**SPEEDNET**

# We're an AI Responsible software agency

supporting decision makers in delivering responsible AI software solutions.

# AI Governance

**Deployment of AI solutions today is a long pass play.**

According to the EU AI Act, European banks must implement comprehensive Ai Governance and risk management processes to comply with the regulation.

Only through thoughtfully implemented, value-driven AI Governance strategy, companies can secure their competitive advantage.

Compliance & Responsibility

Business Objectives

Risk Management

# New AI Act Reality

## Systematic Testing

High-risk AI systems must undergo testing to ensure they perform consistently and comply with regulatory requirements. This testing should be done throughout the development process and before the AI system is placed on the market.

## Risk Management

Banks must establish, implement, document, and maintain a **risk management system for high-risk AI systems**. This system is required to be a continuous iterative process throughout the entire lifecycle of the AI system, including regular reviews and updates. The process involves identifying and analyzing foreseeable risks, evaluating those risks, and adopting appropriate risk management measures to mitigate or eliminate them where feasible
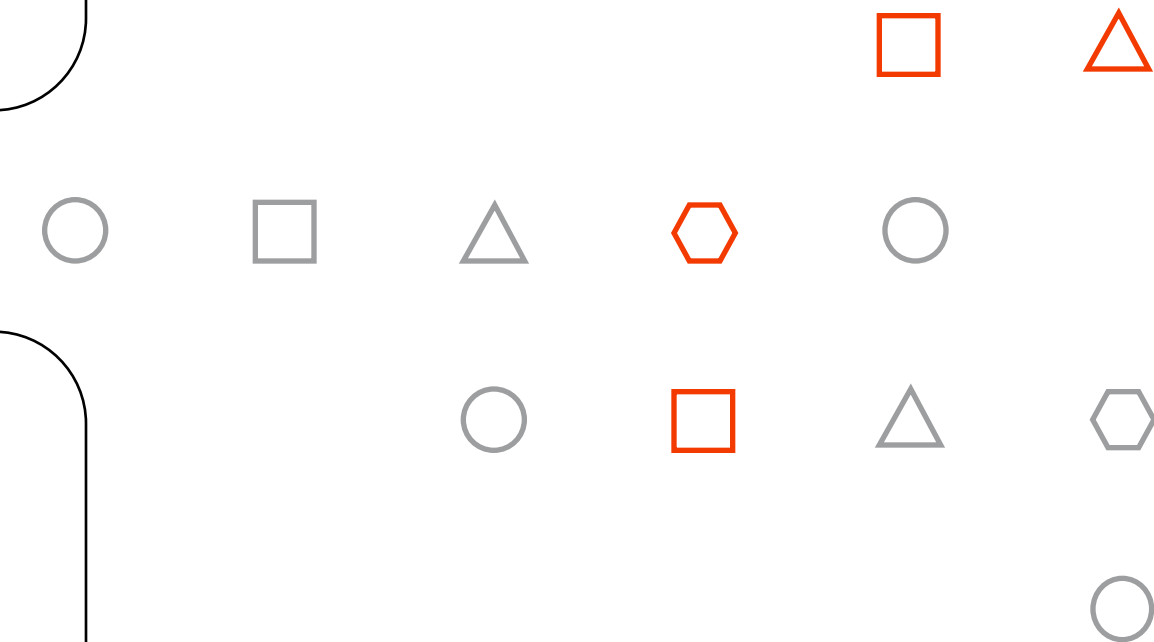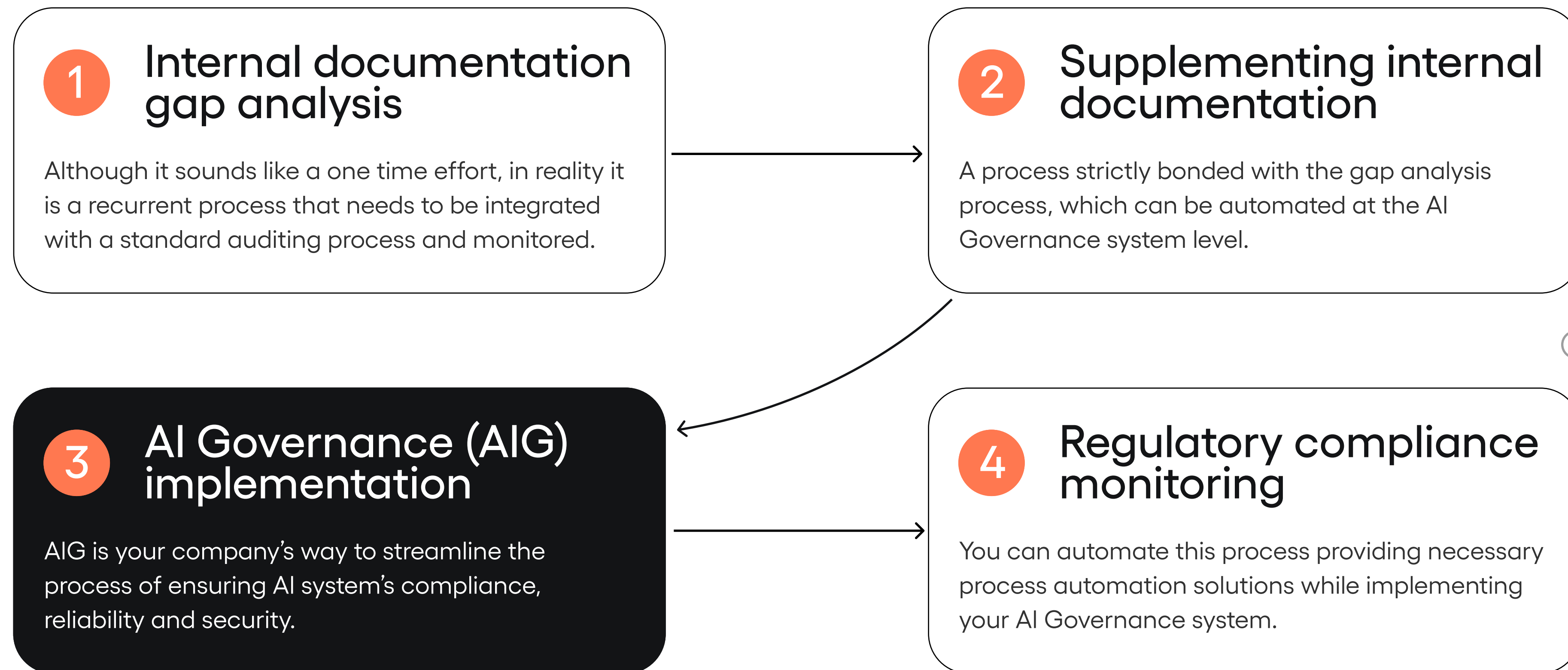
## Cybersecurity and Incident Reporting

Banks are also required to ensure an adequate level of cybersecurity protection for AI systems, particularly those with systemic risks. In case of serious incidents, they must track and report these incidents, along with any corrective measures, to the AI Office and relevant national authorities without undue delay

## 2.08.2027

Deadline for most companies to install necessary AI Governance processes.

## Compliance Integration

For banks already subject to other internal risk management regulations under EU financial services law, the AI risk management procedures may be integrated with existing processes to avoid duplication and minimize the administrative burden. This ensures consistency in applying both AI and financial regulations

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# How to comply?

**1** Internal documentation gap analysis

Although it sounds like a one time effort, in reality it is a recurrent process that needs to be integrated with a standard auditing process and monitored.

**2** Supplementing internal documentation

A process strictly bonded with the gap analysis process, which can be automated at the AI Governance system level.

**3** AI Governance (AIG) implementation

AIG is your company's way to streamline the process of ensuring AI system's compliance, reliability and security.

**4** Regulatory compliance monitoring

You can automate this process providing necessary process automation solutions while implementing your AI Governance system.

# SPEEDNET

# Value-driven & compliant solution discovery

Business value is created through effectively executed processes.

**Solutions**

**Trends**

**Objectives**

**Processes**

**Value**

Assessing detailed solution objectives and associated processes at an early stage, allows you to uncover future strategic and operational risks.

For every solution objective and process, barriers can be defined which cause direct strategic and operational risk, impacting solution's feasibility. In other words, AI solution implementation is a trade-off between business goals and business goals' feasibility.

# What's AIG-Ready AI Solution?

**Develop a bulletproof competitive advantage.**

It's an AIG compliant system with pre-defined risk mitigation strategy for every risk associated with system's processes, compliant with ISO 42001.

- EU AI Act compliance
- ISO/IEC 42001 certifiable
- ROI-driven calculated business objectives
- Fully executable risk management package
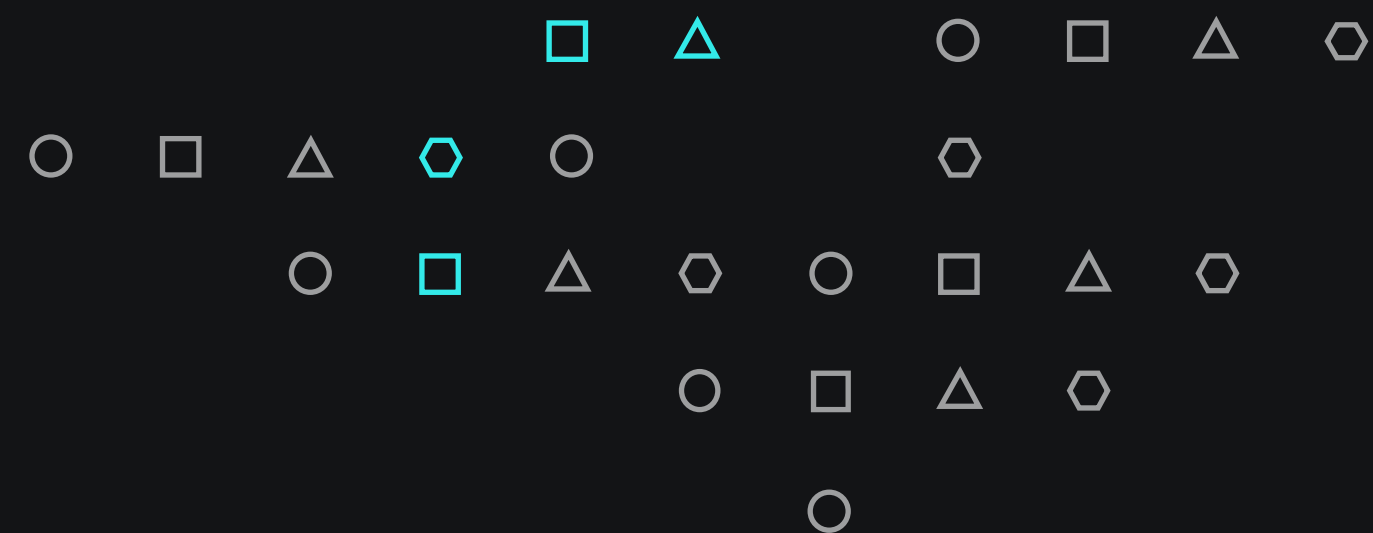
Compliance Package

Risk Assessment Package
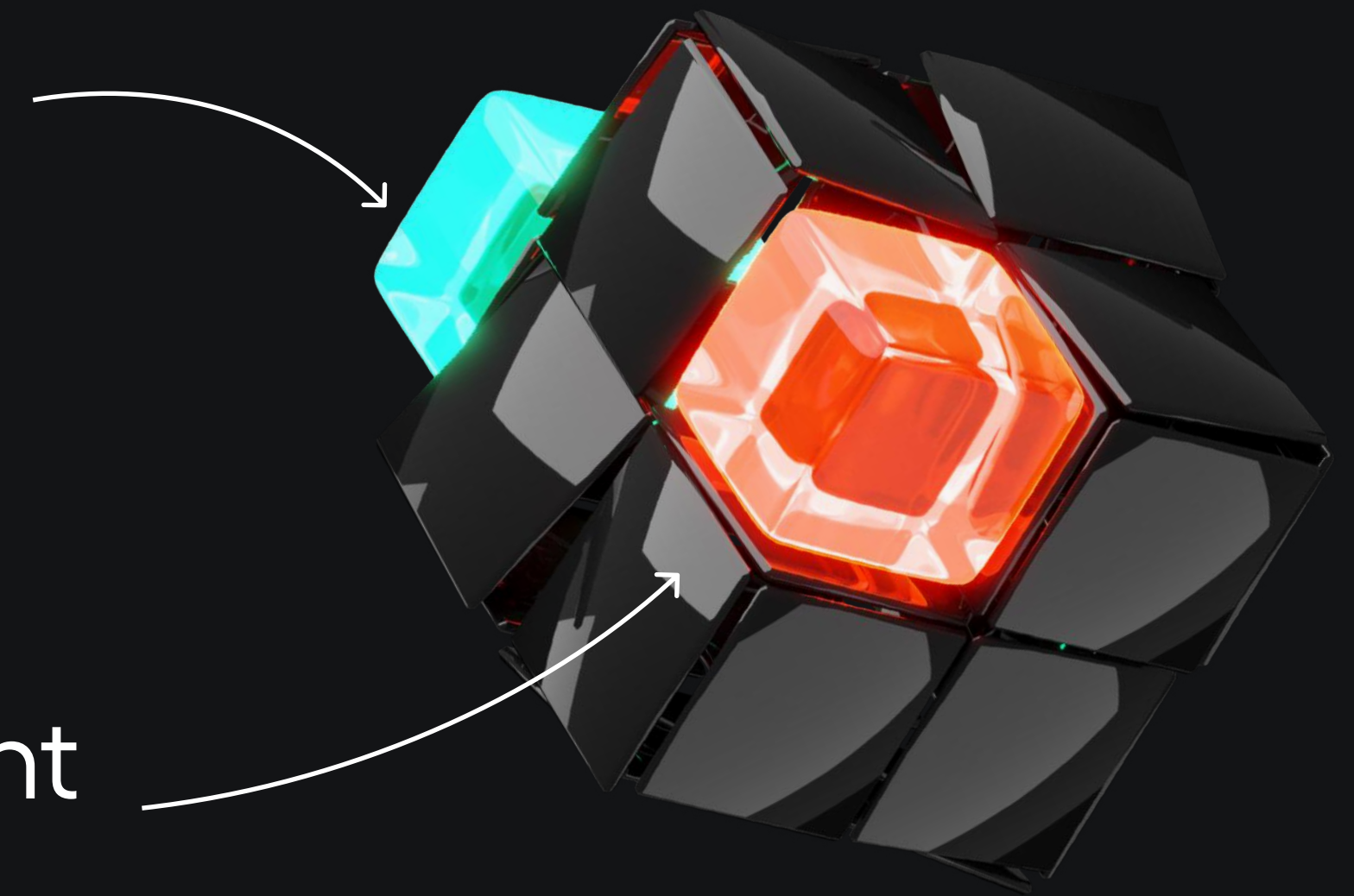
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# Responsible AI Discovery Workshop

Three steps to identify a responsible way to deploy
AI solutions of the future.

1  Use Case Maping

2  Objective & Compliance Assessment

3  Process & Product Scoping

## New AI Solutions

During the workshop we create custom, AIG-Ready solutions that realize specific business objectives using AI technology, securing your future competitive advantage.

## 16 Hours

Maximal total time that will be required on your side over the 3-week time. Most of the work will be on our side. We use AI tools to streamline and speed up the process.

## Clear Objectives

We focus on defining ROI and clear business objectives for each solution. At the end of the workshop, you will receive a package

## What you'll get?

- AIG-Ready Solution (or multiple)
- Solution(s) cost estimation
- Solution(s) implementation roadmap
- ISO/IEC 42001 certifiable package
- New opportunities insights

01
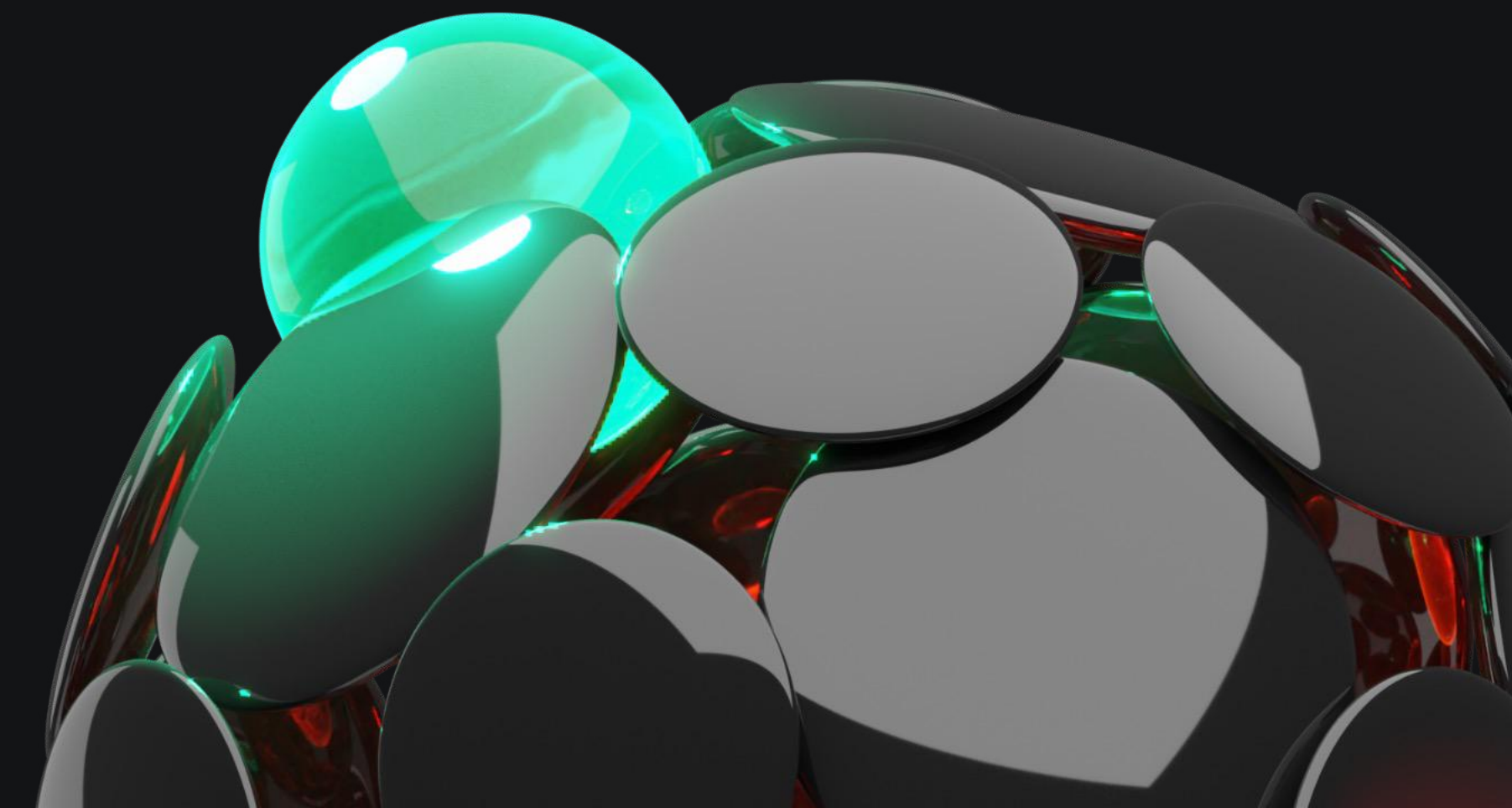
# Use Case Maping

Distilling the right AI innovations from technology bubble

# Stage 1 Methodology

With 20+ years on the scene, **we understand** banking technology. That, combined with our AI & Business consulting capabilities allowed us to create an **AI Banking Trend Map**.

During the workshop, we will identify **Pain Points** - your internal ones or those associated with your customers. The Map allows us to define a **Solution** (or solutions) to those Pain Points with scrupulously estimated ROI.

