ALGABAS

Your integrator
of complex IT solutions

Дія Engine

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About the company. Our benefits	3
The platform "Diia. Engine"	4
The right tool for every task	5
What is the Platform and For whom?	7
General Scheme. DIIA and Platform. Platform benefits	8
Traditional approach vs Platform	13
Registers Development	14
All the necessary components out of the "Box"	16
Security. Low-Code approach	20
Technologies. Integration and implementation support	23
Business Process Management System. Data access and changes control	25
Cost planning for service and support	27
Standardized user interfaces	28
Information about our solutions	29
Contact us	32

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About the company. Our benefits

2008

ALGABAS was founded **in 2008**. Initially, the company was engaged in technical security systems and programming services

2009

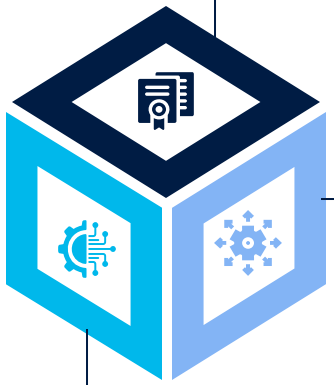
In 2009, **ALGABAS** was the first company in Ukraine to launch **Adobe Connect** for webinar.ua successfully. Later, following the market needs, the company's focus switched to the development and sale of software

2017

In 2017, based on BAS (1C), **ALGABAS** started developing **MES systems** and developed solutions for product traceability at all production stages

2022-23

ALGABAS has been trained to develop on the **Diia.Engine** platform. **Two state projects** of high complexity have been successfully implemented



Qualification

Our team consists of project managers, consultants, and programmers with **experience in implementing large projects**

Integrated approach

A single integrator for all system blocks **makes it possible to reduce the cost and shorten the time of system implementation**

Technologies

Project technologies based on the best international standards. High-quality documentation allows us to **consider all business tasks** and develop a fully functional system

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The platform "Diia. Engine"

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The right tool for every task

Presentation	Power Point	Google Presentation	Keynotes
CMS	Wordpress	Wix	Joomla
ERP	SAP	Oracle	MS Dynamics
CRM	Sales Force	Wrike	Zoho
State Registries and Online Services	?		

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What are the solutions?

Setup new product development

- Expensive
- Long term

Not a specialized solution

- Not effective
- Inconveniently

A specialized solution

- Does such a solution exist?

Ukraine has developed a solution!

Low-code platform
for developing and hosting
government registries
and digital public services

What is the Platform and For whom?

People-less processes
business process automation

Digital public services
development, and integration to citizen's interfaces

Interfaces
standardization for citizens interfaces and public officers

Builders
low code approach, BPMS, building blocks

We provide a scope of functionality to empower quick and easy digital public service development

Ministries

Government digital agencies

State authorities
(tax, custom, police, etc.)

Regions, provinces or other municipal authorities

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General Scheme

Citizens
web-interface

Administration
panel/tools

Administrators

Public
services
portal/app

Unified
exchange
platforms (UXP)

Various API
for integration
with other systems

Officials
web-interface

Public officers,
officials, registrant

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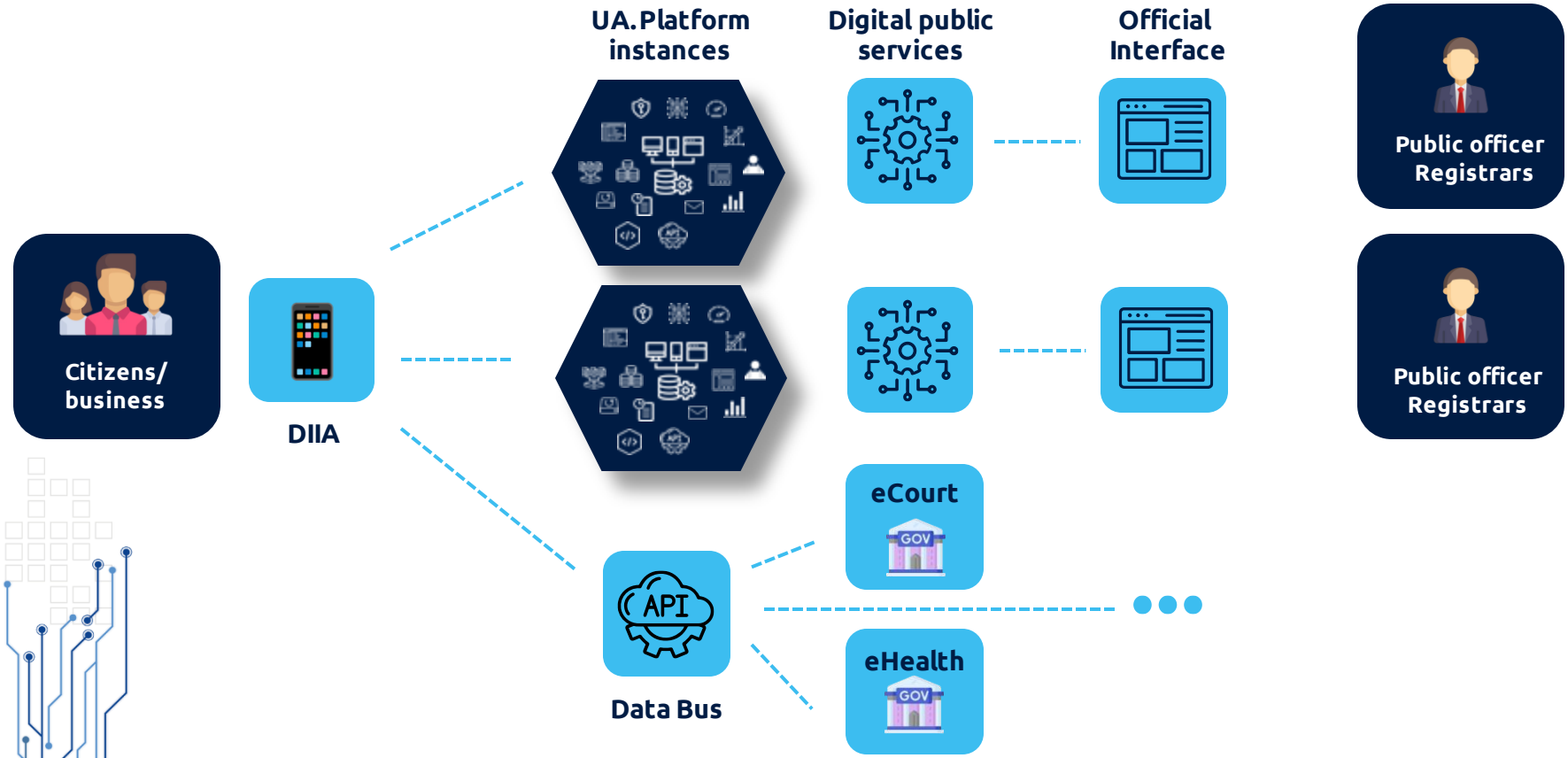
DIIA and Platform



