marketing: marketing@adriafintechjournal.com

Media&Photos: www.freepik.com

www.rreepik.com www.pexels.com www.canva.com www.shutterstock.com

Graphic design: Dušan Radulaški Printing: Birograf d.o.o. Beograd

The authors are responsible for the statements in the articles.

CIP - Каталогизација у публикацији Народна библиотека Србије, Београд

336

ADRIA Fintech Journal: quarterly Magazine Informing Professionals in the Finance Industry / chief editor Marija Dželajlija Džodžo. - 2023, no. 1- . - Belgrade: Anoa, 2023- (Belgrade: Birograf Comp). - 28 cm

Tromesečno. ISSN 3009-4283 = Adria Fintech Journal COBISS.SR-ID 128910345

- Ernst&Young, South East Europe
  Stress Testing Kit: A journey of growth and iterative innovation
- Pioneering Solutions for the Banking and Telecom Industry
- Interview
  Interview with dr Miodrag Džodžo,
  founder of Adria Fintech Journal
- ENFINT Adria
  Empowering Banking in the Balkans: Four Crucial
  Machine Learning Use Cases to look
  at in 2024
- SECIT Cybersecurity
  Ransomware, a threat that's here to stay?
- 22 Identyum

  Banks and digital clients
- 25 EXPERT GROUP
  Transforming Banking with Innovative Data and
  Automation Solutions
- 28 KÖPA Shopping
  The Evolution of Shopping: KÖPA's Innovative
  Approach to Streamlined Checkout
  - SIPOD Software
    Sipod's Business Process Management Platform and
    Automation Solution for Fintech
- Mini interview
  Empowering Digital Transformation: Insights from Sipod's Director, Dejan Beciric

### CONTENTS

- **34** FUTURELAB

  User centricity in banking
- HYPERRISK Solutions
  Navigating Risk in Southeastern Europe's Banking
  Sector
- 40 GLOBAL DIGITAL MARKETING PROGRAMS
  Unlocking Growth and Customer Loyalty: The Power of
  Fintech Loyalty Programs for Banks in the SEE Region
- 43 CODEBEHIND
  Aurora DMS: Revolutionizing Digital Archive
  Management for Banking
- 46 Calendar of events
  Calendar of Upcoming Fintech Events in SEE
- 48 eSigurnost
  The Seventh eSecurity Conference 2023
- Technobank event (ASIT)
  Technobank: Meeting of the Banking Elite
  And Technology
- MISSION FINTECH
  Mission Fintech's Inclusive Fintech Solutions for Southeast Europe's Banking Landscape
- 56 ANOA ESG Traning for Banks
- Carbon footprint report
  Reduce your carbon footprint



Baseline  CONTRACTUAL RISING  Total Principal Inte	FALLING			_						Local Version: 28.09	9.2023
Name	Total	ON	2W	1M	2M	зм	4M	5M	6M	7M	8M
• EUR Asset											
➤ Cash and balances held with Central Bank	0	0	0	0	0	0	0	0	0	0	0
► Due from banks and other FI	0	0	0	0	0	0	0	0	0	0	0
▼ Loans and receivables from clients	4,728,812,404.79	642,634	1,644,034.29	2,507,800	9,838,205.41	1,025,569.75	6,497,388.8	6,110,181.04	300	2,507,800	546,5
► Retail loans	158,400	300	300	300	300	300	300	300	300	300	300
Corporate loans	4,728,654,004.79	642,334	1,643,734.29	2,507,500	9,837,905.41	1,025,269.75	6,497,088.8	6,109,881.04	0	2,507,500	546,5
▼ Investment	4,728,654,004.79	642,334	1,643,734.29	2,507,500	9,837,905.41	1,025,269.75	6,497,088.8	6,109,881.04	0	2,507,500	546,5
Fixed €	4,233,193,776.77	642,334	1,643,734.29	0	7,919,480.41	1,021,669.75	3,989,388.26	6,082,219.28	0	0	546,4
_3M <b>&amp;</b>	493,077,500	0	0	2,507,500	0	0	2,507,500	0	0	2,507,500	0
_6M €	2,258,625	0	0	0	1,916,625	0	0	27,661.76	0	0	26,82
_1M 😪	124,103.01	0	0	0	1,800	3,600	200.55	0	0	0	122,1

# Stress Testing Kit: A journey of growth and iterative innovation

#### What is stress testing?

We live in stressful times. Global pandemics and military crises, inflation higher than seen in decades as well as banking crisis that led to the failure of some of the key financial institutions, all characterize the time we live in. And who is affected? Everyone. During these uncertain times, the entire economy needs support from banks. But what if the bank fails? What if banks need additional support? To prevent banks' failure, regulatory bodies require banks to perform analysis to determine whether they have enough capital to withstand economic or financial crisis. In banking, this is known as stress testing.

Regulators and supervisors require all banks to conduct stress tests and report the results on a regular basis. Stress tests focus on a few key areas such as credit risk, market risk and liquidity risk to measure financial status of banks in crisis and its' ability to face challenges. More than 5000 financial institutions in EU are performing stress tests right now.

This is, quite often, a demanding task for banks for a myriad of reasons, such as: calculation complexity and duration, regulatory pressure in terms of short deadlines and constantly growing requirements, the delay between the CRO asking the proverbial 'What happens if we change this?' question and the analyst delivering an appropriate reply. Finally, integration between different kinds of risks is difficult to achieve.

#### What is Stress Testing Kit and what is it used for?

STK is a lightweight and transparent solution specially designed for credit institutions in order to facilitate stress testing for various purposes and general risk management.

Developed to perform bottom-up stress testing, the Stress Testing Kit has been a game-changer for our banking clients, providing them with new insights into their risk exposure and capital adequacy. However, as its complexity grew, so did the challenges of ensuring its seamless functioning for an increasing number of users and features. Our team realized that, to maintain the software's effectiveness, scaling was not just an option – it was necessary.

Stress Testing Kit possesses a suite of essential features crucial for organizations seeking to fortify their risk mitigation strategies. This solution boasts rapid implementation, empowering banks to swiftly adapt to evolving risk scenarios. Its flexibility enables customization to suit the unique needs of diverse business models. The predefined input data model simplifies data integration, ensuring a seamless transition for users. One of its standout attributes is the absence of any 'black-box' risk, providing complete transparency in any risk assessment. Moreover, it comes with a low accompanying investment, making it accessible to a wide range of enterprises. By adhering to the latest regulatory standards and market practices, this software serves as a future-proof solution for risk management. It conveys key messages to management through userfriendly interfaces, and its comprehensive documentation ensures that every aspect of the system is easily understood. This software represents an incremental advancement in the field of risk management, aligning perfectly with the ever-evolving needs of modern businesses.

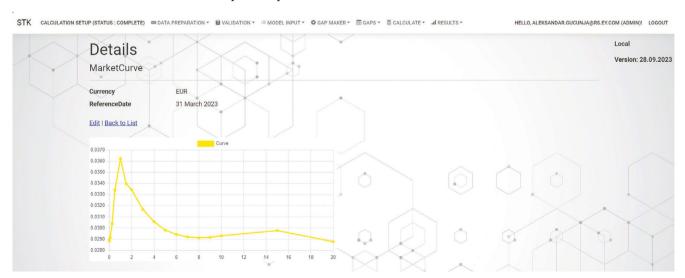
The versatility of STK extends across a spectrum of critical use cases within the realm of risk management. It serves as a foundational tool for internal capital requirements

calculation, facilitating precise and data-driven assessments of capital needs. Furthermore, users can create challenger models, enabling organizations to rigorously assess their risk models and make informed decisions. When it comes to ICAAP stress testing, this software provides an invaluable platform for stress scenario simulations and regulatory compliance, ensuring the resilience of financial institutions. For in-depth scenario analysis, it offers the necessary flexibility and precision to model a wide range of risk scenarios, empowering organizations to make proactive strategic choices. In the context of recovery plans, this software provides essential insights for crafting effective strategies to navigate periods of crisis. Additionally, its real-time capabilities make it an indispensable asset for day-to-day risk management, enabling organizations to monitor, identify, and mitigate risks efficiently. Lastly, it excels in estimating changes in the risk profile due to the introduction of new products, equipping businesses with the foresight needed to navigate the intricacies of evolving markets and products successfully.

#### Plan for the future

Stress Testing Kit is being developed sequentially by modules. Having in mind the current regulatory agenda (EBA's Guidelines on IRRBB and CSRBB, EBA/GL/2022/14), we tackled modules covering Interest Rate Risk first, meaning EVE and NII sensitivity modules are ready to be shipped to our clients at this moment. Next on the list are Liquidity and FX risk modules, which are on track to be completed by year-end. This will finalize the ALM-risks suite of STK. For the remaining four modules covering Credit (IFRS9 and RWA perspectives separately), Operational and Concentration risks, the plan is to have them production-ready by mid-next year, together with quality-of-life features such as real-time market data through Refinitiv or Bloomberg integration.

#### Written by: Aleksandar Gucunja EY



## Logate: Pioneering Solutions for the Banking and Telecom Industry

Founded in 2006 in Podgorica, Montenegro, Logate has emerged as a pioneering force in the digital transformation space for banks and telecom companies across Europe, Middle East, Africa and beyond. With over 17 years of relentless innovation and customer-centric solutions, Logate has cemented its reputation as a trusted technology partner for enterprises worldwide.

#### **Products Driving Innovation**

Logate has become synonymous with cutting-edge products tailored for the ever-evolving demands of the digital era. With a team of over 80 skilled IT professionals, Logate has successfully serviced over 200 enterprise clients across 11 countries. Their comprehensive suite of products includes:

#### **OpenProvider 3GPP AAA Platform**

A versatile and scalable set of Core Network Functions, centered around VNF/CNF AAA platform designed to manage all access technologies, including WiFi, DSL/FTTH, 3G, LTE, and 5G. OpenProvider ensures real-time network management and is built to handle millions of subscribers seamlessly.

#### CX360 - Specialized Banking CRM

Tailored to serve the specific needs of customer-facing departments, CX360 has revolutionized customer relationship management for banks. Its modular structure enhances collection, sales, retail, compliance, and complaint management.

#### Connect - Omnichannel Contact Center Solution

Empowering businesses with an all-in-one communication platform, Connect optimizes customer experience, resource utilization, and productivity. Its seamless integration with CRM systems ensures unparalleled operational efficiency.

#### FolderX - Enterprise Content Management System

A comprehensive content management system that

enables seamless handling of physical and electronic documentation, adhering to the highest standards of security and efficiency. With Camunda Workflow Engine, FolderX empowers teams to automate processes and achieve ultimate productivity.

#### **OpenMX - Enterprise Mail System**

A scalable and secure email system designed to meet the requirements of modern enterprises, ensuring safe and reliable communication for millions of users.

#### A Legacy of Growth and Excellence

From its humble beginnings, Logate has achieved remarkable milestones, including a significant global presence and a strong reputation for excellence. Some of their notable achievements include:

2009: Launch of OpenProvider AAA with Crnogorski Telekom as their first client.

2016: Introduction of the Loan Tracking System (later rebranded as CX360 - a banking CRM).

2017: Commencement of the fast-paced expansion with the establishment of new offices and a significant increase in their workforce.

2018: Crossing the milestone of 1 million EUR in revenue and the launch of Logate Institute of Information Technology.

2022: Expansion into Vienna, Austria, marking their continued global growth and influence.

2022: Crossing the milestone of 2 million EUR in revenue. The expansion to the Middle East market.

#### **Enriching the Community, Creating Opportunities**

Logate has made significant contributions to the community, demonstrating their commitment to social responsibility and education. Initiatives such as the Logate Institute of Information Technology and regional hackathons have empowered individuals and businesses by fostering ICT skills and encouraging collaboration across the Balkans.

#### A Leadership Team Driving Innovation

At the helm of Logate is a dynamic leadership team that has steered the company to its current success:

Ivica Tatar - Co-founder and Chief Strategy Officer: With a wealth of experience, Ivica has been instrumental in shaping Logate's strategic vision and global presence.

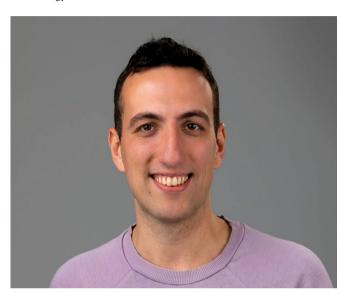
Predrag Biskupović - Co-founder, CEO, and CTO: Predrag's visionary leadership and technical expertise have been critical in driving Logate's technological innovations and market penetration.

Dragan Mihaljević - Co-founder: Dragan's leadership has been vital in establishing Logate's strong business partnerships and fostering a culture of collaboration and excellence.

#### Written by: Jovan Radnić Product Marketing Manager, Logate

#### Staying Ahead in the Ever-Evolving Landscape

Logate prides itself in delivering turnkey solutions that are personalized according to the clients' organizational structure and needs. We like to say that we are a partner, not just a vendor. That means we consult and share knowledge in order to save your resources and complete projects efficiently. We develop software solutions that are useful and fulfilling needs and help you build exceptional employee and customer experiences. Feel free to reach out to our team personally on Linkedin or via website contact form. Foster relationships with your clients while we take care of the technology.



#### #INFINTECH conference

#### **INFINTECH 2023: Shaping the Future of Finance**

Hosted by Logate, INFINTECH is an eminent international fintech conference that commenced in October 12th and 13th 2023 at the Porto Montenegro marina in Montenegro. This event seeks to position itself as a burgeoning hub for fintech excellence, attracting innovators and financial industry leaders.

