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PKO Banking Platform
Story of digital transformation of PKO Bank Polski

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CIO of PKO Bank Polski
PKO Bank Polski in digital transformation since 2010, gaining momentum!

- Decentralized back office: > 3 thousand branches and agencies
- Paper processes: ~100% sales in branches
- No integrated customer knowledge
- Basic www services (transactional)

Centralization and automation of processes:
- Integration of sales processes, New workflow of key processes
- Treasury back office centralization

Modern offer tools evolution:
- New CRM platform (analytics, direct campaigns) New Front-End CRM
- New corporate website

Omnichannel:
- Multi-channel sales management
- Adjusting the price to the customer
- One click processes

Technology driven development:
- New Organization and Cooperation
- Open Banking
- IKO - the best in the world

Traditional bank, decentralized operations:
- Centralization and automation of processes
- Modern offer tools evolution
- Omnichannel
- Technology driven development
... at the same time transformation of technology platforms

**Centralization**
- Central System
- Inteligo platform

**2004-2008**

**Service Oriented Architecture (SOA)**
- Central Business Process Management platform (BPM)
- Central Enterprise Service Bus (ESB)

**2008-2012**

**Omnichannel**
- IKO mobile banking
- New electronic banking
- BLIK
- New generation front end for branches

**2012-2016**

**Flexible architecture**
- Open API incl. PSD2
- Big data, AI, RPA
- DevSecOps
- Microservices
- Cloud computing
We build digital customer experience by developing key areas:

- Technology platforms
- Data and analytics
- New ways of working
- Technological readiness for the future
During online banking era, we offered our Clients the best tools for all segments.

- **iPKO**: 8.5 mln Individual customers
- **iPKO biznes**: 300 tsd Business and entrepreneurs
- **Corporate customers**: 12.8 tsd
- **Children using websites**: 550 tsd
- **Polish schools in the SKO program**: 1/3

Bank Polski
Now we present them the best mobile application in the world and an ecosystem of value-added services.

- 181 million transactions
- 4.2 million applications
- 4 million logins
- 49% of users use BLIK
- Application availability - 100%
We have built foundations for a nationwide payment system with 10.6 million users and potential for international development.
Technology platforms

We were the first Bank to provide use of state institutions services via digital channels.

- **Rodzina 500+**
  - Monthly cash benefits for children
  - 1,398 thousand submitted applications

- **Dobry Start 300+**
  - Cash benefit for students - PLN 300 for school materials
  - 1,039 thousand submitted applications

- **Trusted Profile and e-Identity**
  - Convenient access to e-Administration and commercial services, the possibility of concluding contracts without a qualified signature
  - 729 thousand Trusted Profiles
  - 174 thousand Created e-Identity profiles
The future of mobile banking means efficient customer service using voice technology and artificial intelligence (AI).

Technology platforms

1. The first stage of implementation already in tests:
   - Basic navigation through the application, balance check
   - Payments (transfer to a defined recipient, to an account number, phone number)
   - BLIK functionalities
   - Phone top-up
   - Small talk
   - Frequently asked questions regarding products

2. Next wave:
   - Full IKO functionality available via voice commands
   - Advisory and support functions in financial management
   - Integration with Google assistant
Technological evolution required building advanced analytical skills.

Data and analytics

~ 20% of economic activity in Poland (e.g. Transactions, Payments, BIK, ZUS, CEIDG, KRS)...

...transformed into valuable insights...

...ready to use in all banking channels

- Real Time Marketing
  - CRM with > 60% participation in sale of key credit products

- Credit Decisions
  - 60% Consumer Finance in the „pre-approved“ model
  - 60% of SMEs in the „pre-approved“ model

- Anti-Fraud Protection
  - Around 3 billion operations processed annually in the EFM system
New data sources, new competences, new tools enable gathering and processing of valuable business information. New sources and more data are more efficiently processed, thanks to new competences. ... ready to use in open banking ecosystem.

- Data and analytics
- New sources and more data
- ... more efficiently processed, thanks to new competences
- ... ready to use in open banking ecosystem

- Digital Marketplaces
- Open API
- Voice bots
- Internet of Things

Accelerated by cloud computing

Machine learning
- Fully personalized offers
- A/B and Multivariate testing

- geolocation
- time stamps
- “click stream”
- images
- voice
- video

Bank Polski
Technology company with banking license operates on the principles of an internal start-up

- The speed of response to a changing environment and customer preferences
- Increased satisfaction of employees working in the New Work Model (+10%)
- 6.5x increase in cash loan sales volume in IKO
- 21 million sheets of paper saved in 2019

We are here
Software delivery model built on the basis of agile methodologies and "DevSecOps"

Technological Enablers:
- Integrated technology teams working in "agile methodology"
- Microservices and containerization
- DevSecOps Assembly Line
- Automatic infrastructure management in the cloud (IT in the "pay-by-use" model)

Target Model:
- Continuous integration
- Continuous delivery
- Test automation
- Continuous implementation
- Built-in security mechanisms

New ways of working
Our state-of-the-art model of working on innovative solutions allows us to look for, select and implement the latest technologies available on the market.

**New ways of working**

- **Own accelerator for startups (from 2018)**
  - 300 applications
  - Fast POC implementation path; even within 2 weeks
  - 18 pilotages;
  - 6 full implementations

- **Laboratory branches**
  - 16 implemented PoCs
  - 5 laboratory branches

- **CVC - capital investments**
  - PLN 200 million in budget for investments in FinTech companies

- **Centers of Excellence**
  - Blockchain
  - RPA
  - AI

- **Architecture supported by the effective use of “crowdsourcing”**
  - ~ 500 employees in the internal “crowdsourcing” program;
  - ~ 1,500 external programmers in "hackathons".

Bank Polski
Technological excellence of PKO Bank Polski confirmed by the results of external research

European IT Benchmarking in Banking (EITBB), October 2019
Next step in development means – Bank in the cloud

- Best in class innovating capabilities
- High agility - even shorter time-to-market, scalability, flexibility
- Cost efficiency
In order to secure and advance leadership on the market the Bank established National Cloud Operator.
Our way to the Bank in the cloud

Readiness for the future

Way to Hybrid Cloud

- 2018: Appointment of the National Cloud Operator
- 2019: Partnership with Google - region in the country
- 2020-2022: Test environments in the cloud, 11 thousand VDI in the cloud

Hybrid architecture

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Bank in the cloud 2023