PRIMEFLEX for Hadoop enables Portuguese social security to apply big data to fraud detection, preventing false claims and saving taxpayer’s money.

"Without IT, Portuguese social security could not perform its tasks. With Fujitsu, we are using PRIMEFLEX for Hadoop to help digitally transform social security."

Wilson Lucas,
Instituto de Informática da Segurança Social, Portuguese Social Security

**At a glance**
- **Country:** Portugal
- **Industry:** Government
- **Founded:** 1999
- **Website:** www.seg-social.pt

**Challenge**
The Portuguese Social Security Agency needed better insights from its data to detect fraudulent behaviours in the allocation and payment of sickness benefits.

**Solution**
Working with local partner WWS to deploy Integrated System PRIMEFLEX for Hadoop to implement the necessary algorithms to identify patterns of behaviour that could reveal situations of fraud.

**Benefit**
- Efficient harvesting of data from multiple sources
- Easy analytics with templates and visualization tools
- Identify patterns of fraudulent behaviour
- Huge reduction in fraudulent claims with potential savings of €200m

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Social security in a digital age
Fraudulent sickness benefits claims were undermining public support for this vital government service.

Wilson Lucas, Instituto de Informática da Segurança Social, Portuguese Social Security explains: "Social security needs to transform digitally and without IT we cannot perform our tasks."

Exploiting big data to improve social security
Fujitsu worked with local partner WWS to build an analytics platform, based on Fujitsu Integrated System PRIMEFLEX for Hadoop to help The Instituto de Informática da Segurança Social exploit big data effectively.

PRIMEFLEX for Hadoop is a powerful and scalable platform analyzing big data volumes at high velocity. Consolidated and consistent data management is vital to ensure operational efficiency, optimize planning and foster an innovative approach. Consequently, the economic value of big data depends on achieving replicable analysis and resilient knowledge from multiple sources.

The platform Fujitsu and WWS built enables The Instituto de Informática da Segurança Social to prepare and process large and unstructured data volumes in near real-time, ensuring analysts gain valuable knowledge for the investigation of fraudulent sickness claims.

The deployed solution collects all existing data on an individual, whether it is from databases, application logs, or files. Algorithms are applied to this data lake and identify potentially fraudulent behaviours. This information is made available to the Instituto de Informática da Segurança Social through dashboards and reports, enabling them to spot patterns of suspicious behaviour.

Strategic partners for digital transformation
"I think what makes Fujitsu different is the Japanese culture combined with the way they align with partners in order to bring innovative solutions to the market and bring value to customers," points out Rodrigo Prieto, WWS-Data Technologies.

WWS is a software house that makes complex technology simple for customers to adopt. They worked with Fujitsu from the inception of the project to create the necessary conditions for success. The Fujitsu products have shown excellent performance and resilience. It was a case of true partnership in which each party invested their available resources and the results obtained exceeded the initial expectations.

"By creating this platform we are digitally transforming social security," adds Wilson Lucas.

Co-creating a better future
Fujitsu and The Instituto de Informática da Segurança Social will continue to work together, digitally co-creating innovative solutions and creating new value.

"My vision for the future is trying to evolve this platform by applying new technologies such as machine learning, real-time processing and predictive analytics. Fujitsu technology will help me make this vision happen. That is what co-creation means for me," concludes Wilson Lucas, Instituto de Informática da Segurança Social, Portuguese Social Security.