## Outputs

- Pain Points / Needs
- Identified Use Case
- Estimated Solution ROI

Map — Pain Point — Solution — Objectives — Processes

**SPEEDNET**
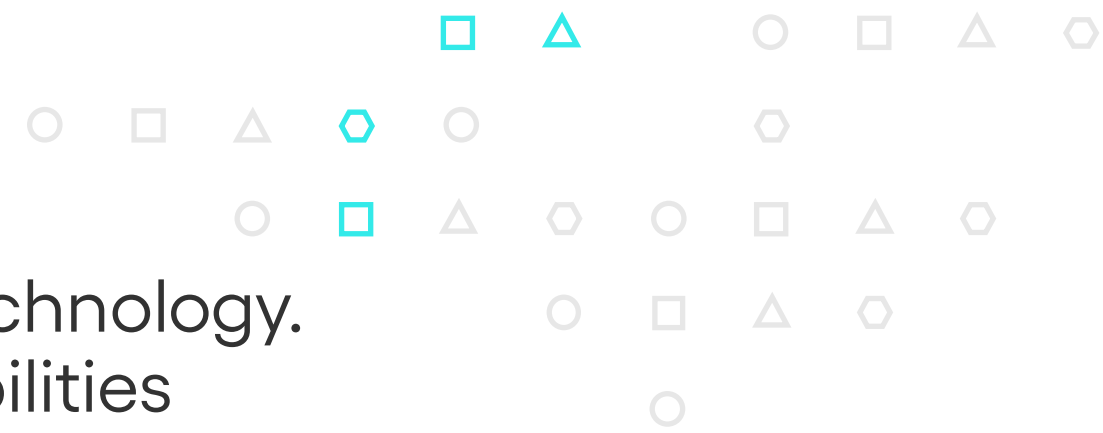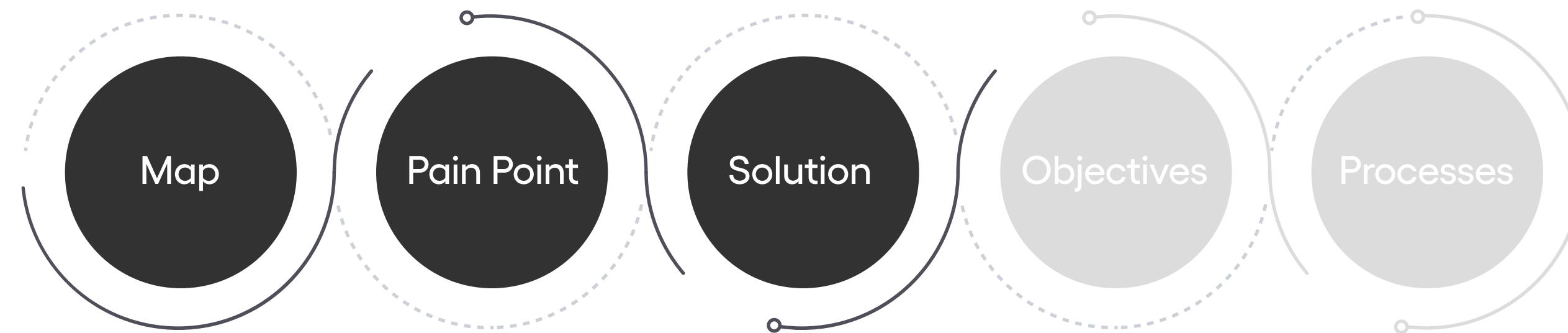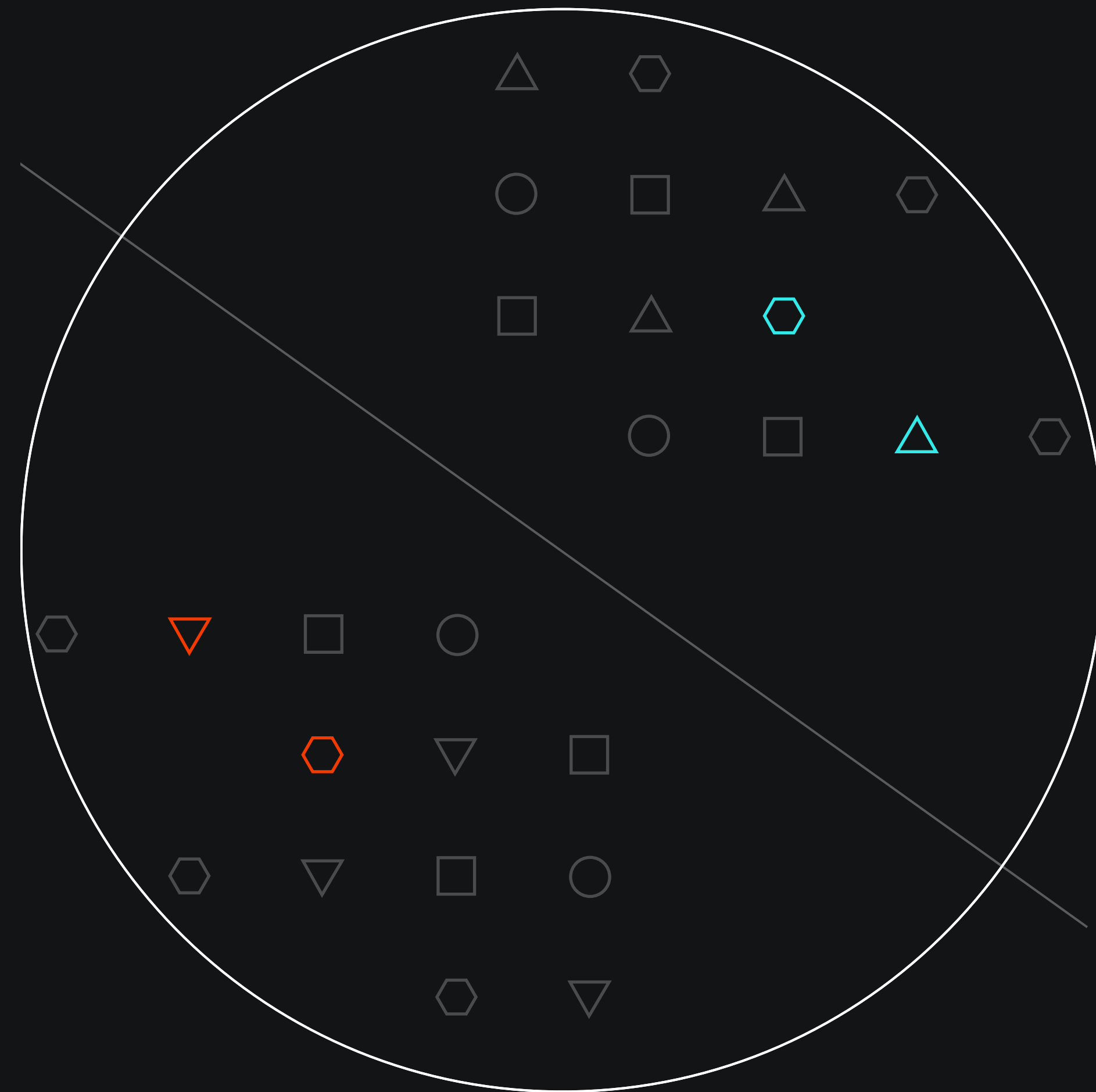
AI Trend
# Map
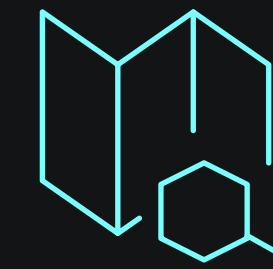
The workshop will allow us to get alignment with mission and vision of your business strategy. We will work with you to nail down the precise need or pain point that we're looking to solve.

We start from defining the way to match the right technology to your needs by choosing **solution area** of the AI Trend Map, which shows currently known and available AI tech trends.

**The Map is focused purely on digital banking / fintech use cases.**

# SPEEDNET

# Stage 1 Process
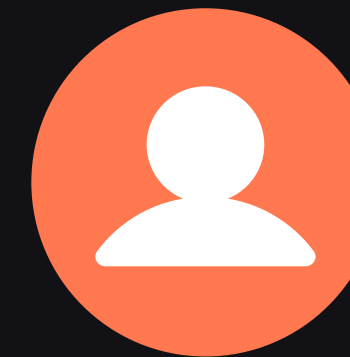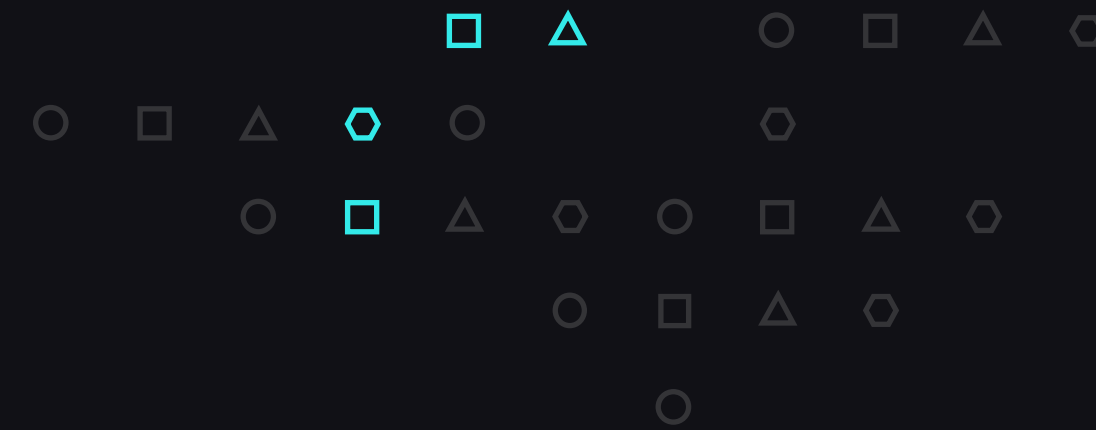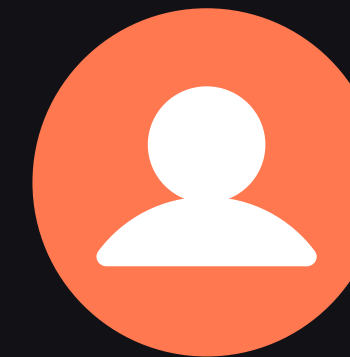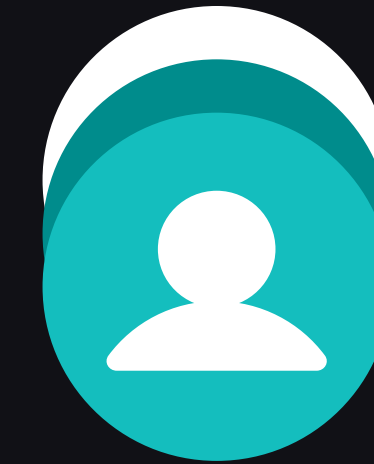
Client Partner    AI Solutions Architect    Client    Speednet    Product Owners    Chief Innovaiton Officer

**1** Together we define the **solution area** you want to focus on, for example - loans. For each area we discuss the challenges associated with it and examples of AI applications.
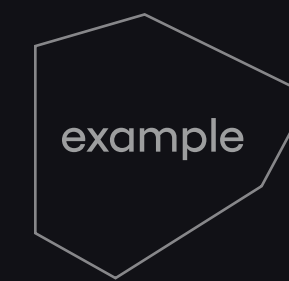
example — In the course of investigation, the CIO declared that the most challenging, yet most strategic area of investment currently for the Bank is related to mortgage loans. Examples of associated tech trends to be considered are: an LLM tool for documentation compliance verification or an LLM agent for document intake verification and customer service.

**2** We identify your current **challenges** related to a given area. These can be both: needs to automate internal processes and opportunities you see on the market. We subsidize this process using Trend Map's data related to known challenges in the industry.
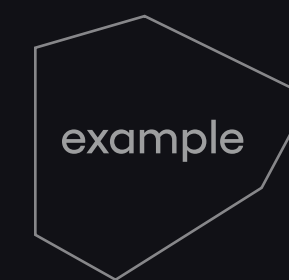
example — The Product Owner team highlighted several issues concerning the speed of credit application intake, verification, offer personalisation and inefficient customer service leading to a high dropout rate. These challenges correlate with what other banks are saying, but according to the Map, most emphasis is put nowadays on customer service automation and application verification. Further analysis leads to conclusion, that optimisation of the credit application analysis process is currently seen as the most burning challenge.
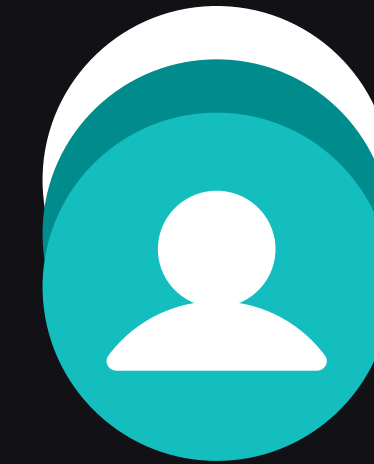
# SPEEDNET

# Stage 1
# Process
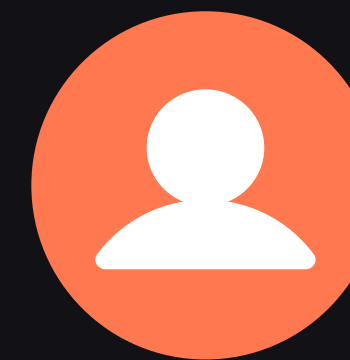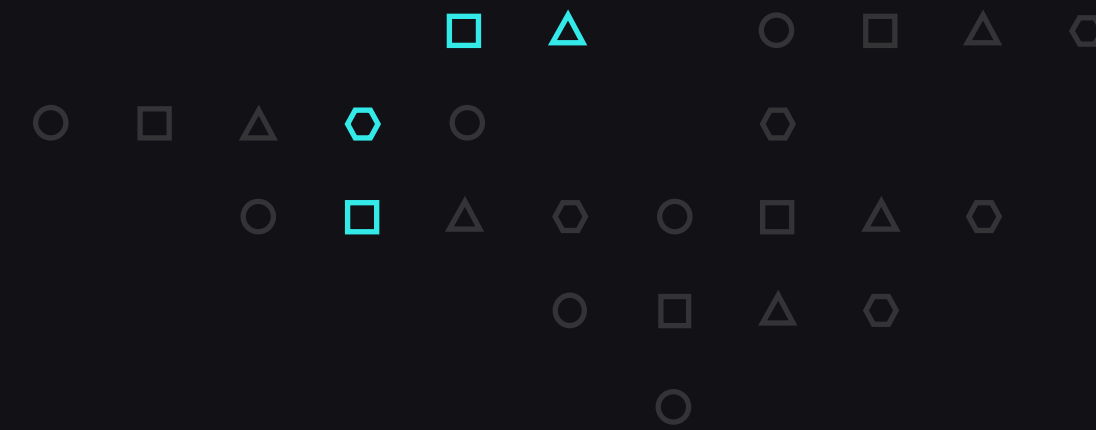
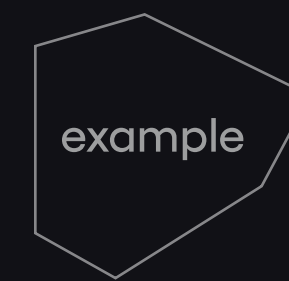Client

Speednet

Client Partner
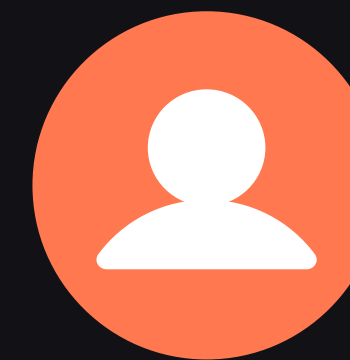
AI Solutions
Architect

Product Owners

Business
Analyst

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**3** Defined challenges are turned into **Pain Points**, with clearly defined challenge actors, triggers, related processes or products and measurable outcomes triggered in predictable situations.

example

Traditionally, lenders rely heavily on standard credit scores (like FICO) to assess an applicant's creditworthiness. This score is primarily based on factors such as payment history, amounts owed, length of credit history, new credit, and credit mix. Applicants with limited or no credit history (e.g., young adults, immigrants, or those who prefer not to use credit cards) may be disadvantaged, leading to lower acceptance rates.

**4** This step is purely on our side. Our AI Solutions Architect backed by the AI Trend Map matches available technology solutions with identified Pain Points, defining the most optimal approach towards solutions. Then, creates **Ideal Solution Proposals**.

example
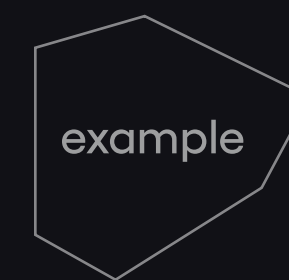
An AI tool can be trained to analyze alternative data sources that are not typically included in traditional credit scores, such as utility and rent payments, banking transactions, social and behavioural data. This way, the Bank can expand credit assessment criteria beyond traditional methods, allowing it to approve more applicants who are likely to be creditworthy but are underserved by conventional scoring systems.
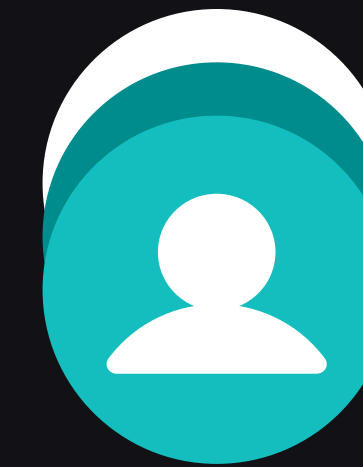
# SPEEDNET
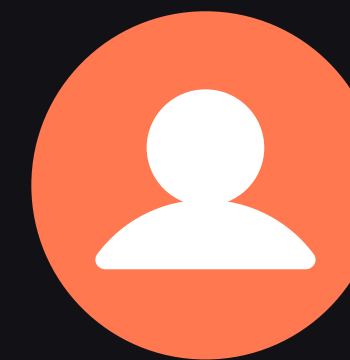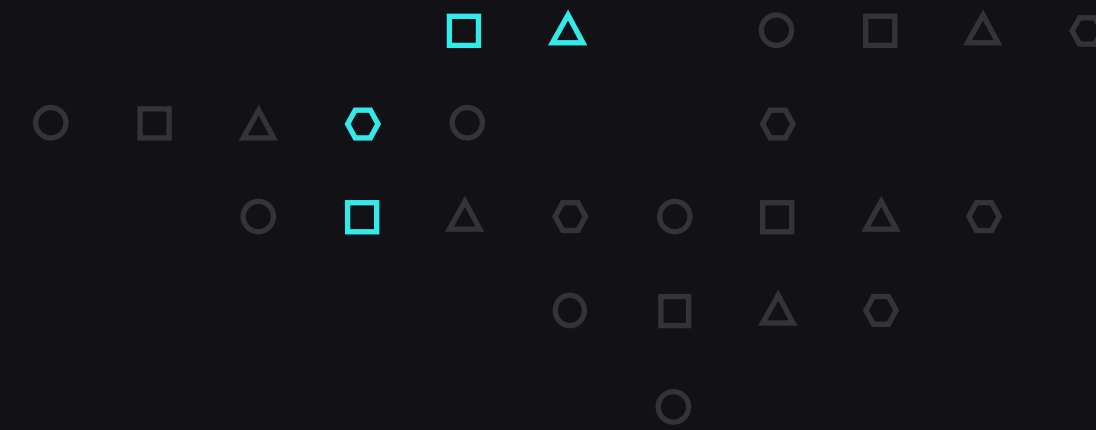
# Stage 1
# Process
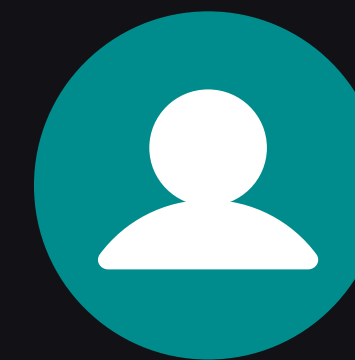
**Client Partner**
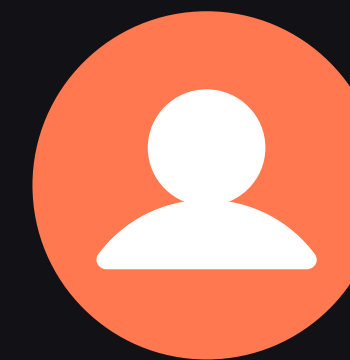
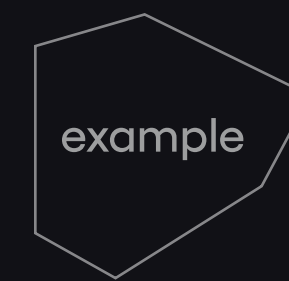**AI Solutions Architect**

Client

Speednet

**Product Owners**

**Business Analyst**

**5** Ideal Solution Proposals become project concepts to be investigated in further stages of the workshop. Proposals include **ROI estimation**, which will be a good basis towards investment decisions. We estimate it together with your Business Analyst.