The conference delivered an immersive experience, with Day 1 focusing on Open Banking, Payments, and Data & AI in Finance. Notable speakers include Bartosz Ciokolowski, General Manager for South East Europe at Mastercard; Ivan Vučinić, Zorica Kalezić, Vicegovernor of Central Bank of Montenegro and panels of industry experts. Day 2 shifted focus to Customer Experience and New Business

Models & Ecosystems in Banking, culminating in a panel unveiling the future of banking with prominent figures such as Deeptasree Mitra, Meaghan Johnson and Georgi Penev.

Beyond the enriching talks, attendees can engage in networking opportunities and explore cutting-edge fintech solutions from esteemed sponsors such as Mastercard, CRIF, and Porto Montenegro. Visit INFINTECH.ME to inform yourself about this influential event and be part of the transformative journey shaping the future of finance.

Reserve October 10 & 11 for INFINTECH 2024. Visit infintech.me to inform.

#### FOUNDER OF ADRIA FINTECH

## Interview with Dr. Miodrag Džodžo

Can you introduce yourself and your role within ANOA company? What motivated you to become part of the fintech industry?

I'm Dr. Miodrag Džodžo, currently in the role of Regional Director for South East Europe at ANOA. My journey into fintech was motivated by a genuine interest in utilizing technology for positive change in the financial sector. With over 20 years of experience in banking, I've developed a keen understanding of the evolving needs of financial institutions, particularly in areas of digitalization, risks and sustainability.

#### **ANOA and Adria Fintech Journal**

ANOA is the publisher of Adria Fintech Journal. Could you provide our readers with an overview of ANOA as a company?

What is your company's mission and vision in the realm of financial technology? ANOA is a regional company based in Belgrade, specializing in business consulting, fintech, IT, and project management services, along with a strong focus on ESG consulting. Our mission is to empower businesses by providing innovative solutions, fostering sustainability, and enhancing operational efficiency.

Adria Fintech Journal is aiming to gain recognition for its role in connecting financial institutions and digitalization solution providers. Could you tell us more about the magazine's objectives and how it aims to facilitate this connection?

Adria Fintech Journal serves as a bridge between financial institutions and digitalization solution providers in the

Southeast European region. Our goal is to provide a centralized stand where providers can showcase their products and services, making it easier for financial institutions to explore digitalization options, ultimately fostering growth and innovation in the industry.

Adria Fintech Journal will serve as a dynamic platform for digitalization providers, offering them a space to present their solutions comprehensively. Through interviews, case studies, and product spotlights, we aim to make it easier for vendors to reach their target audience in the SEE region.

The fintech industry is rapidly evolving. How does Adria Fintech Journal plan to stay ahead of the curve in providing valuable insights to its readers in Southeast Europe?

Adria Fintech Journal aims to stay at the forefront of the fintech landscape by consistently researching emerging trends, engaging with industry experts, and maintaining a close eye on regional developments. We are committed to delivering timely and insightful content that keeps our readers well-informed.

The COVID-19 pandemic has ushered in a profound transformation in the banking sector. It accelerated the already ongoing shift towards digital banking and financial technology. With lockdowns and social distancing measures in place, people turned to digital channels for their banking needs like never before. This pushed banks and financial institutions to prioritize digitalization, not just as a convenience but as a necessity.

The importance of robust online banking platforms, mobile apps, and digital payment solutions became more evident



than ever. Moreover, the pandemic emphasized the need for remote working capabilities, stringent cybersecurity measures, and contactless financial transactions. Banks that adapted swiftly to these changes were better equipped to serve their customers during the crisis and position themselves for long-term success in a post-pandemic world.

#### **UX importance in digitalization**

User experience (UX) has emerged as an unequivocal gamechanger in the realm of banking digital applications. It's not merely about functional features; it's about the overall experience that customers have when interacting with these apps. In today's highly competitive fintech landscape, offering a seamless, intuitive, and enjoyable user experience has become a critical differentiator.

A well-crafted UX design can simplify complex financial processes, enhance customer satisfaction, and build brand loyalty. It's not just about providing a service; it's about crafting an experience that customers will remember and appreciate. Banks and fintech companies that prioritize UX are setting themselves up for success by fostering strong customer relationships, reducing churn, and staying ahead in an increasingly digitalized financial world.

#### Sustainability in Finance

Sustainability is a pressing issue globally, and it's increasingly making its mark in the financial sector. How does Adria Fintech Journal plan to shed light on sustainability within the financial industry, and why is this important?

Sustainability is integral to our mission. Adria Fintech Journal will play a role in promoting sustainability within the financial sector by providing in-depth coverage of ESG initiatives, offering guidance on aligning with global standards, and showcasing success stories. It's vital because it helps create a more resilient and responsible financial industry.

In a bid to demonstrate our unwavering commitment to environmental sustainability, Adria Fintech Journal has taken a proactive step by sponsoring the planting of 20 trees in Romania. This initiative was undertaken with the primary objective of mitigating the environmental impact of our magazine's printing and distribution processes. We recognize the importance of reducing our carbon footprint in today's world, and this tree-planting effort represents our dedication to responsible environmental stewardship. By offsetting our carbon emissions through tree planting, we are contributing to reforestation efforts in Romania, which will help combat deforestation, protect biodiversity, and sequester carbon dioxide from the atmosphere. This

endeavor aligns perfectly with our broader mission of promoting sustainability within the financial sector, reinforcing our commitment to a greener, more ecoconscious future.

Could you share some insights into the magazine's approach to demystifying ESG (Environmental, Social, and Governance) principles and how it aims to guide financial institutions in adopting sustainable practices?

Adria Fintech Journal is committed to explaining ESG principles by breaking them down into practical steps and real-world examples. We aim to provide financial institutions with the knowledge and tools they need to integrate sustainability into their operations effectively, thereby contributing to a more sustainable future. To demystify ESG and sustainability, we'll offer informative articles, expert interviews, and practical guides. By equipping financial institutions in the region with the knowledge and resources to embrace sustainability, we aim to enhance their resilience, reputation, and ability to thrive in a changing world.

#### **Fintech Events Coverage**

Keeping readers informed about important fintech events is a crucial part of the magazine's mission. Could you elaborate on how Adria Fintech Journal plans to provide comprehensive coverage of upcoming fintech events in the Southeast European region?

What can readers expect in this regard? Adria Fintech Journal is dedicated to providing readers with up-to-date information on fintech events. We plan to offer detailed event calendars, pre-event insights, and post-event reports to ensure our readers have a comprehensive understanding of what's happening in the region's fintech landscape.

We recognize the importance of events in fostering collaboration and knowledge sharing. Adria Fintech Journal will maintain a dedicated events section, including event calendars, promotional content, and post-event analyses. Keeping our readers informed about these events is crucial because it enables them to stay ahead in the rapidly evolving fintech landscape.

#### What are your thoughts on cybersecurity in the financial industry of SEE?

The heightened reliance on digital technologies in finance has brought with it an unprecedented focus on electronic security, and for compelling reasons. As the financial industry's digital footprint expands, so does the threat landscape. Cyberattacks, data breaches, and fraud attempts

are becoming increasingly sophisticated and frequent. Consequently, the need for robust e-security measures has never been more critical.

Financial institutions are investing heavily in cuttingedge cybersecurity technologies, threat detection systems, and employee training to safeguard customer data and maintain the trust of their clientele. The rise of biometric authentication, encryption technologies, and AI-driven security systems is a testament to the industry's commitment to fortifying its defenses against cyber threats. Ensuring the integrity and security of digital financial transactions has become an overarching priority for banks, fintech firms, and regulatory bodies alike.

#### AI and ML are on the rise as the expectations of clients for digital interactions become more demanding. What are your takes on that?

Artificial Intelligence (AI) and Machine Learning (ML) are at the forefront of the digital revolution in banking. Clients today expect more than routine digital interactions; they demand personalized, intelligent, and responsive services. AI and ML technologies are instrumental in meeting these expectations. They empower banks to analyze vast datasets, predict customer behavior, offer personalized product recommendations, and automate routine tasks. Chatbots, powered by AI, provide real-time customer support, while AI-driven fraud detection systems enhance security. Moreover, AI and ML enable banks to assess credit risk more accurately and efficiently. As client expectations continue to evolve, AI and ML will play an increasingly pivotal role in shaping the digital interactions that define modern banking, ushering in an era of more seamless, intuitive, and customer-centric financial services.

## Finally, Dr. Džodžo, as we conclude this insightful conversation, could you share your vision for the future of Adria Fintech Journal and the broader financial landscape in the Southeast Europe region?

What exciting developments can our readers anticipate in the coming years? Absolutely, I'd be delighted to shed some light on what lies ahead for Adria Fintech Journal and the financial sector in Southeast Europe. Our vision for the journal is to continue being the definitive source of information, innovation, and inspiration at the crossroads of fintech and sustainability. In the near future, readers can expect us to expand our coverage to include Hungary, Greece, Turkey, and Moldova, ensuring that our insights and connections encompass a more extensive geographical canvas.

Moreover, we are committed to nurturing a thriving ecosystem that brings together financial institutions



and digitalization providers, promoting innovation and collaboration in the region. We will continue to highlight the transformative power of fintech, emphasizing the pivotal role of digitalization and sustainability. Adria Fintech Journal will be the platform where readers discover not just the latest trends but also the driving forces behind them, offering in-depth analysis and expert perspectives.

In terms of the financial landscape in Southeast Europe, we foresee a dynamic future. The digitalization wave, which the pandemic accelerated, is here to stay. Banks will further diversify their services, becoming holistic financial solutions providers. E-commerce will continue its ascent, with banks and merchants forging deeper partnerships to enrich the customer experience. E-security will remain paramount, as safeguarding digital assets becomes non-negotiable.

Additionally, artificial intelligence and machine learning will increasingly shape client interactions, making them more personalized and responsive than ever. It's an exciting time for the region, with opportunities aplenty for those who embrace innovation, sustainability, and the evolving needs of their customers. We'll be here, at Adria Fintech Journal, to chronicle and champion this journey. Thank you for this opportunity, and we look forward to sharing more of these developments with our readers in the months and years to come.

### Empowering Banking in the Balkans: Four Crucial Machine Learning Use Cases to look at in 2024

#### KEY ML-DRIVEN BANKING TRENDS IN BALKANS

As Western Balkan economies sought to rebound from COVID's impact, new challenges emerged. Inflating energy and food prices, global growth slowdown, and tightened finances burden markets in SEE, despite some positive economic trends that have been observed in 2022. Such blend of shocks hits the region's outlook, sustaining high inflation and dampening confidence. Advanced economies' slowdown, notably Eurozone, affects demand, investment and remittances, which leads to slower pace of economic growth.

Such circumstances produce new challenges for local financial sector players, tightening the competition and struggle for the clients. This requires both better care and service for existing customers as well as creative ways to onboard new ones. And that is where ML-driven solutions and AI may become a real game-changer for Balkan banks, creating for fast adopters sustainable competitive advantages. The presence of AI in the banking sector elevates the performance and competitiveness of banks and financial institutions. The array of AI applications in banking is vast. AI implementation aids in fraud detection, enhancing customer experiences, analyzing customer behavior for tailored service recommendations, assessing customer credit histories to predict loan-associated risks, and more.

Although variety of AI use cases, based on our experience in servicing world's most sophisticated financial institutions, below we would like to outline four domains that may produce tangible quick wins and have the significant impact on organizations performance in the next 3 years:

- · Forecasting of client churn and LTV optimization
- Higher service personalization through AI-driven Virtual Assistants
- · Margin optimization through dynamic pricing
- · Scaling of AI assets within the organization

#### CLIENT CHURN FORECASTING & LTV OPTIMIZATION

Artificial Intelligence can play a significant role in preventing customer churn in the banking industry. ML models can analyze vast amounts of customer data, including transaction history, browsing behavior, and demographics, to identify patterns and indicators of potential churn. By analyzing historical data and customer interactions, AI can predict which customers are likely to churn in the future. Banks can then proactively take measures to retain those customers by offering personalized incentives, tailored promotions, or improved services such as investment options or credit products that align with their financial goals.

On top of that, AI algorithms can analyze customer feedback, including social media posts, reviews, and customer support interactions, to gauge customer sentiment and identify early signs of dissatisfaction, which may be used as early warning triggers for churn-preventing actions. For instance, Banks can also proactively reach out to dissatisfied customers to resolve their concerns and prevent them from switching to competitors. By staying connected with customers and providing personalized value-added services, banks can strengthen relationships and reduce churn.

Similarly to the churn forecasting techniques, personalization of recommendations consists of offering the customer the right product at the right time, based on their personal profile data, and above all, on the products with which the customer has interacted or for which they have shown interest. Recommendations allow banks to adapt to customer expectations, reduce the complexity of their choices, increase loyalty and, finally, increase purchase and consumption frequency.

#### **Enfint Case Study**

One of the practical examples of this approach was implementation of AI-driven churn forecasting and cross-sell recommendation machine in one of the middle-sized European banks carried out by Enfint experts. In less than 4 month, Enfint Data Science team has built several ML models that are taking care of churn forecasting and for customers at risk generate mitigation options, that include offering of various products and services that are associated with highest probability to buy and retail client to abandon the Bank. As the result of this initiative, bank was able to improve performance of its credit card portfolio and transactional business.

