

Tuned IT Engine:
Dynamic. Digital. Scalable.

Engineers

Ensuring **technology** excellence
to accelerate the **growth** of your business.

FACTS AND FIGURES

200+
TECH EXPERTS

100+
SUCCESSFUL PROJECTS

2022

We expanded towards our customer locations and enhanced development capacity

Clients enjoy complete service offering from our high performing teams of tech experts

Technology startups and fast-growing businesses rely on our expertise

2007

Founded by senior managers from SaxoSoft, IT company of SaxoBank

Stockholm

Saint-Petersburg

Moscow

Minsk

Hague

E-ENGINEERS SERVICES

Launching new concepts & ideas.



- Get your concept prototyped and proved for digital launch

Software Engineering.



- Boost your business with tailor-made solutions designed and fitted by us

Team Extension.



- Boost your growth with expert sourcing



BENEFITS

FLEXIBLE SCALABILITY.



- Adjust your teams on demand
- More control over development costs
- Adjustable cooperation model

SPECIFIC EXPERTISE ON-DEMAND.



- Add rare tech expertise to your team
- Find confirmed knowledge of specific or legacy systems
- Close the gap when dealing with overwhelming workload



Optimize development costs



Avoid competence bottlenecks

COMPLETE SET OF SERVICES

Analysis & Prototyping



- Consulting
- MVP and Prototyping
- Technical analysis & architecture
- Prove of Concept

Product & Solution Implementation



- Design
- Software Engineering
- QA & Testing
- Deployment & integration

Maintenance & Sustainable Development



- Maintenance and support
- End-user documentation and training
- Code refactoring
- Product/Solution Reengineering

BROAD TECHNICAL COMPETENCE



WEB APPLICATION DEVELOPMENT

- ASP.NET (MVC, WCF), Net Core
- J2EE (Spring, AWS) / Kotlin
- JS & JS frameworks, TypeScript, HTML5



MOBILE

- iOS, Swift, Android (Java, Kotlin), cross platform development



SOFTWARE DEVELOPMENT

- Python, C/C++, Kotlin, Go, Java, R, C#, RPG



CORE BANKING

- Misys Equation, Finastra BankFusion, Temenos T24, Flexcube
- AS/400 – IBM i
- DB2, xSQL, Oracle
- HCL Domino, HCL Notes, Siebel CRM
- IBM WebSphere, Informatica PowerCenter



ARCHITECTURE DESIGN

- Message oriented architecture (e.g. MS MQ, ActiveMQ)
- DCOM, CORBA
- Enterprise service bus (e.g. Tibco)
- Microservice architecture



SOFTWARE DEVELOPMENT METHODOLOGIES

- Agile, Scrum, planning / iterating / monitoring: Jira, TFS, etc.
- Kanban, RUP, XP, Spiral
- Waterfall



DEVOPS

- Jenkins, Docker, Rancher, Ansible, Cruise Control, GitLab CI/CD, RIA, TeamCity, Hadson