*example*

Increased Loan Approvals: 5,000 additional loans/year
Average Loan Size: $200,000
Average Interest Rate: 4%
Additional Revenue: 5,000 loans * $200,000 * 4% = $40,000,000/year
Operational Savings: $1,000,000/year
Development and Integration Costs: $5,000,000
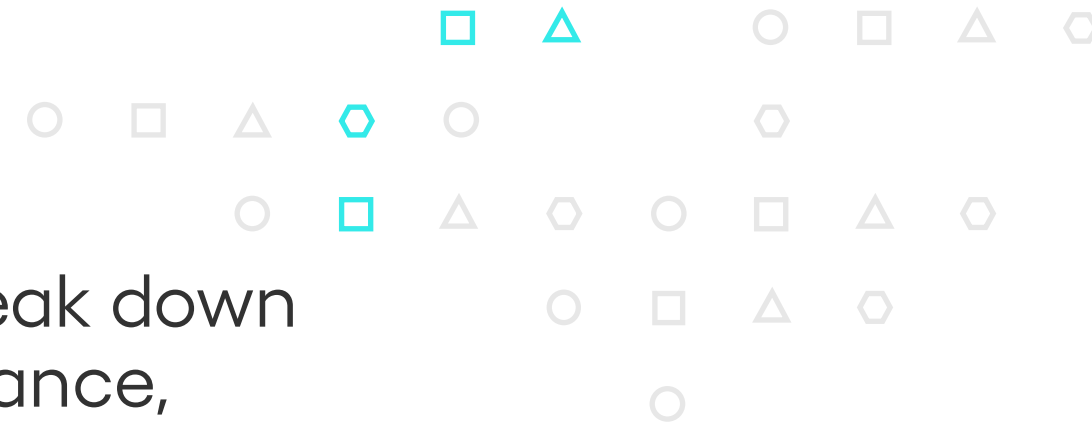Ongoing Costs (Maintenance, Data): $500,000/year

- Total Revenue Impact: $40,000,000/year
- Net Profit (or Benefit): $40,000,000 (Revenue) + $1,000,000 (Savings) - $5,000,000 (Initial Cost) - $500,000 (Ongoing Costs) = $35,500,000 in Year 1
- ROI: ($35,500,000 / $5,500,000) * 100 ≈ 645%

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# Objective & Compliance Assessment

Securing strategic aspects of your innovation
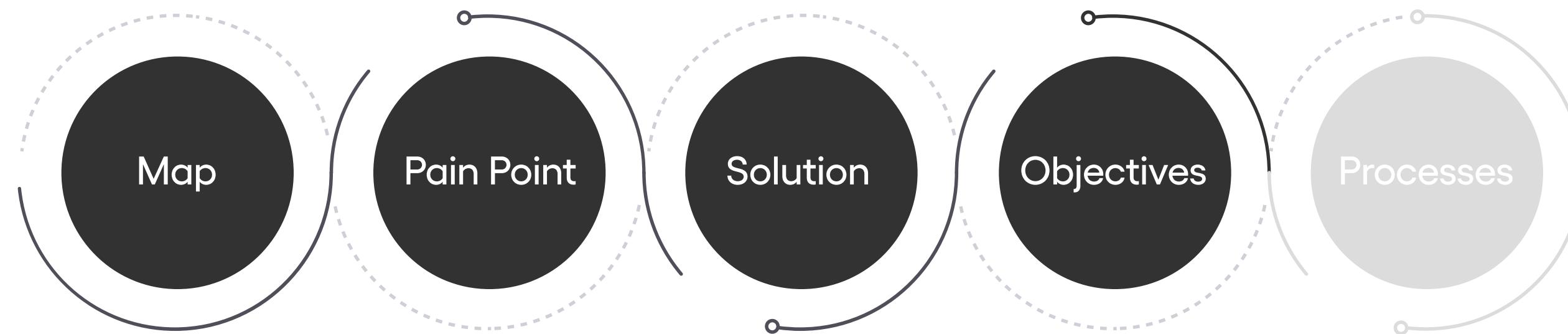
# Stage 2 Methodology

Every solution requires clear **Business Objectives**. We break down those objectives to identify their risks: regulatory, compliance, technical dependencies, organizational needs and other strategic criteria.

As a result, you receive a full solution **Risk Assessment**, with feasibility, compliance and change impact report.

## Outputs

- Solution Risk Assessment
- Compliance Assessment
- Feasibility Assessment
- Change Impact Assessment

Map → Pain Point → Solution → Objectives → Processes

# SPEEDNET

# Stage 2 Process

Business Analyst

AI Solutions Architect

Banking Software Developers

Client

Speednet

Risk Management Stakeholders

Product Owner

**1** Using the Ideal Solution description, we define a list of **Business Objectives** of such solution. Objectives must be measurable and represent the intent of system functionalities at every level.
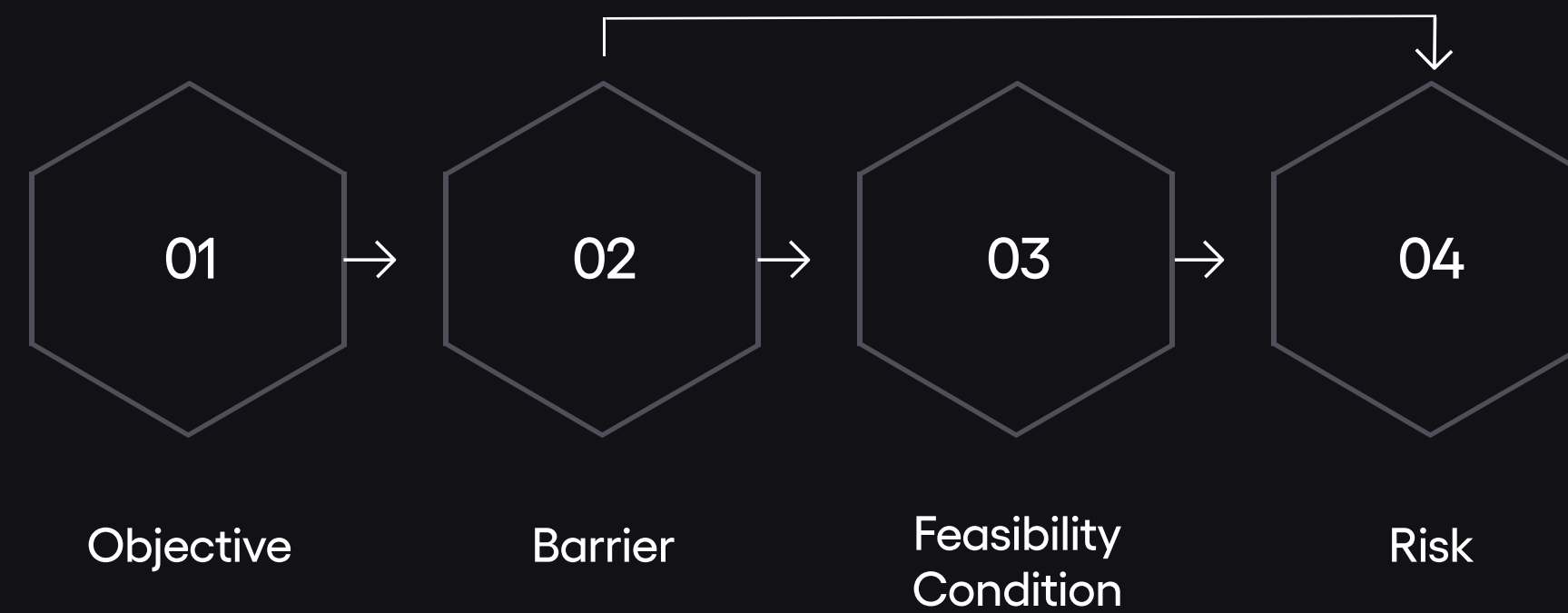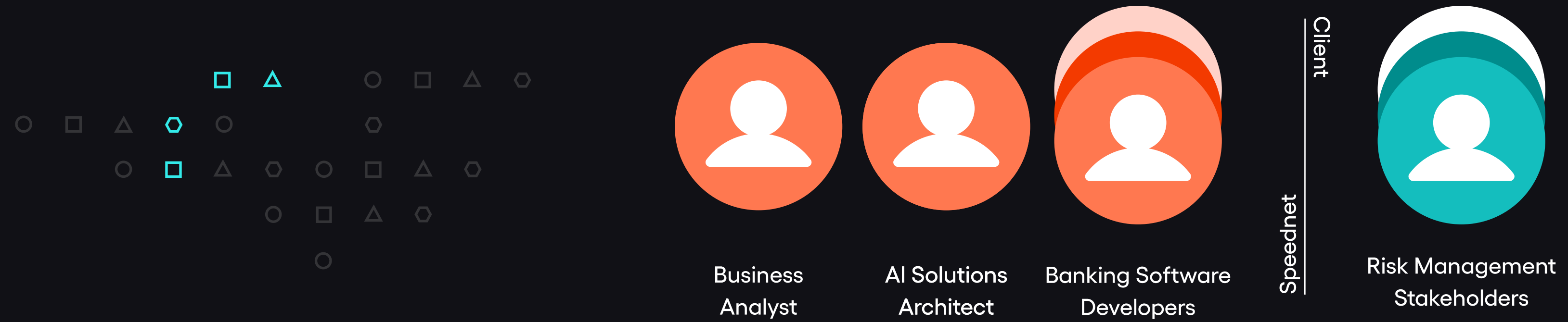
example
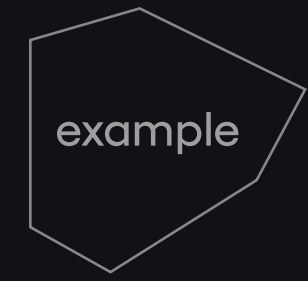
- Utilize AI algorithms to identify 10-15% more creditworthy applicants who may not meet traditional credit scoring thresholds but demonstrate financial responsibility through alternative data, such as consistent rent and utility payments.
- Deploy AI models that analyze a combination of traditional credit data and alternative data to reduce the loan default rate by 5% by better predicting the likelihood of repayment difficulties.

**2** We define potential **Barriers** to Business Objectives, which cover compliance and regulatory gaps, technical, infrastructural and organisational challenges, outcome unpredictability etc.

example
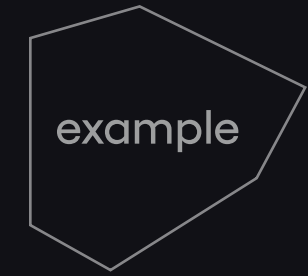
AI Act, Art. 13: Transparency - Mandate: AI systems must be designed and developed to ensure that their operation is sufficiently transparent to enable users to interpret and understand their output. For a mortgage loan approval AI system, this means that the system must provide understandable explanations for why a particular applicant was approved or denied. It should detail which data points influenced the decision (e.g., income stability, payment history) and how alternative data was factored into the outcome.

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# Stage 2 Process

**Business Analyst**

**AI Solutions Architect**

**Banking Software Developers**

**Risk Management Stakeholders**

**01** → **02** → **03** → **04**
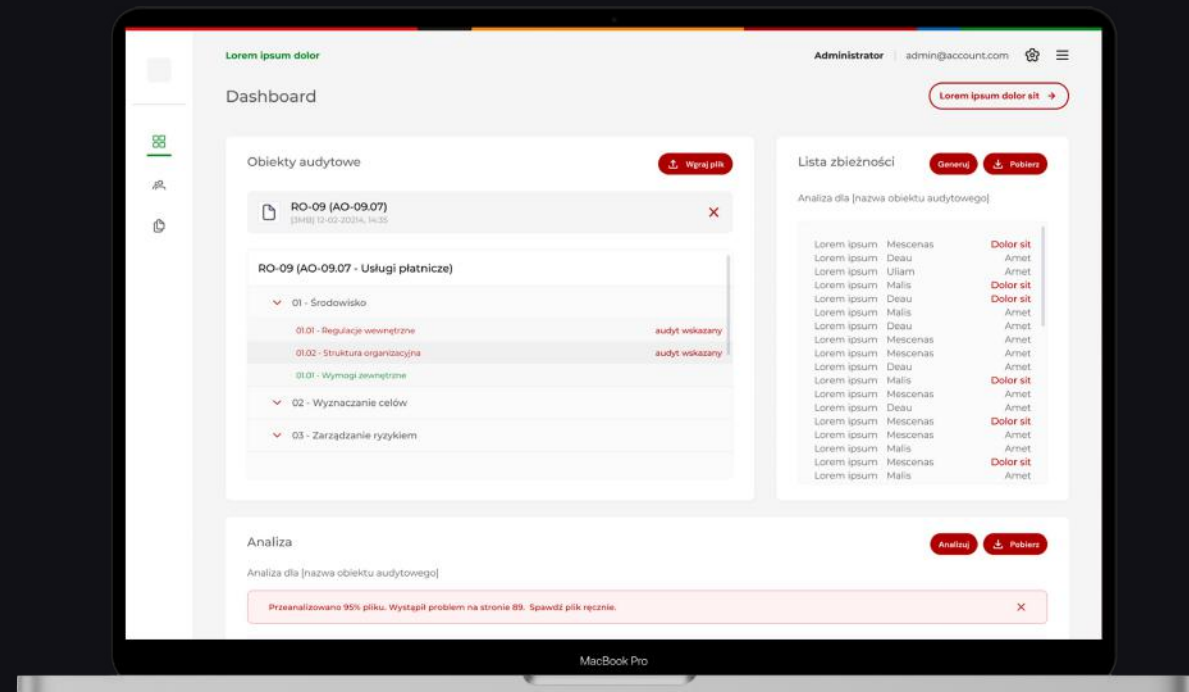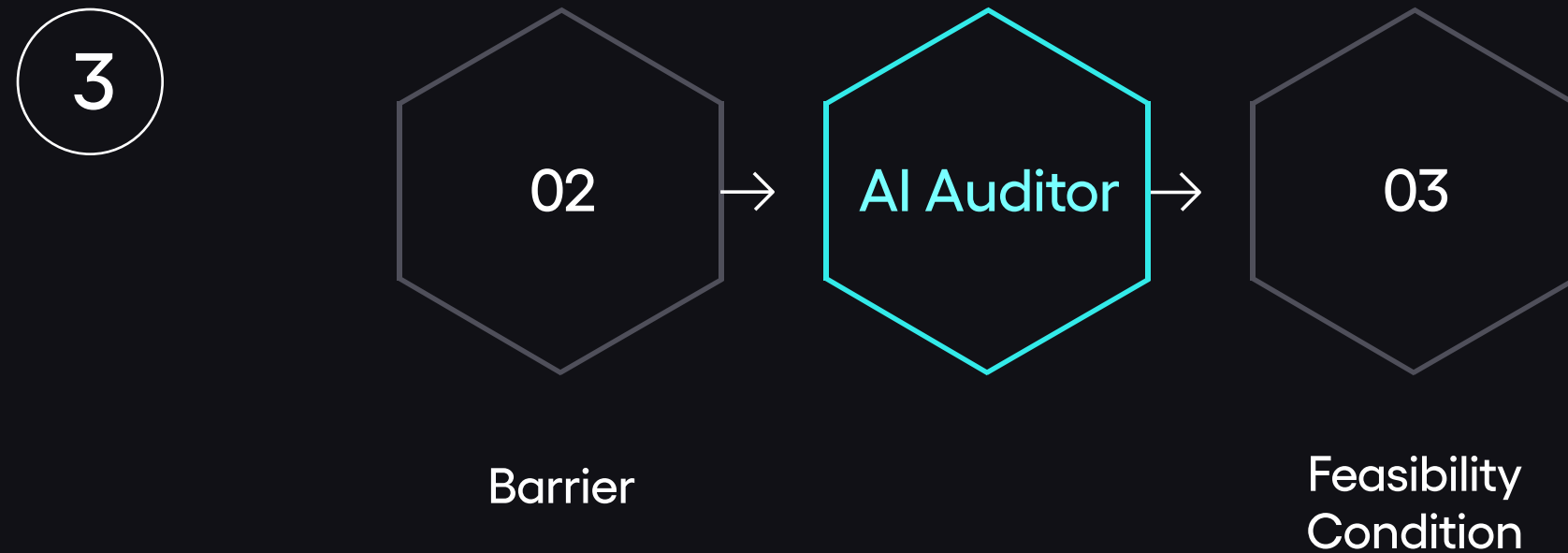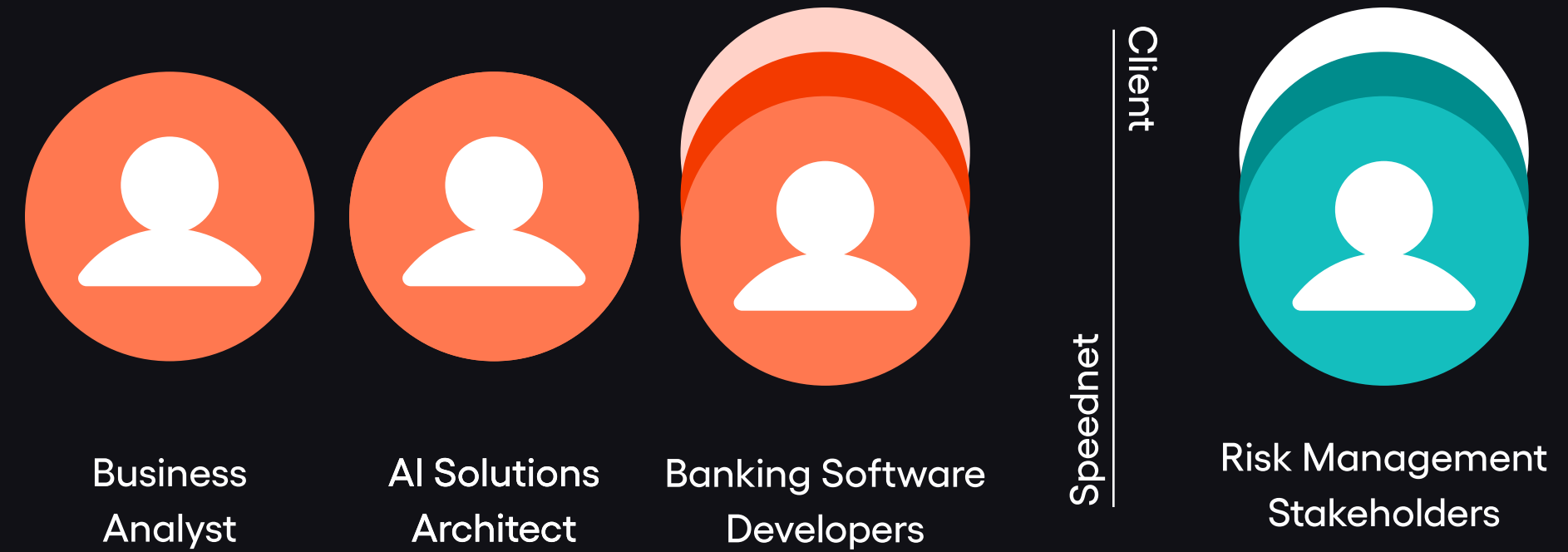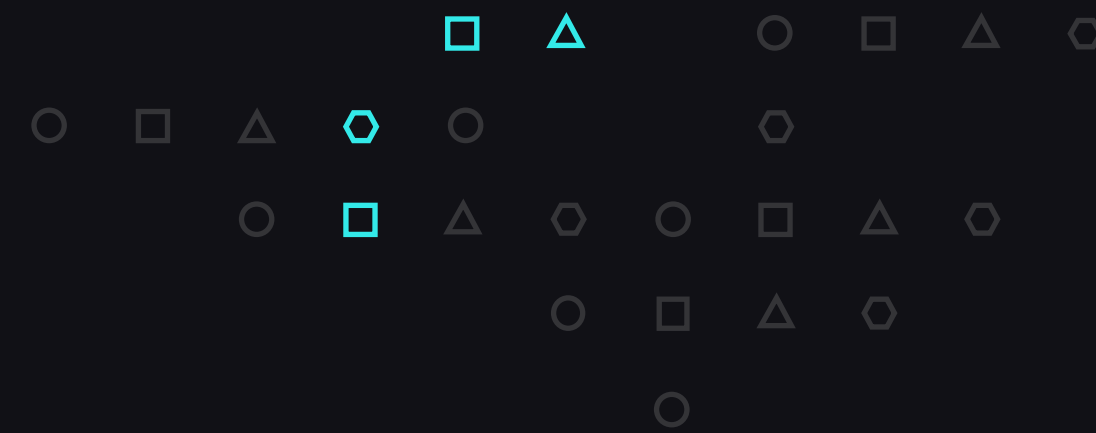
Objective

Barrier

Feasibility Condition

Risk

**3** Identified barriers allow us to conduct **Feasibility** assessment and determine legal, technical and business solution feasibility conditions. We utilize our own solution - AI Auditor, in order to identify compliance and regulatory gaps / requirements.

example
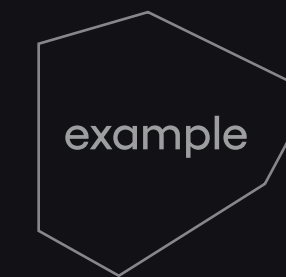
The AI-driven mortgage loan approval system must include a transparency module that can generate clear, understandable explanations of its decision-making process for both technical and non-technical stakeholders, while also ensuring compliance with Article 13 of the AI Act. This module should meet the following specific conditions to be considered feasible:

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# Stage 2 Process



**Business Analyst**

**AI Solutions Architect**

**Banking Software Developers**

Client

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**Risk Management Stakeholders**