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Platform benefits

1. Provide remote automatic digital services (in complex with citizen interface)
2. To be a part of digital and online governmental Services ecosystem
3. Easy to connect and integrate existing IT systems to provide new services
4. No need to rewrite current state services
5. No human factors
6. Automatic processing of requests from citizens and issuance of results 24/7
7. Easy scaling for processes and resources
8. Guaranteed protection for all services based on security by design principles

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Why the UA.Platform?

Changes and digitizes public services

Fast

Register development ~1-2 months

Simple

Low-Code approach (Designers of data models/APIs/forms/ business processes)

Cheap

Low-Code approach and business processes, the cost of development and support is reduced

Secure

Data is encrypted,
Data is digitally signed,
Scalability,
Load resistance

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Stakeholders

Clients

- State structures

Users

- Public officers and state employees
- Citizens
- Business

Technical teams

- Development team
- Registries administration team
- Platform administration team

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Traditional approach vs Platform

DEVELOPMENT TO ORDER		Diia. Engine
6+ months	Time for development	**from 2 months**
Need to gather a team with team lead, developers with different seniority depending on scope of technologies	Developers level	**Simplified requirements for the development team. The platform is accessible to a wide range of technical experts and simplifies the process of training and developing on it**
Need to write additional code and systems	Functionality upgrade (changes due to legislation)	**Easy to update previous services due to the low-code approach**
May include vendor lock-in and license fee	Operational costs	**Platform is based on Open Source component (No need license fee. No vendor lock-in)**
Build from scratch the entire cybersecurity environment and settings	Security and resilience	**Cybersecurity and IT infrastructure scaling from «Box»**

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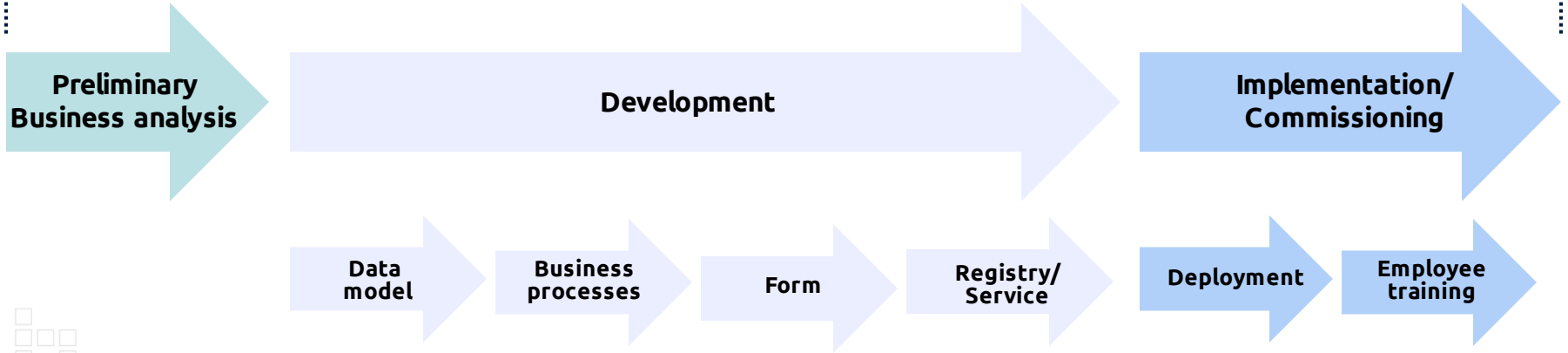
Registers Development