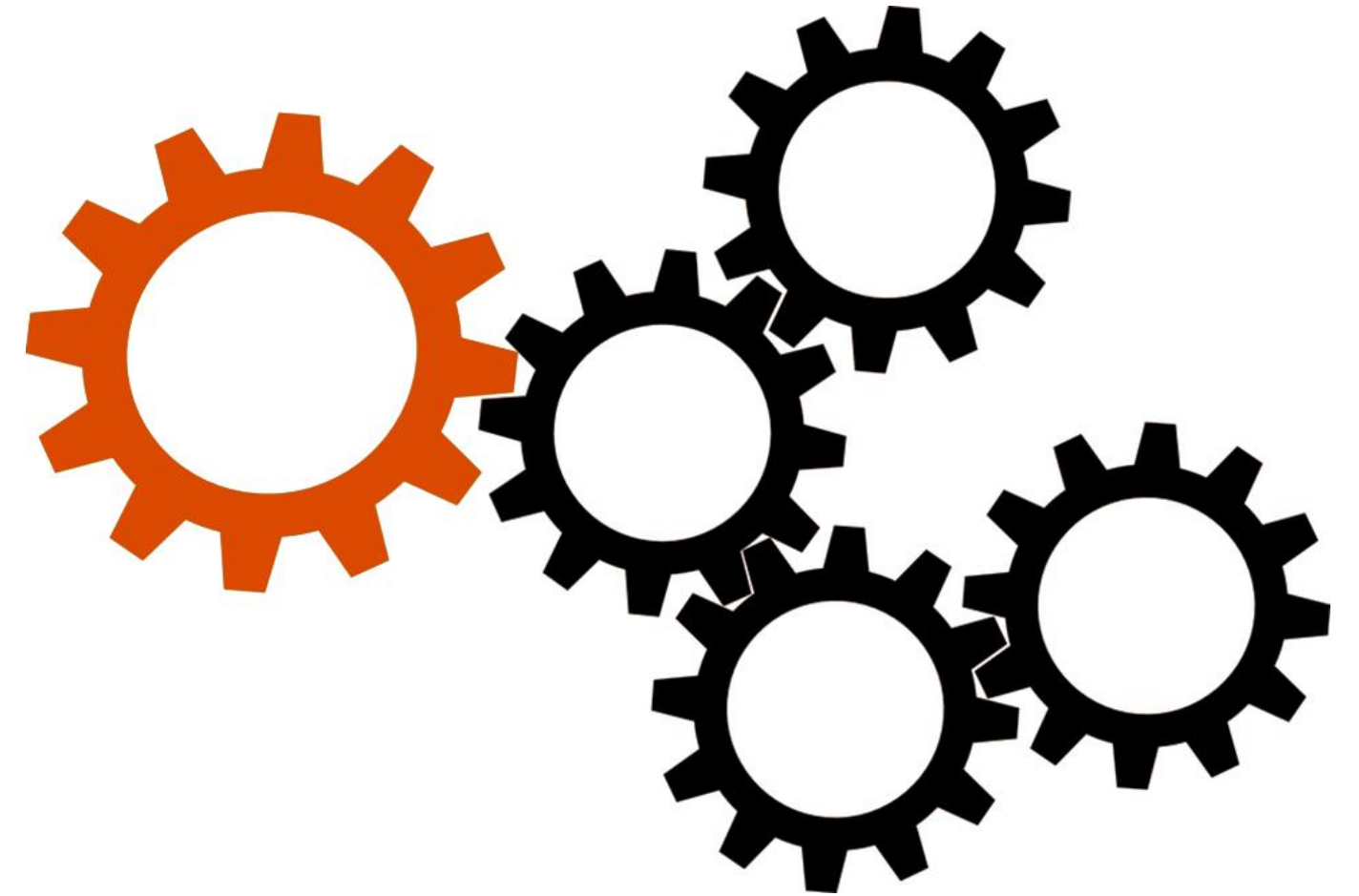
QUALITY ASSURANCE

- Test Driven Development
- QUnit, jUnit, Selenium, Mockito, Cucumber, Jmeter, Jmock

Engineers

CASE STUDIES

OVERVIEW



TRADE CHARTING TOOL

Client

On-line bank

Implemented for a European on-line bank. Communications with 3 people from IT. IT & RND department of 20+ people.

#J2EE #Apache Tomcat #jQuery #Web Sockets #Web SQL

- Allows to reflect graphically price indications of financial instruments.
- Easy to use trading analytical tool for comparative and technical analysis.
- Implemented for European on-line bank, financial instrument – equities. Can be implemented for major securities types.
- In trading analysis, many indicators have been developed to identify future price action & trading strategies. This Charting App includes all key financial indicators in the trading world. Specific indicators can be implemented additionally.
- Depending on the purpose can be implemented in analytical or real time version.

Cross platform user application for mobile & tablet devices iOS & Android based.



ON-LINE MATCHING SERVICE FOR BUSINESS LOANS OR BANK GUARANTEES

Client

Fintech start-up

The platform serves companies that want to apply for a guarantee from a bank and is a working place of a credit manager.