## 3

```
02  →  AI Auditor  →  03
```

Barrier

Feasibility Condition
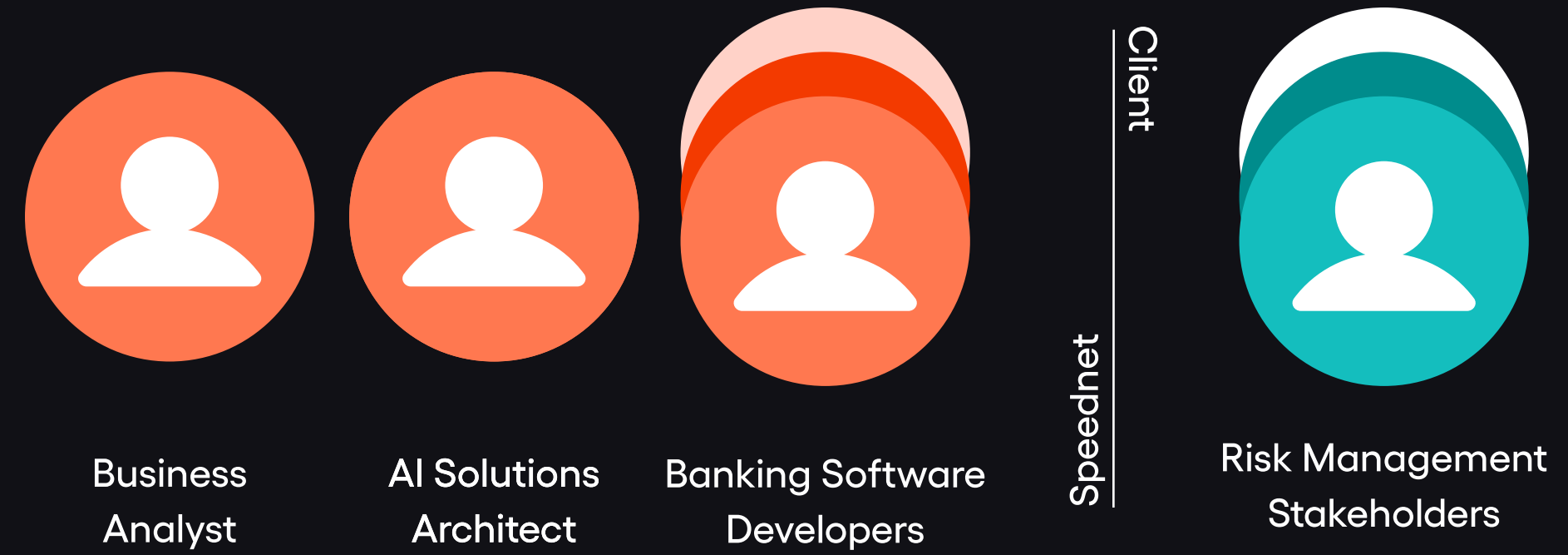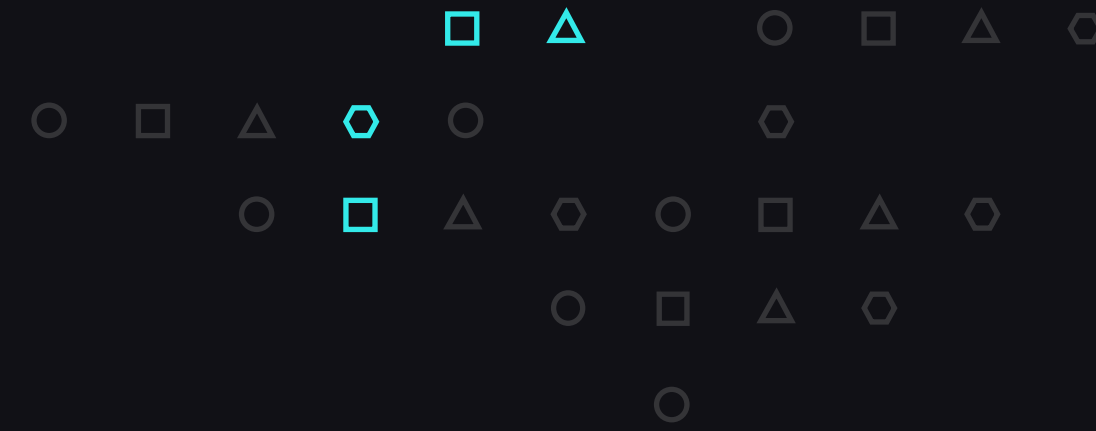


Explainability of Decisions:

- Condition: The AI system must be able to explain its decisions in plain language, detailing the key factors that influenced the approval or rejection of a loan application. This includes both traditional credit data and alternative data sources used by the model.
- Measurement: The system's outputs should be tested with a sample of loan officers and customers to ensure that at least 90% of them can understand and accurately interpret the explanations provided.

Documentation and Traceability:

- Condition: The system must generate and store documentation that outlines the decision-making process for each loan application, including the data used, the model's logic, and the rationale for the final decision.
- Measurement: The system should automatically generate comprehensive reports that can be reviewed by compliance officers and regulators. These reports must include the decision logic and data points considered, and should be accessible for audit purposes at any time.

# Stage 2 Process

Business Analyst

AI Solutions Architect

Banking Software Developers

Client

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Risk Management Stakeholders

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**4** We conduct a strategic **Risk Assessment**, using data from both: Objective Barriers and Feasibility Conditions, outlining risks associated with technical, business and compliance challenges, as well as residual risks.

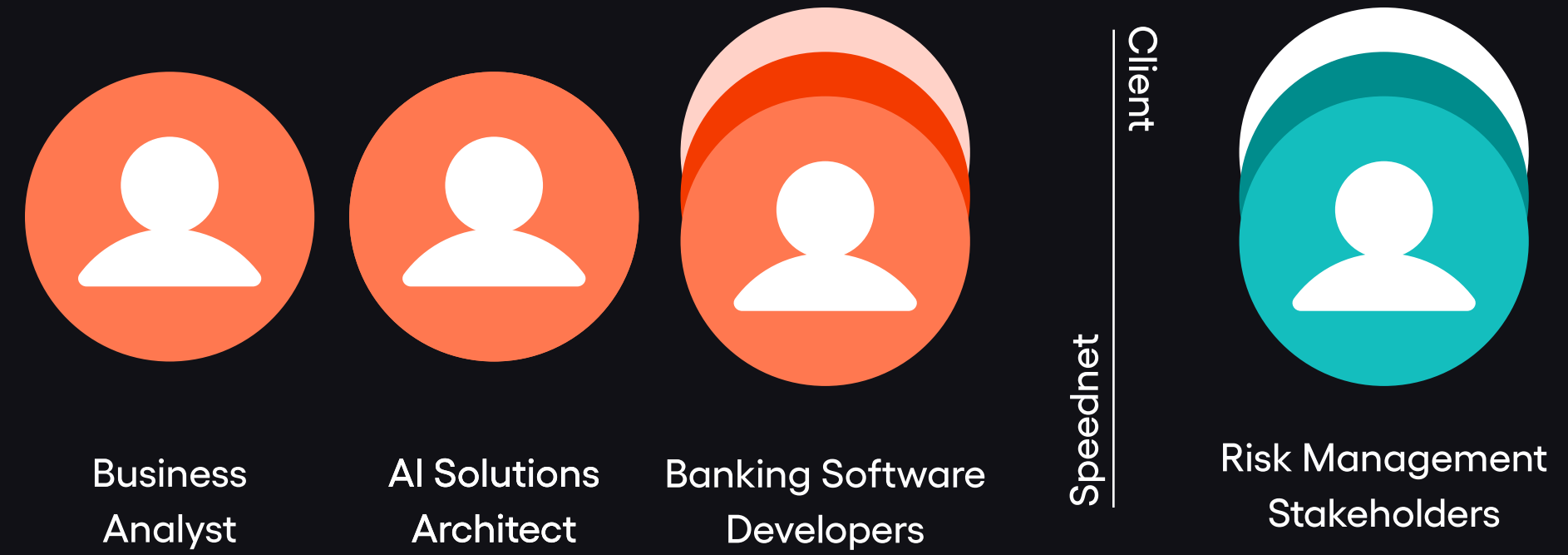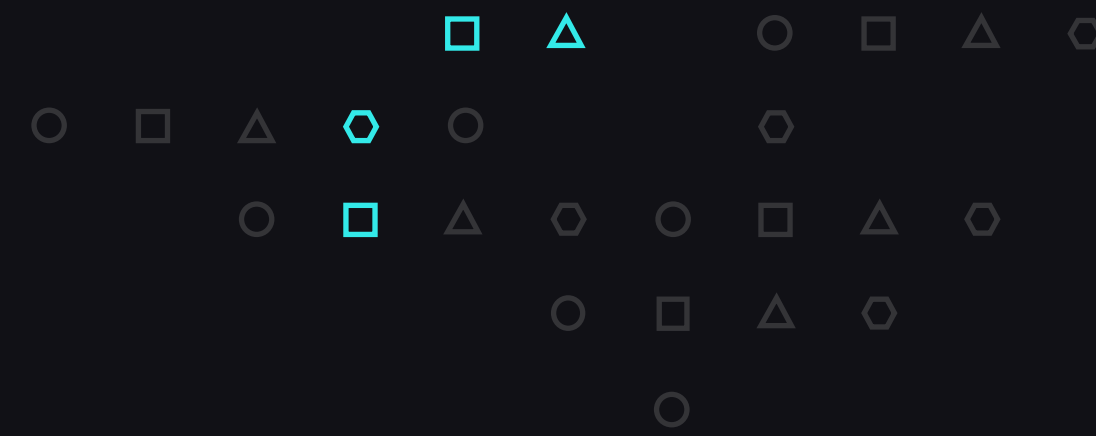A mitigation strategy is proposed for each risk.

We utilize the AI Auditor to determine any further compliance and regulatory gaps by including pre-determined feasibility conditions as a context for an LLM model.

**example**
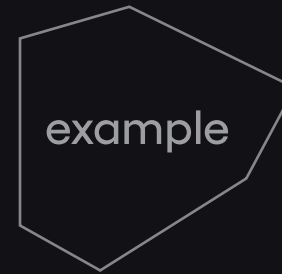
The complexity of AI models, particularly those utilizing deep learning and alternative data sources, poses a significant risk to generating explanations that are understandable to non-technical users. If the AI system fails to provide clear and understandable explanations, it could lead to non-compliance, eroding trust among users, and potentially resulting in legal challenges. Risk components:

1. Complexity of Deep Learning Models:
   - Description: Deep learning models, which are often used in AI systems for their predictive accuracy, operate in a highly complex manner, involving multiple layers of data processing. This complexity makes it difficult to extract straightforward explanations for how decisions are made, particularly when decisions are influenced by numerous, subtle data interactions.
   - Residual Risk Example: Even after implementing Explainable AI techniques, some explanations may still be too technical or abstract for end-users to understand, particularly for those with no background in AI or data science. For example, while an explanation might show that "feature X had a 70% influence on the decision," the user may not grasp what "feature X" is or why it matters.

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# Stage 2 Process

**Business Analyst**

**AI Solutions Architect**

**Banking Software Developers**

Client

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**Risk Management Stakeholders**

④

**02**

Barriers

**03**

Feasibility Conditions

AI Auditor →

**03**

Risks
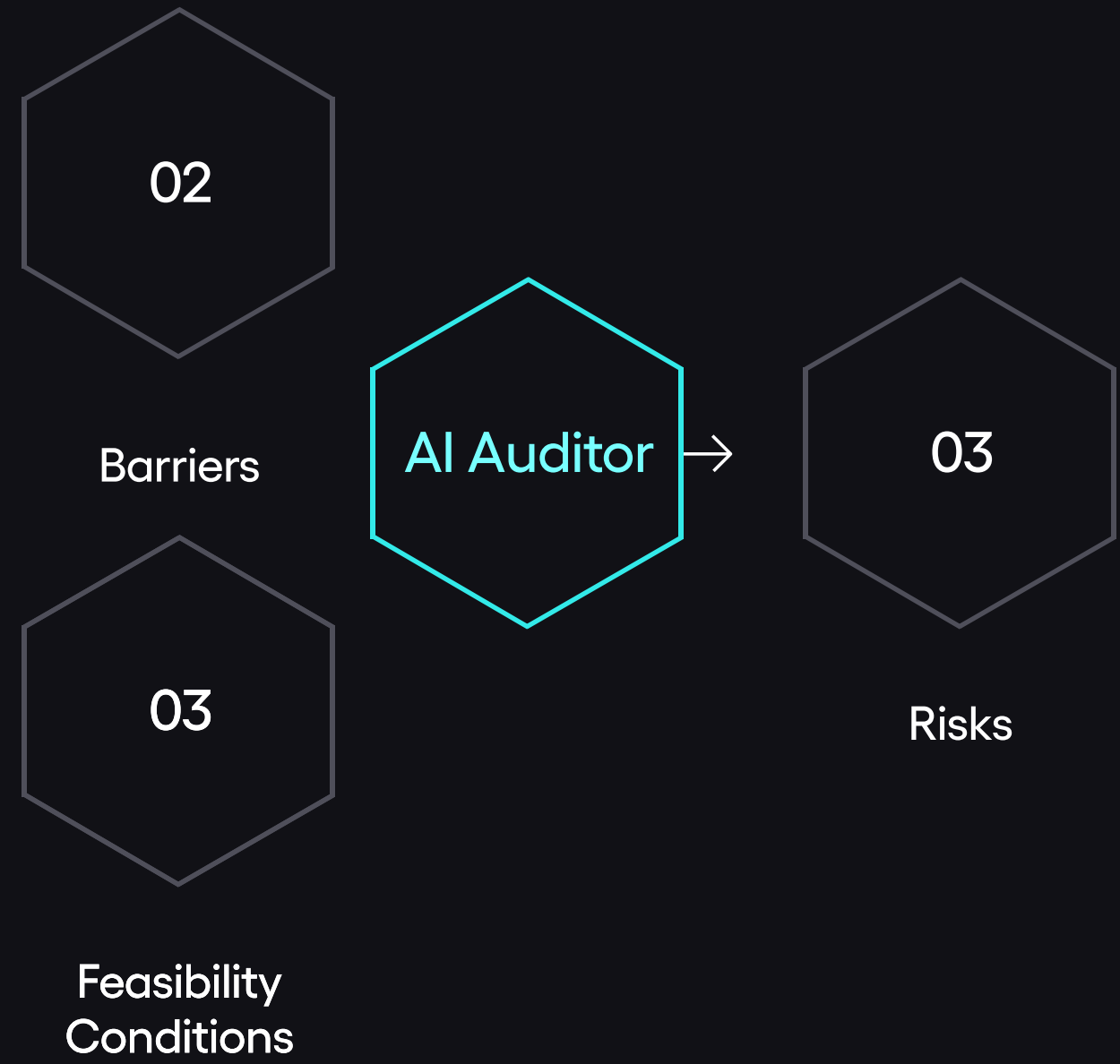
Use of Alternative Data Sources:

- Description: Incorporating alternative data sources (e.g., social media activity, online behavior, utility payments) into the decision-making process can introduce additional complexity. These data sources may not have straightforward or well-understood implications for creditworthiness, making the resulting AI decisions more difficult to explain.

- Residual Risk Example: An explanation that includes factors such as "frequency of social media activity" or "patterns in online purchasing behavior" might confuse or concern users, leading them to question the fairness or relevance of such factors in their loan approval process. Even if the system uses XAI to clarify these points, the relevance of such data may still be disputed or misunderstood by the applicant.

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# Stage 2 Process
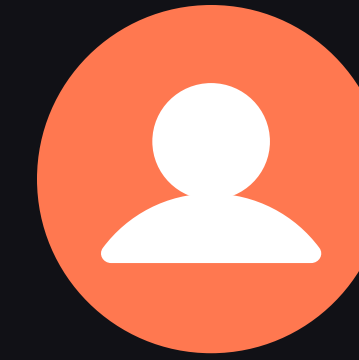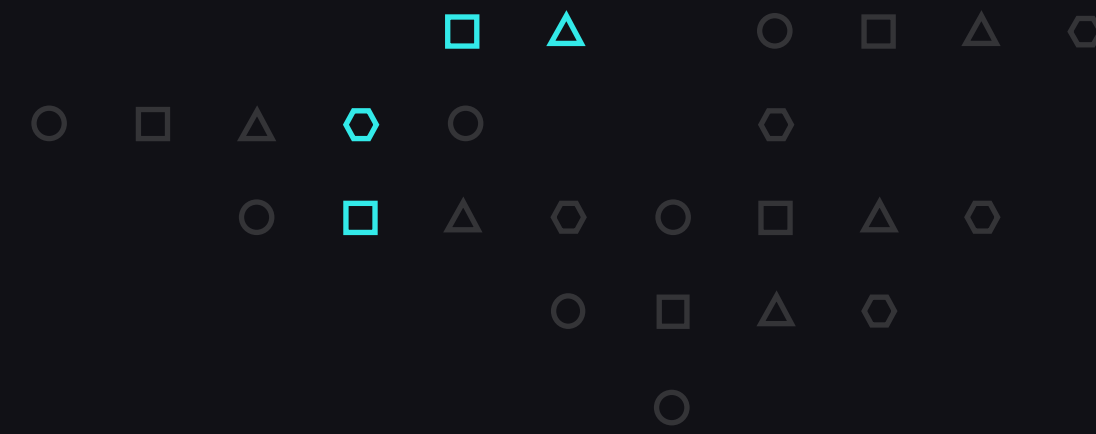
Client Partner
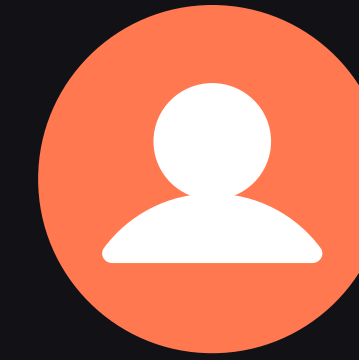
AI Solutions Architect

Speednet

Chief Innovation Officer

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**5** An optional, supplementary step is the Objective **Change Impact Assessment**, during which we analyse size vs complexity of the change associated with your future internal process optimization using AI tools / agents.

*example*
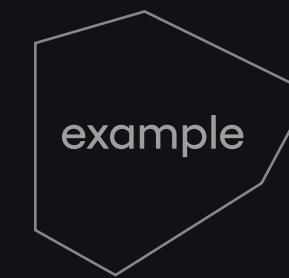
Objective Impact Assessment - System Change (High Impact)
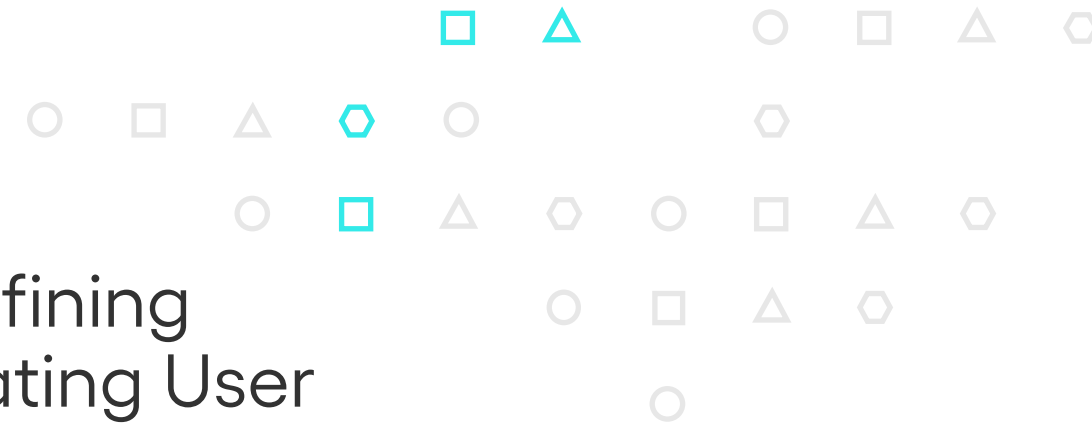
Detailed Breakdown of the System Change:

1. Integration with Existing Systems:
   - Details: The AI system must be integrated with the existing core banking systems, customer relationship management (CRM) tools, and loan processing platforms. This integration is complex, as it requires seamless data flow between the AI tool and these legacy systems to ensure accurate and efficient decision-making. The integration process may involve significant modifications to data structures, APIs, and data governance practices.
   - Challenges: There is a risk of compatibility issues between the AI system and existing software. These issues could cause disruptions in daily operations if not properly managed. The integration process also demands substantial IT resources and expertise.

