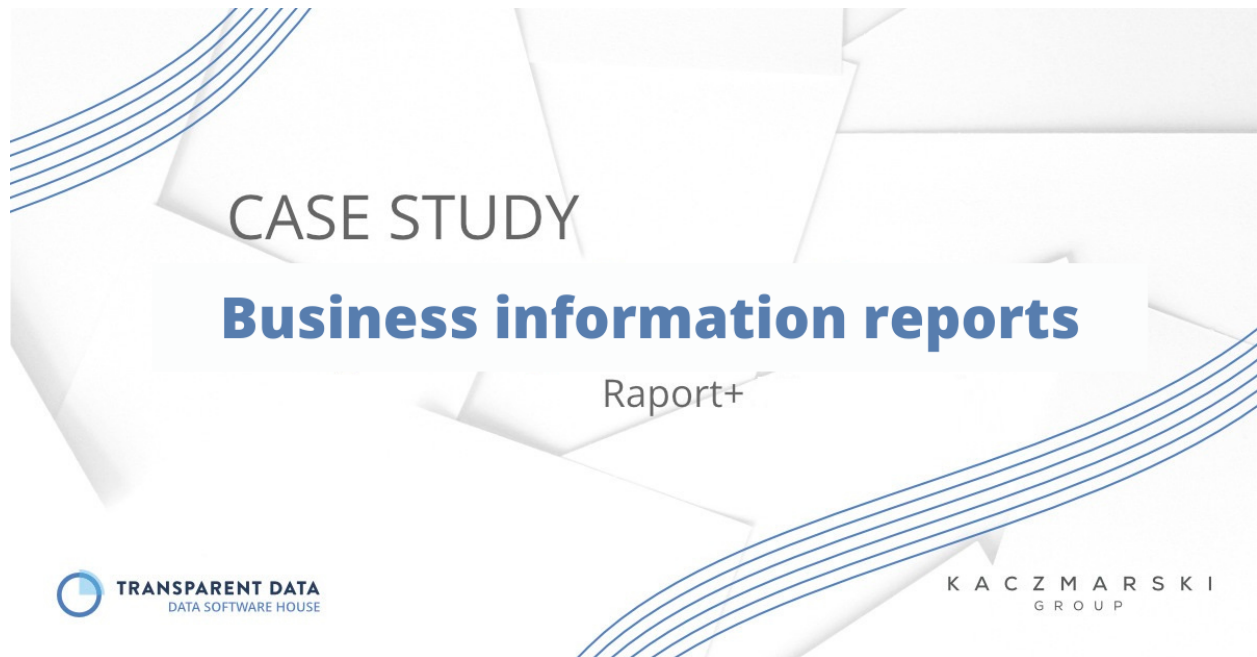# Case Study Business information reports Raport+ for Kaczmarski Group

Introduction

A few words about the project

Raport+ are comprehensive business reports on Polish companies available 24/7 online, which, apart from information on receivables of enterprises from the largest economic information bureau in Poland KRD BIG S.A., also present data from debt exchanges, financial statements, the White List, KRS, CEIDG, REGON, CRBR, SUDOP, KNF and dozens of other sources. These are the first and only such extensive reports on Polish companies on the market. They are used primarily by companies from the SME sector in their contractor verification processes.

As Transparent Data, we are responsible for the entire process of generating and ordering reports - from the efficient operation of the company search engine, through the aggregation and processing of data from original commercial registers, Kaczmarski Group databases and third party databases, to integration with the payment operator and invoicing office, and general security of the process.

Type of data software services provided: dedicated business information reports and the process of their generation, aggregation of data from various sources, data processing and parsing, data integration with external databases and the cloud, API development, programming services to ensure business continuity

Year of cooperation: 2017

Project type: continuous project (cooperation ongoing)

About the Client

[Kaczmarski Group](#) is a large group of modern companies that focus mainly on supporting consumers and entrepreneurs in business risk assessment and invoice management at every stage. It includes i.a. Krajowy Rejestr Długów Biuro Informacji Gospodarczej S.A., the oldest debt collection company in Poland Kaczmarski Inkasso, factoring company NFG, ChronPESEL.pl and Easy Check. Both the companies themselves and their experts have been awarded many times over the past decades for their contribution to the development of the best solutions on the Polish market.