#### PERSONALIZATION & IMPROVED ASSISTANCE

Another emerging area for AI-driven solutions revolutionizing service personalization and customer experience is Virtual Assistance that can be created based on GPT-Like models. Upon the recent release of ChatGPT and few other Large Language Models based on pretrained transformer neural networks, possibilities for implementation of deeply personalized virtual assistants become truly endless.

Numbers say that 93% of consumers want their bank to know them and their banking needs. However, only 33% feel their current banks deliver this.

Based on that, we expect banks and financial service providers start implementing AI assistants to improve customer experience and availability of financial services. This would include both direct interaction of AI with the clients as well as indirect, which would look like AI-driven assistance to human employees, taking care of client and technical support.

Despite the fact that creation of superior virtual assistant for a mid-size Bank may be a challenging task due to large volume of required data engineering work, data privacy issues and relatively expensive model inference, implementation of service chat-bots "trained' on internal knowledge base can be done relatively quickly and bring substantial quick wins.

Based on Enfint experience, such project, based on pretrained LLM models (GPT-like) and cloud inference servers may be launched live in 1-3 month, depending on quality and availability of respective knowledge base.

#### **Enfint Case Study**

One of Enfint Clients, an AI startup specializing on seamless cloud ML model deployments was able to adopt GPT-driven chat bot trained on large and sophisticated Client's product documentation, which significantly simplified usage of Client's platform for end users and significantly increased quality of support and customer satisfaction.

Last but not leasts, from financial sector's perspective, new depths of AI-based relationships will result in not only in reduced call center volume and more promt client consultations, but also will drive and extensive building of AI neobanks, representing digital-only banking platforms that operate solely online, unlike digital banking that acts as an extension of traditional banks. This trend may clearly become a strong industry disruptor and traditional banks that will not promptly adopt such AI technologies risk to become just 'funding back-office' of AI fintechs, that will be gaining most of the margins.

#### **RISK-BASED DYNAMIC PRICING**

Another promising area of AI implementation in financial sector is pricing. World's most advanced financial institutions are moving out from the old pricing schemes to dynamic risk-based pricing for various products including loans, mortgages, and insurances. Instead of utilising legacy



rules-based matrices, companies have turned to ML and predictive modeling to establish risk-based loan pricing and loan terms based on credit profile and creditworthiness or the associated ability of the borrower to pay back the loan.

Through these tools, lenders can use various factors such as credit score, debt-to-income ratio, loan tenure, price elasticity, macroeconomic indicators and more, to determine the appropriate interest rate for each customer. This includes also understanding and prediction on the likelihood of default and overall borrower repayment performance, all together boiling down to risk adjuster return indicators such as RaROC and RoRWA.

However, implementation of dynamic pricing in the lending space can be challenging for many financial institutions outside Tier-1. For instance, a solid dynamic pricing process would require development and implementation of several types of ML models, namely product-level elasticity models, behavioral models (early withdrawals/redemptions) and deal structure recommender models as well as number of mathematical models covering such areas as embedded options pricing, estimation of expected risk-adjusted returns and rate optimization algorithms. Altogether, this means that getting the right teams and software that would enable efficient pricing mechanisms should be a top priority for the banks willing to offer more competitive and tailored services, especially in SME and Corporate lending segments.

Nevertheless, development and implementation of even separate bits and pieces of end-to-end dynamic ricing process can themselves unlock some quick wins and business value across the organizations, for example behavioral maturity models may improve forecasting capabilities and liquidity risk management practices.

#### **Enfint Case Study**

Enfint team has contributed to the improvement of pricing process at one of the Europe's largest financial institutions with overall assets exceeding 400 Bln. \$. providing E2E support for the implementation of each element of the pricing process including ML-driven dynamic pricing and embedded option evaluation for banking book products: pricing recommendation for corporative loans, price-demand optimization for retail loans and small-micro business loans, etc. . Upon the measurement of economic effect based on AB tests and number of other methodologies, overall positive impact on PnL has exceeded 20 mln USD.

#### **ML & AI AT SCALE**

All 3 ML business cases outlined above rely on extensive usage of some sophisticated machine learning algorithms. Though as the popularity of ML models increases, so does the challenge of scaling them to handle the ever-increasing volume of data and user requests. This is where MLOps comes in. MLOps, or Machine Learning Operations, is a set of practices and tools that enable organizations to efficiently and effectively deploy, monitor, and maintain ML models in production. It is a crucial element in the ML lifecycle that helps organizations scale their ML models to handle large amounts of data and user requests.

One of the biggest challenges in scaling ML models across the organization relates to the management of complexity of the ML pipeline. ML models often involve multiple stages, such as data preparation, feature engineering, model building, and deployment. Each stage involves different





tools, technologies, and processes, making it difficult to manage and maintain the pipeline.

MLOps platforms allow organizations to automate the entire pipeline, from data preparation to deployment, using a single platform. This automation not only simplifies the pipeline but also helps to reduce the risk of errors and inconsistencies.

Another significant challenge in scaling ML models is deploying and maintaining them in production environments. ML models are deployed in a variety of environments, including on-premises, cloud, and edge devices. Each environment has its own set of challenges, such as security, compliance, and resource constraints. On top of that, MLOps platforms monitor and maintain ML models in production, ensuring that they are performing as expected and that they are secure and compliant.

#### **Enfint Case Study**

Based on our experience with numerous implementation of Enfint MLOps platforms in financial organizations since 2019, organizations that are struggling to order stock of their models, improve time-to-market of ML-driven services and reduce related operational risk may have a quick start in MLOps by setting up model repository and automation of model deployment. Further this may rolled out to experiment tracking, feature store and creation of standardized data preparation services, as well as to model performance monitoring. Finally, MLOps initiative can be wrapped up by process automation, that woul provide comprehensive tracking and reporting across entire model lifecycle. Although overall complexity, each individual block of MLOps juorney can be implemented in a few month, and economic effect will be dramatical for example, one of Enfint's Clients, a universal Bank with ~4 Mln. Clients and 40+\$ Bls of assets was able to reduce

time-to-market for new loan origination models from 3-4 month (on average) to 3-4 days. In another example, large insurance company with \$3.1 billion revenue and over 30 million customers upon implementation of key MLOps elements unlocked technical capabilities for robust production usage of ML-driven car insurance pricing services that significantly increased their customer base in that segment thanks to more personalized and competitive offers.

#### CONCLUSION

The above shows that AI/ML and MLOps have emerged as transformative forces in the financial sector, revolutionizing the way institutions operate and make decisions. ML-driven insights enable financial organizations to uncover patterns, predict market trends, and manage risk more effectively, enhancing decision-making accuracy. Through robust MLOps practices, the deployment and management of ML models become streamlined and efficient, ensuring consistent performance and regulatory compliance. This synergy between ML and MLOps empowers financial institutions to gain a competitive edge, achieve operational excellence, and navigate the complexities of modern finance with greater agility and precision.

#### **ABOUT ENFINT**

ENFINT, an international powerhouse, is at the forefront of ML-driven solutions, crafting cutting-edge IT platforms to drive digital business transformation for our clients. Our expertise lies in custom application development and the deployment of essential ML-powered IT solutions for some of the most challenging industries worldwide. We pride ourselves in utilizing state-of-the-art technologies to deliver projects that embody the perfect blend of efficiency, scalability, and robustness.

Drawing from our deep industry and technical knowledge, further enriched by our own software accelerators, we are adept at unraveling business challenges of any complexity. Trusted by leading companies across 20+ countries in Europe, Asia, and Africa, our track record shines with 9 out of 10 clients continuing their collaboration beyond the inaugural project.

#### Written by: Andrej Steinmark Enfint Adria



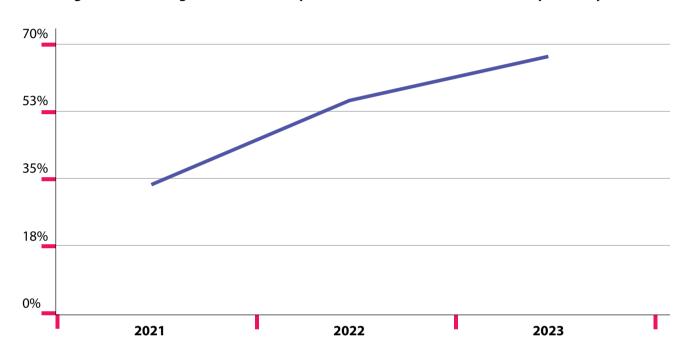


www.enfint.tech



2021	34%
2022	55%
2023	64%

#### Percentage of financial organizations that experienced a ransomware attack in the previous year



## Ransomware

#### a threat that's here to stay?

#### The first ransomware attack

When Joseph Popp, PhD, who was involved in AIDS research, distributed 20,000 floppy disks to his colleagues at an AIDS conference organized by the World Health Organization in 1989, no one could have guessed that their colleague had malicious intentions. When distributing these discs to colleagues from 90 countries, Joseph stated that they contain a program that analyzes the risk of aids for each individual and operates on the principle of questionnaires. However, what he "failed" to say, is that there is also a malicious program on these floppy disks that, after the 90th startup of the computer's operating system, will start a process that will hide directories and encrypt or lock files on the C disk. In order to regain access, users had to pay a ransom of \$189.

With this attack and the creation of the first malware of its kind, Joseph Popp laid the foundations of modern ransomware that have become one of the favorite tools of hackers with malicious intentions with the advent of cryptocurrencies.

#### The rate of attacks based on sophos' 2023 report

The number of ransomware attacks targeting the financial sector has been on the rise for several years. The latest Sophos survey, conducted between January and March 2023 and involving 3,000 cybersecurity/IT leaders, 336 of them in finance, has shown us that the trend of increasing the number of these attacks continues. Namely, out of the total number of respondents from the financial sector,

64% of them gave an affirmative answer to the question of whether they recorded this type of attack within their organization during the previous year, which is an increase of 9% compared to the 2022 report, when the percentage of respondents who answered the same question was 55%.

#### Success of the attack

A worrying figure may be that 81% of financial organizations affected by this type of attack reported that their data was encrypted. Therefore, if the encryption rate is compared to that of a survey conducted in 2022, when it was 54%, we can see an increase of almost 50 percent, which indicates that malware is becoming increasingly difficult to detect. Only 14% of the attacks were successfully stopped.

Also, in 25% of cases, it was observed that in addition to encrypting the data itself, a download was made, which allowed the attackers to get ransom money paid by the affected company, but also could sell the data to other interested parties.

#### How are the systems compromised?

According to the results of the research, it was found that attackers used existing vulnerabilities as the most common method of compromising the system, and it was found that 40% of attacks were carried out using this method. The second cause is 23% of stolen credentials, while malicious (19%) and phishing (13%) emails take the third and fourth positions, respectively.

#### Recovery from attacks

The good news is that 98% of organizations whose data has been encrypted have successfully recovered their data. The way they did so is generally classified into two categories – the use of backup copies and the payment of ransom. With the first method, 69% of organizations recovered their data, while 43% paid the ransom.

#### What novelties have been spotted in the development of ransomware?

According to the second Sophos Report – Threat Report, which also covers the period 2022, ransomware groups have been observed to be turning to new programming languages, in order to make it easier to run on different operating systems and platforms or to improve existing malware. Rust has been noted to be a programming language adopted by developers of BlackCat and Hive ransomware, while BlackByt's malware is written in the Go Lang programming language.

This is supported by the fact that it has been noted that attacks are no longer directed exclusively at Windows operating systems. Namely, RedAlert or N13V ransomware,

can perform encryption on Windows, but also Linux ESXi servers, luna has the same capabilities. The Linux-ESXi variant of LockBit was also noted earlier this year.

Directing attacks to other platforms allows attackers a greater area of attack, forcing potential victims to share their focus. Furthermore, this also potentially reduces the risk of detection, as most anti-ransomware measures focus on Windows.

#### Which financial organization has recently been the victim of a ransomeware attack?

In June 2023, we witnessed an attack on a major financial organization – Globalcaya Bank. The bank, which has more than 300 offices across Spain, was the victim of aransomware attack, which was claimed by the Play ransomware group.

The group said it also obtained confidential private and personal confidential information, customer and employee documents, passports, contracts and other sensitive data. The bank confirmed the attack and stated that systems in several locations were infected with ransomware, which forced certain services to be temporarily suspended.

#### How to prevent the system from being compromised?

Perhaps already a platitudes, but certainly true is that it is not a question of whether the attack will happen, but when it will happen. Unfortunately, no system is perfect and it is very likely that a sufficiently motivated attacker would be able to find a way to approach it, but that does not mean that we should not try to minimize the risk. On the contrary, by implementing various technical solutions in the field of information security, conducting continuous training for employees and creating a so-called security culture, and establishing controls and processes, we can prevent or notice an unauthorized approach. Also, by implementing these measures, we will directly complicate unauthorized access to the system, and we can influence attackers to give up the attack itself.

However, in order to ensure that the measures we have put in place to maintain the confidentiality, integrity and availability of data in our information system function as intended, it is necessary to carry out security assessments on a regular basis. For this reason, Secit Security has created a unique methodology that aims to evaluate the established measures within the company's information systems, and to determine the risks and weaknesses that can lead to compromise. Consequently, we encourage you to contact us and schedule a free consultation, which will achieve the first step towards strengthening the security of your company's information system.

Written by: Nemanja Petrović Secit

# Banks and digital clients

#### The challenges of digital transformation in the banking industry

Over time, banks have digitalized their relationship with their clients through standardized products and services streamlined to clients via web and mobile banking applications, such as Internet banking, mobile banking, banking payment apps, and more. These remote banking services have irrevocably transformed the banking industry, but is this level of digital transformation in banking sufficient in today's context? The straightforward answer is – no!

