Quality by MÁTICA partners

Company

Mática Partners is a young company which was created based on a common view of their team: become a high performance analytics and big data company. Mática's most important element is their team, complementary in their knowledge and skills, with a common view of what should be a company, based on previous professional experiences and therefore, we share the following foundational pillars:

- We are what we know, and we know about Big Data, Analytics, Data Governance, Cloud Computing, IoT and Blockchain.

- We are enthusiastic and creative thinking: we want to create a model, participatory, purpose-oriented, high performance and specialized, structured through a partnership Km0.
- We are partners of talent: we work with people with a high level of specialization regardless of location and condition.
- We are what we contribute: we are knowledge and technological excellence, trust, security and with a lot of common sense.
- We are business oriented: we see technology as an accelerator to make companies achieve their business goals.

we know about:

At Matica we know about different technologies and methodologies thanks to our multidisciplinary team we can cover different solutions in differents areas. We are comfortable working with On-premise and Cloud environments.

big data:

More than 7 years working in big data solutions support us. Our strengths: near real time processing, productive datalakes, analytical industrialization. We do not only code solutions, we are consultants specialized in helping our clients to define their big data initiatives, to supply and manage the necessary and sustainable resources, to develop the systems and to activate them for their running.

business analytics:

We cover the business analytics needs of our clients: machine learning, deep & reinforce learning, cognitive analytics & artificial intelligence, chatbots, everything from a business perspective, from industrialization environments, data visualization and the results activation model.

data governance:

We have our own methodology in the areas of data governance and p.m.o.. Our methodology allows to measure and know the contribution of the government process value and a project risks preventive management.

blockchain:

We facilitate new models of distributed and safe work. we focus the model as the data distributed security layer in environments where we have a high knowledge, supplychain -control of manufacturing processes and components traceability-, distribution -information distributed in intercompany environments- and transport -incident management and multi-carrier tracking.

success stories:

Our solutions are working in different sectors like financial, oil & gas, transport and logistics. Some of our solutions:

“we have defined the data government model of several financial entities in spain together with their big data architecture, both batch and near real time. not only that, but we have helped them to integrate it with traditional business intelligence systems in an efficient way”

“we have created, in one of the main utility company in spain, both generation and demand forecasting models, operational intelligence processes through business analytics and visual analytics, as well as client segmentation and micro-segmentation projects”

“we have worked hand in hand with a retail world leader to optimize their ecommerce processes, from the creation of simulators, development of route optimization, placement and picking algorithms, based on metaheuristics and deep learning models”

“we have helped, in the area of public transport, to develop their big data roadmap, from the first pocs, to the running of their Hadoop cluster to finish with the development of the line of analytical projects and data processing initiatives”

Quality by Matica

Quality’s is a product that cover the gap that we have now in the market related with tools for intake data quality. Our focus is to provide to the customer a powerful tools that can monitor the quality of their data in real time. **Quality’s** is a system based in rules and analytic patterns, where the user can define the rules that he can apply to their data at the moment it arrives.

Quality has defined multiples rules like this:

- Cell based rules: based on analysing each data by itself, detecting nulls, regular expression rules, finding their completeness against a source of truth, and more.
- Unicity rules: focused on detected if there is duplicated data arriving at the system
- Timeliness rules: focused on detecting if the data arriving is still valid in time and their lifespan is not expired
- Static Value Distribution: rules based on detecting if the histogram or distribution of some key indicators of the data has variated more than some threshold detected
- Dynamic Value Distribution: rules based on measure ad-hoc metrics at each arrival and compare them based on time-series analysis in order to detect anomalies.
- Quality allows to create rules at each quality dimension: veracity, validity, timeliness, unicity, completeness, timeliness and more.
- Ad-hoc rules created by users in order to cover other quality rules not presented before.
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Quality is designed to work with your real time ingestion system and batch data load. It is an easy and not invasive mechanism to integrated with your ingestion flow, your Quality Department define the Quality Point, the Data Source and the Rules. The application of

quality rules to your ingestion processes is done with only two lines of code. With only that, Quality can apply the rules to your data and collect all the quality metrics of your data.

Quality allows to configure in one single line of code a flow-control mechanism, ir order to stop, warn or inform in the case of errors arriving.

At the moment we support Spark and Flink the most important frameworks in data processing on the Big Data Ecosystem. Besides, our solution provides integrations with the most common pattern of Cloud Architecture for data ingestion like Azure Event Hub and Azure Functions.