#Laravel5.Vue2 #Java8 #PostgreSQL9.6 #PHP7 #JQuery #GitLabCiRunners

Manager's tools:

- ✓ Customer database.
- ✓ Automated filling and submission of client's applications according to requirement of each bank.
- ✓ For clients required to run a tender for bank guarantees tender information can be automatically pulled from tendering systems and used to fill in an application.
- ✓ Integrated state registries. In case an applicant is missing some information needed for application process it can be obtained from state registries automatically.
- ✓ Integration with IP telecom company for calling and Call Center module.
- ✓ Easy to use mail client.

- Scoring system automatically analyzes uploaded financial documents and based on custom algorithms produces needed credit KPIs. The system matches these KPIs with KPI-ranges of partner-banks.
- Based on the result, the applicant is provided an advice on which bank or banks would be most likely to consider issuing needed guarantees.



BANKING SERVICES PACKAGES CUSTOMIZATION ENGINE

Client

Major bank in Belarus

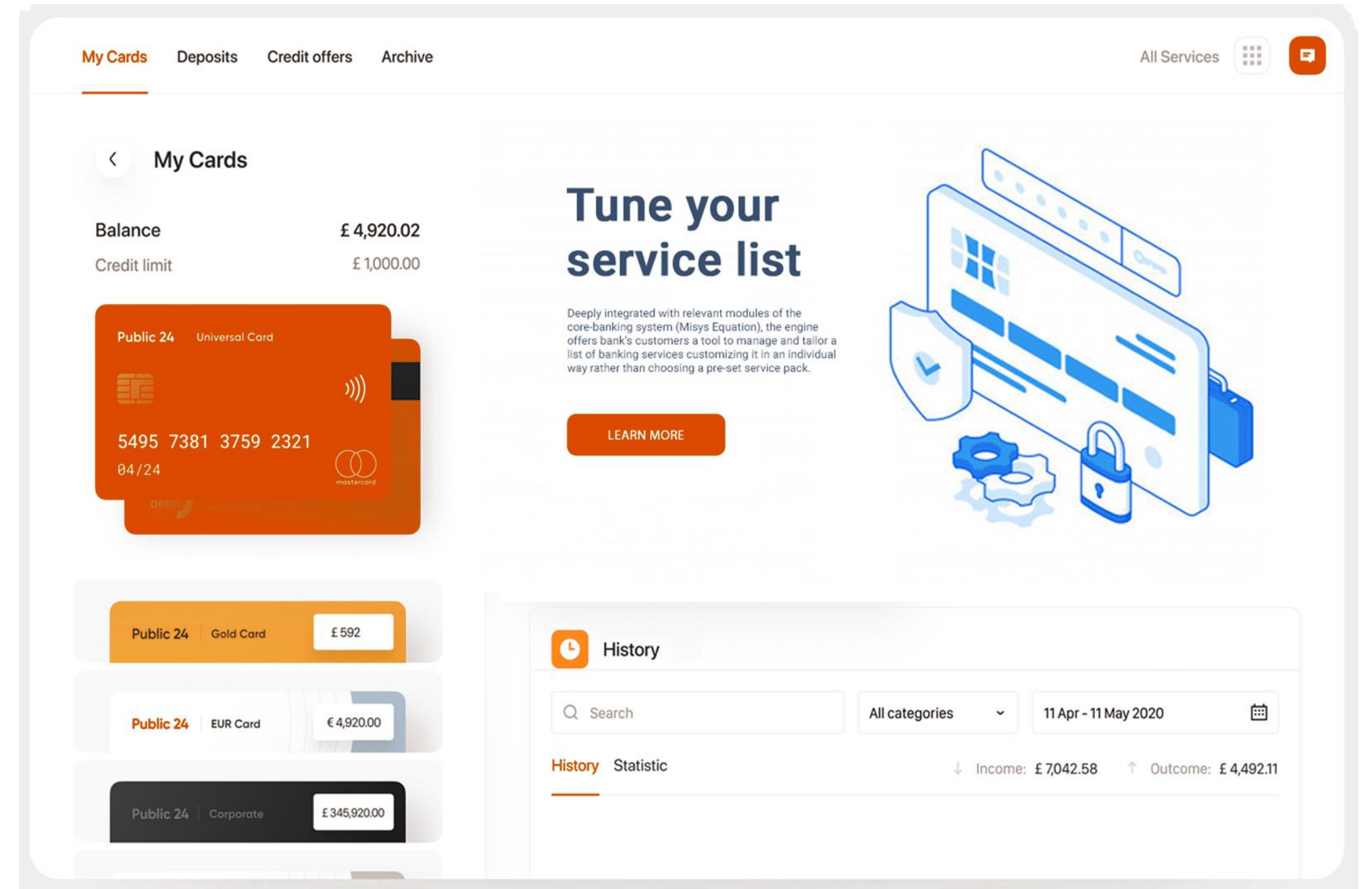
Part of an international financial consortium.