The higher level of digital transformation demanded by today's clients would be enabling the digital contracting, managing, and upgrading of all bank products and services through a single digital and trustworthy connection with every client, even for non-clients (new clients). In this process, individuals could easily compare bank product offerings, request for a specific product, securely and easily verify their identity, complete product/service arrangements by electronically signing an agreement and become bank clients and users of new or upgraded bank products. All these steps should be conducted entirely digitally, without the need for even a single physical presence at a bank branch, using only a personal device with a browser (smartphone or laptop) and an Internet connection, while at the same time being fully compliant with regulatory framework, typically very heavy for banking.

#### Digital relationship with clients

When we consider the new generations (Gen Y and Gen Z), who spend a significant part of their lives in the digital realm and find it challenging to imagine a world without it, banks face a substantial challenge in satisfying their needs. Why is this a challenge? Merely offering a product or service that is financially competitive with similar offerings

on the current bank market is not enough. What matters most is understanding these clients thoroughly, including their behavior and habits. Banks must grasp the differences between these clients and other generations, as well as the distinctions among them, to recognize their unique needs and tailor their digital offerings accordingly.

These generations expect the same level of convenience from banks as they experience in non-financial services. They demand high-quality bank products and services that are always available to them (in real time) through various channels.

For them, a bank is just another application they want to download from the app market on their mobile phone. They actively avoid any physical visits to branches.

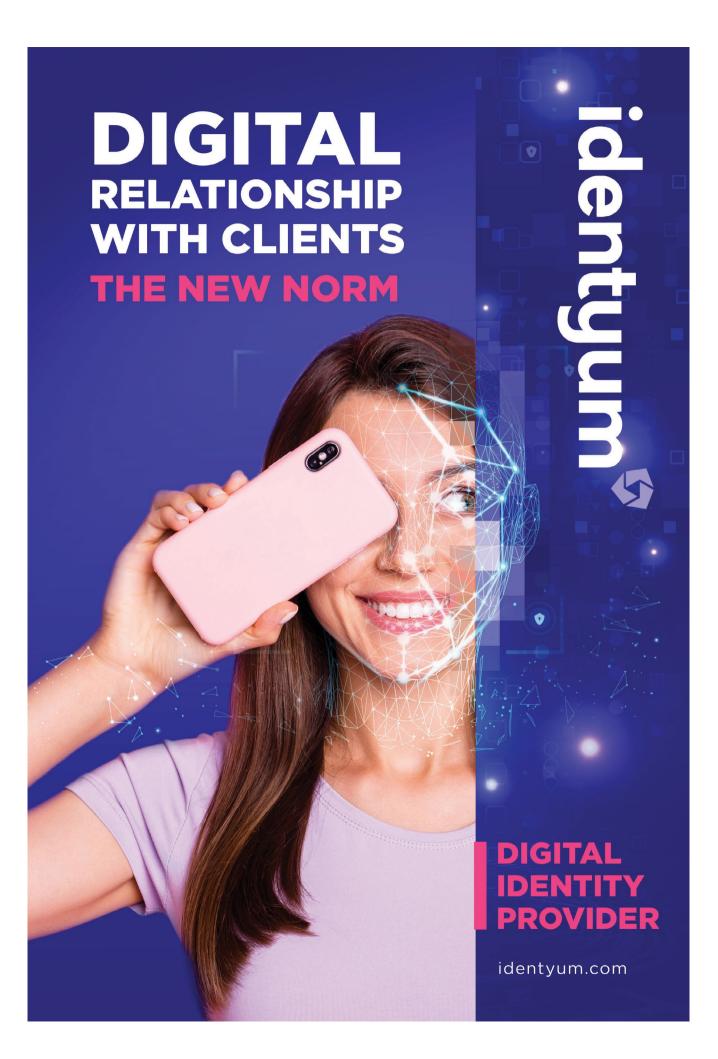
#### Digital onboarding / KYC

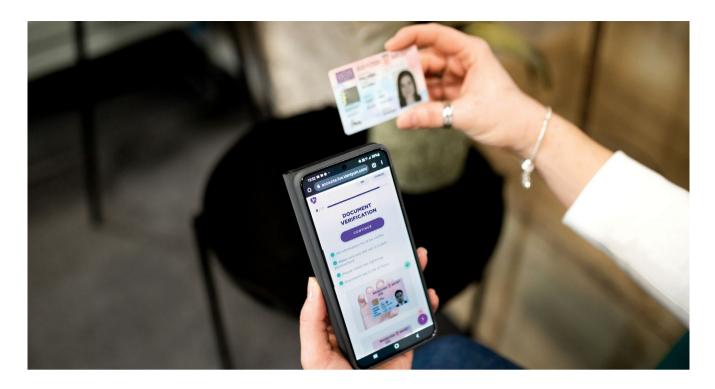
In general, to remain competitive in the market, the first step is to digitalize the banking product. In order to be fully digital, this must include digital onboarding of the client.

The two most critical features of the digital onboarding process are:

- Client identification should be credible and secure while at the same time fully complying with relevant legal and regulatory requirements (AML, GDPR), the so-called KYC (Know Your Customer)
- Onboarding user experience should be simple, intuitive, and straightforward.

One additional factor that many banks get wrong is – the client should onboard to the bank, not to the bank product.





This essentially means that remote onboarding should be done only once. So, in addition to digitalizing the product, the bank also needs to digitalize the connection to the client.

#### E-signing and Onboarding

In most cases, the digital onboarding process is connected to a specific bank product (such as a cash loan or a current account). Consequently, once the digital onboarding process has been successfully completed, the bank should be capable of providing an electronic signature capability to the client as a natural extension of the onboarding process.

In fact, if the digitally onboarded clients are unable to seamlessly continue the process with integrated e-signing, it diminishes the benefits of the onboarding process for both the bank and the client.

However, once again, it's important to consider that even when a client is onboarding for a specific bank product, the process should actually digitalize the client, thereby eliminating the need for them to undergo onboarding again when seeking another product.

This is the reason why, for the bank's long-term strategic advantage, the e-signing certificates should ideally be bound to the client (long-term certificates) and not to the bank (one shot certificates).

#### Retrieval of Client's External Banking Data

When a bank onboards a new client, particularly for a

credit product, it becomes crucial to be able to retrieve comprehensive data about the client's banking history, especially if this new client is already using products from market competitors – which is, in most cases, very likely. This retrieved banking data should contain details about the client's financial capacity and behavior. With it in hand, the bank should be able to make an informed decision whether even to establish a relationship with the client and if so, how to customize the product for the specific client's risk profile.

Although the EU has tackled the challenge of opening access to banking data "by force" (PSD2 Directive), the primary idea behind PSD2 was to enable rise of payment solutions which would compete with American card companies that dominate the EU payments market.

Unfortunately, PSD2 has not (yet) changed the payments landscape, primarily because of sub-optimal interface for payment authorization ("SCA"), which (still) cannot compete with user experience of smartphone contactless payment utilizing virtualized payment card in a brick-and-mortar store, nor can it in most cases truly compete with the simplicity of online payment with a credit card.

Outside of the EU, open access to external banking data is possible through somewhat controversial (yet legally valid) technology known as "screen scraping". Screen scraping operates by enabling a third party to access a customer's Internet banking by using the client's one-time login credentials.

#### The future of banking

The main components that a bank should focus on when investing in the digitalization process are:

- 1. Making products available to clients 100% via digital channels
- 2. Improving clients' user experience
- 3. Developing a plan for the transformation of existing clients
- 4. Include products and channels for SME and Corporate as well
- 5. Educating the employees

Considering these factors, along with future banking trends primarily influenced by the behavior, habits, and needs of the new generation of clients, successful bank's strategy will steer in one of two directions:

- Digital leaders Banks that invest heavily in innovation and enhance digital channels offering new digital products and new functionalities oriented towards wider client needs
- Digital followers Banks that concentrate their efforts on copying from leaders only the core functionalities of market-proven main digital products and optimize their operational efficiency.

Digital beginners and digital latecomers simply won't remain competitive enough to thrive in the future market.

#### Identyum solutions

Identify – digital onboarding service which provides reliable digital identification of individuals while fully complying with AML and GDPR provisions.

Sign – service for remote issuing of eIDAS compliant and legally valid cloud certificates to clients, enabling them to e-sign any PDF for a banking product in a fully automated and streamlined process.

FinCheck – service for retrieval of client's bank data via either PSD2 API (EU) or via direct interface (non-EU), enabling the bank to extract client's financial history and parameters and utilize credit scoring models.

#### Written by: Katarina Palašek Identyum



### Expert Group: Transforming Banking with Innovative Data and Automation Solutions

As the banking industry continues its digital transformation journey, the need for innovative solutions to streamline operations, enhance decision-making, and ensure compliance with ever-evolving regulations has never been greater. Expert Group, a leading company specializing in services and software development, is at the forefront of this transformation, offering a range of cutting-edge solutions tailored to the unique needs of banks' CEOs. In this article, we'll explore how Expert Group's expertise can revolutionize the way banks manage data and optimize business processes.

#### The Power of Quality Data

In the digital age, data is the lifeblood of any efficient enterprise management system. Quality data plays a crucial role in facilitating well-informed business decisions, both at the strategic and operational levels. Managing data effectively and uncovering valuable insights within it are essential for any forward-thinking bank.

Expert Group offers Data Advisory services designed to help banks harness the power of data and make informed decisions. These services include:

BI (Business Intelligence): BI is essential for data analysis and reporting, providing managers and employees with the insights needed to make informed business decisions. Expert Group Offers training programs, consultancy and implementation services regarding BI solutions.

ETL Process Development and Documentation: ETL (Extract, Transform, Load) processes are critical for data extraction, transformation, and loading. These processes ensure that data from various sources is converted into a usable and reliable resource for solving business challenges.

Data Governance and Modeling Assistance: Data governance encompasses processes, policies, standards, and

metrics that ensure effective and efficient data usage to help organizations achieve their goals. Expert Group can assist in establishing these processes and responsibilities, ensuring data quality and security throughout the organization.

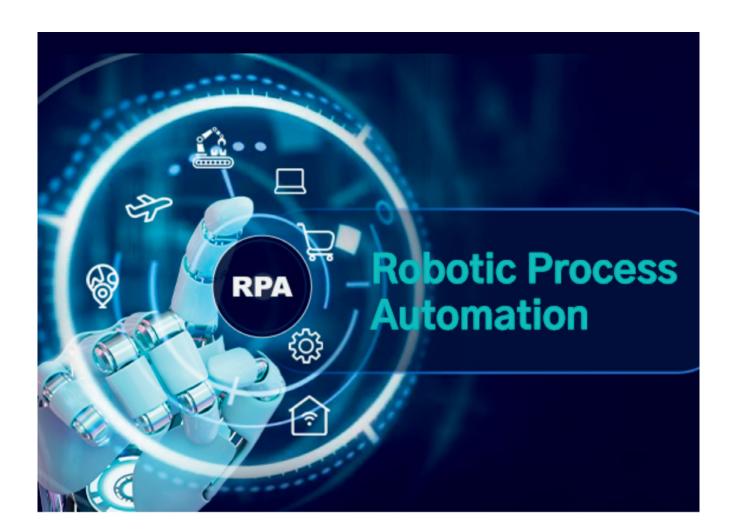
#### Standard Solutions Tailored to Banks

In addition to their Data Advisory services, Expert Group offers ready-made software solutions suitable for various industries, with a particular focus on banking. These solutions are designed to address specific challenges faced by banks, and the current portfolio includes four standard solutions:

BI Reporting and Data Management: Business Intelligence is essential for analyzing and reporting on data, providing crucial information for strategic and operational decisions.

RPA Process Optimization and Automation: Robotic Process Automation optimizes business processes through automation, including data processing, manipulation, and communication with other digital systems.

Data Advisory: Data management consulting services including assistance in choosing the right cloud data processing architecture which is petabytes/dollar effective, and compliant with all privacy requirements.









This technology allows configuring the computer software or a robot to recognize and interpret the existing applications for processing of transactions, analyzing data, triggering responses and communicating with other digital systems.



Learn more! https://www.expertgroup.rs/

#### **Custom Solutions and Ongoing Innovation**

While the standard solutions mentioned above cover a range of banking needs, Expert Group also offers the flexibility to develop custom solutions tailored to specific client requirements. The company's team of carefully selected experts possesses extensive knowledge in relevant fields, including IT, data analysis, project management, and tax regulation. This multidisciplinary approach enables Expert Group to identify potential synergies and opportunities for improvement within organizations.

#### A Focus on the Banking Sector

Expert Group's wealth of experience extends to various sectors, but its primary focus is on the banking industry. The company's extensive experience in project execution, data analysis, and regulatory compliance uniquely positions it to serve banks, insurance companies, large corporations, and SMEs.

#### Conclusion: A Partner in Banking Transformation

In an era where data-driven decision-making, automation, and compliance are non-negotiable for banks, Expert Group emerges as a trusted partner. Their innovative solutions and expertise in data management, process optimization, and tax regulation provide the tools banks need to thrive in a rapidly evolving industry. By leveraging Expert Group's services and solutions, CEOs of banks can enhance efficiency, drive informed decision-making, and stay ahead of the curve in an increasingly competitive landscape. Expert Group is not just a service provider; it's a strategic ally in the banking sector's ongoing digital revolution.