It takes 1-2 months to develop the registry or services on platform



Creating a system on the Platform is FAST | SIMPLE | CHEAP

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Summary

It's easy to get started
Low entry threshold for new teams

Low requirements for developers
Expensive developers and architects are not needed

Rapid Low-Code development
Builders of business processes, forms, API allow to reduce the development process in fraction of the time

No additional license payments
The UA.Platform is based on Open Source components, so there are no additional license payments

Complex cost reducing
It is possible to put many registries on one instance of the Platform

Easy to make changes
Changes in regulatory documents can be transferred to the work register swiftly

Easy to administer and support
All the technologies used are standard and common, there are plenty of such experts

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All the necessary components out of the "Box"

Business process management

Factory data

API Trembita, REST

Reporting

Applicant interface

Official's interface

GIS module

id.gov.ua

CAP

Logging

Backup

Role model

Secrets management

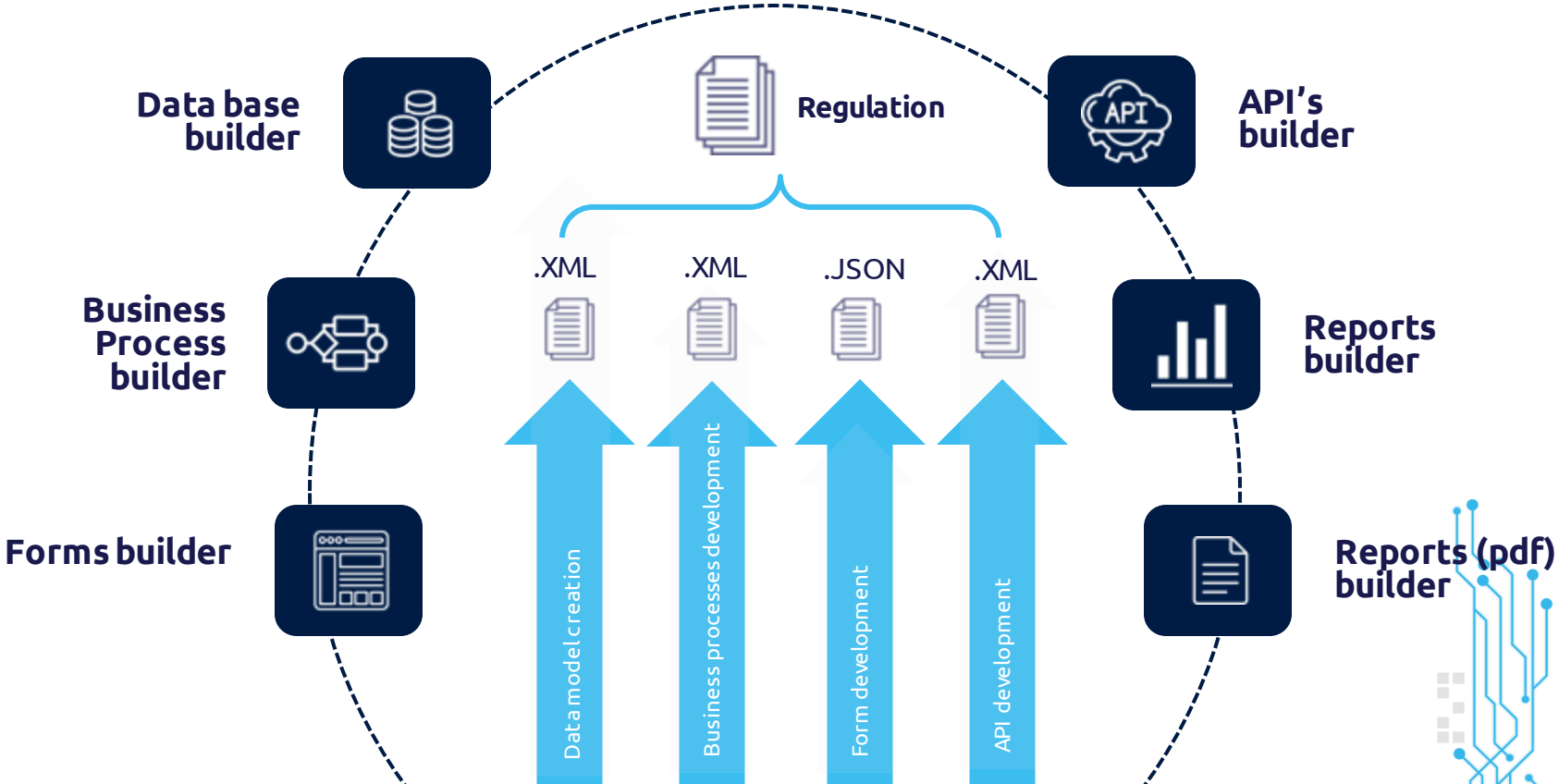
Scaling

Monitoring

Encryption

Message queues

Registry settings structure



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Platform features

Engine for deploying registries, systems and services

Standardized government SaaS

Tools and development environment

Cloud hosting

Hosting different registries on one Platform

Hosting on your own hardware

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All components required by the customer out of the "Box"