Deeply integrated with relevant modules of the core-banking system (Misys Equation), the engine offers bank's customers a tool to manage and tailor a list of banking services customizing it in an individual way rather than choosing a pre-set service package.

#IBM i #Misys Equation #RPG ILE #.Net #Java #JavaScript
#Rational Development Studio #DB2 #SQL

Advantages:

- Client-friendly and handy system that provides a high level of customer satisfaction.
- Implementation of the engine allowed to accelerate the service process and increase its effectiveness helping the bank to switch from off-line (when clients need to visit the bank) to almost entirely online management of banking services.



TRADING FRONT-END

Client

CFH systems, Denmark, brokerage

Tier 1 liquidity provider and prime broker with clients in over 80 countries.

Usability concept and design, architecture (facade access to trading system), implementation, integration with other trading platform modules, simple but containing all main trading functionality expected from a mature trading Front End.

#C #IIS #MS SQL #HTML5 #CSS3

- Implemented open API allows working with different trading platforms. Customizable Front End for White Label Partners.
- Ready for integration with any additional components like trade allocation tools, charting tools, etc.
- Touch & feel with customizable work spaces. Tool ribbon modules can be dragged and dropped anywhere to fit trader's individual setup.



ONLINE PORTAL FOR REMOTE TEAMS

Client

Collaboration start-up

Platform designed for hiring and tracking performances of remote specialists and whole remote teams.

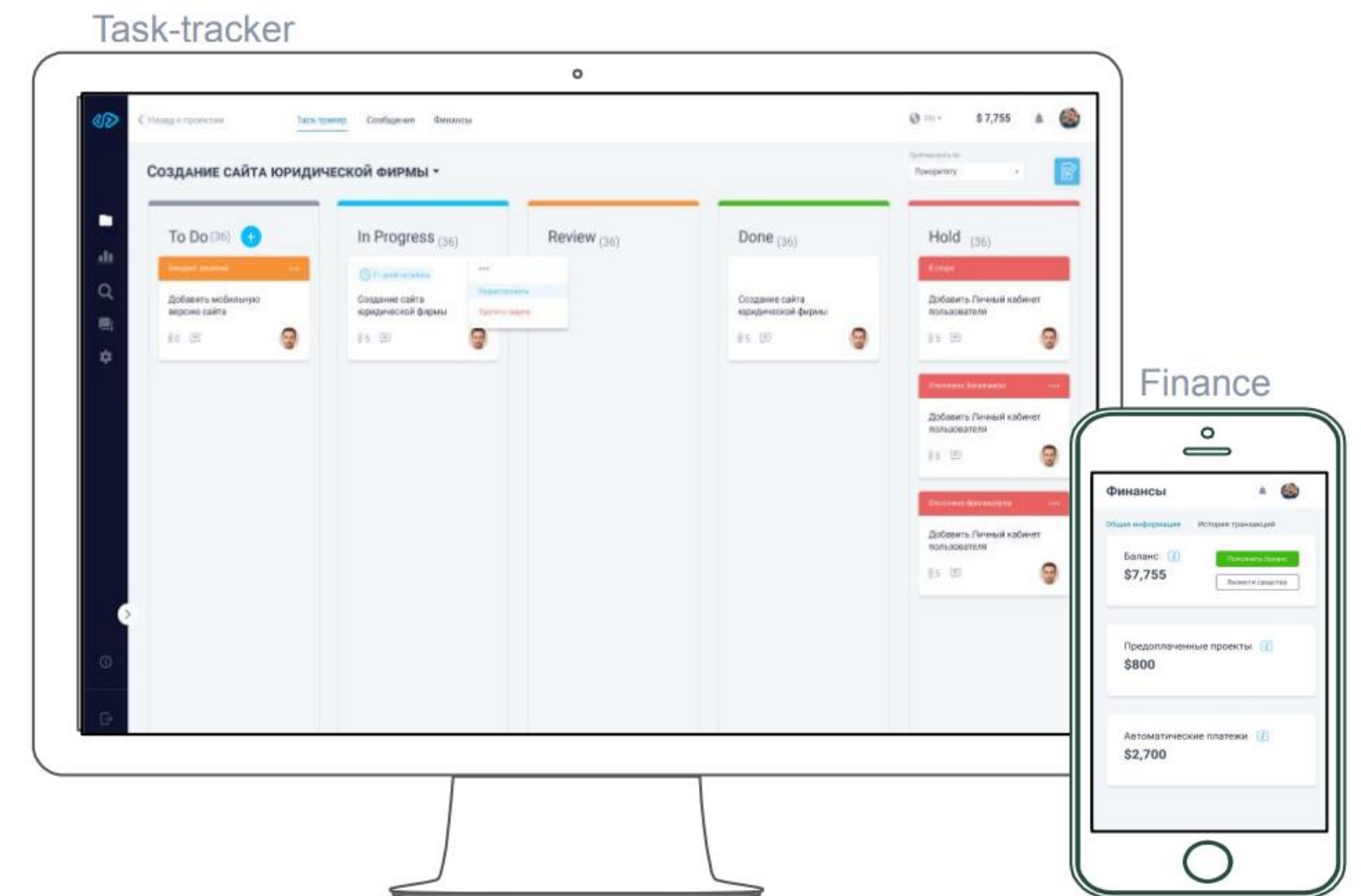
#Angular #Java 8.0 #Kotlin #Spring Framework #Ebean+Postgres #RabbitMQ
#Rancher