Written by: Nikola Jeremić Expert Group

#### Insert:

Expert Group is helpful in the banking industry, offering a range of cutting-edge solutions designed to streamline operations, enhance decision-making, and ensure compliance. With a focus on CEOs of banks, let's explore their credentials and how they are revolutionizing data management and business processes. Credentials Highlight:

Impressive Automation Stats: Achieving over 90% automation rates and automating 50+ processes.

Trusted by Industry Leaders: Backed by a growing list of top-tier clients.

RPA Management Excellence: Providing comprehensive RPA management services with a stack including UiPath and Azure DevOps.

End-to-End Automation: Offering end-to-end process automation using UiPath, Power Automate, and more, achieving >90% automation rates and >100% ROI.

High ROI Automation: Delivering remarkable returns on investments, exceeding 1000%, through process automations in finance and risk management.

Expert Group's commitment to excellence and innovation makes them a trusted partner in banking transformation. CEOs of banks can leverage their solutions to enhance efficiency, drive informed decisions, and stay ahead in the competitive banking landscape.

References from financial sector:

Banca Intesa AD, Beograd
Generali Osiguranje, Beograd
Addiko Bank AD, Beograd
Eurobank Direktna bank AD, Beograd
Triglav osiguranje AD, Beograd
Sparkasse banka, Sarajevo
Raiffeisen bank, Sarajevo
ALexBank, Cairo
First Abu Dhabi Bank, UAE

### The Evolution of Shopping: KÖPA's Innovative Approach to Streamlined Checkout

In today's rapidly evolving digital landscape, e-commerce trends and innovations have a profound impact on how businesses and customers interact. One such innovation that has garnered attention is KÖPA Shopping, a solution that simplifies the checkout process and bridges the gap between the physical and digital retail experience. In this article, we delve into the details of this emerging trend, offering a neutral and informative perspective that will resonate with banking professionals seeking to stay informed about market developments.

#### The Rise of Streamlined Checkout

As consumer expectations for seamless and efficient shopping experiences continue to grow, businesses are constantly exploring ways to eliminate barriers in the buying process. KÖPA Shopping addresses this need by reimagining the checkout process.

#### A Unified Commerce Platform

KÖPA's core offering is a unified commerce platform

that streamlines the purchasing journey. It ensures that businesses maintain up-to-date product information, including real-time stock availability and item locations. This level of integration simplifies the customer experience, reducing friction during the checkout process.

#### **EXPLORING KÖPA'S FEATURES**

Let's take a closer look at the features that make KÖPA Shopping stand out in the evolving e-commerce landscape:





We bring reliable one-click checkout to the Internet and your local shop!

www.kopa.rs

#### Seamless Accessibility

KÖPA's approach offers accessibility across various touchpoints. Customers can initiate the payment process by scanning a QR code or clicking on a link, irrespective of whether they are on a website, reading a magazine, or even standing in a physical store. This accessibility extends the reach of businesses, making shopping more convenient for consumers.

#### Streamlined and Effortless

The standout feature of KÖPA Shopping is its simplicity. Customers follow a few easy steps, and the transaction is complete. This user-friendly approach significantly reduces cart abandonment rates, an issue that plagues many online retailers.

#### Versatility and Integration

KÖPA Shopping seamlessly integrates with popular e-commerce platforms like WooCommerce, Shopify, MerchantPro, and others. This adaptability ensures that businesses can easily incorporate KÖPA into their existing systems, enhancing their operations.

#### The Digital-Physical Convergence

KÖPA Shopping's unique selling point is its ability to bridge the gap between the physical and digital realms. It unifies the retail experience, allowing customers to shop online or offline with equal ease.

#### The Metaverse Connection

With the concept of the Metaverse gaining traction, KÖPA is well-positioned to facilitate shopping experiences within this emerging virtual space. It's a future-ready feature that aligns with the evolving landscape of digital commerce.

#### Addressing E-Commerce Challenges

E-commerce is not without its challenges, and KÖPA Shopping has its sights set on resolving some of the most common issues:

#### Cart Abandonment

Lengthy and complicated checkout processes often lead to cart abandonment. KÖPA Shopping's simplified approach can significantly reduce this problem, potentially boosting conversion rates.

#### Real-Time Inventory Management

Accurate inventory tracking is vital for e-commerce success. KÖPA ensures customers always have access to current stock information, reducing customer frustration caused by inaccurate data.

#### Omnichannel Consistency

Inconsistent experiences across various channels can deter customers. KÖPA Shopping unifies these channels,

delivering a consistent shopping experience whether customers are online or offline.

#### The Sustainable Edge

KÖPA Shopping also recognizes the growing importance of sustainability in e-commerce. Their innovative data transfer system reduces CO<sub>2</sub> emissions by 90% compared to industry standards. This environmentally friendly approach aligns with the increasing demand for ethical and sustainable shopping practices.

#### PREPARING FOR THE FUTURE

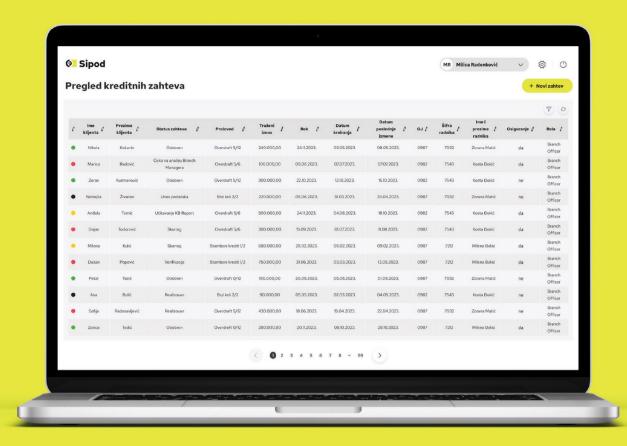
In conclusion, KÖPA Shopping represents an emerging trend in e-commerce that emphasizes simplicity, efficiency, and adaptability. It is a solution designed to address common challenges faced by businesses in the digital age. Its ability to bridge the gap between physical and digital retail experiences positions it as a forward-thinking solution, ready to meet the evolving demands of the market.

#### **Embracing the Future of Shopping**

KÖPA Shopping offers a practical example of how businesses can enhance the customer experience in an ever-evolving digital landscape. It's an innovation worth considering for those looking to streamline their e-commerce operations and meet the expectations of today's discerning consumers.

#### Written by: Sava Živanović Technology partnership





## Sipod's Business Process Management Platform and Automation Solution for Fintech

The banking and financial industry has significantly transformed over the past decade. The increasing demand for mobile and online banking services, coupled with the tech-savvy nature of today's customers, has reshaped the expectations for convenience, speed, and accuracy in every banking transaction.

Over the past few years, Sipod has developed a software platform that innovatively digitalizes, optimizes, and orchestrates business processes in various industries, with a particular emphasis on the financial sector.

#### Sipod's Comprehensive Solution for Banking and Finance in the Digital Age

Our comprehensive solution encompasses the entire spectrum of digital transformation and refactoring of both new and existing processes. From the meticulous design of processes adhering to BPMN 2.0 standards to implementation, integration with

existing services, and thorough testing on a random sample, Sipod's solution enables each step of the process to be analyzed, tested, modified, and improved independently. The platform also encompasses the formulation of process rule engine rules and the creation of complex decision matrices.

#### A Glimpse into the Technology Behind Sipod's BPM platform

Our BPM platform is based on a combination of cutting-edge technologies, with the well-known open-source process design tool Camunda serving as the foundation. The platform itself is architected within the framework of Microsoft's microservices, with APIs consumed by web and mobile client applications featuring very modern user interfaces built with Angular and Flutter technologies. The solution can easily be adapted and integrated into existing corporate systems.

#### A Trusted Partner in Finance - Sipod's partnership with OTP Bank Serbia

As mentioned earlier, our BPM platform is highly suitable for processes in the financial sector. OTP Bank Serbia, for instance, has recognized our solution as ideal for implementing overdraft processes. This partnership signifies a significant milestone for us, as it solidifies our reputation as a trusted software partner and highlights the value of our platform in managing and orchestrating complex origination processes.

#### Enhancing Efficiency Through Real-Time Tracking and Monitoring

One of the key benefits of the Business Process Management Platform is its ability to track and monitor processes in real time, enabling effective monitoring and optimization. With accurate implementations and standardized process documentation, businesses can eliminate the possibility of incorrect process implementation, reducing errors and improving efficiency.

#### Flexibility for Continuous Improvement

The platform's flexibility allows continuous process improvements and changes to be implemented quickly and easily, saving significant time and costs. With a user-friendly interface and the ability to integrate with existing dependent services, Sipod's Business Process Management Platform offers an exceptional user experience and a seamless transition to optimized business processes.

#### Your Partner in Digital Transformation

At Sipod, we are always available for personalized consultations regarding our BPM platform implementation, ensuring your platform integration goes smoothly and meets your needs. To explore how Sipod's Business Process Management Platform can revolutionize your banking operations, reach out to us today. Schedule a demo and experience firsthand the remarkable capabilities of this platform.

sipodsoftware.com Valterova 17, Belgrade, Serbia office@sipodsoftware.com +381691476036

#### Written by: Jovana Nataša Rudan Sipod software



## Empowering Digital Transformation: Insights from Sipod's Director, Dejan Beciric

In the first edition of our magazine, the Adria Fintech Journal, we have the privilege of featuring an interview with Dejan Beciric, the director of the company Sipod. To start, could you provide our readers with some insights into your company?

Sipod is distinguished by its expertise in developing tailored software solutions for clients and enhancing their business processes through digitalization. While our core competency lies in software development, our overarching mission is to assist our clients in achieving their strategic objectives.

#### How do you assist your clients in accomplishing their objectives?

Helping our clients achieve their goals is a complex process that hinges on establishing trust and nurturing long-term partnerships. Clients need a solid foundation of trust to hand over their most critical digitalization, reformulation, and optimization processes to an external company.

Typically, our collaboration starts with smaller tasks, like refining less critical software elements or seeking advice on existing software solutions. During this initial phase, which clients often call the "first stage," we focus on building trust. We're proud that clients often choose to expand our partnership.

This collaboration brings tangible benefits to our clients, leading them to involve Sipod in more than just software development. We become integral to their product development, process optimization, and long-term digital investment planning.

#### Is it challenging to achieve such a level of collaboration?

Not particularly, as our approach aligns closely with the core values that Sipod holds in the highest regard: professionalism, reliability, and ethical conduct. One of the primary challenges we encounter is addressing the initial perspective of certain clients, which assumes that an external software company merely provides programmer resources for hire. This perception, however, does not encompass the full spectrum of possibilities. Staff augmentation, or what is commonly known as body leasing, falls short in delivering comprehensive benefits for corporations embracing this model, as it predominantly focuses on personnel, without providing any additional value. The essence of our model is to deliver much more than human resources. We offer a holistic approach, comprising a well-coordinated team, bolstered by a dedicated business analyst with industry-specific insights.

This is complemented by effective management to lead the team and strategize methods for maximizing outputs and value in collaboration with the client.

Furthermore, by engaging the entire managed team and positioning Sipod as a strategic partner rather than a mere staff augmentation vendor, our clients gain access to pre-configured solutions, established best practices, and extensive expertise acquired through our experience across diverse industries and business processes.

#### To sum up, what do you typically advise your clients?

If clients decide to partner with Sipod, we recommend considering a close collaboration and granting us the opportunity to showcase our capabilities in helping them attain their objectives.

We encourage clients not to limit their requests to short-term problem-solving resources but to view us as potential long-term partners who can provide comprehensive support across various aspects of their business.

### User centricity in banking

There is no bank outside that does not put the customer at the center of their strategy and attention. At least if you believe the colorful advertisements where attentive bank employees speak with customer about important things that make them obviously happy. The reality often lags behind this lovely picture both on operational and strategic level. That's unfortunate in many ways: It not only weakens the competitive situation of the bank in regards of existing customers. It also weakens the capabilities and reduces the options for new business.

#### **User Centricity explained**

Many banks are still stuck in a very product-oriented world of thinking. There's the checking account, the credit card, the fixed term deposit, the overdraft: Products with a one-size-fits-all approach. The marketing department then tries to sell it with benefit-oriented slogans or, in the words of former Fidor Bank CEO Matthias Kröner, simply "puts lipstick on the pig".

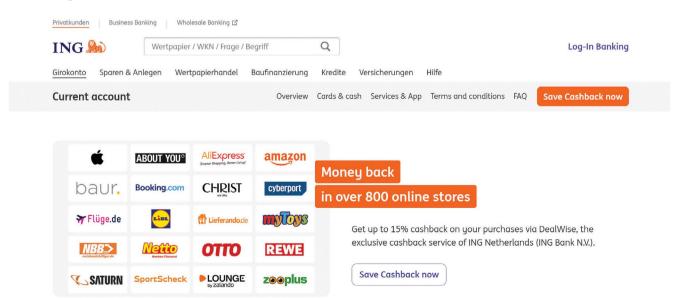
Some companies are very successful with their product-driven approach, e.g. Apple. While they do consider customer feedback, they design and develop products based on their vision of innovation and excellence. But to my best knowledge there is no successful "Apple of Banking". Some examples of very focused offerings like Goldman Sachs' Marcus exist, though.

Customer centricity is a business approach that prioritizes the needs, preferences, and values of individual customers over everything else. Companies that adopt a customercentric approach aim to foster a positive experience and build long-term relationships with their customers, knowing that this is the basis for good, long-term business. A non-banking example, known for its "customer obsession" is Amazon. They continually innovate based on customer feedback. Its Prime membership, easy return policies, and personalized recommendations are all tailored to enhance the customer experience.

Banks need to transition from a product-focused approach to a customer-centric culture. This is not a romantic notion but a business-driven fact. An EY study shows two-thirds of banks have experienced at least one underperforming transformation in the past five years, with a lack of commitment to customer-centricity being a primary reason.

#### **Levels of User Centricity**

To achieve user centricity, you can fall into the trap of focusing on operational, day-to-day elements only, such as a smooth customer journey. Surely this is an important element, and both your customers and your revenues will benefit from clear individual offerings, intelligent search that understand natural language, superior customers service supported by AI, instant risk-assessment and decision making, online contracting with digital signatures, swift video ident onboarding, migration support, activity monitoring and automated check-ins with your customers, just to name some examples. Also, small elements like



customizable user interfaces make a big difference, as well as sophisticated features like open banking supported liquidity planning and budget control.

#### Weave customer centricity into the bank's fabric

At the strategic level, user centricity in banks is about long-term planning and decision-making that places the customer at the core of business strategies. Of course, you start with (re)defining who your customer actually is. And if you want to change that? Addressing the unique expectations of urban millennials and Gen-Z customers requires different approaches than rural boomers looking for a partner to manage their accrued wealth.

Make "customer obsession" your primary value. Banks must base their decisions on a deep understanding of their customers' needs and behaviors. The digital transformation has provided banks with a plethora of data. However, the challenge lies in translating this data into actionable insights. While digital platforms generate vast amounts of data, understanding the motivation behind customer actions remains elusive. This involves analyzing banking transaction data, surveying customers, and conducting external research. There are some ways where customer reveal their intentions pretty openly: Examples are named saving sub-accounts or marketplaces in combination with cashback programs. In order to measure the impact and success of your initiatives you should define and review a wide range of customer-centric KPIs regularly. This includes combining NPS scores with other metrics to get a comprehensive view of customer satisfaction. Make sure that employee incentives are in line with these goals.

Successful banks also invest in the human side of customer centricity: This involves acquiring skills in data analytics, user experience, customer research, and product testing. Allocate at least 15% of budget to customer centricity. Additionally, creating a culture of customer-centricity is crucial. Customers now seek a more personalized and

Invoice 427 is sent

2h ago

Invoice 427 is fully paid

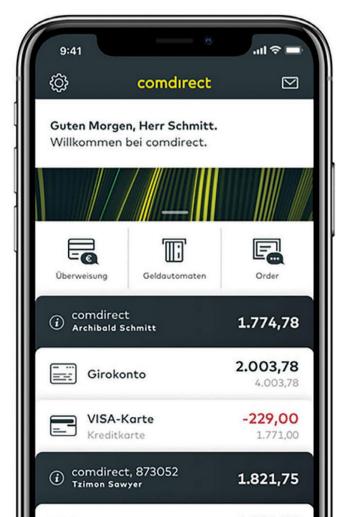
Just now

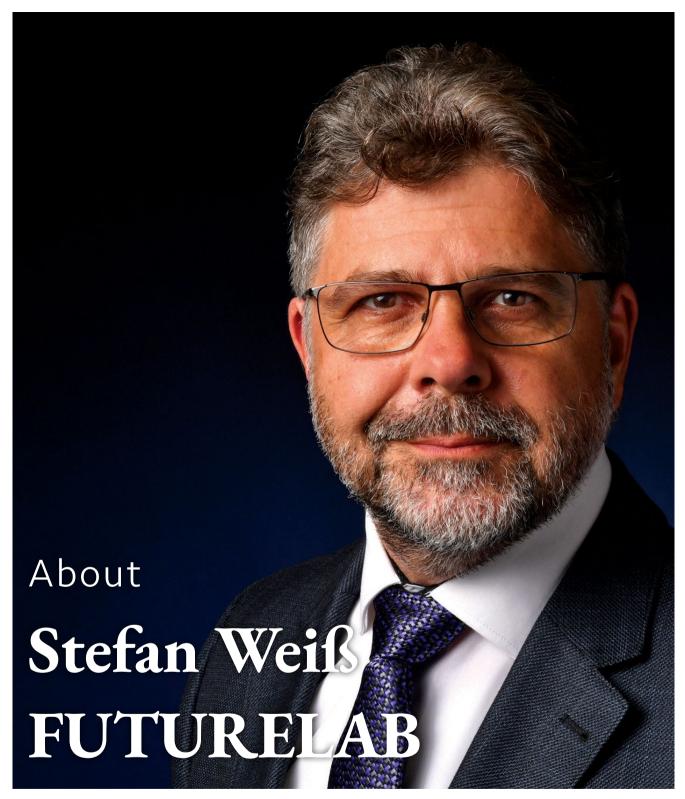
Invoicing

Simple, powerful — built to get you paid twice
as fast

supportive banking experience, especially in challenging economic times. If you want loyal customers, you have to create an emotional bond with the product and the brand, and you only have a few "moments of truth" to do so. This is not something that only challenger banks can do. Quite the opposite. Especially in the beginning, the focus of e.g. Monzo and Starling (UK) was on innovative features to attract customers. In contrast, traditional banks, such as Barclays (UK), emphasize personal service. This human touch is highly valued by customers. A prerequisite for that is "colleague centricity". By enhancing the experience of bank employees, especially in customer-facing roles, banks can improve the overall customer experience. If the inside does not work, the outside will not, either. Your customers' trust is hard to earn and easy to lose.

Customer centricity is an up-hill battle because customer requirements are every changing. The good news is: you don't have to be perfect and new technology is providing you with super-powers that allow personalization and efficiency that was unthinkable just a couple of years ago. We suggest to appoint and empower a chief customer officer, who is be part of the executive management team to ensure the customer is at the center of every transformation initiative. In addition, specialized consultancies can identify loopholes, define systemic approaches, suggest priorities, select best of breed solutions and guide through the implementation. To turn customer centricity into profits.





Stefan Weiß is CEO and founder of FUTURELAB, a Munich based management consultancy that support business for over 20 years with IT strategy, trusted supplier partnerships and project management. He's in online payment and digital banking for 15 years now, working with banks and fintechs. Until recently he was the CTO of the vertical banking start-up CURE, targeting medical doctors. Currently he's involved in open finance projects for the MENA region.

# Hyperrisk Solutions: Navigating Risk in Southeastern Europe's Banking Sector

In the ever-changing landscape of the banking industry, staying ahead of risks is imperative. For CEOs of banks across the Southeastern European (SEE) region, risk management isn't just a matter of compliance; it's a strategic imperative. Enter Hyperrisk Solutions, a company quietly making waves in the region, providing specialized software, development, and consulting services tailored to address the unique challenges faced by banks in SEE.

### **Experts in Risk Management**

Hyperrisk Solutions, though yet not a household name, is a provider of software solutions for risk management, credit rating and scoring, as well as regulatory reporting in SEE. In addition to their software prowess, they offer bespoke risk consulting services. Their client base encompasses a wide spectrum, from systemically important banks to boutique consultancies and startups. Notably, local bank clients account for a significant portion of the total Serbian banking balance sheet.

# RiskGuard 3.2: Streamlining Basel Compliance

One of Hyperrisk's flagship offerings is RiskGuard 3.2. This software solution is designed to tackle Basel III Pillar

I and 2 calculations, all while ensuring compliance with regulatory and financial reporting standards. It offers streamlined calculation of key indicators and compliance reporting based on localizable COREP templates. The solution's robust routines are optimized for handling substantial banking and trading books. Calculations are typically conducted on the client's premises, on a server infrastructure integrated with their own, and results are accessible through a user-friendly interface.

The beauty of RiskGuard 3.2 lies in its full data model automatization. Once implemented, manual data entry becomes a thing of the past, saving valuable time and reducing errors. Furthermore, the solution's modular architecture allows clients to tailor it to their specific needs, adding modules like Credit Risk, Market Risk, Liquidity Coverage Ratio (LCR), Net Stable Funding Ratio (NSFR), and more.

# Navigating Risk in Southeastern Europe's Banking Sector ->



We are a leading provider of software solutions for risk management, credit rating and scoring as well regulatory reporting in South-East Europe. In addition to software development, we have provided bespoke risk consulting, together or separately to our software implementations.



For SEE's CEOs, the automation of regulatory reporting is a game-changer. RiskGuard 3.2 enables COREP reporting for Pillar 1 risks, such as credit, concentration, counterparty, and liquidity, all in user-friendly formats like xlsx and xml. It also handles Pillar 2 risks, whatif scenarios, stress tests, ALM-related reports, and customized reports for various purposes.

### Select-9: Mastering IFRS9

In the era of IFRS 9, Hyperrisk's Select-9 comes to the rescue. This tool simplifies the complex task of calculating credit impairment under the IFRS 9 standard. Beyond core calculations, Select-9 provides reporting based on FINREP guidelines. It offers precise cash flow projections by instrument, efficient collateral allocation, and customizable staging algorithms.

Additionally, Select-9 tackles lifetime Probability of Default (PD) calculations, LGD evolution, Point-in-Time transformations, and forward-looking macroeconomic scenarios. It's a comprehensive solution for banks navigating the intricacies of IFRS 9.

### **AccuRate: Precision in Credit Rating**

Credit rating is a critical component of risk management, and AccuRate is Hyperrisk's answer to achieving precision in this realm. This software solution is a powerhouse for developing, validating, and automating credit rating and scoring models. It uses machine learning and econometric methods to ensure optimal model selection.

AccuRate addresses common issues found in standard logit models, such as multicollinearity and missing values, through careful data transformation and bias-reduction methods. It allows users to create custom factors based on raw data and offers flexibility in parameter selection. The

software supports multiple competitive models, ensuring users can choose the most suitable one for their needs. Its user-friendly interface and built-in tools for data import make it a valuable asset for banks looking to enhance their credit rating processes.

### **Beyond Software: Consulting Expertise**

Hyperrisk Solutions doesn't stop at software; they offer a range of consulting services related to financial and risk modeling. Their team's methodologies are widely adopted in financial institutions across SEE. These services span from regulatory compliance regarding Basel methodologies to intricate risk modeling, including LGD modeling, pricing complex financial products, and assessing operational risk.

### The Hyperrisk Advantage

What sets Hyperrisk Solutions apart is not flamboyant marketing, but a commitment to delivering quality solutions that address the specific needs of SEE's banking sector. With a blend of cutting-edge software and expert consulting, they offer a holistic approach to risk management. The expected influence of Hyperrisk Solutions in SEE's banking industry is unmistakable. For CEOs navigating the treacherous waters of risk, this unassuming company might just be the ally they never knew they needed.

Written by: Aleksa Jorga Hyperrisk Solutions

### ABOUT HYPERRISK

### **MODELING & REGTECH**

Hyperrisk solutions is a provider of software solutions for risk management, credit rating and scoring as well regulatory reporting located in South-East Europe. In addition to software development, they are providing bespoke risk consulting, together or separately to the software implementations. Their software products have been implemented successfully in leading financial institutions locally, regionally and internationally. Their local bank clients account for 60% of the total Serbian banking balance sheet. Overall, their clients range from systemically important banks to boutique consultancies and start-ups. They are expanding both geographically and across product lines.

# Unlocking Growth and Customer Loyalty: The Power of Fintech Loyalty Programs for Banks in the SEE Region

In the rapidly evolving landscape of banking and finance, staying ahead of the curve is essential. Banks in the SEE (South East Europe) region are exploring innovative strategies to expand their services, boost sales, and retain clients. One such strategy is the implementation of a loyalty program, supported by cutting-edge fintech solutions. This article delves into the possibilities and benefits of loyalty programs for banks, focusing on how they can be a gamechanger in achieving these objectives.

The SEE region, is witnessing a digital transformation, and banks here are keen to harness the potential of fintech to meet the evolving needs of their clients.

### The Power of Loyalty Programs

Loyalty programs have long been a staple in the retail industry, but their adoption in the banking sector is a relatively recent development. A well-designed loyalty program can be a powerful tool for banks to:

- Enhance Customer Retention: In a highly competitive market, retaining existing clients is as crucial as acquiring new ones. A loyalty program encourages customers to stay loyal to a bank, thus reducing attrition rates.
- Boost Sales: Loyalty programs incentivize customers to engage more with the bank, leading to increased product adoption and cross-selling opportunities. The chance to earn rewards or discounts can be a strong motivator.
- Improve Customer Engagement: Digital banking is becoming increasingly popular. A mobile app that offers rewards, promotions, and personalized recommendations can significantly enhance customer engagement.
- Attract New Clients: A well-publicized and enticing loyalty program can also be an effective marketing tool, attracting new customers who are drawn to the benefits and advantages offered.

Global Digital Marketing Programs (GDMP), a Belgrade-based fintech company, specializes in developing and delivering such loyalty programs. Their flagship product, GLOOK, offers a platform that connects users with smart devices and automates workflows. GDMP's expertise lies in providing personalized and targeted benefits to consumers, a crucial aspect of any successful loyalty program.

### The Roadmap to Success

Establishing the Loyalty Program of the bank focuses on launching and growing a mobile app or enhancing the existing one to provides customers with easy access to their points, rewards, and benefits. The key milestones in this process include market research, app development, testing, and a public launch. Continuous monitoring and improvements are integral to this phase.

Quick Wins (Short-Term Initiatives)

To see immediate results, banks can consider quick wins like forming partnerships with popular merchants, launching referral programs, implementing customer feedback mechanisms, conducting satisfaction surveys, and maintaining informative blogs or newsletters.

Digital Persona - End User ExampleUnderstanding the target audience is critical. For instance, a 40-year-old accountant in Belgrade, Serbia, who values financial security and convenience. His needs and desires include





Introducing Global Digital Marketing Programs, the company specialized in crafting and implementing cutting-edge digital marketing and loyalty systems tailored to the financial industry. With a commitment to innovation, our solutions represent a paradigm shift in the world of financial services and e-commerce, setting new standards for excellence and efficiency.

Backed by a history of delivering results, our seasoned team of experts has provided advancements in both the financial services and e-commerce realms, consistently exceeding expectations and redefining what's possible in the digital landscape.

Our reputation in the commercial sphere is underpinned by the knowledge and experience, paving the way for the creation of a digital marketing solution that is fit for modern era. Our premium offering stands as a testament to our dedication to excellence and our pursuit of perfection. Partner with us and embrace a new era of digital marketing excellence in financial institutions.

www.globaldigitalmp.com

easy access to benefits plans, personalized promotions, and efficient financial management through a mobile app.

### Key Performance Indicators (KPIs)

Tracking KPIs such as enrollment rate, engagement rate, redemption rate, average order value, repeat purchase rate, customer retention rate, Net Promoter Score (NPS), Customer Lifetime Value (CLV), cost per acquisition (CPA), application downloads, number of transactions, and referrals is essential to measure the loyalty program's success.

### Loyalty Program Functionalities

The loyalty program should include various functionalities, including digitized membership cards, receiving coupons from merchants, notifications for promotions, integration with merchant loyalty programs, referral programs, purchase of preferential gift vouchers, and personalized targeting based on user preferences and behavior.

Listening to Customers, Empowering Employees, and Personalization

To create a better customer experience, banks should collect feedback from customers, empower employees

to provide input, and design for simplicity and usability. Personalization, based on demographics, behavior, preferences, and needs, should also be a core component.

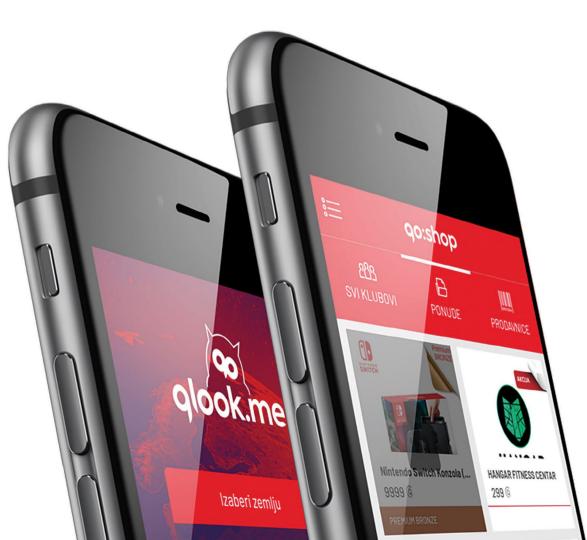
### Risk Matrix of the Loyalty Program

Implementing a loyalty program is not without its challenges. Banks should be prepared to address risks, including cyber threats, regulatory compliance, and fraud. Developing a comprehensive risk management plan is crucial to mitigate these potential issues.

### Conclusion

Loyalty programs, driven by fintech solutions, offer banks in the SEE region an opportunity to extend their services, increase sales, and retain clients in an increasingly competitive market. By following a well-structured roadmap and keeping a keen eye on KPIs and customer needs, banks can harness the full potential of loyalty programs to achieve their growth and retention objectives. GDMP, with its expertise in fintech solutions, stands ready to assist banks in this transformative journey.

### Written by: Vladimir Džodžo Global Digital Marketing Programs



# Aurora DMS: Revolutionizing Digital Archive Management for Banking

In the rapidly evolving world of banking, efficiency, compliance, and cost-effectiveness are paramount. CEOs of banks are constantly seeking innovative solutions to streamline their operations while ensuring adherence to evolving regulations. Enter Aurora DMS, a cutting-edge digital archive management solution offered by Codebehind d.o.o. Based in Belgrade, Serbia, this powerful tool promises to transform how financial institutions manage their electronic documentation.

### **Unlocking Time and Cost Savings**

In today's digital age, banks are inundated with electronic documents that need to be archived efficiently. Aurora DMS rises to the challenge by reducing the time required for archiving electronic documentation through two key methods: Aurora DMS Mobile Application: One of the standout features of Aurora DMS is its mobile application, which allows for rapid, reliable, and high-quality indexing on the go. With this app, you no longer need to rely on traditional scanners, saving you both time and money. OCR (Optical Character Recognition): Streamline the process of adding metadata to your documents by letting Aurora DMS extract information directly from the documents using OCR mechanisms, barcodes, or QR codes.

### Going Green with Digital Signatures

In an era where environmental sustainability is a top concern, Aurora DMS offers an innovative solution by promoting the use of digital signatures. Instead of printing documents, you can now add your handwritten digital signature directly to the electronic document, significantly reducing both printing costs and the need for physical document storage.

### **Automated Indexing for Efficiency**

Aurora DMS takes automation a step further with its automated indexing capabilities. It seamlessly indexes both incoming and outgoing invoices and email correspondence, saving valuable time and effort. This ensures that your digital archive is organized, up-to-date, and readily accessible.

# Seamless Integrations for Enhanced Productivity

For banks that rely on ERPs or CRMs, Aurora DMS offers a plethora of integration options. Its rich system of



# **Aurora DMS**

# FAST, AUTOMATIC, RELIABLE SOLUTION FOR YOUR DIGITAL ARCHIVE



www.codebehind.com



# Codebehind

webhooks and REST APIs allows for seamless integration with your existing systems. Should your bank require custom modules for integration, the expert team at Codebehind d.o.o. stands ready to fulfill your needs.

# Qualified Digital Signatures for Compliance

Aurora DMS is well-versed in integrating with the qualified electronic signatures of the Republic of Serbia. This includes a module that simplifies the process of signing with qualified digital certificates while automatically storing the signed documents securely in your digital archive.

### **Ticketing System for Process Efficiency**

For banks where documentation serves as the catalyst for internal processes, Aurora DMS introduces a powerful ticketing system. This system automates the creation of tasks upon document archiving, assigns them to the relevant teams, tracks task progress, and facilitates communication within the team. Robust reporting capabilities provide valuable insights into process quality and execution within your bank.

### **Meeting Regulatory Requirements**

As the financial industry navigates a sea of evolving regulations, Aurora DMS ensures compliance with the standards of electronic archiving. By choosing a system such as Aurora DMS, banks can rest assured that their digital archives will align seamlessly with incumbent or any new digital archive regulations.

### A1: A Million-Euro Success Story

To illustrate the immense potential of Aurora DMS, let's take a look at a real-world case study involving AI Serbia. The initial situation at AI Serbia was characterized by the need for instant scanning, reduced vendor scanning costs, decreased print volume, and improved ticketing and reporting.

By implementing Aurora DMS, Ar achieved:

· Instant document scanning, eliminating the need for

external vendors.

- · Drastic reductions in printed documentation.
- Enhanced ticketing and reporting, leading to more efficient processes.
- A substantial reduction in physical document storage requirements.

In total, AI Serbia realized savings of up to I million euros through the adoption of Aurora DMS.

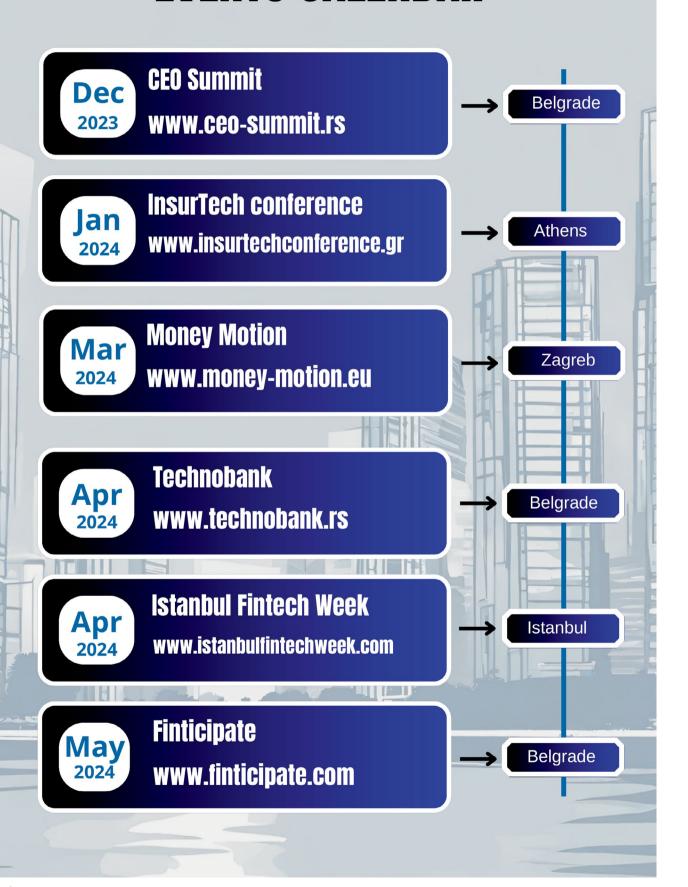
### Conclusion

Aurora DMS by Codebehind d.o.o. is poised to revolutionize the way banks manage their digital archives. It offers a compelling suite of features that drive efficiency, cut costs, and ensure compliance with evolving regulations. The case study involving AI Serbia serves as a testament to the tangible benefits that this innovative solution can deliver. For CEOs of banks, Aurora DMS is more than just an investment; it's a strategic move towards a more efficient, sustainable, and compliant future.

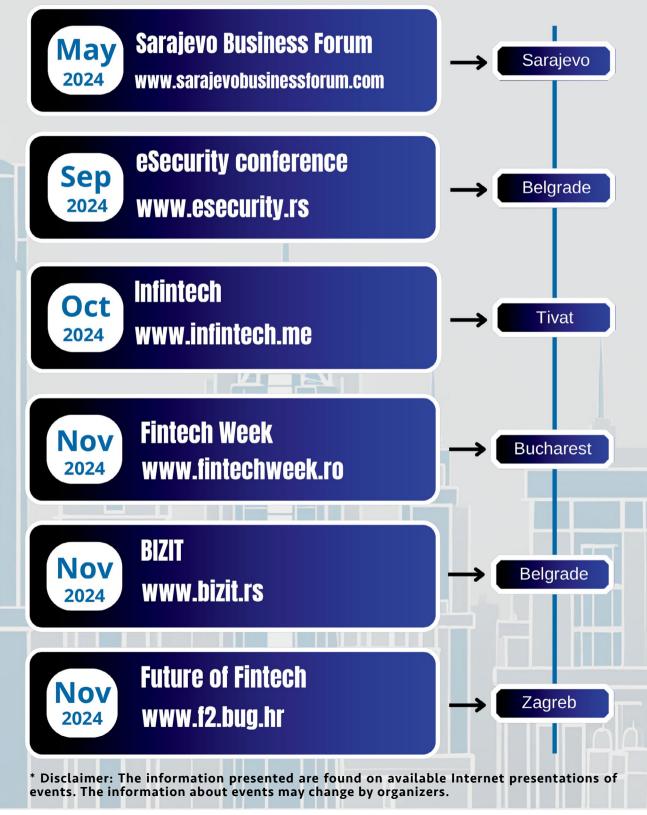


Written by: Miroslav Ninković Codebehind

# **EVENTS CALENDAR**



# **EVENTS CALENDAR**





# The Seventh eSecurity Conference 2023

The seventh international eSecurity conference, organized by the eSecurity Association, was held from September 25 to 28, 2023 at the Mona Plaza Hotel in Belgrade. For the first time, the conference lasted 4 days, bringing training days - Zero Day, two conference days - Conference Days, and a day for sponsor workshops - Workshop Day, as well as various activities during the breaks and sweet surprises for all participants from our sponsors.

The International eSecurity Conference, as one of the most important IT events in the region, attracted more than 250 experts from the country and abroad in the field of ICT, information security, data protection, digital forensics, IT auditing and cyber risk management. As every year, the conference brought a large number of lectures, hands-on demonstrations, live hacking, workshops on current threats, sophisticated attack techniques and the dark web, digital life, security challenges in the country and the region, as well as advanced protection systems. The conference

was attended by IT managers, information security managers, network engineers, IT auditors, experts in the field of cybercrime and digital forensics, as well as many others interested in trends and practical advice regarding the protection of information systems.

All conference participants received nice gifts from the organizers: a laptop backpack, a t-shirt with an interesting print and a pendant with the conference logo, and training participants also received special sweatshirts.

The conference was opened by the president of the eSigurnost Association, Dr. Igor Franz, who emphasized the importance of information security in today's world. In the following, he wished all present participants successful work at the conference and presented basic information about the Association itself, the organizer of the conference.

At the beginning of the first day, an interesting lecture was given by Srđan Radosavljević, a representative of the company Kaspersky, which was also this year's general sponsor of the eSecurity conference. On that occasion, Srđan spoke about everyday realistic scenarios of attacks, as well as new threats we face.

Through lectures and presentations with various gifts, large international and domestic companies such as Kaspersky, Comtrade Distribution, Trend Micro, Seif.ai, Clico, Check Point, Comtrade System Integration, Ernst and Young, REAL Security, Exclusive Networks, Ingram Micro, Infoblox, SentinelOne, Forcepoint, BeyondTrust, Oktacron, Gatewatcher, Mondist, SECIT Security, BiIT, Brother, Digitron-ist, Bambi.

