



# Espeo's Healthcare Focus

We help healthcare companies **gain market share** by transforming them into **market leaders** through **innovation**





Espeo  
Software



# Daybreak Chita

CHITA is a unified content integrity and collaboration platform for the modern digital life sciences workplace.

Healthcare

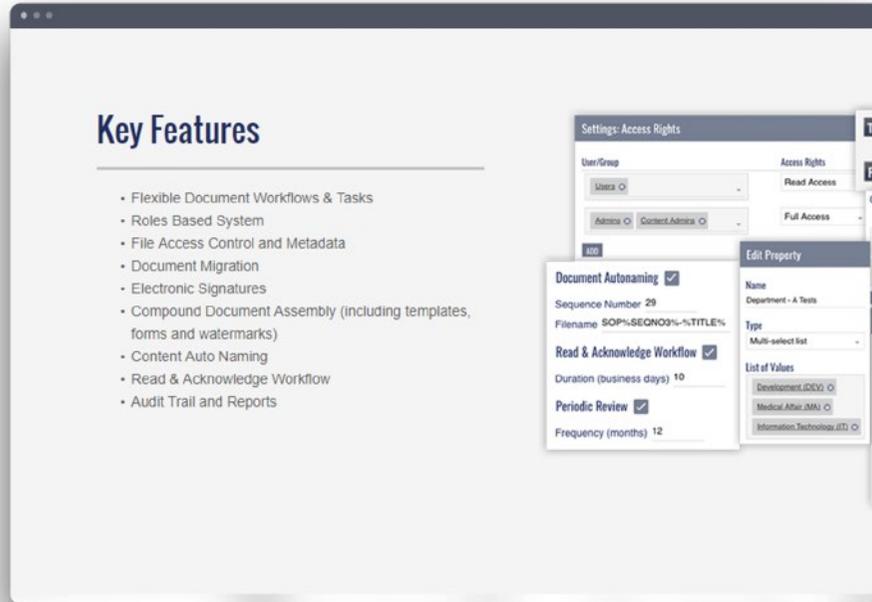
Elasticsearch

Vert.x

Java

Docker





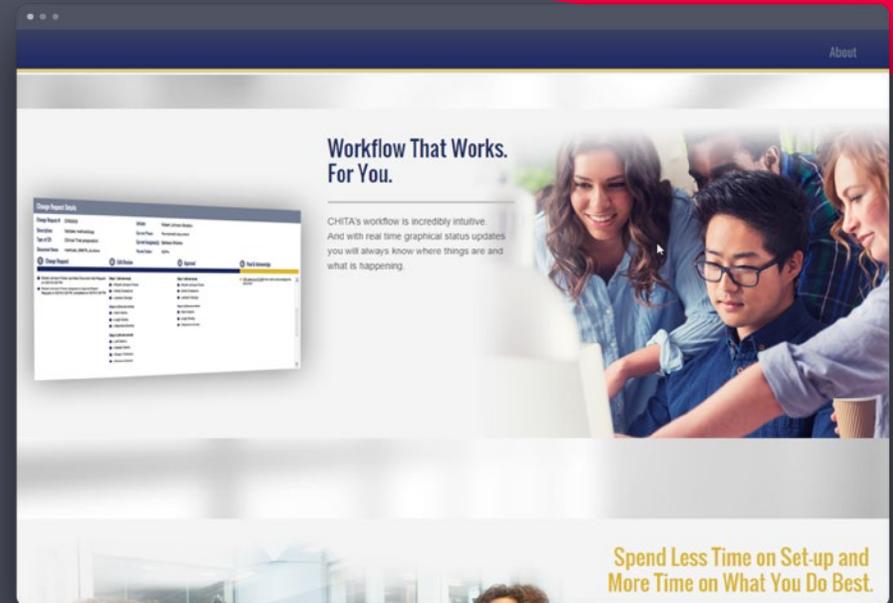
## Business challenges



In the drug review and development process, the formal issues alone can generate costs in the billions of dollars. **The challenge was to create an easier and safer workflow documents system** - one that would automate elements of the process of reviewing and approving innovations in the pharmaceutical industry.