The Kaczmarski Group business information reports and its services are used by both the largest organizations and medium, small and micro entrepreneurs from all sectors of Polish business, from the loan and financial industries, through FMCG to construction and transport. Kaczmarski Group's customers number in the hundreds of thousands. It is one of the largest and best-known groups of companies with only Polish capital.

Business needs

To meet the difficulties of small and medium-sized companies in assessing the risk of starting cooperation without professional business analysis departments, Kaczmarski Group has planned to launch a new product: Raport+. It is ordered online from the Kaczmarski Group companies' own websites and is a new line, complementary to other products in the company's portfolio.

Kaczmarski Group already had had data from the business information bureau KRD BIG S.A., of which it is a partner, and from the Kaczmarski Inkasso debt exchange, but **in order to create more comprehensive commercial reports, the client needed to add more data from external sources, such as state business registers and external databases.** Great emphasis was placed on the short implementation time of the solution.

Importantly, **not only the technological skills of the solution provider were highly desirable** (building APIs that query many sources on an ongoing basis, data processing and inserting the answers into the report layout)**, but also the certainty that the partner perfectly understands the specifics of the operation of commercial registers and their limits**, and that will take care of the safety issues of the entire process.

Kaczmarski Group was looking for a stable RegTech partner that would be ready for continuous product development.

What did the client expect from the new business reports?

First of all, the new quality of data - ensuring that each ordered report about the company will contain up-to-date data from all indicated sources, already validated, while **ensuring a short report generation time (on average 30 seconds, and max. 90 seconds)**. In addition to quality control, the Kaczmarski Group also expected the development of an effective system of separate query queues for each report, which would allow for easy scaling in the future (i.e. adding more sections of information and sources) and a separate API with monitoring of queue times and possible errors.

What's more, the company search engine on the Kaczmarski Group brand pages had to allow searching for companies not only with a Polish company number (NIP), but also from several other EU countries, and in the case of companies from the Czech Republic and Slovakia, the system should generate business reports about them, returning basic information from the official Czech and Slovak company register. In the case of other foreign companies, the search engine was supposed to return the registration number and information about the company's possible debt on the Kaczmarski Inkasso stock exchange. The client indicated that in the future it might want to develop the product with in-depth information from other countries.

Solution

What work has Transparent Data done?

Over several months of close cooperation with the Client, Transparent Data has created a new method of generating business information reports from scratch, which, based on the provided company number, aggregates data from many sources (the Client's own partners - the Kaczmarski Inkasso debt exchange and KRD BIG S.A. - and external among others KRS, CEIDG, MSiG, REGON, CRBR, KNF, UZP, the White List, global sanction lists and databases of PEPs, SUDOP, other large debt exchanges, Czech register Justice.cz, Slovak Obchodný register).

In order to generate the Raport+ business report in less than 30 seconds, we **built over 60 APIs and created a separate source query queuing system, along with an API monitoring the entire process for Kaczmarski Group**. The company search engine on the Client's website correctly identifies the registration numbers of companies from many European countries, returning the appropriate set of economic information depending on the country of origin.

The biggest challenges

- Express aggregation of data from sources of various difficulty (querying successfully various data sources, even those with CAPTCHA), fast data conversion into consistent formats and sending responses so as to be able to generate one comprehensive business report. In total, more than 60 APIs were needed to achieve such data interoperability;
- Ensuring the average time of generating a business report up to 30 seconds (it is worth noting that the average time of generating one report is 25 seconds);
- Creation of a company search engine that, in addition to recognizing Polish NIP numbers, will also correctly identify registration numbers of foreign companies (and these often have the same number of digits in the sequence as the Polish NIP number) and, depending on the country of registration of the company, generate the expected version of the report;
- Development of technology for easy scaling of the number of API queues

Technologies used

- Google Cloud Platform
- PHP 7.4 oraz 8.0/8.1
- Slim
- Laravel
- HTML
- CSS

- JavaScript
- PhantomJS
- MySQL
- Redis
- Kubernetes
- Docker

Client about cooperation on the project

"I value cooperation with Transparent Data for its strong substantive foundations, flexible approach to the client, as well as good pace of project implementation.

Raport + was the first project that resulted in the expansion of cooperation. In fact, today we can already talk about regular activities that have become "permanent" in the daily functioning of both companies."

Katarzyna Starostka - Product Manager, Kaczmarski Group