Modern technology stack

Low-Code approach

Builders

User accounts

Data encryption

Data isolation from the administrator

Open Source components

Cloud or hardware

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Security

PLATFORM SECURITY PRINCIPLES

Officials do not have direct access to citizens' information

Officials do not have direct access to the data tables. They can operate data only using permitted business processes

Easy scalability and resistance to loads

Horizontal scaling allows response to changes in load

Digital signature and Changes logs

All entered or modified in the system data is signed with a digital signature, and such changes are registered

SECURITY METHODS AND COMPONENTS

01 DATA ENCRYPTION
Encryption during data transfer. The storage is encrypted. A secure data exchange bus

02 CNCF COMPONENTS
The platform components meet all the requirements set for modern cloud services

03 EXTERNAL STORAGE OF LOGS AND BACKUPS
Logs and backups can be stored in a separate secure storage

04 SYSTEM DEVELOPMENT MEET SECURITY REQUIREMENTS
A secured SDLC is used at the architecture level, in the development process, and at the testing stages

05 TESTED FOR THREATS
The platform has been tested by several independent teams

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Low-Code approach

Data Bases builder

- Fast creation of data structures
- Ease and flexibility of changes making

Business Processes builder

- Standard BPMN form
- Easy to make changes

Forms Constructor

- Swift and intuitive forms creation
- No programming required

API's builder

- Automatic API development
- Register - Register, Platform - Platform, The registry to another system

Reports builder

- Fast creation and report adaptation
- No programming required

Extracts (pdf) Constructor

- Swift and intuitive forms creation
- Easy to make changes

Constructors' use makes the development process

FAST | SIMPLE | CHEAP

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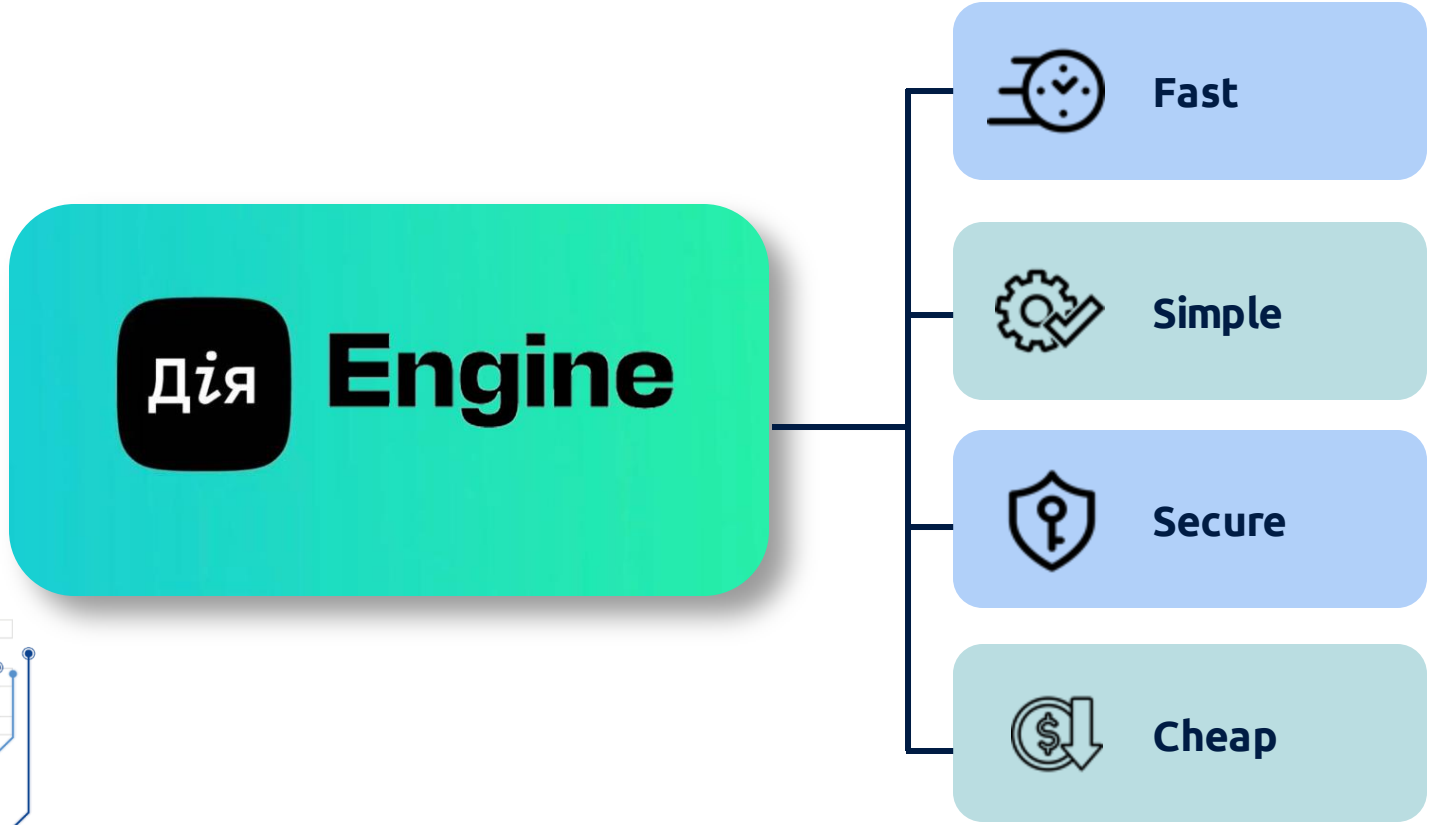