SPEEDNET

03

# Process & Product Scoping

Creating an AIG-Ready product
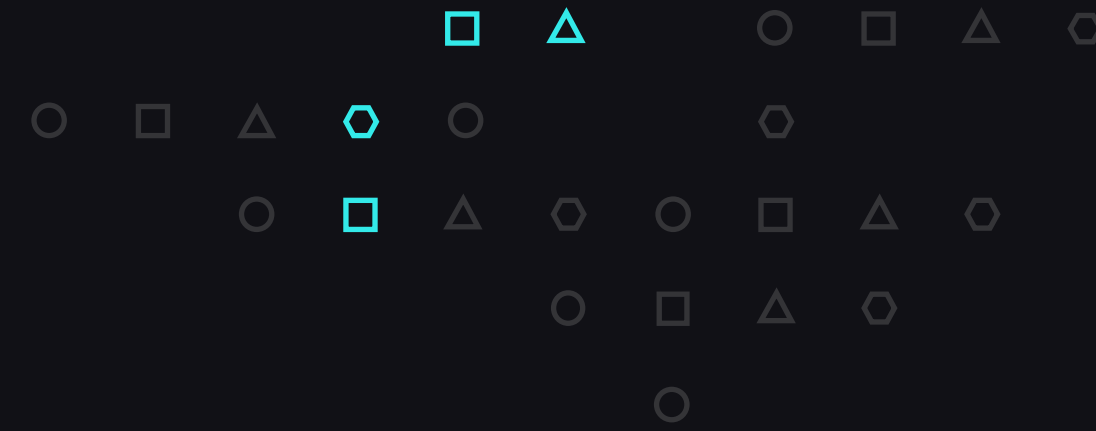
# Stage 3 Methodology

The final stage is a custom **Product Design** workflow, defining functional and non functional system requirements, creating User Stories and estimating implementation cost.

To achieve an objective you need a compound of multiple processes. Based on User Stories, we define **Objective Processes** and associated risks,
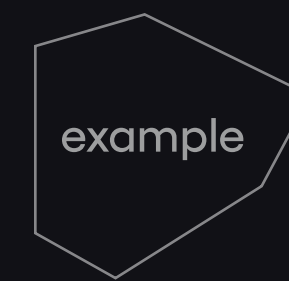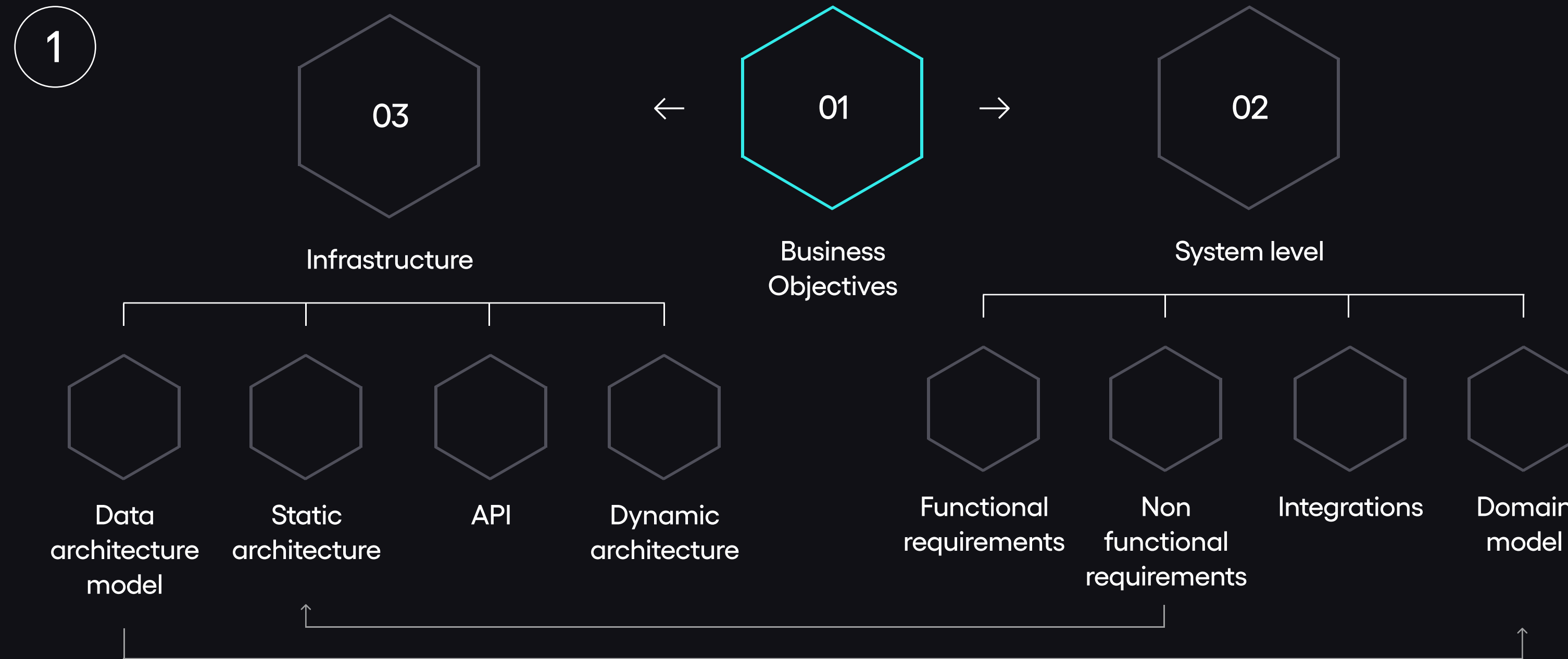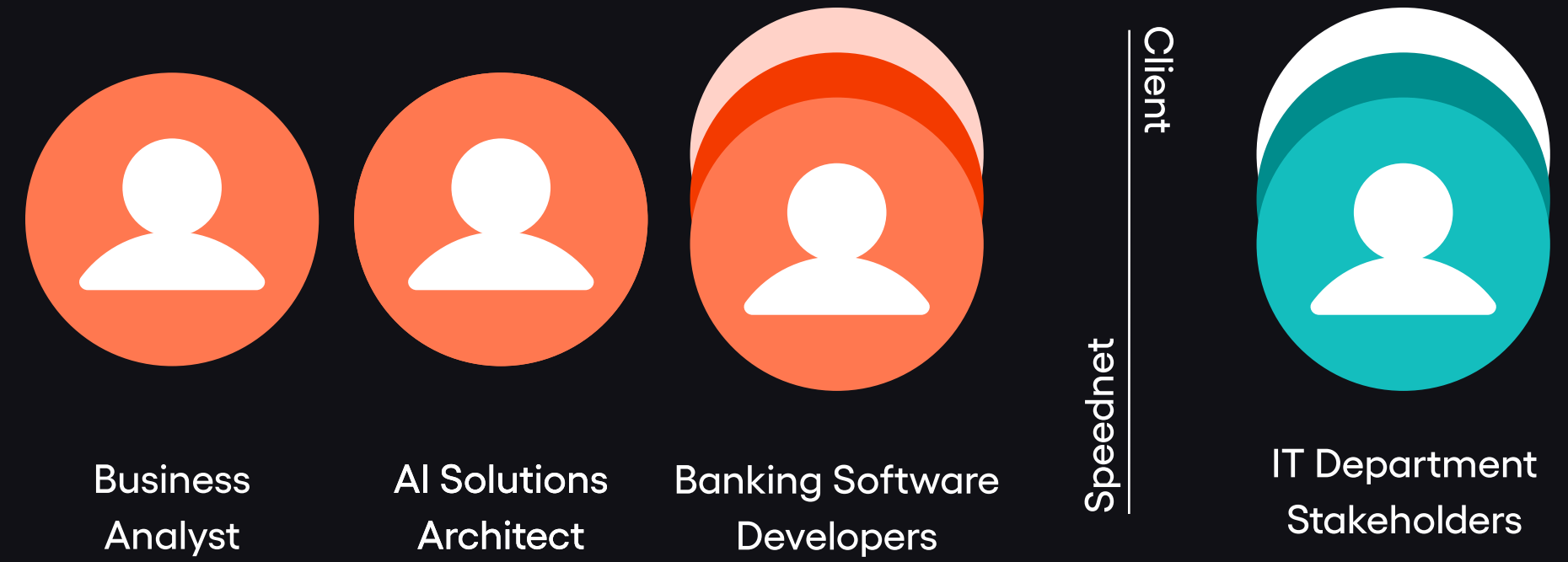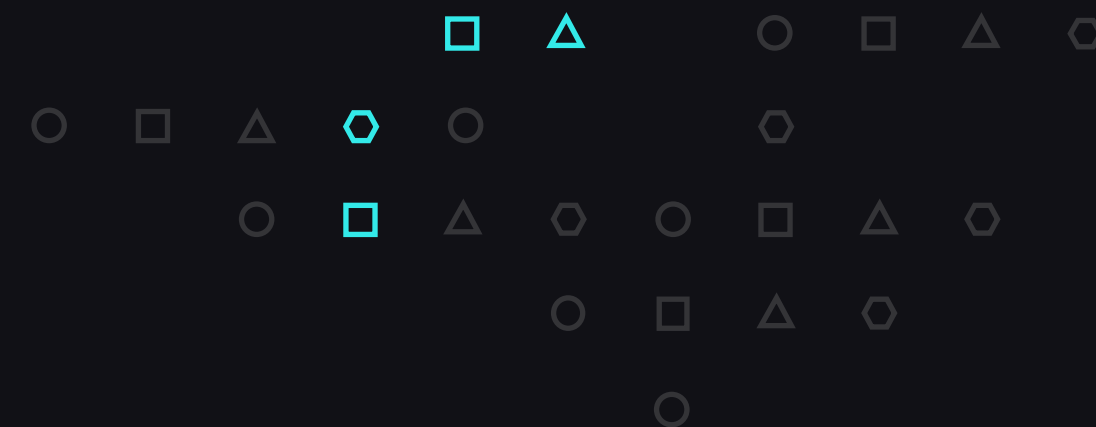
## Outputs

- ◈ High Level Design & Architecture
- ◈ Project cost & TCO estimation
- ◈ Final Risk Assessment
- ◈ ISO 42001 certification package

Map  Pain Point  Solution  Objectives  Processes

**SPEEDNET**

# Stage 3
# Process

Business
Analyst

AI Solutions
Architect

Banking Software
Developers

Client

Speednet
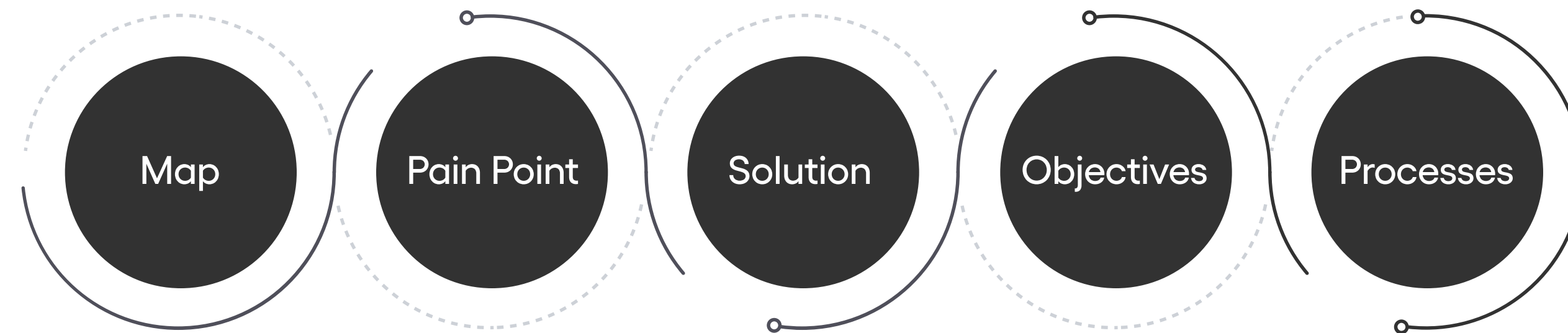
IT Department
Stakeholders
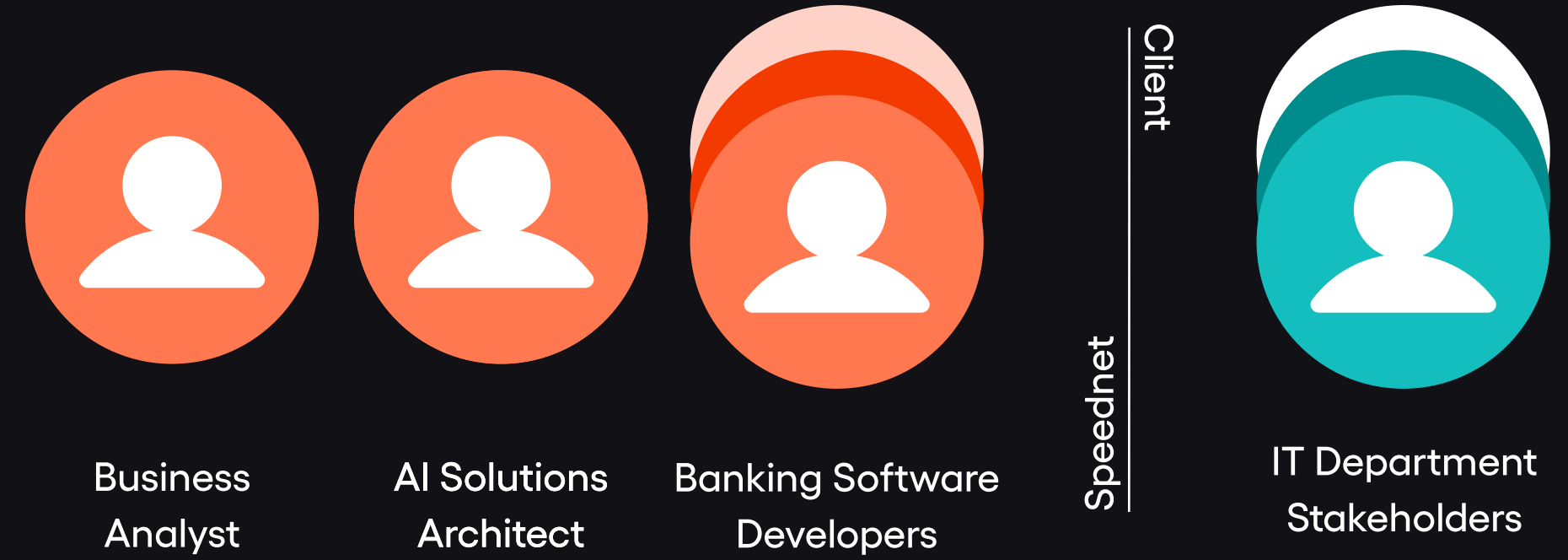
**1** Based on defined Business Objectives and conducted Feasibility Assessment with determined feasibility conditions, a **High Level Architecture** concept is created.

example

Example set of High Level Architecture documentation (PDF)

DOWNLOAD →

# Stage 3
# Process

**SPEEDNET**

Business Analyst

AI Solutions Architect

Banking Software Developers

Client

Speednet

IT Department Stakeholders

---

**1**

**03**

Infrastructure

| Data architecture model | Static architecture | API | Dynamic architecture |

**01**

Business Objectives

**02**

System level

| Functional requirements | Non functional requirements | Integrations | Domain model |

---

## High-Level Architecture Documentation

**1. Introduction**
- 1.1 Project background and purpose
- 1.2 Glossary of terms
- 1.3 Recipients and document goal

**2. Scope of the project**
- 2.1 High level conceptual/architecture overview
- 2.2 Business Process perspective & mapping

**3. Use Case diagrams**

**4. Functional requirements**
- 4.1 System functions with description
- 4.2 Integration specification
  - 4.2.1 Identified IT systems in the processes
  - 4.2.2 Identification of SPOCs

**5. Non-functional requirements**

**6. Other assumptions**

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## Stage 3 Process

**Business Analyst**

**AI Solutions Architect**

**Banking Software Developers**

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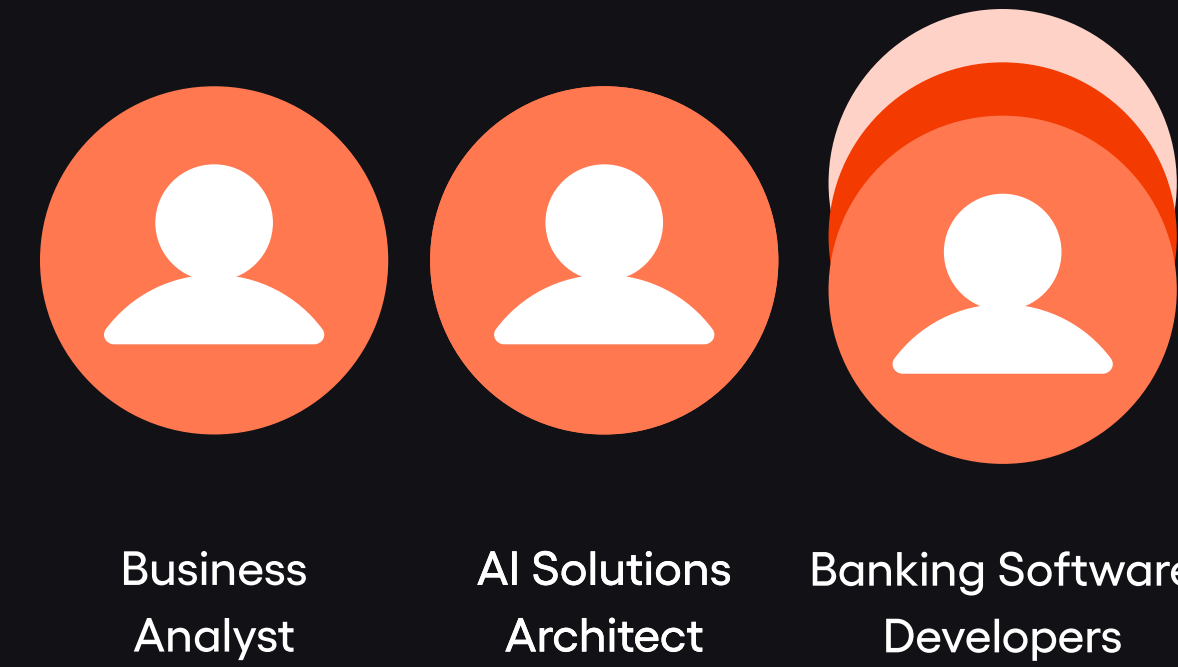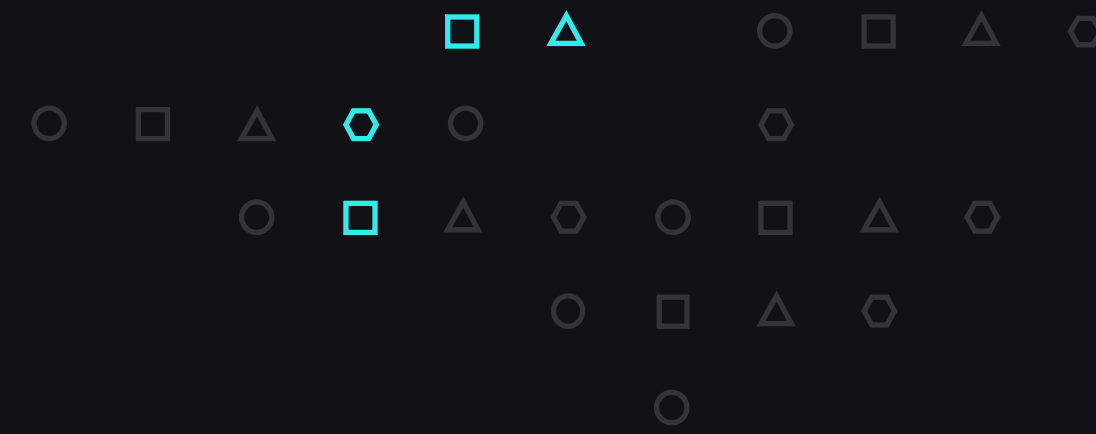
**2** Created diagrams of Business Processes and Functional Requirements allow us to create high-level **User Stories**. Our UX/UI Designer uses them to create mockups to visualise the most critical functionalities.