• The platform covers general functions of three types of services:

- 1 FREELANCING PLATFORMS - Search specialists & Pay**
 - Post job, find candidates
 - Billing & quotes
- 2 MESSENGERS - Communicate & Track**
 - Video and voice calls
 - Text messagers
- 3 PROJECT MANAGEMENT TOOLS - Track. Check & Analyze**
 - Project planning and tracking
 - Team collaboration

- The end-to-end solution for both employers & freelancers
- Commission model monetization

A digital workspace for searching and managing remote teams and freelancers without using any external services



CONTINUOUS DELIVERY PORTAL

Client

Moscow Branch of a European bank

IT department of the Moscow branch is 300+ people.

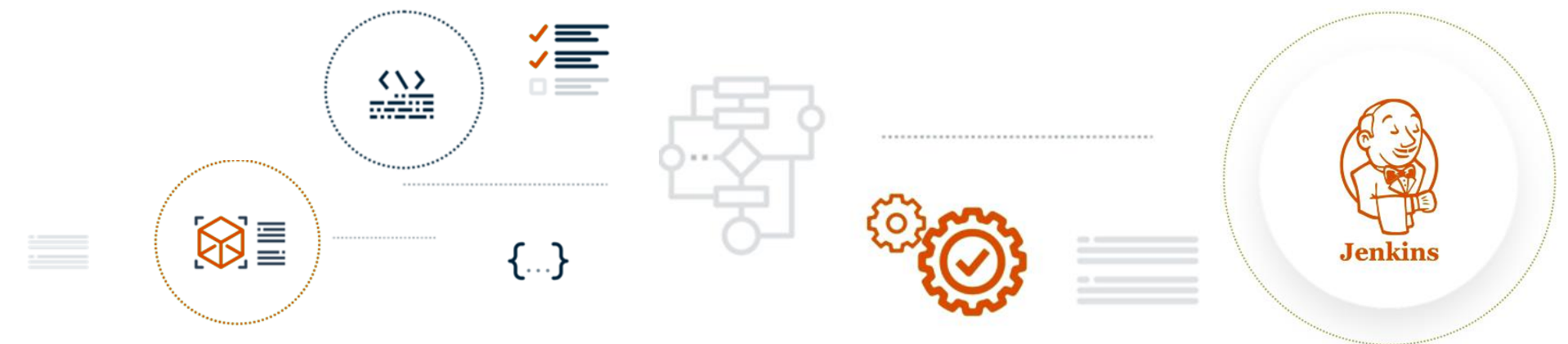
- Divided into several phases according to IT units inside development department: web application development, core banking; ESB; CRM.
- Integration process and version control are very different in each phase due to the specifics of the development in each IT unit.