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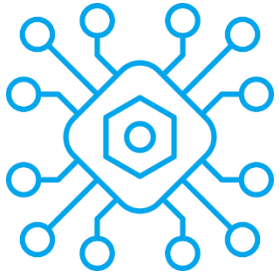
Technologies

The best and most popular technologies are used



Containerization
docker, okd, kubernetes

Backup & Restore
MINIO, VELERO

Event streaming
Apache Kafka

Database evolution
Liquibase

Metrics
Grafana, Prometheus, Thanos

Logging
elasticsearch, kibana, fluentd

Documentation
Antora

Reports
re'dash

Business processes
camunda

Storages
redis, ceph, PostgreSQL

User management
KEYCLOAK

GIS
GeoServer

Forms UI
<form.io>

Frameworks UI
Vue.js, React, Material-UI

CI\CD
Jenkins, Gerrit, nexus by sonatype

Scripts
Groovy, JavaScript

Secrets management
HashiCorp Vault

API
Kong

Gateway
Istio

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Integration and implementation support

10
IT-companies

International organizations

giz

GovStack

USAID
FROM THE AMERICAN PEOPLE

Local state digital service provider

Business analysis

Business processes modernization

Platform deployment

Adaptation and scaling

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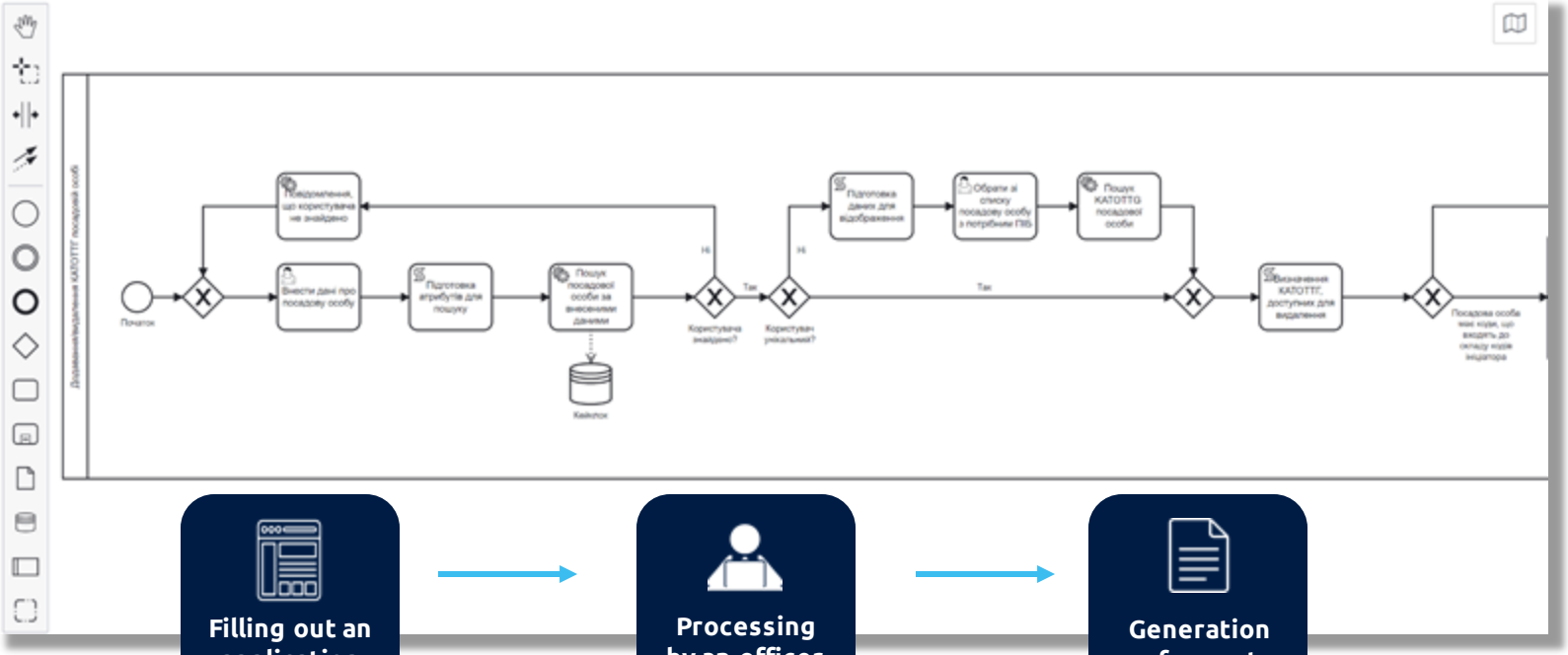
Business Process Management System



Filling out an application → **Processing by an officer** → **Generation of report**