example
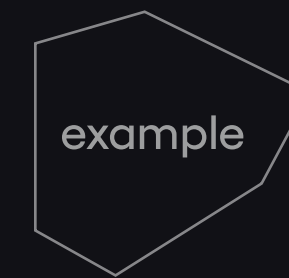
**DESCRIPTION**

As a registered user, I want to be able to log into the application to access all functionalities.
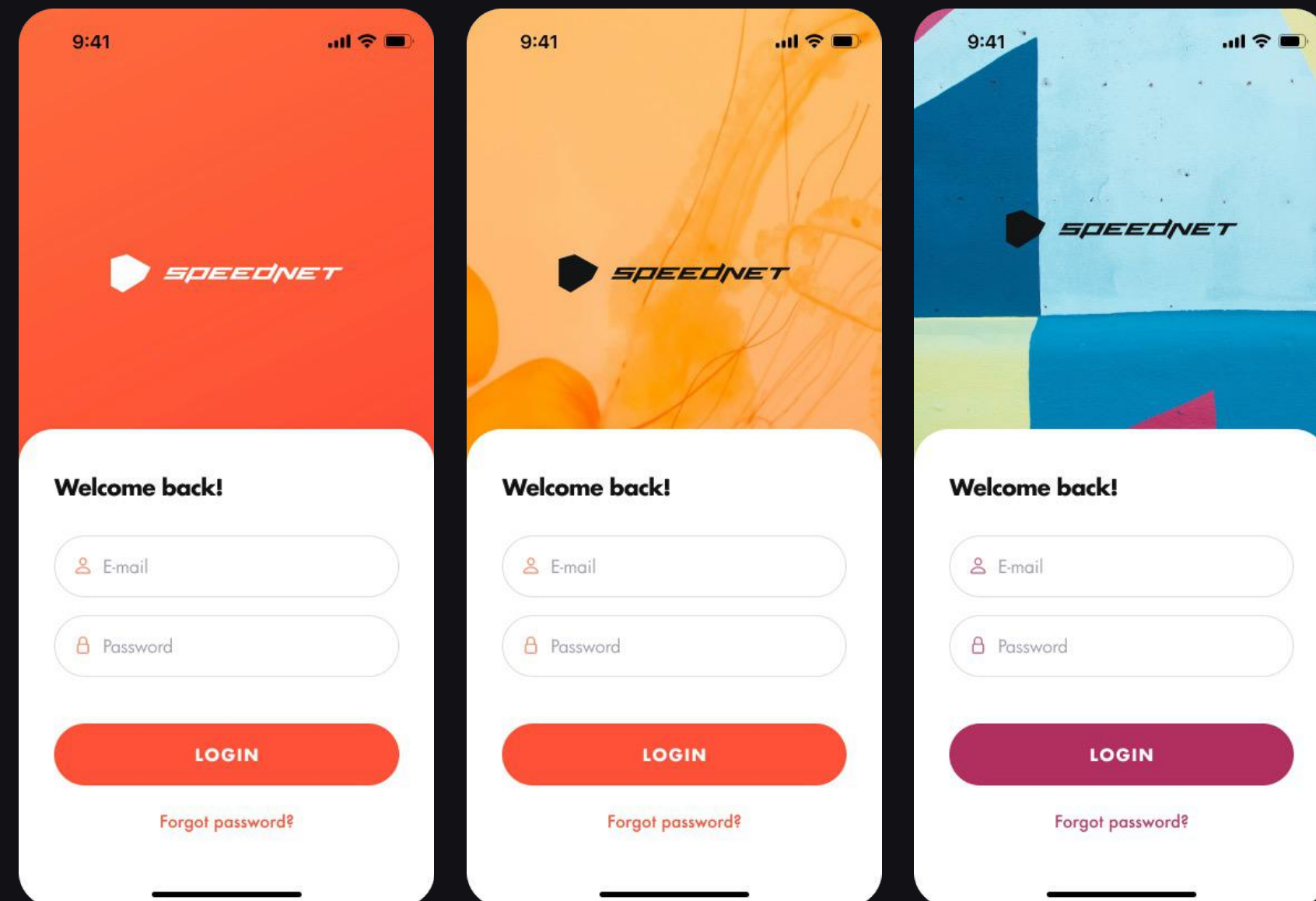
1. Logging in is done by phone number and SMS code
2. The form displays an input for entering the phone number
3. Clicking on the input displays the system numeric keypad
4. In the input "Phone number" you can enter up to 9 digits
5. CTA "Send activation code" activates after entering 9 characters in the input
6. After entering the phone number, an SMS code is sent to the indicated number
7. SMS content: Activation code for ABC application is: <SMS code>.
8. The user enters the SMS code, after which logging into the application takes place
9. Functionality meets the requirements of WCAG

**INPUT CONDITIONS**

The user has logged out of the application - not logged in.

# SPEEDNET

# Stage 3 Process

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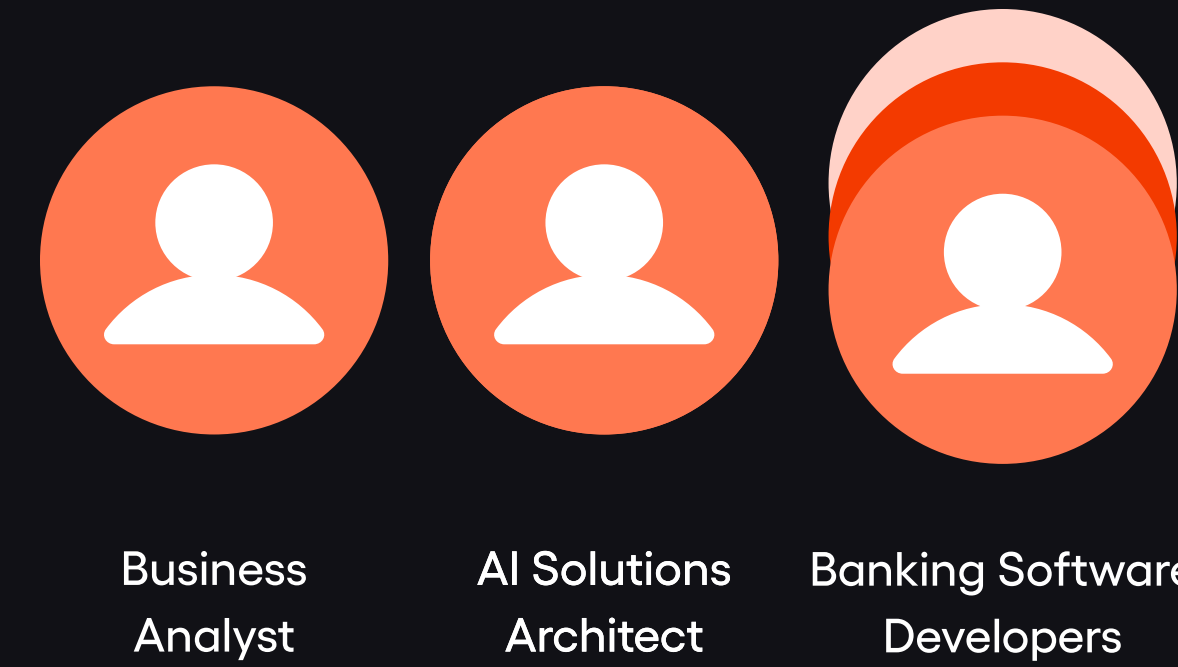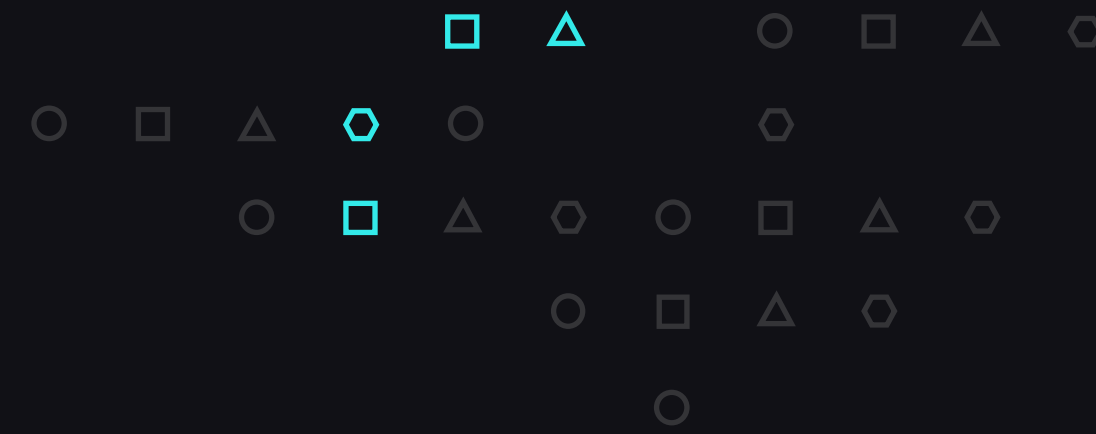
**2**

For a User Story prepared in this way, the UX/UI specialist develops proposals for mockups, which he presents to the client and makes changes if necessary. At this stage, we ask many questions to best understand the client's expectations and present how we see the implementation of the requirements in the mockups.

# SPEEDNET

# Stage 3
# Process

Business Analyst

AI Solutions Architect

Banking Software Developers

Risk Management Stakeholders
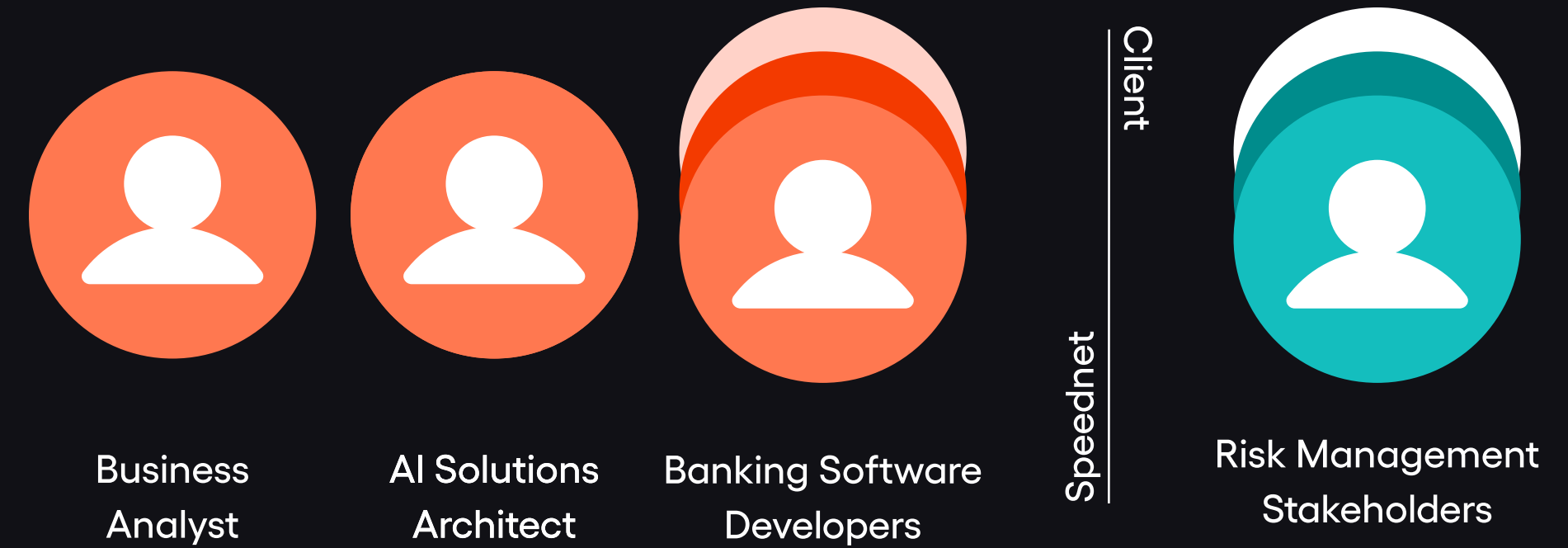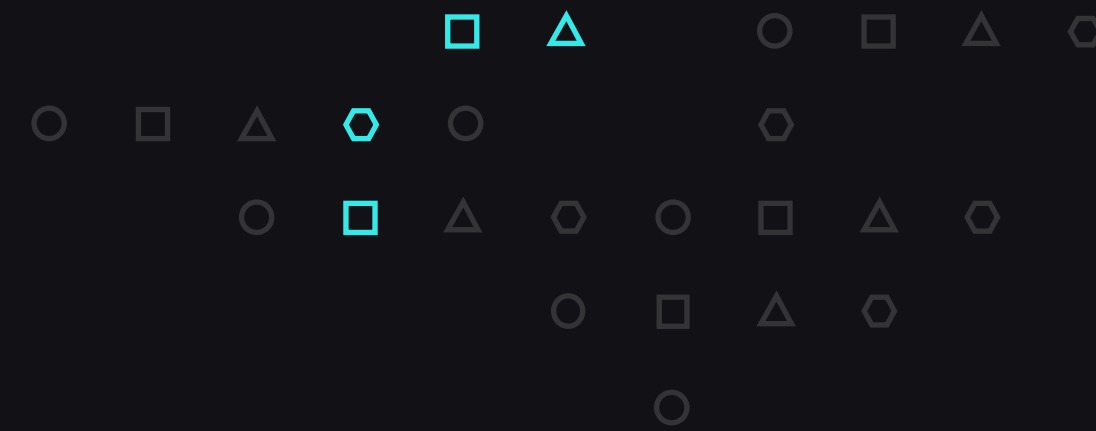
**3** We conduct a process **Risk Assessment** using data from High Level Architecture, outlining risks associated with technical and compliance challenges.

A mitigation strategy is proposed for each risk.

We utilize the AI Auditor to determine any further compliance and regulatory gaps by including pre-determined feasibility conditions as a context for an LLM model.

example
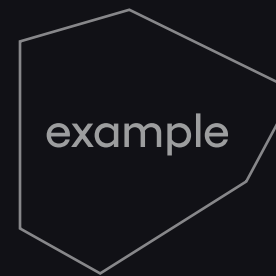
Process Overview: Onboarding and Authentication

The "Onboarding and Authentication" process involves gathering company data, verifying identity, and ensuring secure access to the system. This process is crucial as it forms the entry point for users into the system and must comply with various regulations, including those governing AI, data protection, and security.

System Integration and Interoperability:

- Risk: The AI system for onboarding and authentication must integrate seamlessly with other components of the architecture, including external systems like Tuum for core banking and SumSub for fraud detection.
- Likelihood: Medium
- Impact: Medium
- Mitigation: Conduct thorough integration testing to ensure compatibility between the AI system and other components. Use standardized APIs and ensure all systems are regularly updated to maintain interoperability.

**SPEEDNET**

# Stage 3
# Process

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Banking Software Developers

Risk Management Stakeholders
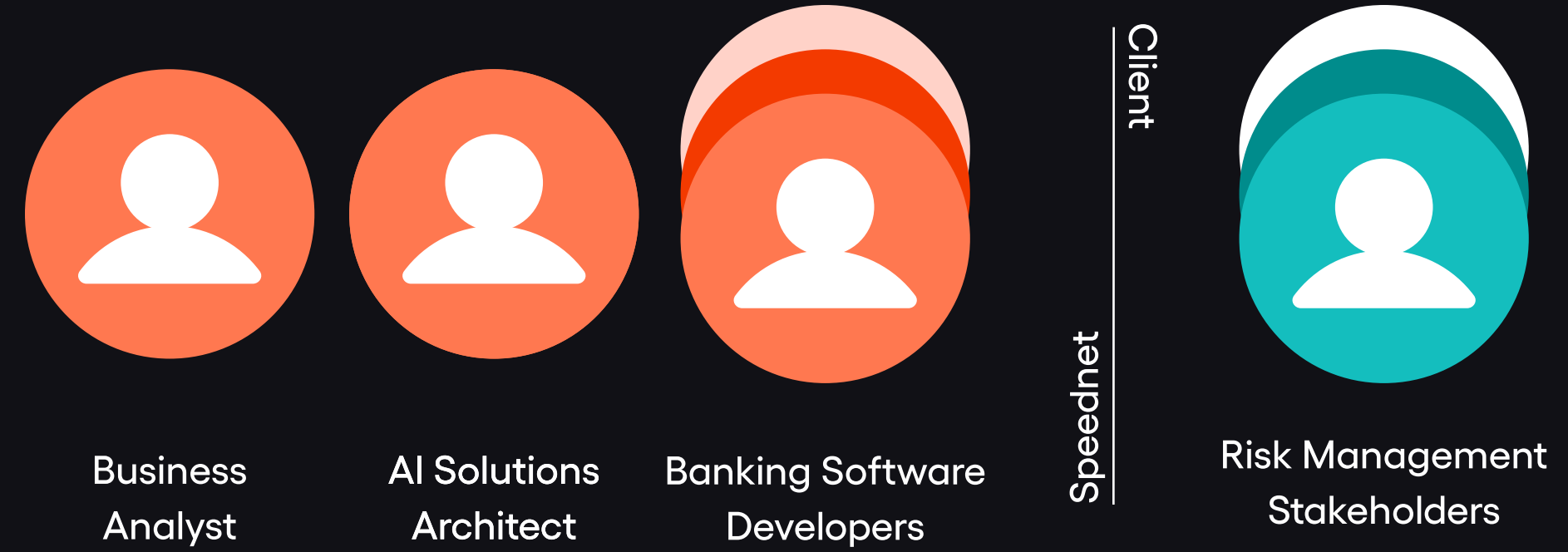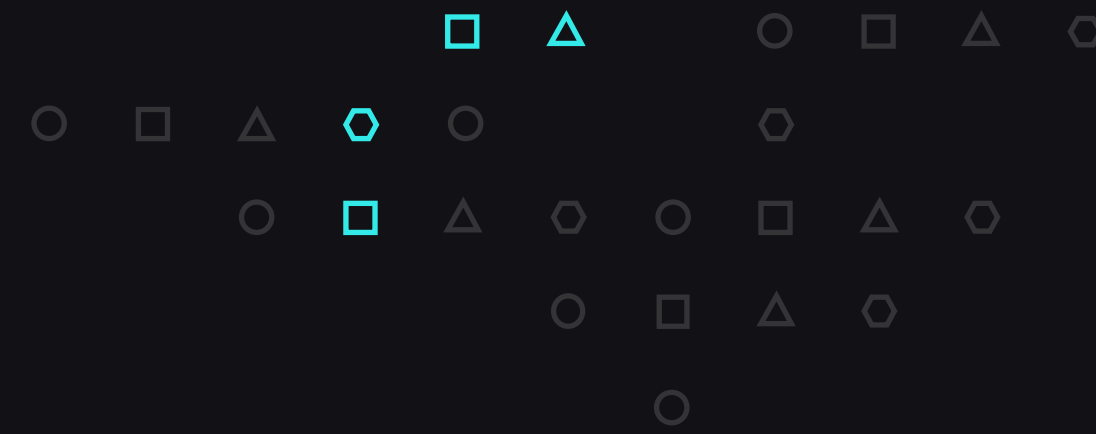
**4** In the final step, we provide our offer with detailed **Project Cost Estimation** and **Delivery Plan**. Once you decide to move forward, we start implementation.
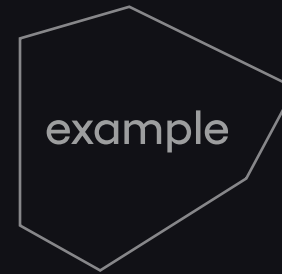
example

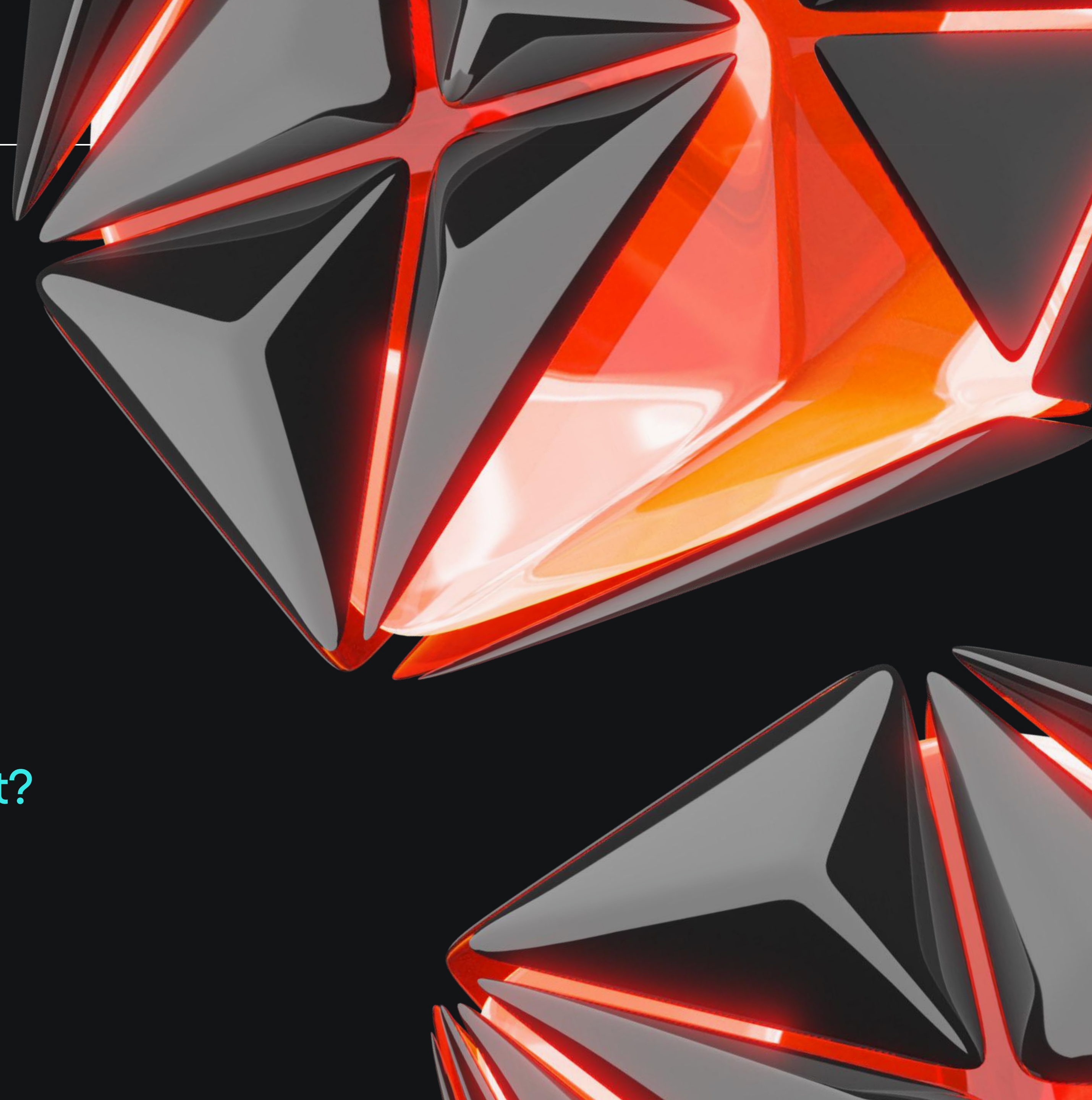Example set of project cost estimation based on AI Auditor.