PHASE 01

Web application development unit the following functionality was implemented

- Role-based access policies and access restrictions
- Monitoring of non-production environments
- Monitoring configuration
- Creation and configuration of software deliveries to non-production environment pipeline

Jenkins based portal allows to build complex fully automated process for software set up, run utilities compilation, integration with third-party project management systems, customer service management, functional testing, etc.



PHASE 02

Core banking unit the following specifics of development are researched, analyzed and elaborated for implementation

- Version compilation
- Solution for reversing faulty state of DB during an error-prone deployment process
- SCM in-house and cloud versions
- Deploy on command and on request
- Comparative analysis of inspection and testing tools, tool selection, preparation for integration with Jenkins

RISK MANAGEMENT BRIDGE

Client

Banking groups

Own solution adjusted and implemented for one of the big Russian banking groups. The group comprised over 20 credit institutions and financial companies.

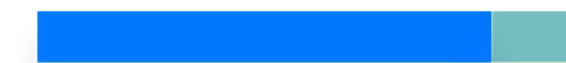
Dynamic visual solution for operational analysis and risk assessment of Credit Institutions.

#Jbos #PostgreSq #EJB3.0 #Java 1.7 #Jquery #D3 #Hibernate

- Overview dashboard aggregated across all risk types and built on a traffic light principle allows to monitor & evaluate risks status on a daily basis.
- Option to Drill Dow all criteria by risks types, time, product, industry & region.
- Plotting of charts & diagrams that illustrate risks statuses.
- Ability to react interactively on risk indicators increase.



CREDIT RISKS



MARKET RISKS



LIQUIDITY RISKS



OPERATIONAL RISKS



MYSIS INTERNET BANKING CORE UPGRADE

Client

Major bank in Belarus

Part of an international financial consortium.

#IBM i #Misys Equation #RPG ILE #DB2 # SQL

- Complete remodeling of an international private bank's Internet services architecture supporting more than 200,000 users.
- Rebuilding the entire layer of related core-banking modules to support all-new features as well as improving and expanding default Internet services.
- Seamless integration with the heavily customized major core-banking system and many 3rd party products.



DSA MANAGEMENT

Client

Major bank in Russia

Part of an international financial consortium.



Direct Sales Agent Management Application

- Handy tool for a Sales Agent to input and process information about clients & their application
- Effective management app to control and coordinate Sales Agents Network & client applications flow, as well as to build a process of interaction between the agent and the client
- Role-based access (agent, supervisor, manager, administrator)
- **Perfect for:**
 - Credit institutions
 - Insurance companies
 - Pension Funds
 - Telecom companies
 - Recruitment agencies that offer out staffing services
 - Others businesses what use sales agents model

Agent interface

- **Meeting with a client and filling in the request form**
 - Meeting calendar
 - Creation of requests
 - Option to attach a meeting to a request
 - Fast duplication of the same client's requests for different products
 - Automatic change of request status
- **According to the data in the request form loan programs are automatically offered**
 - Client's compliance check up to the minimal requirements: Minimal Acceptance Criteria, Payment-to-income, Debt-to-Income
 - Defining of the products available for this client & selection of the product parameters (calculator)
- **Client chooses a loan program and an extended request form is filled**
 - Upload of client's documents
 - Sending a link to download client docs via e-mail
 - Sending a filled in application via e-mail
- **Information is send to the bank for analysis**
 - Client's check up by the bank: Credit bureau, Scoring
 - Reporting on the approved applications and agency fees