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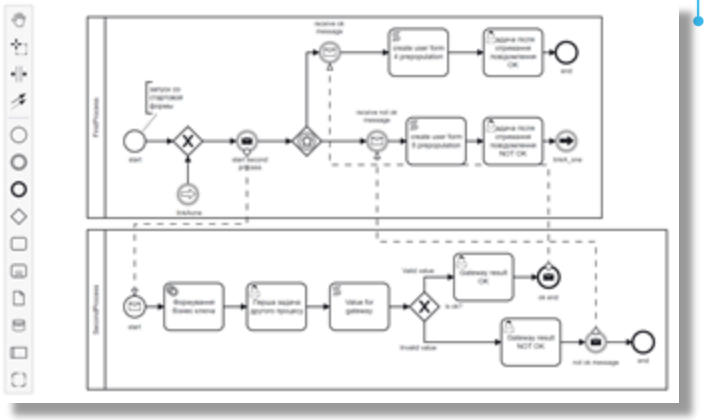
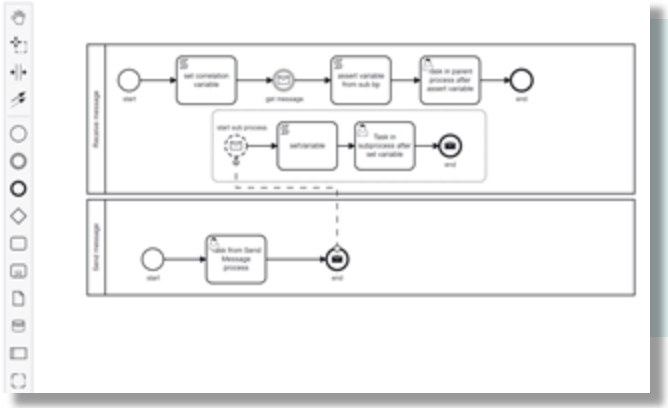
Data access and changes control

All changes are signed





All data is isolated from administrator

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Cost planning for service and support

M I N I M U M

Useful for services
from state structures to business

2 entities,
3+3 business processes,
20 custom forms,
4 roles,
2 API integrations

≃ $ 20 000
costs for development

LOW LOAD
service / register

Up to 100 users,
up to 10 services,
up to 10 reports,
only during working hours

≃ $ 1 000 to support

S T A N D A R T

Useful for services
for public services to business/citizens

4 entities,
3+6 business processes,
20+10 custom forms,
4 roles,
2+2 API integrations

≃ $ 54 000
costs for development

MIDDLE LOAD
service / register

Over 100 users,
over 10 services,
over 10 reports,
24/7

≃ $ 2 280 to support

B I G

Useful for services
for public services from state to citizens

10 entities,
> 20 business processes,
> 50 user forms,
> 10 roles,
> 10 API integrations

INDIVIDUAL
costs for development

HIGH LOAD
service / register

Over 1000 users,
over 100 services,
over 100 reports,
24/7

INDIVIDUAL

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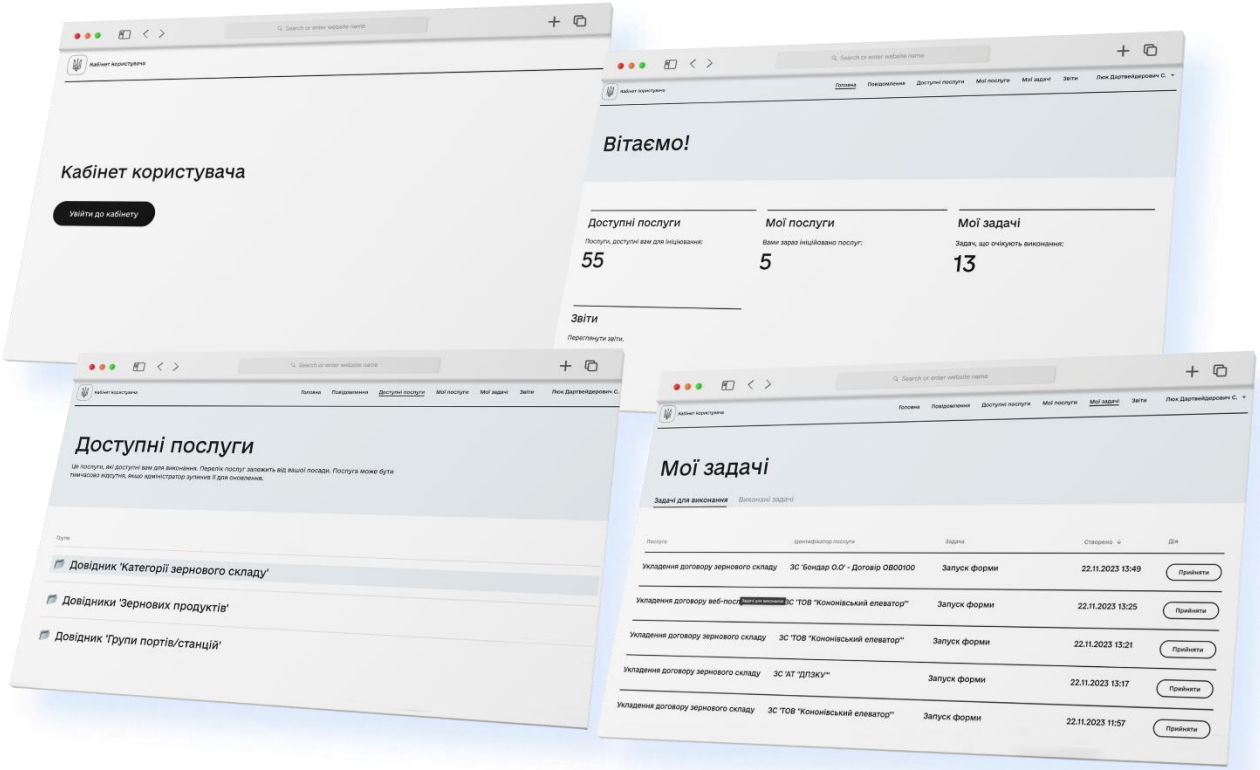
Standardized user interfaces



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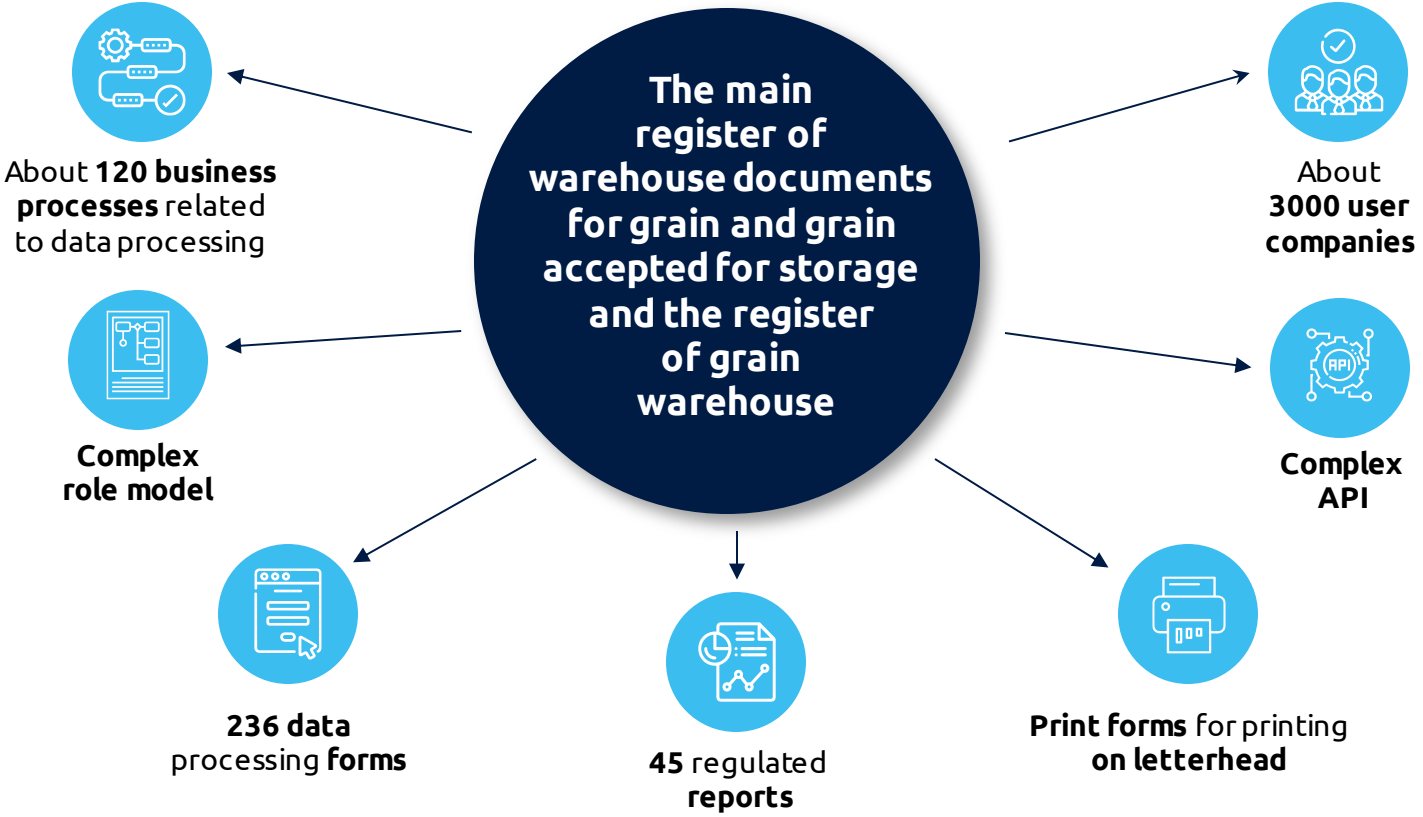
Information about our solutions



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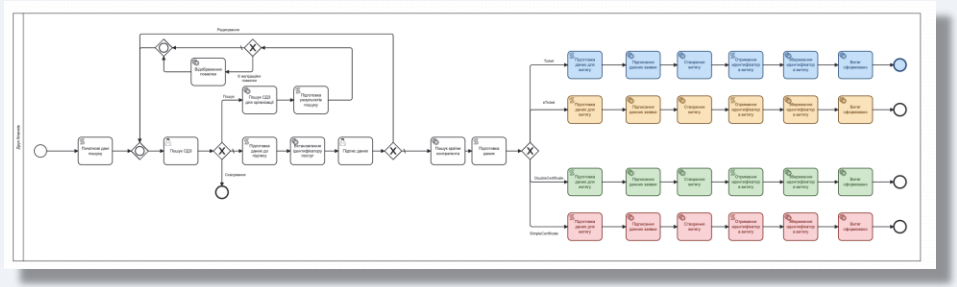