DOWNLOAD →

SPEEDNET

# About Us

Why should you choose Speednet?

**SPEEDNET**

# Companies work with SPEEDNET when they:

Are looking for a vetted partner with hands-on experience in their industry

Must deliver a project that exceeds current team's expertise or required velocity

Are looking for a value-for-money solution to impact the bottom line

**SPEEDNET**

# Areas of expertise
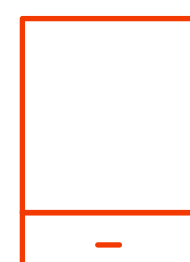
Mobile banking

Internet banking
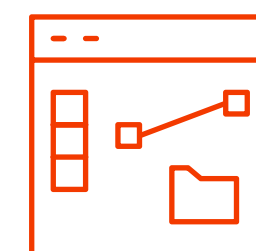
Product Design

Business logic layer
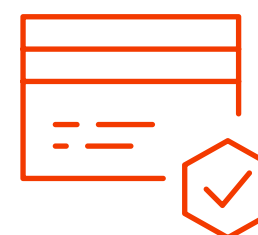
Loan & Credit platforms
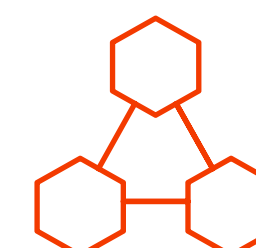
CMS, CRM & ECM

Payments & cards solutions

Insurance cross-selling
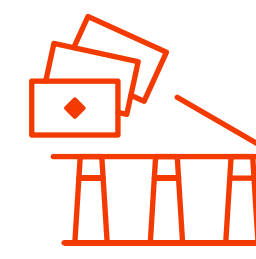
Open banking

## Sample results of our work

The change we delivered for Finnish Pop Pankki translated into **a +20% increase in number of customers** and a **+126% increase in overall profit,** enjoying the highest customer satisfaction rate in the Nordics.

# Bank - a software company with a banking license? Definitely!

**Adam Marciniak**

CEO, VeloBank

Nothing is changing here. We are not going back to the days of relegating technology to the background.

Over time, the skills gap will only widen, and it needs to be rebuilt.

If you don't acquire new technological competence, don't implement new projects then you are going backwards.

# Enabling Modern Digital Banking
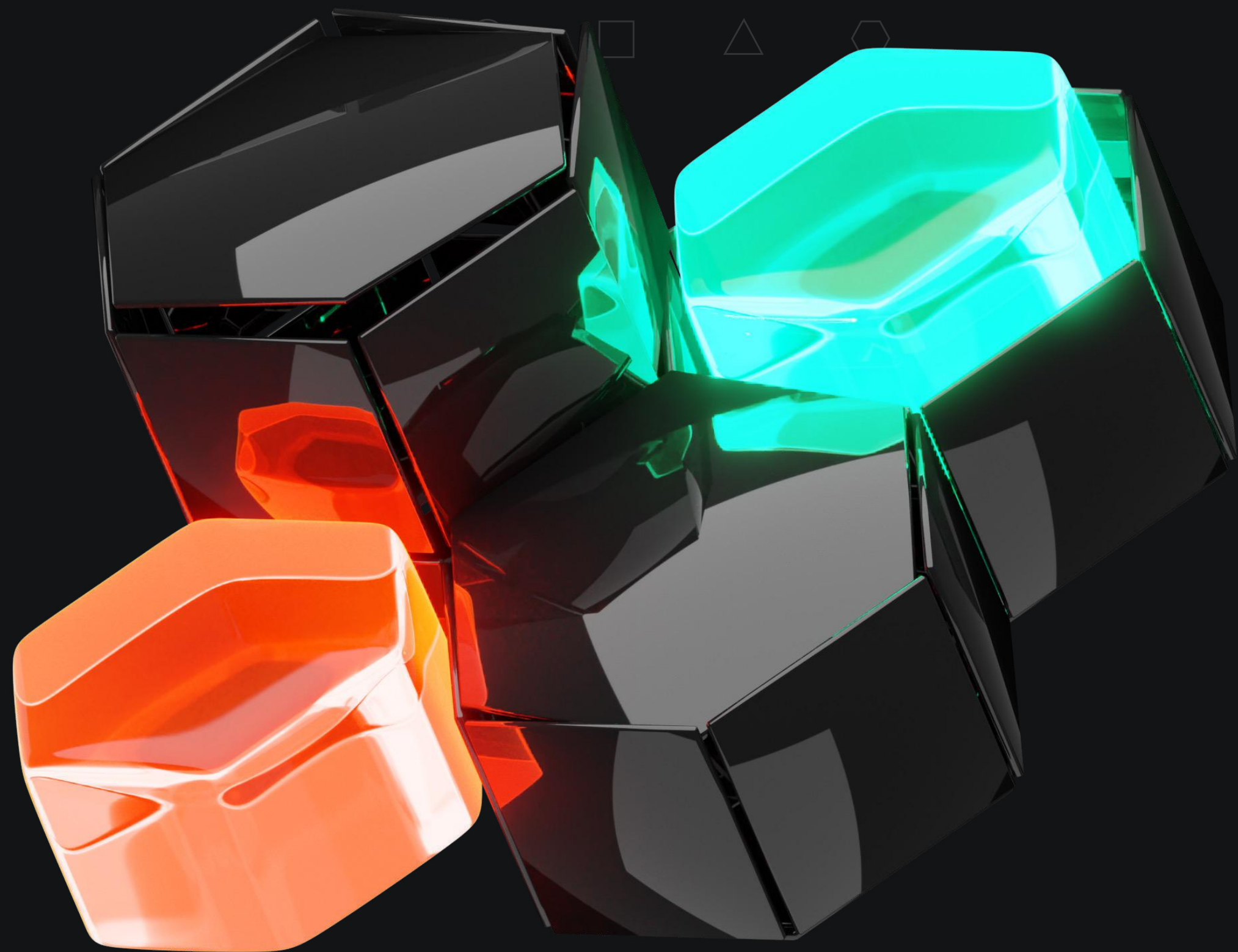
# Reinventing Digital Banking

After Bank's rebranding, VeloBank decided to become a top-tier client experience for mobile and web users.

A key component of our project was the creation of a brand new website service, optimized for both desktop and mobile usage. This initiative was crucial to ensure that customers retained uninterrupted access to banking services, regardless of the device they were using. The implementation of a unified application state management system and a consistent user interface ensures smooth and efficient operation.

We have created an entirely new mobile banking application from scratch. The project was critical from the perspective of the business objectives and strategic goals of the bank. Applications have been created both for iOS and Android platforms. Ultimately, all of the phases of the project, including design, development, testing, and production implementation, were successful.
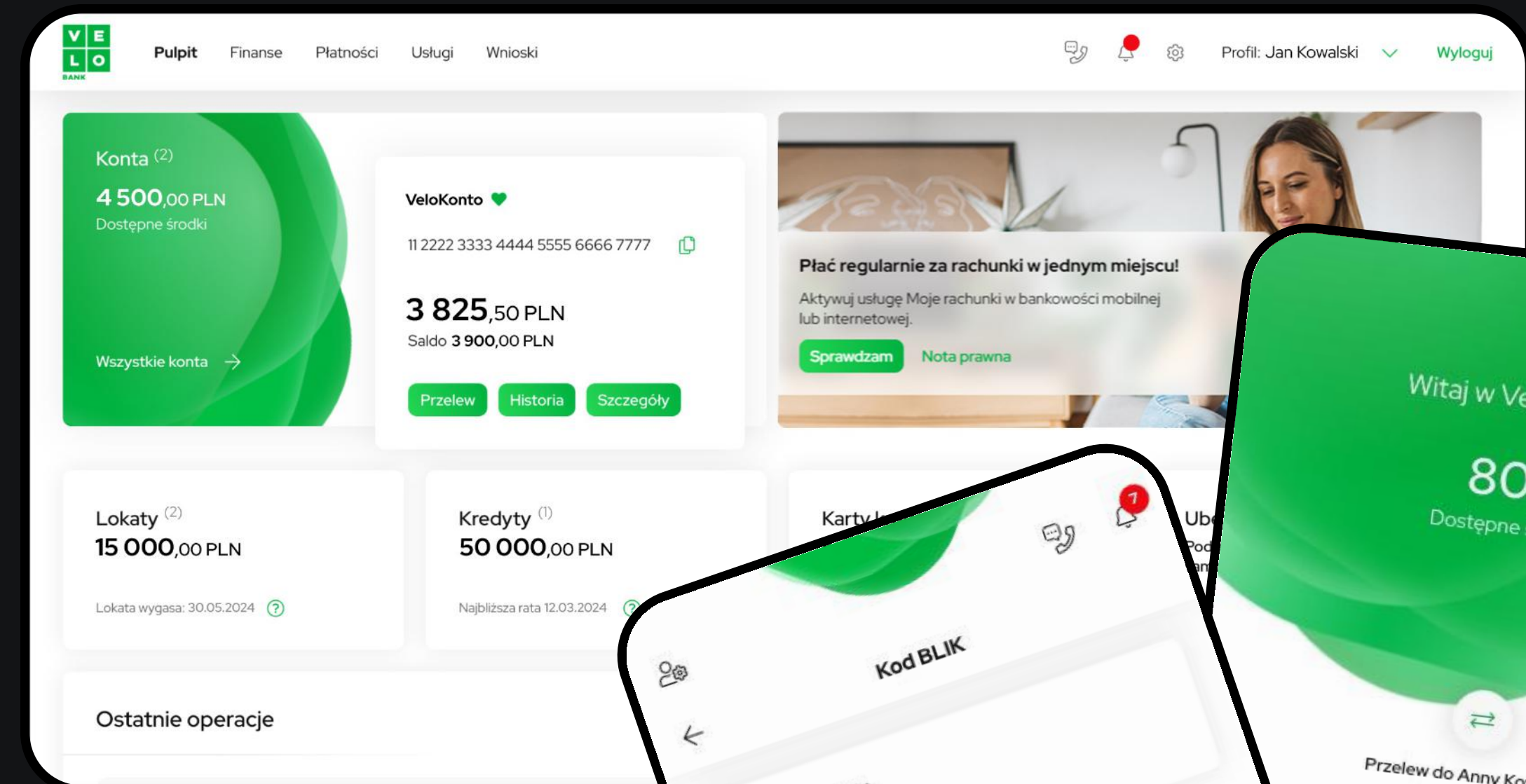
4,5 ★ Google Play

4,6 ★ App Store
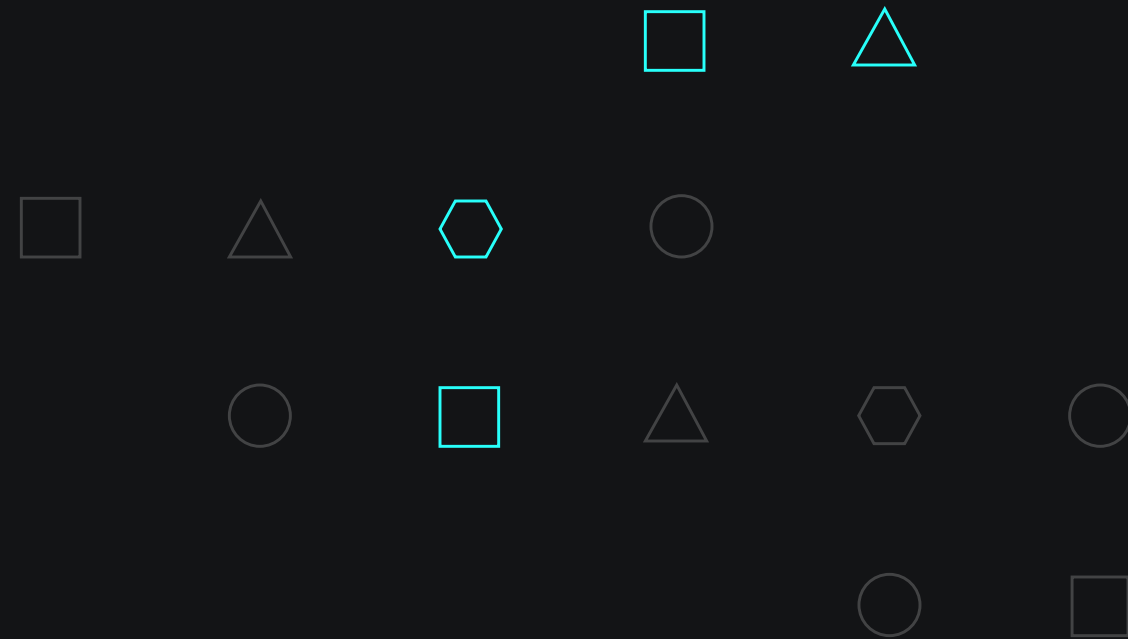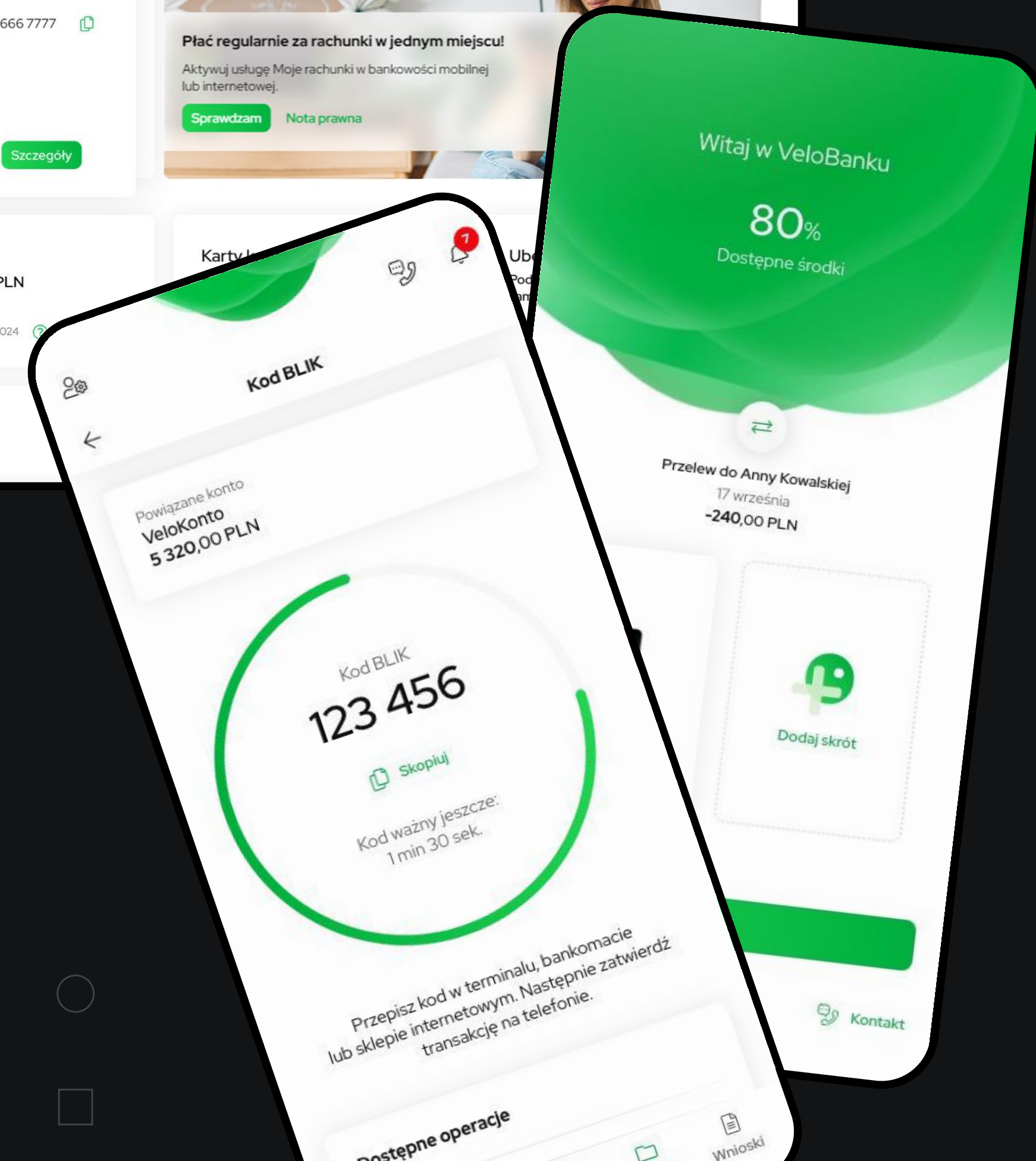
# Creating Multi-Channel Banking Experience

Getin Bank was one of the largest banks with Polish capital. Getin's main area of activity was retail banking, hence the need to create a user-friendly, multi-channel user experience for the bank's customers.

We started working with Getin Bank in 2015, when we joined their development team in order to refresh the appearance of their mobile application. Over time, our commitment grew and more of our people got involved in new projects. We supported the maintenance and development of mobile applications, building online banking and developing a middleware platform.

# SPEEDNET
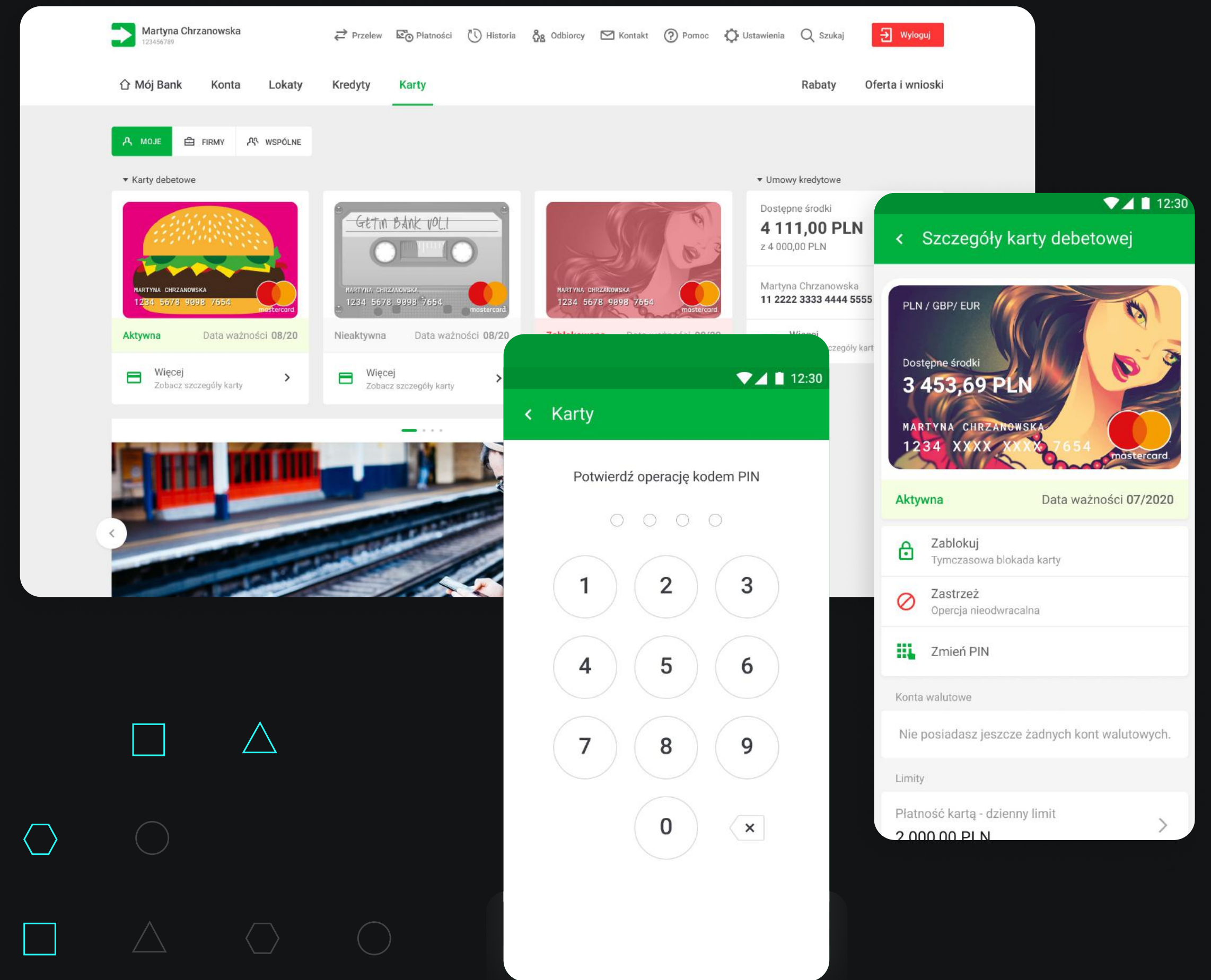
# Taming Large Data Structures

Professional and efficient CMS platform with 9 language versions available, prepped for marketing and sales departments in Fico's global structure.