Administrator / Manager interface

- **Agent's administration**
 - Organization of agent's calendar – list of meetings, reminders, etc.
 - Agents list administration: hiring, dismiss, temporary blocking
 - Editing access rights according to the business roles
 - Control of the agents working capacity
 - Distributing of the sales leads among agents
 - Getting reports on the agent's work
 - Estimation of agent's KPIs directly in the working process
 - Automatic calculation of agency fee based on the application/clients assigned
- **Geographical administration**
 - Division of the territory into zones and fixing agents to zones
 - Automatic binding of an agent to a zone according to the address
 - Appointment of the Head of the territory
 - Appointment of a responsible person in a zone - Supervisor
- **Product catalogue management**
 - Work with a list of client's requests (with option to import/export according to a preset format)
 - Minimal requirements to products and customers setting.

CUBES

Client

For Top-Managers of an Investment and Consulting Company (Russia)

#jQuery #JAVA Script #HTML #CSS #J2EE
#EJH 3 #Oracle

Visual analytical management tool

- Handy analytical app for management of business units with distributed structure of financial indicators
- Can be customized for many company key performance indicators:
 - Key Balance sheet & P&L indicators: revenues, profits, costs, interest income & expenses, etc.
 - Invested & attracted assets
 - Cash Flow indicators
 - Commission Products
 - Structure of sales of sales managers
 - Number of customers
 - Status of customer's activity
 - Structure & quality of client's portfolio
 - Personal data



- Reporting data can be itemized by different indicators:
 - Products & Industries
 - Regions & Branches
 - Time periods
 - Others
- And visualized:
 - In graphs, diagrams, charts – to present structures & ratios of performance indicators (sales, costs, portfolios, etc.), dynamic & comparative analysis to other time periods, budget indicators, etc.
 - In structured spreadsheets
- User-friendly interface to get feedback from employees responsible for a particular indicator
- Allows to make comments and request information immediately
- Option to arrange corporate browsing sessions on multiple devices with centralized administration
- Multilingual, with option to change playback styles & brows data collectively from different tablets

VIRTUAL PBX MANAGEMENT PORTAL

Client

Advoco - IP Telecom company

Swedish provider of IP telephony solutions.

Application for editing and managing virtual PBX systems on a tenant level via web portal (Standard PC & iPad).