## Technology challenges

The challenges were around the development process that required full auditability of source code and technical architecture. **The work done had to be documented in a very accurate manner**, allowing for further certification of the platform to process sensitive data such as electronic health records.





## → Project goal

Create an easy and safe workflow documents system to automate reviews and approvals of innovations in the drug development process.

## Services provided

After consultations, the Espeo team decided to create a system using the **Vert.x framework and the Elasticsearch engine**. This included efficient search comparison, approval and record-keeping mechanisms for documents likely to undergo thousands of changes. **Thanks to the components used, the product now boasts an efficient and precise search and comparison mechanism and makes work with regulated content much more hassle-free.** What's more, the system was adapted for integration with additional platforms offering disk space (like Box.com).

## Technologies

VERT.X



## We delivered



Software development



Automated testing



Consulting / Advisory



Espeo  
Software



# Biomensio

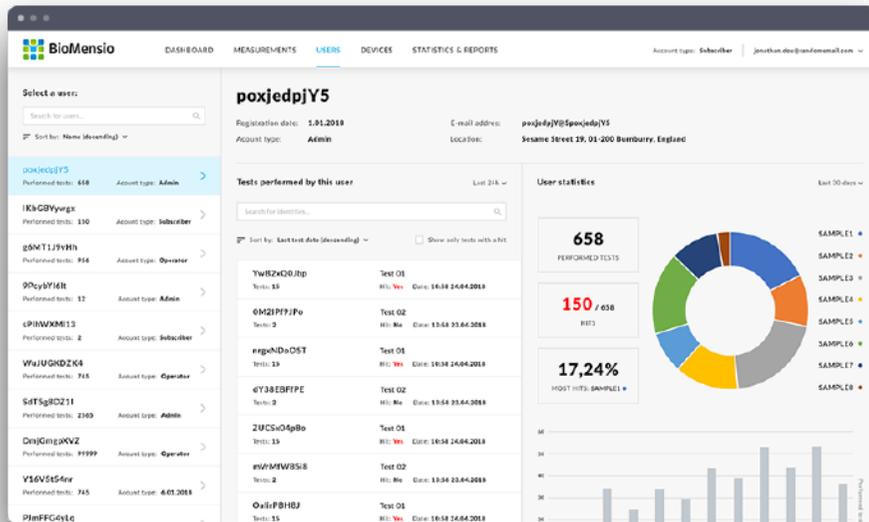
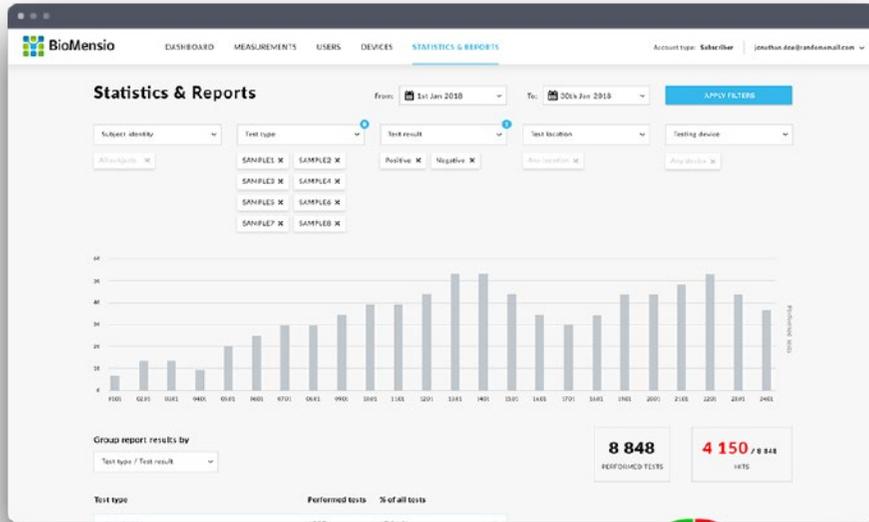
BioMensio builds international research programs and intellectual property of more than 15 patent families. The company's product is a handheld reader and diagnostics-as-a-service application that can detect the presence of drugs in saliva samples within minutes. This is especially useful in point-of-need food safety tests or drug testing.