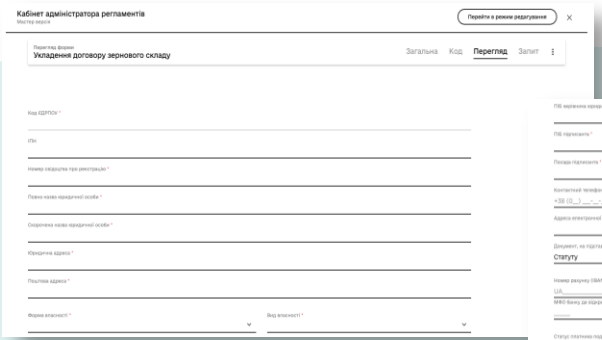

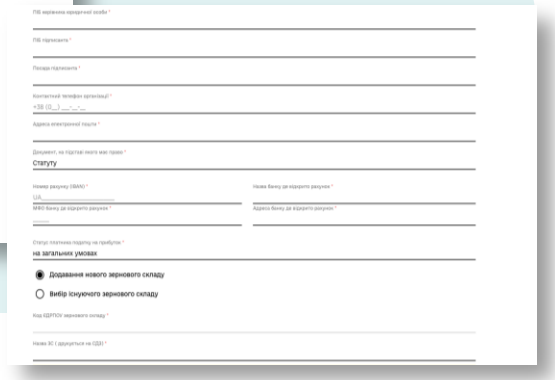

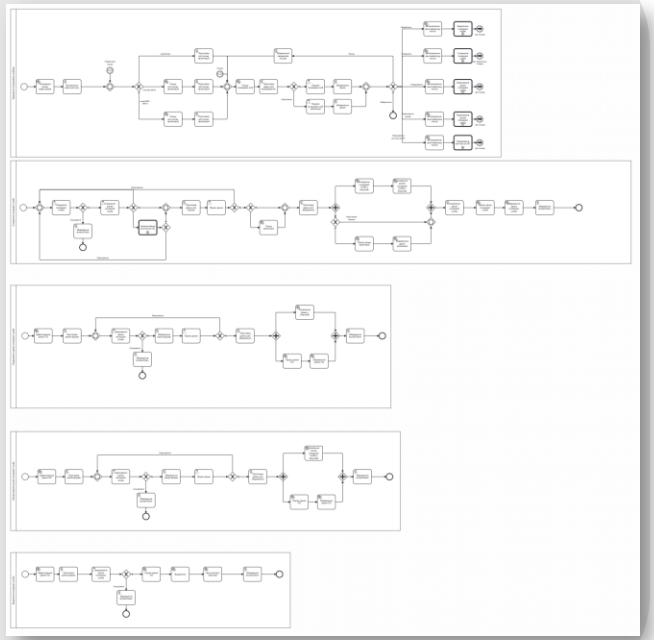

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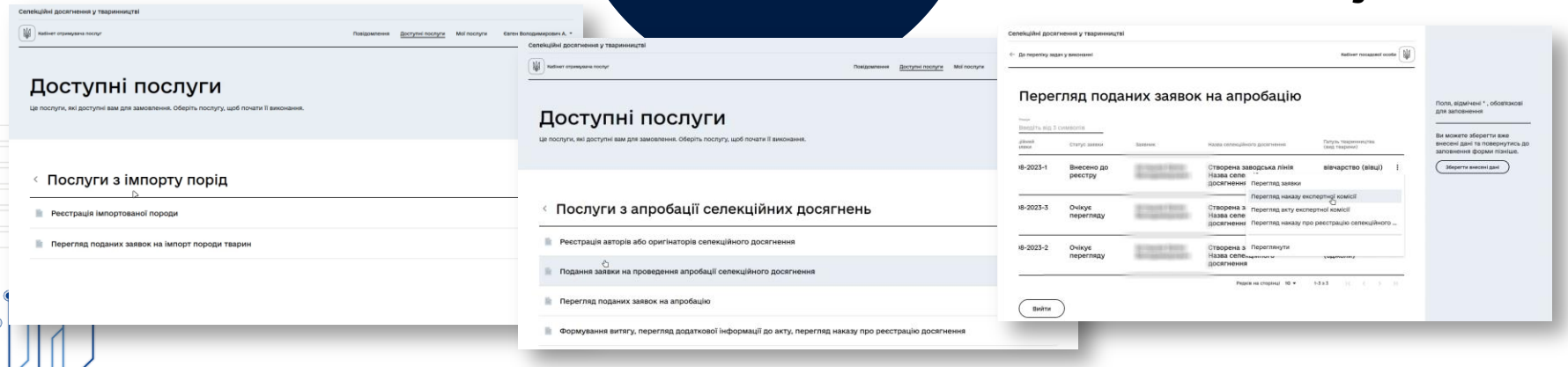
Information about our solutions

Register of breeding achievements and list of animal breeds

Complete paper-less

Providing a single list of breeds for other systems using the API



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