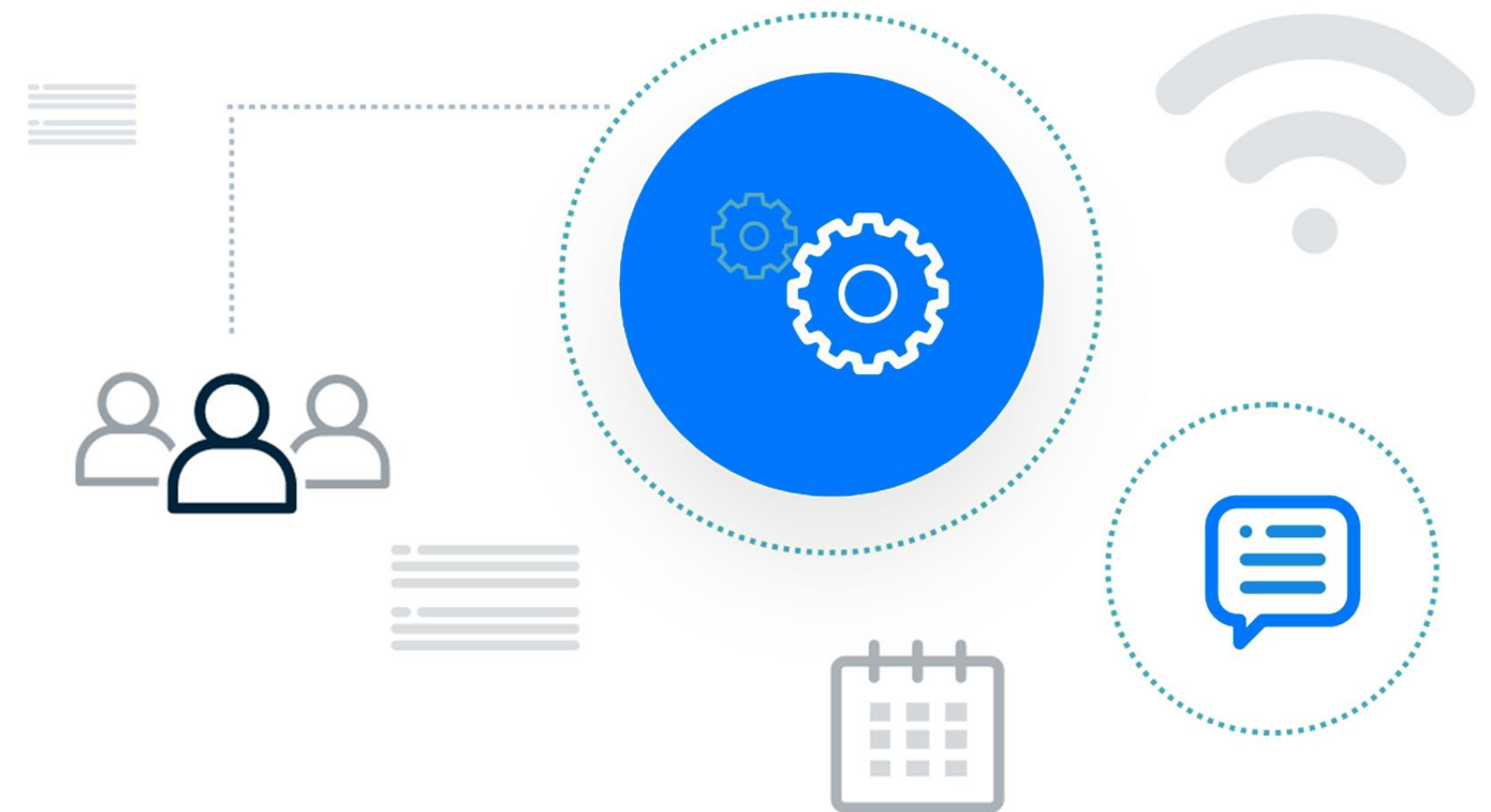
#WCF #jQuery #HTML5 #.net Framework 4

Allows tenant administrators to manage enterprise-wide configurations personal user and user group configurations such as:





- Personal and group profiles
- Presence & absence scheduling
- IVR and welcome messaging

Provides functionality like:

- System visualization
- Distribute user manuals and similar materials
- Supports service provider branding and content management



OTHER PROJECTS OUR DEDICATED AND DISTRIBUTED TEAMS WORK ON

 <p>Sport portals and mobile apps for clubs, events and associations, entertainment systems</p>	<p>IT Consulting</p>	<p>Enterprise level systems</p> <p>Document Management Systems, Content Management systems, Custom industry-oriented systems</p>	<p>Mobile development</p> <p>Front and Back end development</p>
 <p>Video components and related features:</p> <p>advertising, analytics, live, on-demand content and back-end services like user authentication, internal consoles, APIs</p>	 <p>Financial systems</p> <p>Smart data systems for banking, investment banking and trading applications, digital and omnichannel applications for individuals and legal entities.</p>	 <p>E-commerce</p> <p>Custom web-shops, CMS based web-shops</p>	<p>Advising in new technology and architectural approaches inclusive microservice and serverless architectures</p>
			<p>Automation testing and QA strategies development</p>

WHY E-ENGINEERS



Proactive approach and cooperation with business



Quick access to additional knowledge and resources when required



Fast **setup and organization** of remote and distributed teams



Ability to cover **complete application/product life-cycle**



Experience in **working with startups and fast growing** companies



Engage **proven tech experts** in your field of operation.



WHEN MAY WE HELP YOU?

LET'S TALK!

E-NGINEERS EUROPE AB

Torshamnsgatan 27,
164 40, Kista, Sweden
+46 735 24 24 90
info@e-engineers.com

DEVELOPMENT CENTERS

DATASCALE MCHJ

5 Sagbon str., Kushtut MFY
Tashkent, Uzbekistan

E-engineers GENERAL DC RO TECHNOLOGY S.R.L.

Strada Episcopul Chesarie 15, Section C,
Ground Floor, Office 1, Camera 7
Bucharest, Romania