The attention of the conference participants was particularly attracted by two panel discussions. One panel discussion discussed internal threats and theft of data, not only personal, but all that are important for the company, as well as how to protect the company in these cases and prevent unwanted effects. During the second panel, the participants talked about the Law on Information Security and the changes brought by the new version.



Getting to know each other and socializing is certainly one of the important aspects of the conference, so this year the organizers' attention was directed in that direction as well. At the conference itself, but also outside the conference hall, participants and lecturers spent quality time exchanging knowledge and experience. A nice evening gathering with food, drinks and pleasant music supported by the CheckPoint company was organized for all conference participants.

This year's conference brought a number of novelties and improvements in the organization itself. The nice ambience of the hotel and restaurant additionally contributed to the participants feeling good during this year's conference. The successful tradition of the eSecurity conference continued this year in terms of good organization, attendance, and presentation of interesting and current topics from the ever-dynamic cyber world.

### Written by: Luka Milinković Esigurnost



# Technobank: Meeting of the banking elite and technology

If you are looking for a place where you can see and hear more about modern IT solutions in the field of finance and banking, the upcoming Technobank Conference and Exhibition is the right place for you.

The leading IT conference and exhibition in the region will be held **on April 10 and 11**, **2024** in Belgrade, at the Crowne Plaza Hotel, while the opening is scheduled for Wednesday, April 10 at 9:00 am.



<u>Technobank</u> traditionally (23 years old) is the main meeting place of technology and best practice in Southeast Europe. It brings together representatives of renowned ICT companies who present their innovative technological solutions and products on the one hand, and representatives of the banking and financial sector on the other.

Participants will attend various panel discussions, case studies and examples from practice applied in various markets. Through personal and direct interaction, technobank conference participants improve their experiences, contacts and business processes.



If you are part of the banking or IT industry and want to get acquainted with the current trends of digital transformation of banking technologies, visit Technobank Conference and Exhibition.

According to the organizers, this year the main focus will be the **impact of artificial intelligence on the banking industry** and the significant role of technology in the emerging circumstances. In addition, we will talk about e-commerce as the fastest growing industry, electronic money, Soft POS solutions, digitalization of processes in the bank, automation of cash deposits, advanced protection systems, regulations and other current topics in the field of banking technologies.

ASIT, the organizer of Technobank, also organizes other conferences with a decades-long tradition in the field of Information and Communication Technologies (ICT), namely Infotech and Smart eGovernment. "All three conferences we organize have a clear focus on improving business in different sectors, through modern IT solutions," the organizers point out.

Written by: Nikola Mirković ASIT



# **EVENT PROMO CODE**

for the April 2024 event in Belgrade



# TECHNOBANK Powered by 0517

Enter this code in the Note section of the registration form for Technobank 2024

### **ATB243**

in order to receive a **5% discount** on registration fee for participants

Organized by

www.technobank.rs



# Unlocking Financial Potential: Mission Fintech's Inclusive Fintech Solutions for Southeast Europe's Banking Landscape

As the world rapidly embraces digital transformation, the financial sector is undergoing a paradigm shift. Amidst this evolution, Mission Fintech emerges as a force of inclusion, helping the banking industry grow green portfolio across Southeast Europe. With a commitment to financial inclusion, sustainable growth, and innovative technology, Mission Fintech is poised to enhance the region's financial services industry. This article delves into the essence of Mission Fintech and its role in empowering individuals, startups, SMEs, and banks throughout the region.

### **Empowering Financial Inclusion**

At its core, Mission Fintech's mission is to unlock financial potential for all. Recognizing that access to finance is not a privilege but a core need, this fintech platform is dedicated to bridging the gap between underserved individuals, businesses, environmental projects and the financial resources they need. This vision resonates strongly in a region where economic disparities persist, and financial inclusivity remains an uphill battle.

"Our vision is to unlock financial potential by bridging the gap between underserved individuals and business entities, green projects and the financial resources they need to thrive."

### **Key Services for Transformation**

Mission Fintech's cache of services is designed to cater to a diverse range of clients, from private individuals to startups and SMEs. The company's commitment to simplicity and ease-of-use is evident in its user-friendly platform. This platform allows clients to create budgets, make informed financial plans, and access the necessary funding seamlessly. By combining technology with financial expertise, Mission Fintech empowers clients to achieve their aspirations without all the complexities associated with traditional banking practices.

# The Power of Mobile and Internet Technology

In a world driven by technology, Mission Fintech harnesses the power of mobile and internet technology to redefine convenience. The company's intuitive mobile app empowers clients to manage their finances on-the-go, ensuring that financial decisions are not bound by location. Meanwhile, the internet platform ensures that financial resources are accessible 24/7, transcending geographical boundaries.

### Simplicity in Finance

Finance can often be perceived as intricate and overwhelming. Mission Fintech disrupts this notion by offering a simplified approach that empowers clients with financial literacy. Innovative tools such as the home budget app and the startup business plan app provide step-by-step guidance, ensuring that clients navigate the financial landscape with confidence. This approach ensures that even the most financially inexperienced clients and clients with basic knowledge of majority speaking language can make informed decisions.

## Inclusivity through Localization and Translation

Understanding the importance of language in communication, Mission Fintech is committed to localization and translation. By breaking language barriers, the company ensures that clients can access services and information in their native language. This approach not only promotes inclusivity but also reduces the risk of overindebtedness, as clients can fully comprehend the financial products and terms.

## Partnership with Banks: A Win-Win Collaboration

Mission Fintech's partnership with banks paints a picture of mutual growth and advancement. By acting as an intermediary, the company introduces banks to a previously untapped market segment. This collaboration extends beyond conventional banking practices, enabling banks to diversify their client base and revenue streams.

"Our fintech platform offers a streamlined and simplified loan query procedure, providing clients with a hassle-free experience."



# MISSION FINTECH



Unlocking Financial Potential: Bridging the Gap with Inclusive Fintech Solutions

### **Promoting Sustainable Growth**

As sustainability takes center stage, Mission Fintech actively contributes to banks' ESG (Environmental, Social, and Governance) portfolios. By providing financing inquiry to clients aligned with ESG values, the platform empowers banks to drive the growth of their green portfolios. This commitment to sustainability aligns with the region's growing focus on responsible banking practices.

# Structured ESG Data: A Symbol of Transparency

In a landscape where transparency is paramount, Mission Fintech ensures that **ESG data is structured, auditable, and verifiable**. This data provides banks with a robust source of information, demonstrating their commitment to ESG practices. By integrating this data in the inputs alongside the loan query, Mission Fintech adds key information for banks in initial contact with the new client. This showcases the bank's responsible lending initiatives and contributes to building a more sustainable financial ecosystem.

### **Enhanced Customer Support**

Managing a diverse range of clients can be demanding for banks. Mission Fintech acts as an external central point of contact for these clients, streamlining communication channels and ensuring a seamless experience. This approach relieves banks of the burden of extensive customer support while maintaining high levels of client satisfaction.

# Driving Corporate Social Responsibility (CSR)

In an era of conscious capitalism, Mission Fintech's collaboration with banks extends to achieving CSR goals. By aligning with

the company's focus on financial inclusion, sustainability, and empowerment, banks actively contribute to positive social change. This partnership allows banks to demonstrate their commitment to making a difference while upholding their financial objectives.

## Conclusion: A New Era of Financial Services

Mission Fintech's potential impact on Southeast Europe's banking landscape is undeniable. Through inclusivity, innovation, and collaboration, the company is setting a new standard for financial services. By bridging gaps, promoting responsible practices, and empowering clients and banks alike, Mission Fintech is ushering in an era where finance becomes an enabler of sustainable growth, and progress for all, leaving no one behind in the journey to financial prosperity.





Written by: Marija Dželajlija Džodžo and Mirko Džodžo

### Discover ANOA: Your Partner in Business Excellence

In the heart of Belgrade, ANOA doo stands as a reputable firm with a distinguished legacy spanning over 15 years. But who exactly are they?

Global Ties: ANOA proudly boasts 50% ownership by US investors, underscoring their commitment to global collaboration.

Masters of Consultancy: ANOA specializes in an array of areas: business planning, risk management, sales development, market research, and fostering international client relationships. Their forte? Crafting strategies that foster growth and bolster operational efficiency.

IT & Project Management Expertise: ANOA's capabilities encompass cutting-edge fintech solutions, Agile Scrum project management, IT sales, and training. They ensure that technology investments translate into tangible business success.

ESG Navigators: Environmental, Social, and Governance (ESG) consulting is a forte of ANOA. They guide businesses in traversing this complex terrain, offering services like carbon footprint measurement, climate risk assessments, and sustainability advisory.

A Sustainable Vision: ANOA's commitment to environmental and social responsibility shines through in their ESG services. They empower organizations to reduce their carbon footprint and build resilience in an ever-evolving world.

# **ESG Training for Banks**

### ESG seminar for financial institutions



### Invitation to ESG Training

Do you want your bank to become a leader in sustainable business? Do you want to understand how ESG (Environmental, Social and Governance) principles can improve your business and contribute to sustainable future growth? We have a solution for you!

### ESG Training for Banks

Our exclusive ESG training for banks will provide you with deep insight into ESG principles, their impact on the banking industry and concrete steps you can take to make a positive impact on society and the planet.



### Why sign up for our ESG training:

- Increase Reputation: Understanding ESG principles and applying them in business helps to build a positive reputation among clients, investors and the community.
- Reduce Risk: ESG analysis helps in identifying potential risks and avoiding negative impacts on business.
- Increase Profitability: Integrating ESG factors into the strategy can lead to positive effects on profitability with more efficient operations.
- Achieve Sustainable Growth: ESG principles are the key to sustainable growth and longterm success in today's banking world.

### What you will learn at the training:

- Basics of ESG principles and their significance for the banking industry.
- · Practical examples of how ESG can improve business.
- · How to integrate ESG into banking strategy.
- Contemporary trends in ESG investments



Anoa d.o.o. Belgrade

www.anoa.rs info@anoa.rs +381 62 757478





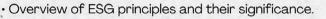
### ESG seminar for financial institutions

### Content of ESG training in banking

### In person or online







· Historical perspective and regulatory framework.

### **ESG Basics**

- · ESG goals and value systems.
- · Application of ESG principles.
- · Environmental aspects of ESG.

### Social and governance aspects of ESG

- · Social aspects in ESG.
- · Management aspects in ESG.
- · Product design considerations.

### Supply chain and ESG

- Supply chain considerations.
- · Emission of greenhouse gases (GHG).
- · Energy management and sustainability.

### Client welfare and business practices

- · Client welfare and ESG
- · Ethical sales practices
- · Impact of digitization and ESG

### Employee engagement and business ethics

- · Involvement and engagement of employees.
- · Business ethics in ESG.
- · Characteristics of an active ESG implementer
- · Knowledge areas for ESG implementers

### ESG Organization and reporting

- ESG organization.
- · ESG reporting and transparency.
- · Sustainable development goals that are particularly relevant to banking
- · Measurable ESG/SDG goals

### Group discussions and case studies

- · Case studies
- · Interactive group discussions on ESG case studies.

### **ESG Knowledge Test**

- · Participants take a written test to assess their understanding of ESG principles.
- · Award certificates to participants who successfully completed the test and seminar.

Contract of the Contract of th	
The state of the s	
	CALIFORNIA Chry I. Roy (so find) or company (so find)
	*
TO SERVICE STATE OF THE SERVIC	one and

Level	Training hours	Certifi- cate
1)Basic	12	<b>E</b>
2)Advanced	12	<b>E</b>



# REDUCE YOUR CARBON FOOTPRINT SMALL ACTIONS, BIG IMPACT!

### Adria Fintech Journal's Green Initiative: Planting Hope in Romanian Soil

Adria Fintech Journal is proud to announce a significant step in our commitment to environmental sustainability. In partnership with One Tree Planted, we have taken a substantial stride towards neutralizing our carbon footprint. As part of this initiative, we have sponsored the planting of 20 trees in the picturesque landscapes of Romania.

The project we supported will focus on several native tree species, including the European fir (Abies alba), Common beech (Fagus sylvatica), Sycamore (Acer pseudoplatanus), Elm (Ulmus glabra), Mountain Ash (Fraxinus excelsior), Rowan (Sorbus aucuparia), Grey elder (Alnus incana), and Dwarf pine (Pinus mugo).



But why Romania, you might ask?

The goals of this project encompass three vital aspects:

**Erosion Control:** Romania's dramatic terrain, with steep mountains and rolling hills, faces a constant battle with erosion. By planting trees that will help reduce erosion and optimizing the flow of water, we contribute to the preservation of the country's lush forests. This, in turn, helps prevent trees from being uprooted, ensuring their longevity.

**Protecting Animal Habitat:** The tree planted will not only strengthen the forests but also create new homes for wildlife in the area. As the forest thrives and biodiversity increases, more animals will be drawn to this flourishing habitat, further enhancing the region's ecological richness.

**Restoring Native Species:** Monocultures of spruce dominate significant portions of the region. Planting trees here will help to restore balance and promote biodiversity by reintroducing native tree species. This not only preserves the area's ecological heritage but also contributes to the overall health and resilience of the local forests.

At Adria Fintech Journal, we firmly believe that every small action counts when it comes to environmental stewardship. Our commitment to planting trees in Romania is a testament to our commitment to sustainability, environmental awareness, and the preservation of our natural world. We look forward to nurturing this green initiative and expanding our efforts to make a positive impact on our planet.





CISO as a Service



Security Assessment



Risk Assessment



Vulnerability scanning



Penetration testing



Cyber security consulting



Education



Digital Forensics

www.secitsecurity.com