The current system supports 4,200 subpages and over 1,500 documents, premium and free, for logged-in and not logged-in partners, clients and employees. The system is also integrated with Salesforce, Eloqua, and Motion Point which form the backbone of FICO's infrastructure. It has been one of the largest systems the Speednet team worked with.
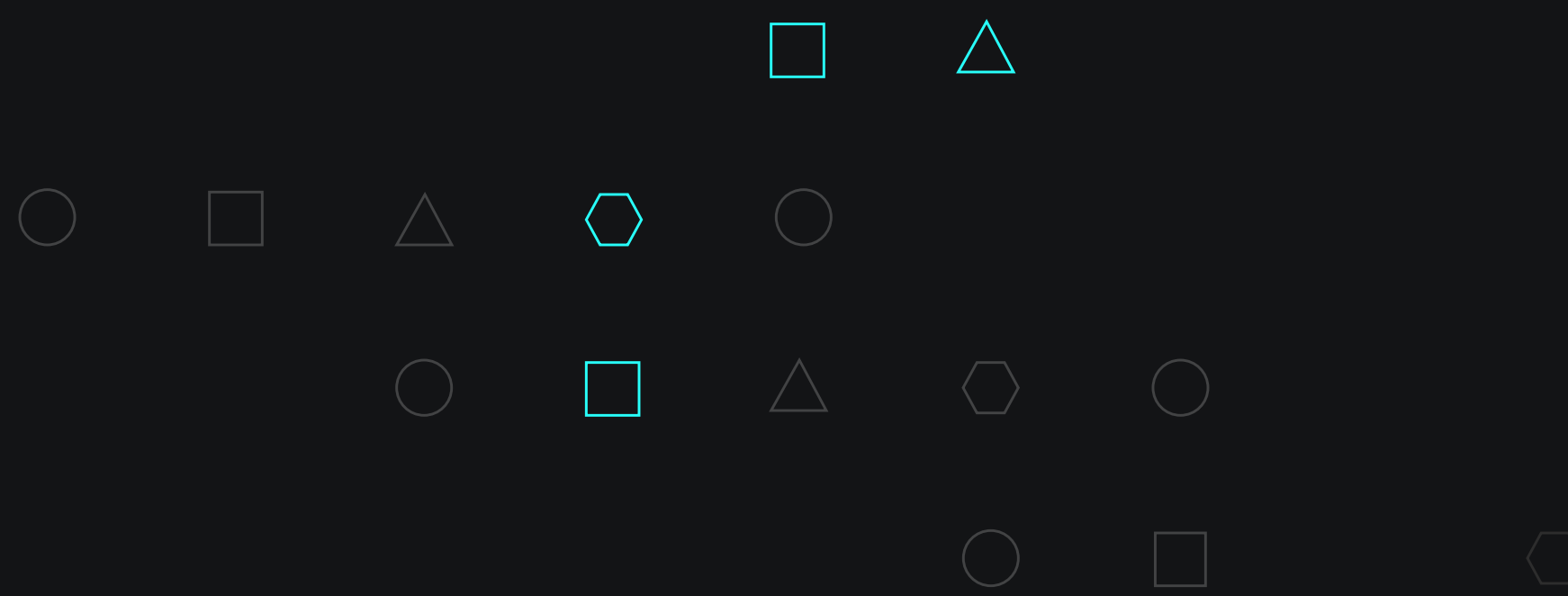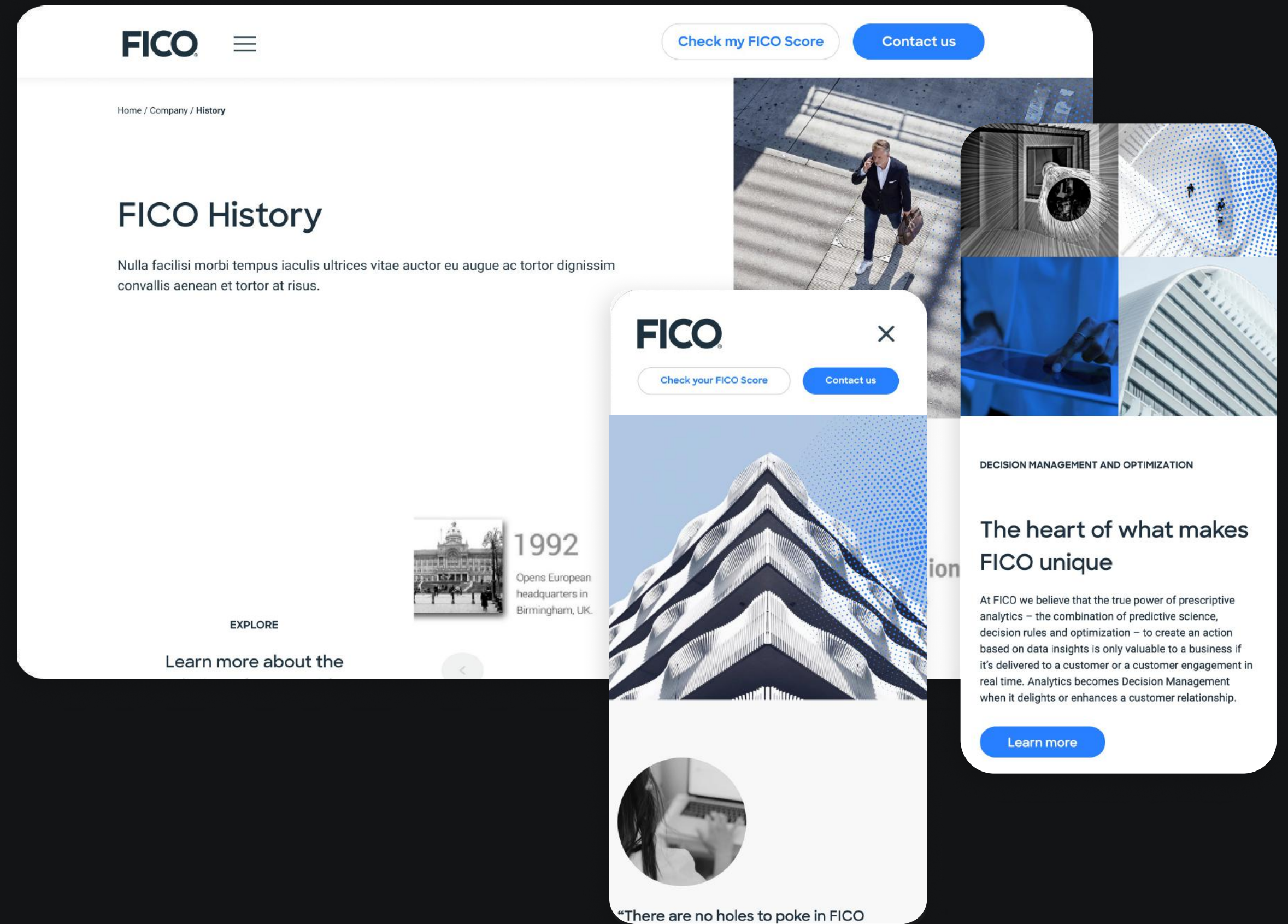
# Digitalizing Mortgage Access

Highly-secure online platform for servicing mortgage loans used by customers and bank employees. It provides borrowers with a user-friendly access to key information on their financial products and enables them to track currency exchange rates and easily contact the bank.

The bank's employees use the platform for effective communication with customers as well as to generate reports and statistics.

# Binding the Fintech Ecosystem

A fintech platform enabling users to choose among more than 25 financial, banking and non-banking institutions.

The complexity of the platform required a variety of skills; with the end-user application including a system for communication with many financial institutions as well as a reporting system and an extensive back office.

The Bancovo application Speednet delivered consists of more than 100 microservices. Translating this complexity into a user-friendly and transparent interface required a lot of involvement from UX designers. Our team not only built the platform, but also managed the successive onboardings of new specialists (client's employees), who were to take over and run it on their own.
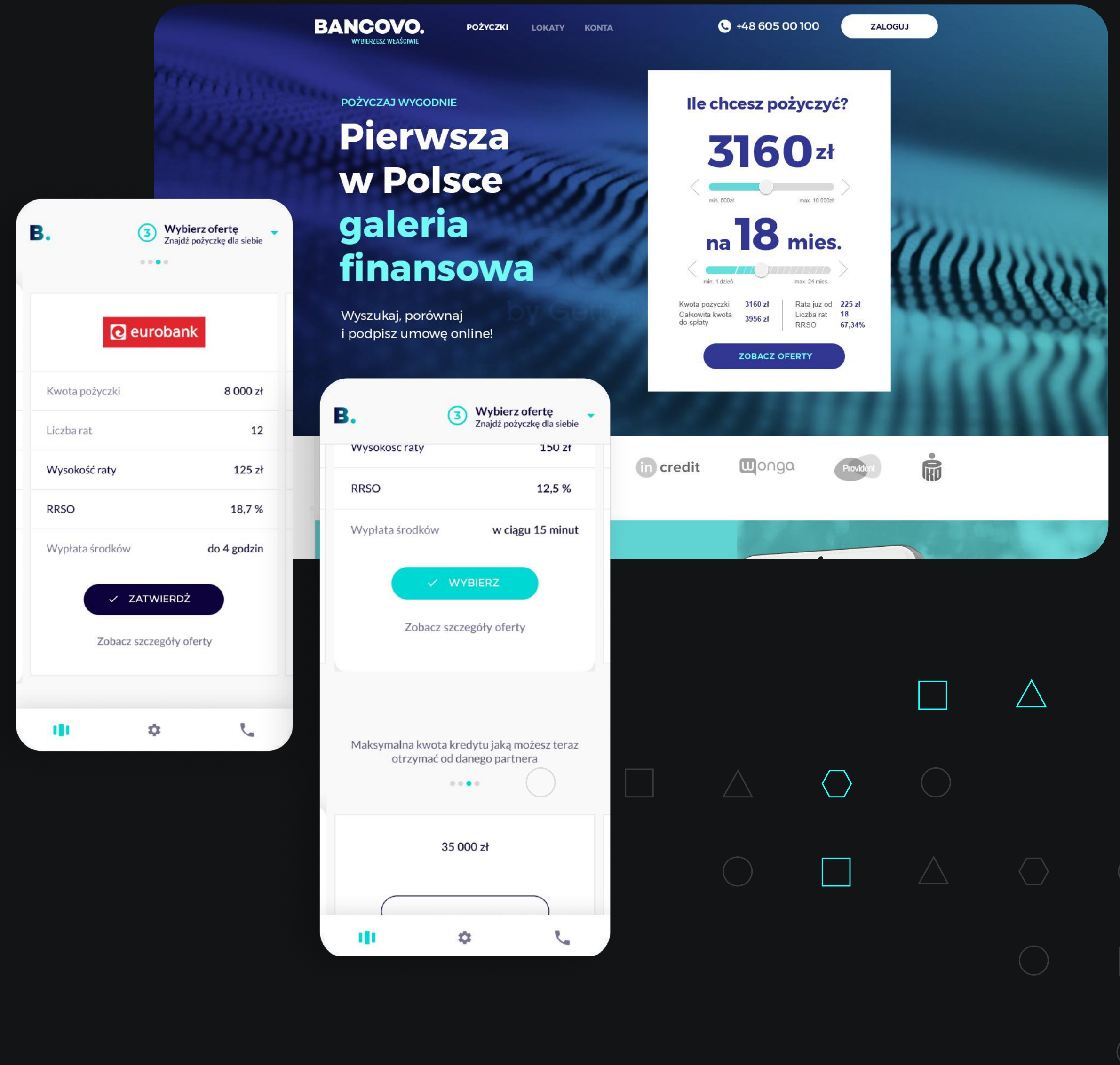
# Creating Leaders of Mobile Banking

A mobile banking application, one of the highest rated at Google Play and Appstore in Finland.

Created for a group of cooperative banks and insurers, the POP Pankki app identifies users using the TUPAS protocol (the Finnish Online Bank Identification Strong Customer Authentication platform). It has also passed the Finnish F-secure security audit. The app communicates with external APIs to complete banking operations (payments, accounts management, savings accounts, loans), servicing insurance (generating quotes, purchasing policies, paying premiums) and external services (e.g. selling investment funds).
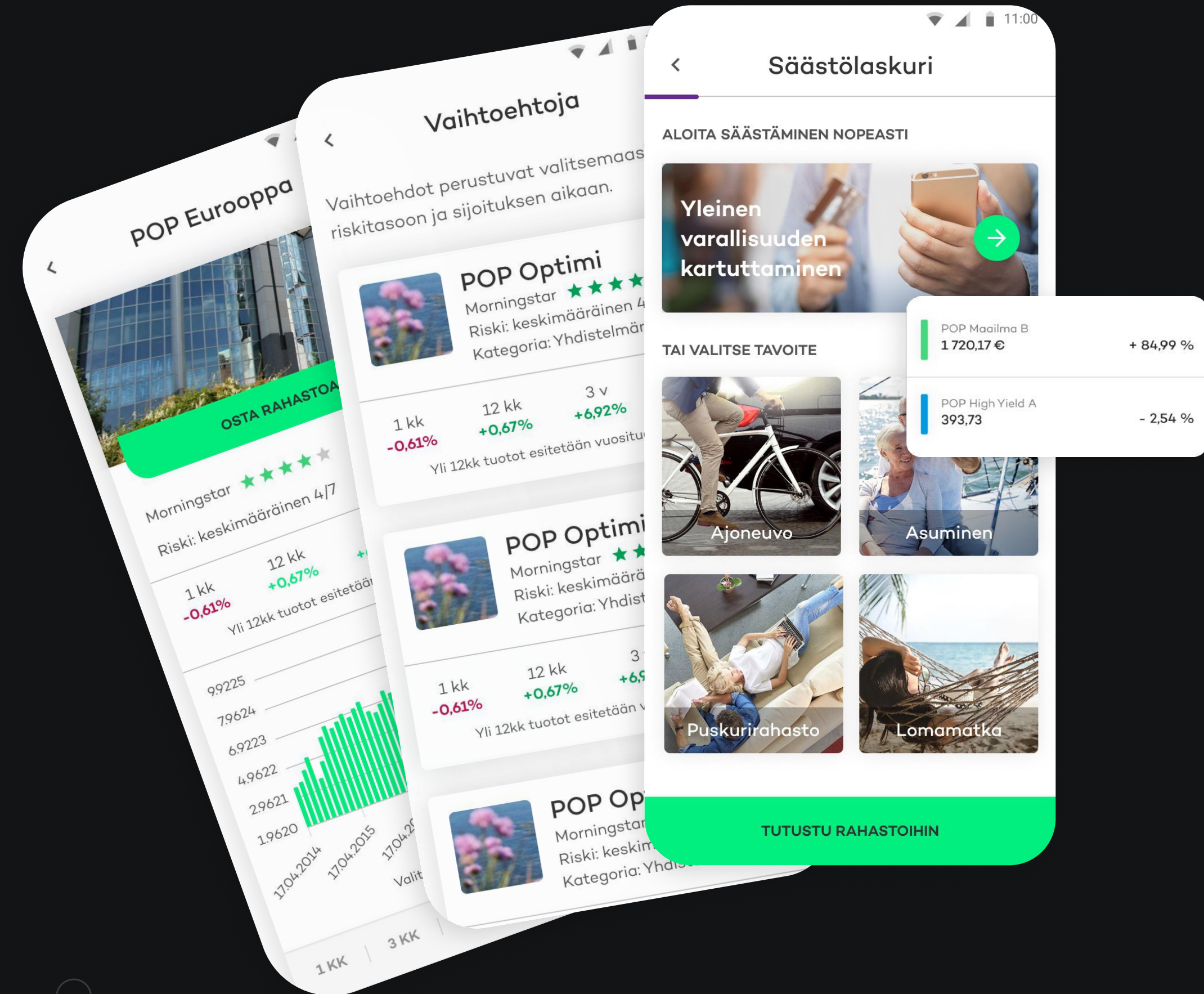
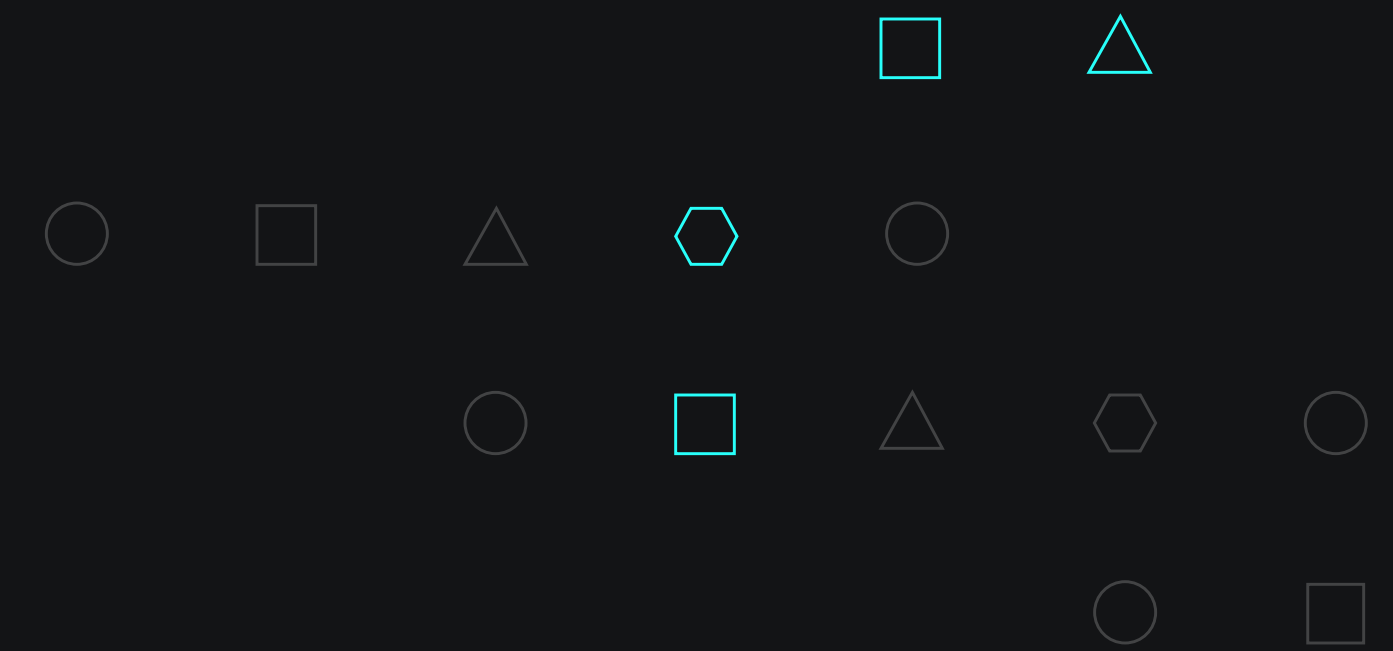# Digitalizing Loan Approval

Landesbank Saar provides loans between EUR 20 million and 50 million in Germany and France, processing large volumes of documentation.

The process of processing a loan application generates a huge amount of documentation. When it was traditionally paper-based, both the client-bank exchanges and the internal circulation of documents were very laborious and time consuming.

The situation fully revealed its disadvantages when COVID-19 hit, hence fast and efficient digital transformation of the key process became absolutely essential. We worked together to digitize their credit approval process to improve its efficiency and get rid of the paperwork.

**SPEEDNET**

# Contact us

We encourage you to ask
questions and get in touch ↓

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+48 794 783 335

Let's talk →

Our website