Healthcare

Product Design

Consulting





# Business challenges



BioMensio's handheld readers and fluid cartridges quickly analyze human saliva for illicit drugs. Users first load a fluid cartridge with the test sample and the application detects illicit drugs or other substances. Results are then securely stored to the BioMensio analytics database for easy data access. This allows law enforcement, for example, to test suspects on the spot rather than sending test samples to external laboratories.

Of course, the entries are anonymized statistics of different variables such as location, drugs, person, etc. **The business challenge was to create a system that will securely store data and provide user management solutions.** This data is also exchanged with legacy customer information systems. Sensitive data collected by the app is only shared with a restricted group of users.

BioMensio Analytics solution can deliver analytics results data to customer's legacy systems. Data can be anonymized when needed for statistical purposes. A customized data transfer between BioMensio and the customer's legacy systems can be built if needed. Analytical data can be directly viewed and managed from BioMensio's solution but a subset of data can be stored to legacy systems' databases. A customized data transfer can be used for additional functions between BioMensio and legacy systems.





## → Project goal

**Our goal was to develop a system where the company's devices upload data automatically to the BioMensio data management system.** This data has to be kept securely but also has to be easily accessible for analysis.

## Services provided

**Espeo prepared the documentation of the administration panel and application prototype.** The architecture had to be well thought out in terms of data security, the ability to connect with other systems, as well as the feature of downloading data from separate devices.

## We delivered



**Product Design**



**Consulting / Advisory**



Espeo  
Software



# GHP

**GHP is a blockchain-based health platform that harnesses both a public and private blockchain to grant users instant access to their medical records.** Developed by medical professionals, the solution combines practical medical industry knowledge with cutting-edge technology. GHP's plan includes a Security Token Offering.

Healthcare

Consulting

Blockchain





## Business challenges



We had to deliver on-site consulting with the team to determine the **best way to integrate blockchain technology to manage medical records** and launch an **STO**. A big challenge was to draw up an architecture review with key insights and a roadmap for the product's phases.

## Technology challenges

The complexity of the healthcare system and the sensitivity of medical data proved challenging. A **public blockchain** would run the **STO**, while a private blockchain would control access to sensitive data. Planned for a launch in Portugal, GHP hopes to expand into other countries. Medical data handling differs in each jurisdiction **so each country would need its own version.**





## → Solution

During our time in Portugal with GHP, we came to fully grasp the business model and estimate the cost of the MVP. The project proposal included both private and public blockchains to give **multiple levels of security and to control access**. We not only had to consider the technical challenges involved in tokenomics, but also in **handling sensitive data**. With all the necessary features, we were able to give our recommendations for how best to develop this blockchain solution.

## Espeo's involvement

Espeo consultants drew up an elaborate architecture review for GHP's medical data management system. In it, a detailed diagram of the project outlines the ways the company can put blockchain technology to good use.

## We delivered



Tokenomics



Blockchain consulting



## What our clients say

“

The Espeo Team has been spectacular. Great execution, efficient response time, very professional, proactive and all round an added value to our project. It has been a pleasure to work with them.

”

**Fernando Santos Leite**

Co-founder, CTO, GHP

“

Our experience has been excellent. I'm most impressed by the team's project management and communication skills. Espeo Software definitely has the passion to get things done.

”

**Melissa Christian**

Ecommerce Business Manager, Guardian News & Media



# Let's **get in touch!**

 [www.espeo.eu](http://www.espeo.eu)

 [hello@espeo.eu](mailto:hello@espeo.eu)

Find us here:

