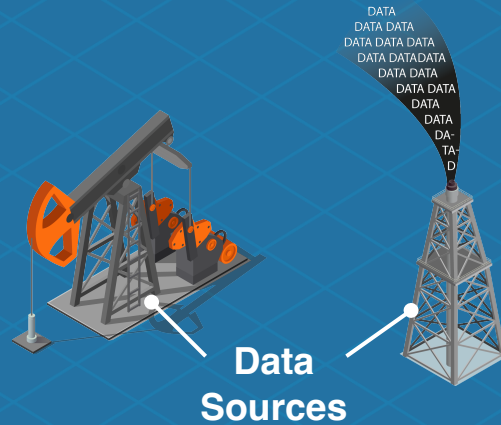


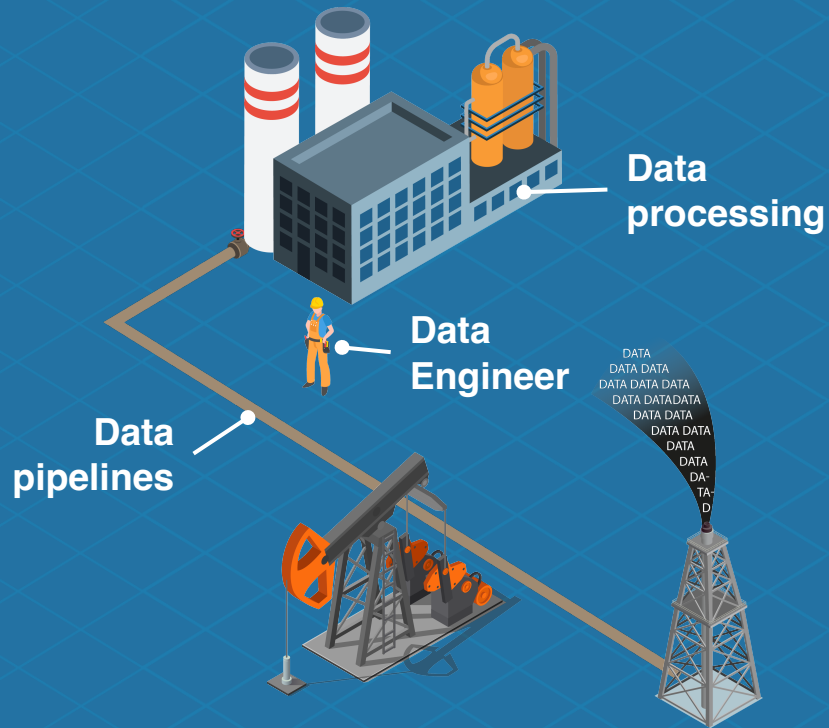


Understanding who does what in data analytics

Data Ready - February 2023

Everything starts with data, produced through **data sources**: our various applications and systems such as our cash-desk, e-commerce website, CRM...





From there, our **data engineers** build **data pipelines** to capture and transport this data. If needed, they can cleanse them through **data processing**.









As a **data engineer**, I automate access, manipulation and presentation of data.

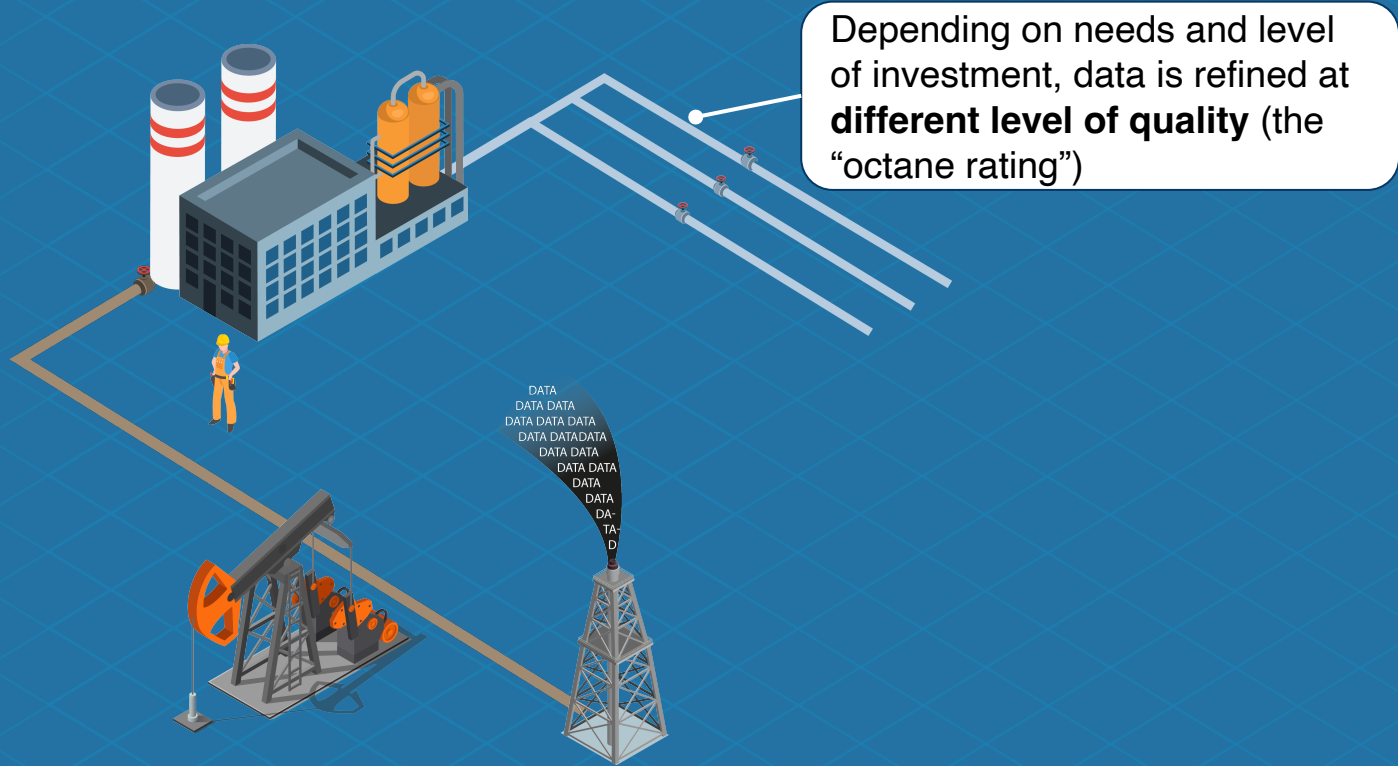
Thanks to my tech skills, I bring **data management** to the next level, systematizing data techniques: I understand the tools required to **extract, structure, clean and prepare data**. I am able to grant access to the right granularity and history of data.

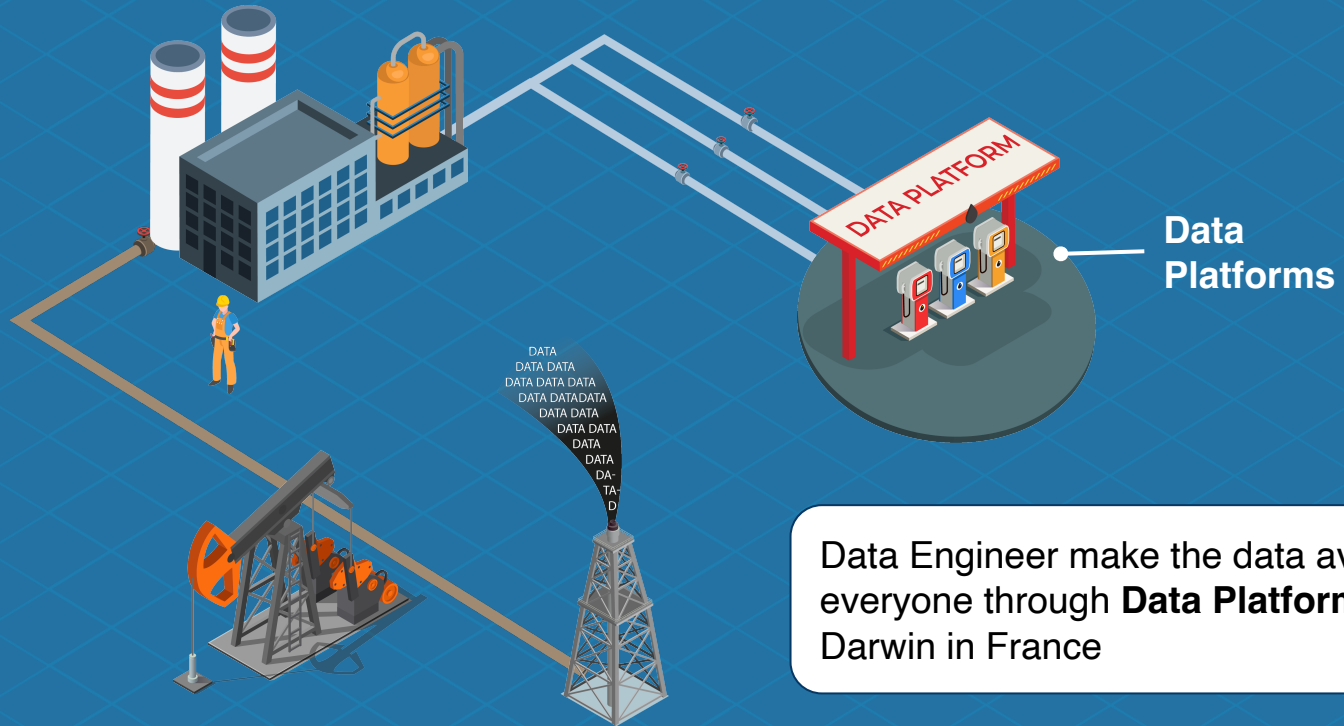
My responsibilities comprehend **architecting cutting-edge solutions** for data scientists and dataviz specialists: Turning manual processes into "**data pipelines**", optimizing the **acquisition of data**, designing **scalable structures to store information...**

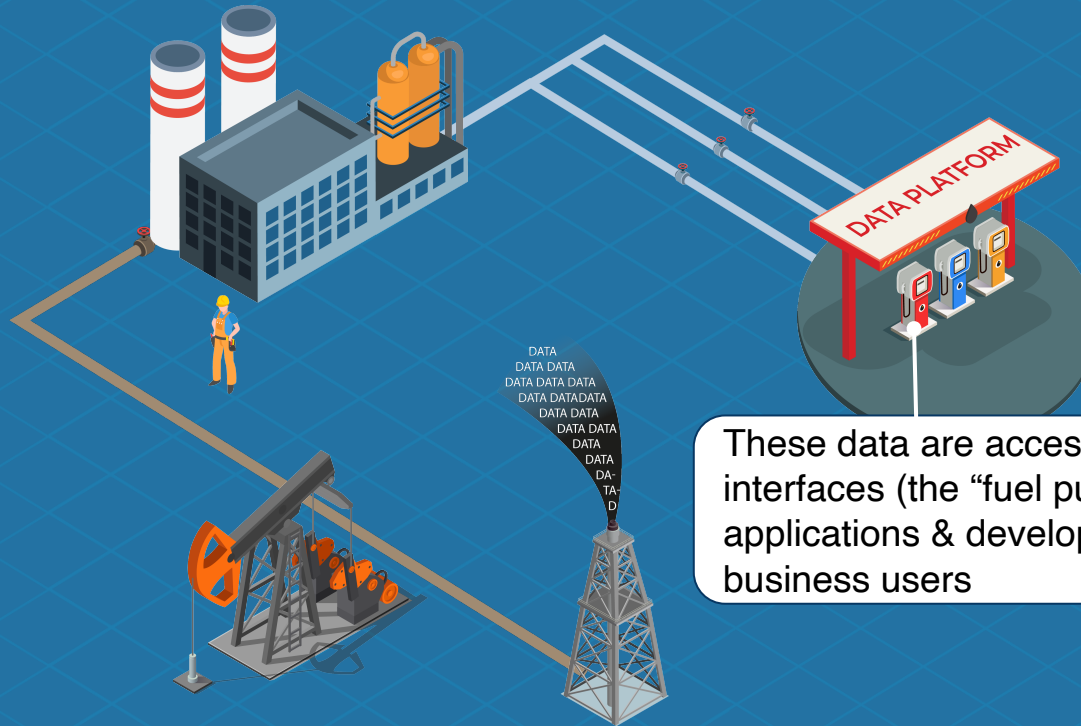
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These data are accessible through standardized interfaces (the “fuel pump”) such as **APIs**, for applications & developers, or **datamart**, for business users

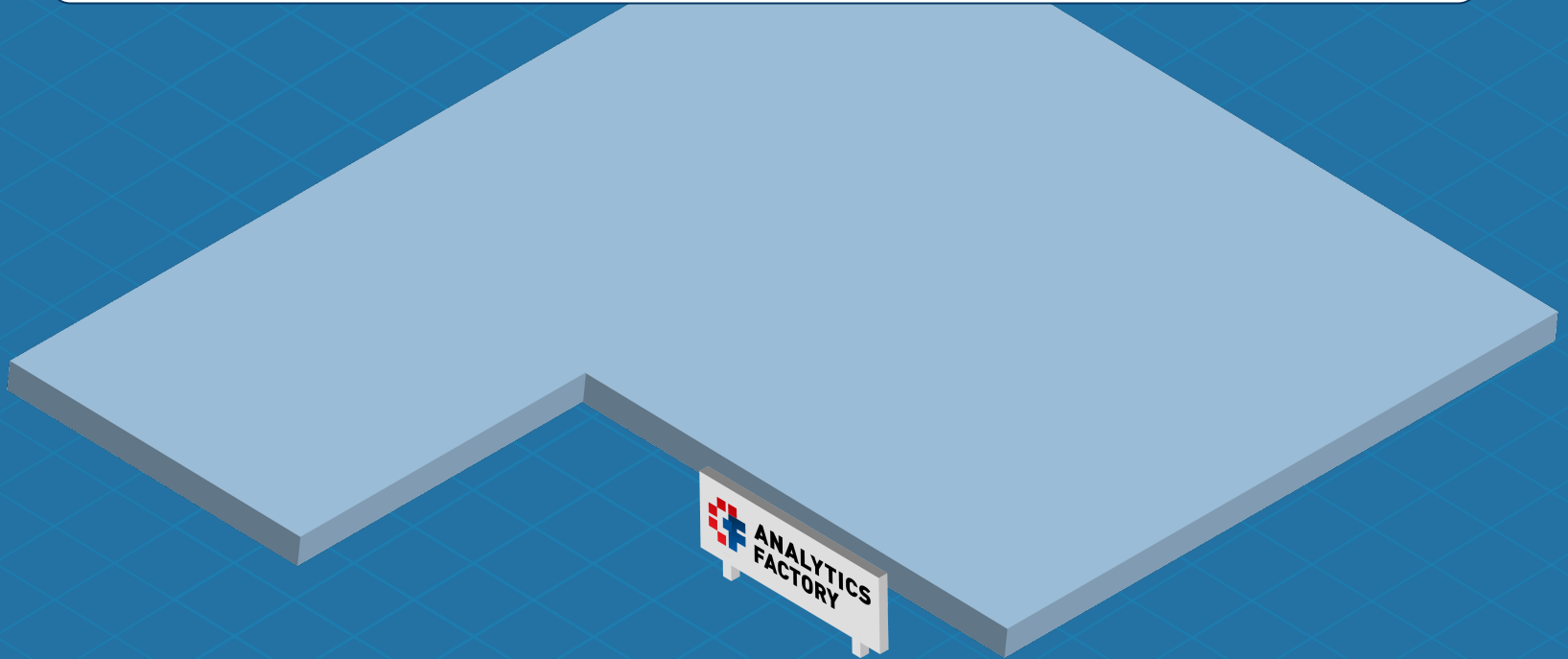


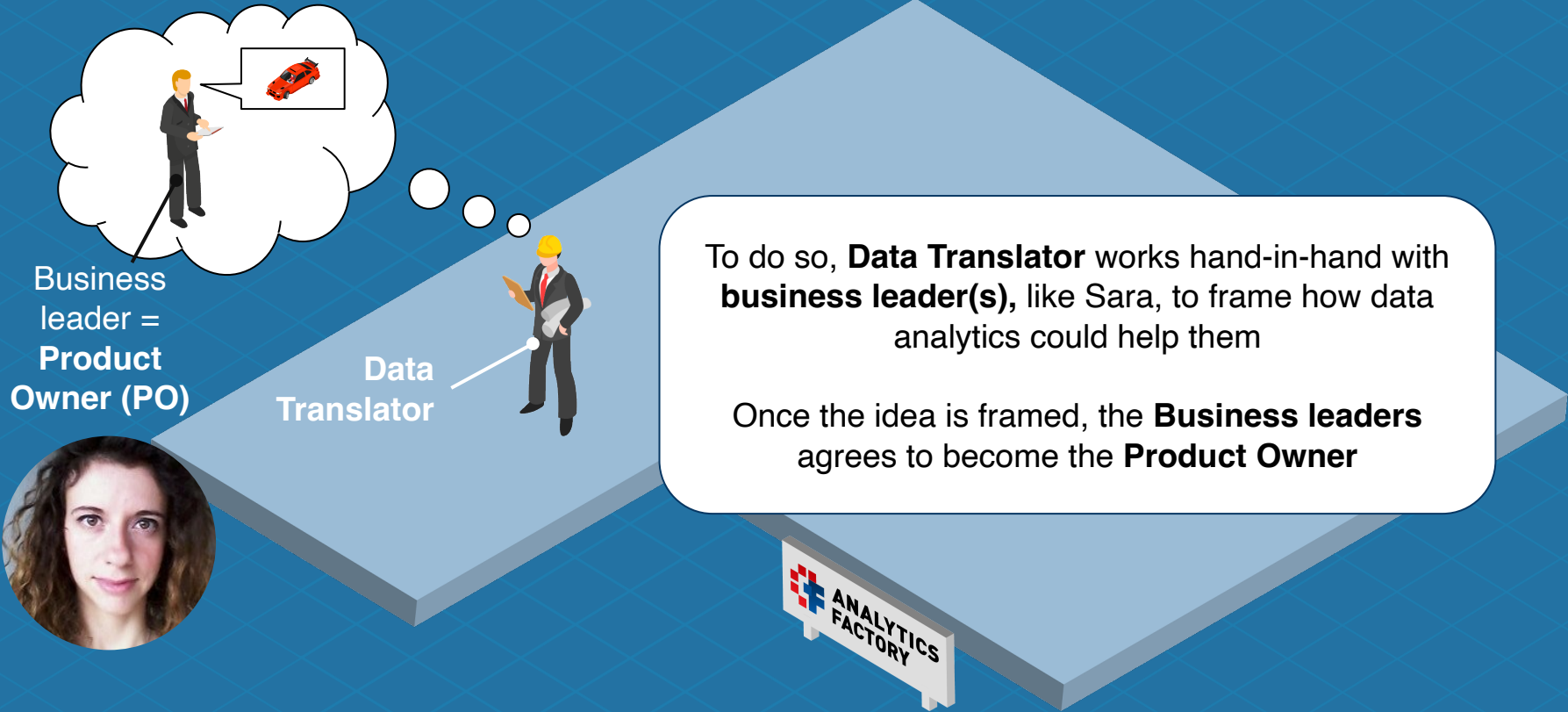


Extracting and making the data available is the work of our **Data Tech** teams



In order to generate value from this data, we need 'vehicles' and 'engines' capable of using it, that's where the **Analytics Factory** comes into play









Etienne, **Data Translator**, will tell us more about his job







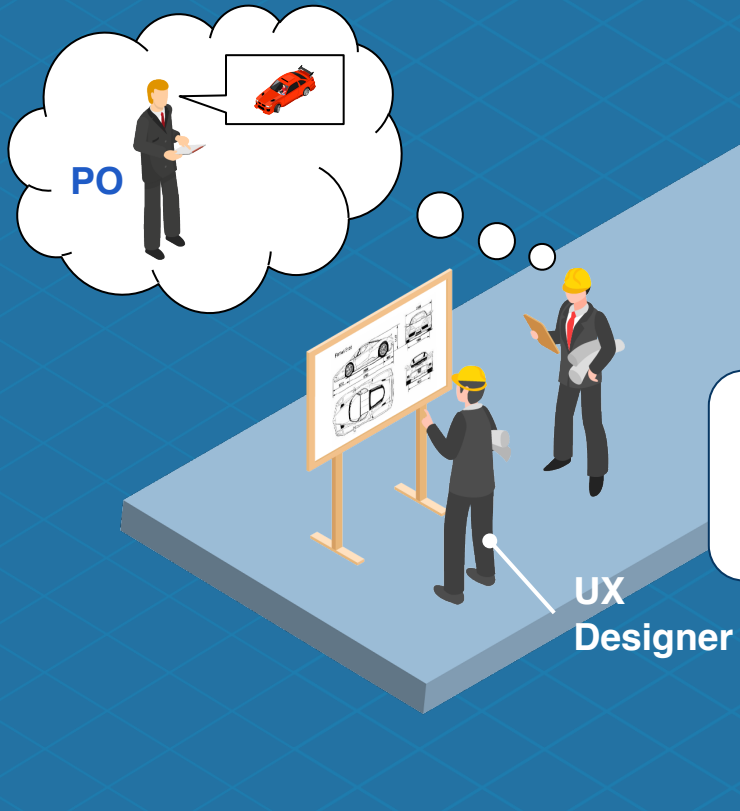
As a **data translator**, i'm the interface between the business and analytics.

I speak the same language as my business colleagues, and ensures we understand each other. As the first point of contact of the business unit I'm accompanying, I contribute to identifying **data priorities** every day while inspiring with market trends when possible.

Once the business needs are well understood and formalized, I discuss with the different data experts (scientists, dataviz, engineers...) to **identify the best solutions**. I also provides transparency on progress during delivery.

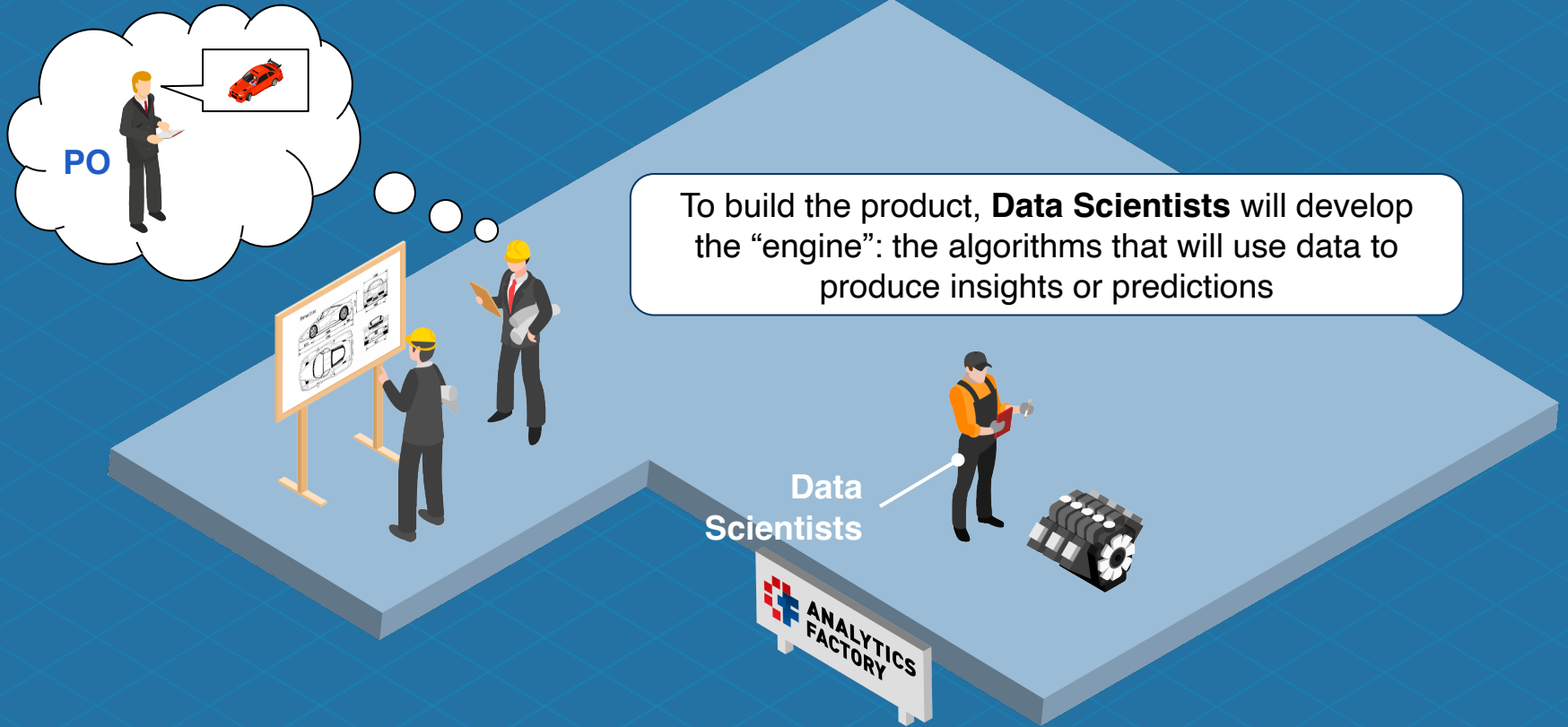
Finally, my job also include ensuring **capability building** of business areas when it comes to data: I strive to be the best "teacher" every day.

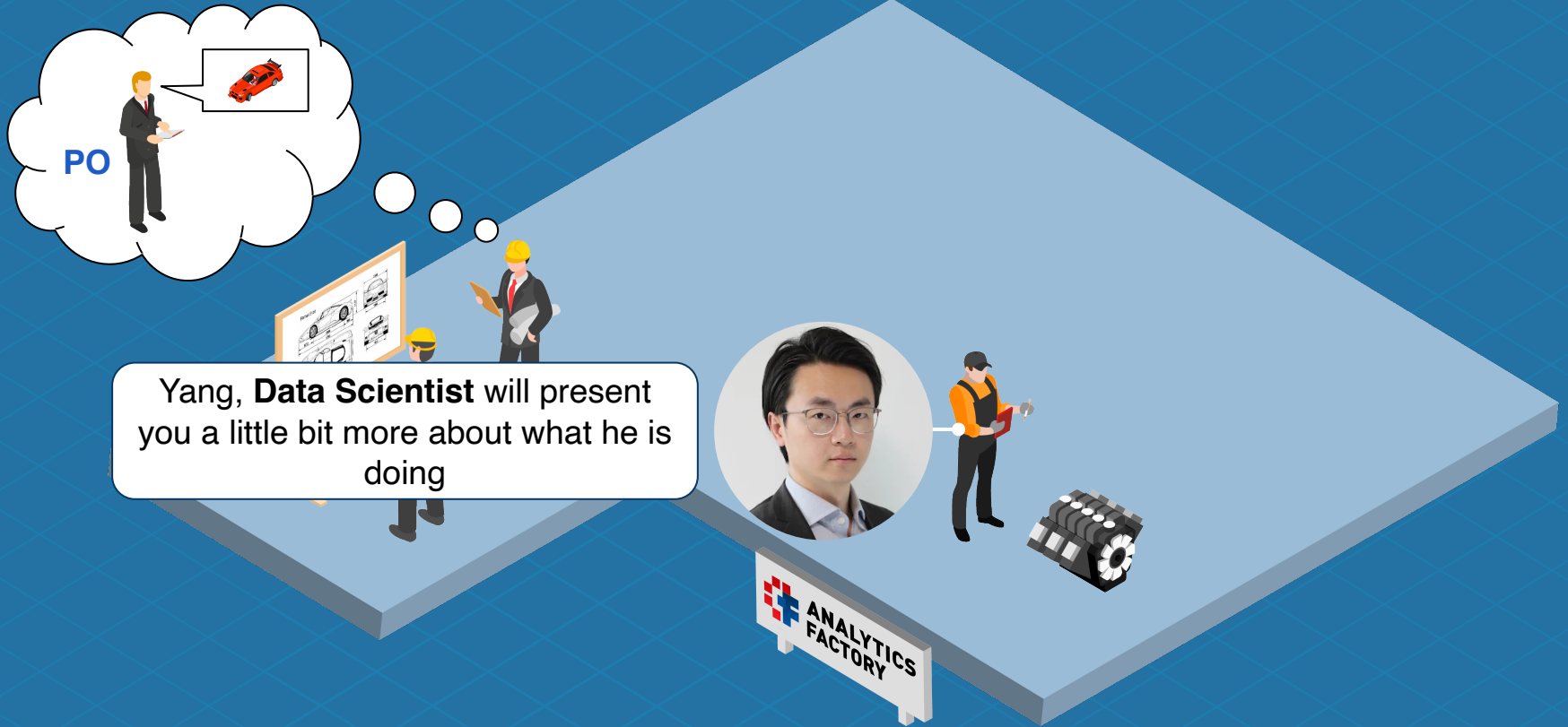




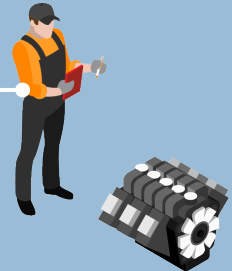
When designing a new analytics product, the data translator will work with **User Experience designers** to make sure the product is usable and desirable for business users







Yang, **Data Scientist** will present you a little bit more about what he is doing



 ANALYTICS FACTORY



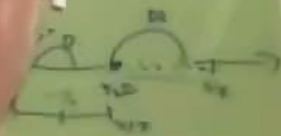
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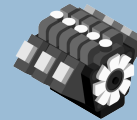




Deep into numbers and stats, I'm able to turn raw, often complex and large quantities of data -what is commonly called "Big Data"- into **added-value insights**.

In order to make this happen, I master several **analytics techniques** (statistics, optimization, machine learning, deep learning...) and i'm **fluent in technology** (R, Python, SQL...). I use this toolkit to solve problems that matter for business. Extracting data from multiple sources, looking at it from different angles, looking for trends and presenting it in an insightful manner are part of my day-to-day tasks.

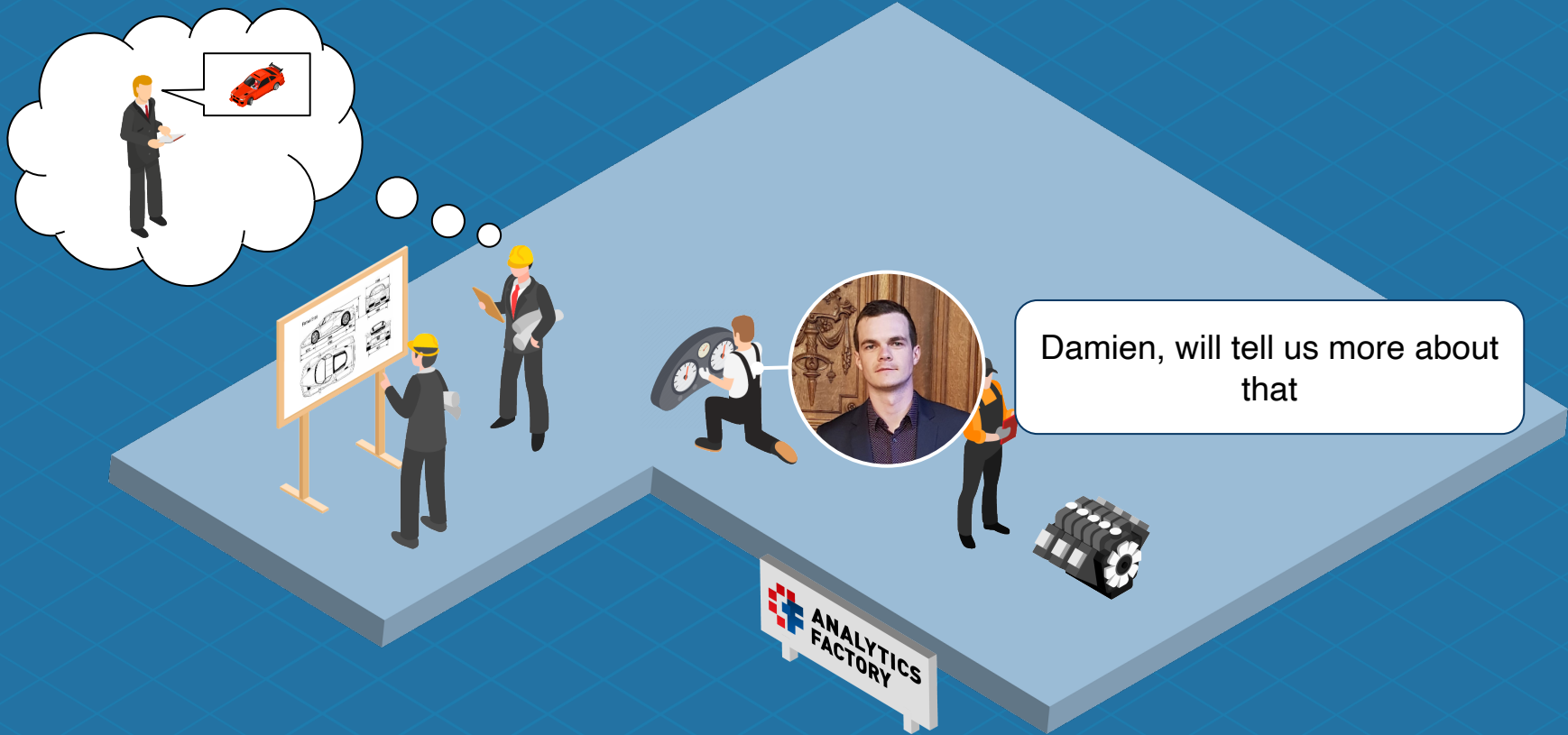
I do not work on my own: I **collaborate closely with business and translators** to define the criteria that will determine if analytics models work, and with data engineers to gain access to the necessary data.





The **data viz specialist** will construct dashboard and reports that make the data understandable by the business users





Damien, will tell us more about that

ANALYTICS FACTORY



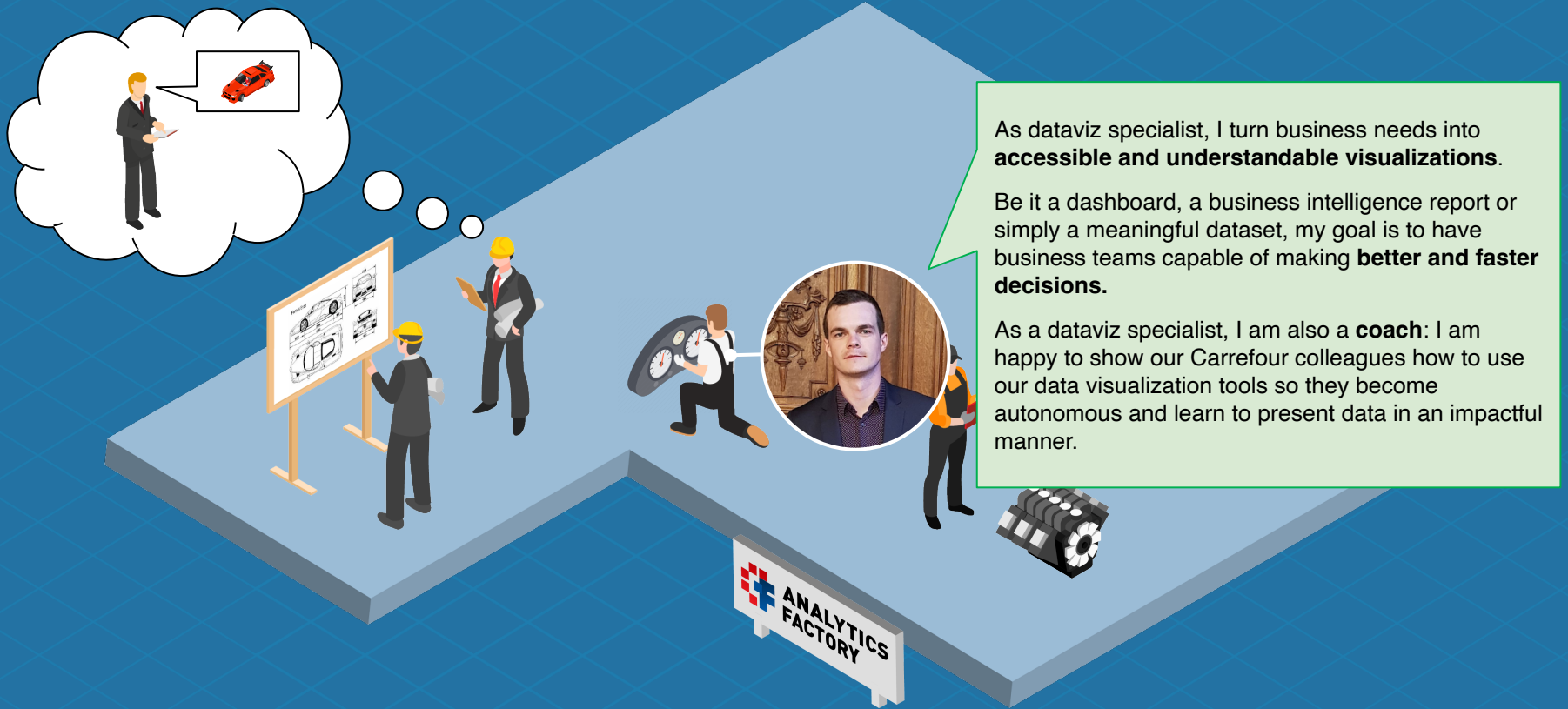
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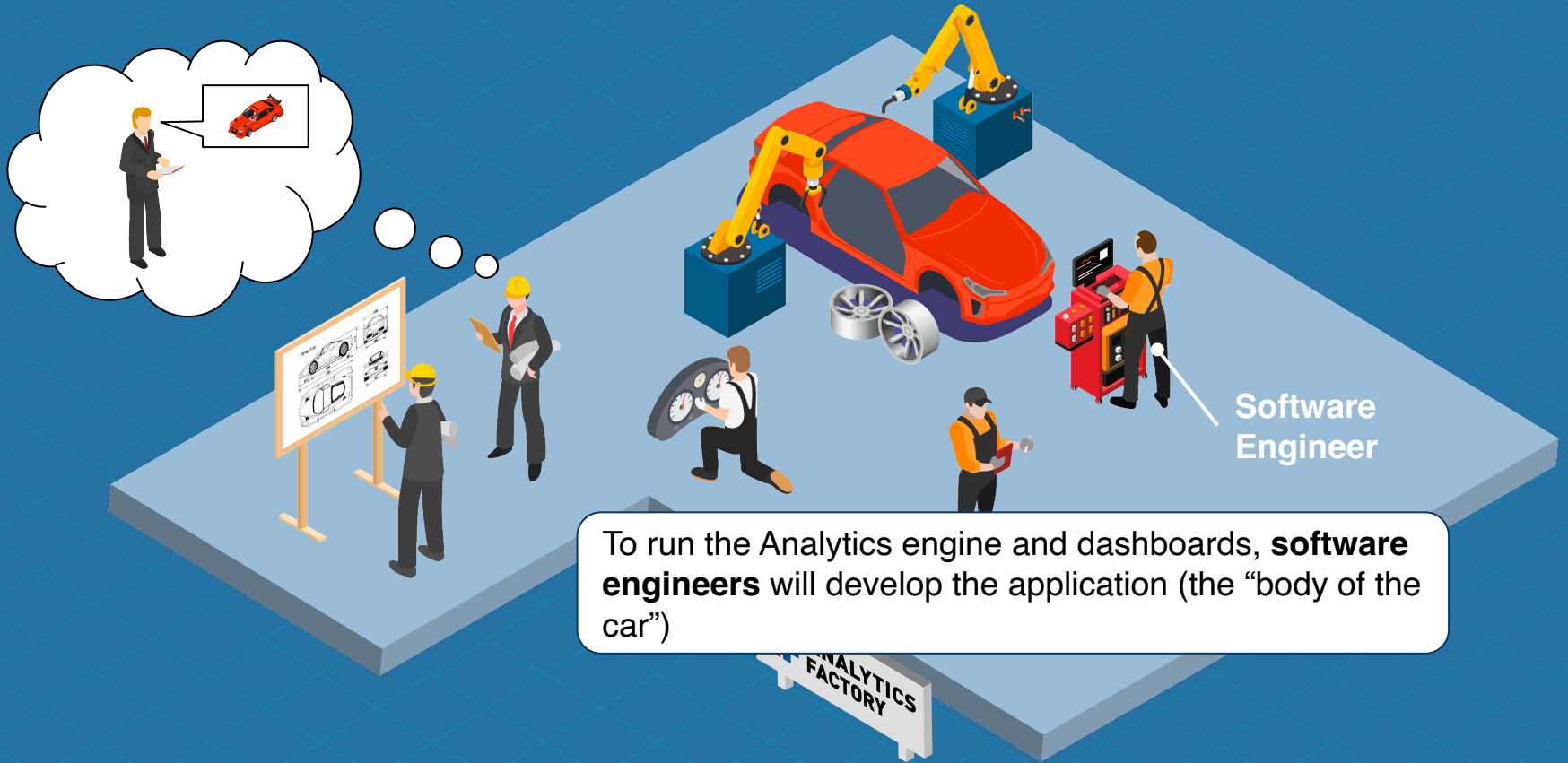
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To run the Analytics engine and dashboards, **software engineers** will develop the application (the “body of the car”)





Finally, the **data governance analyst** will ensure the data (the “oil”) has the right level of **data quality** to run the engine, and will work with the data engineers to refine them as needed







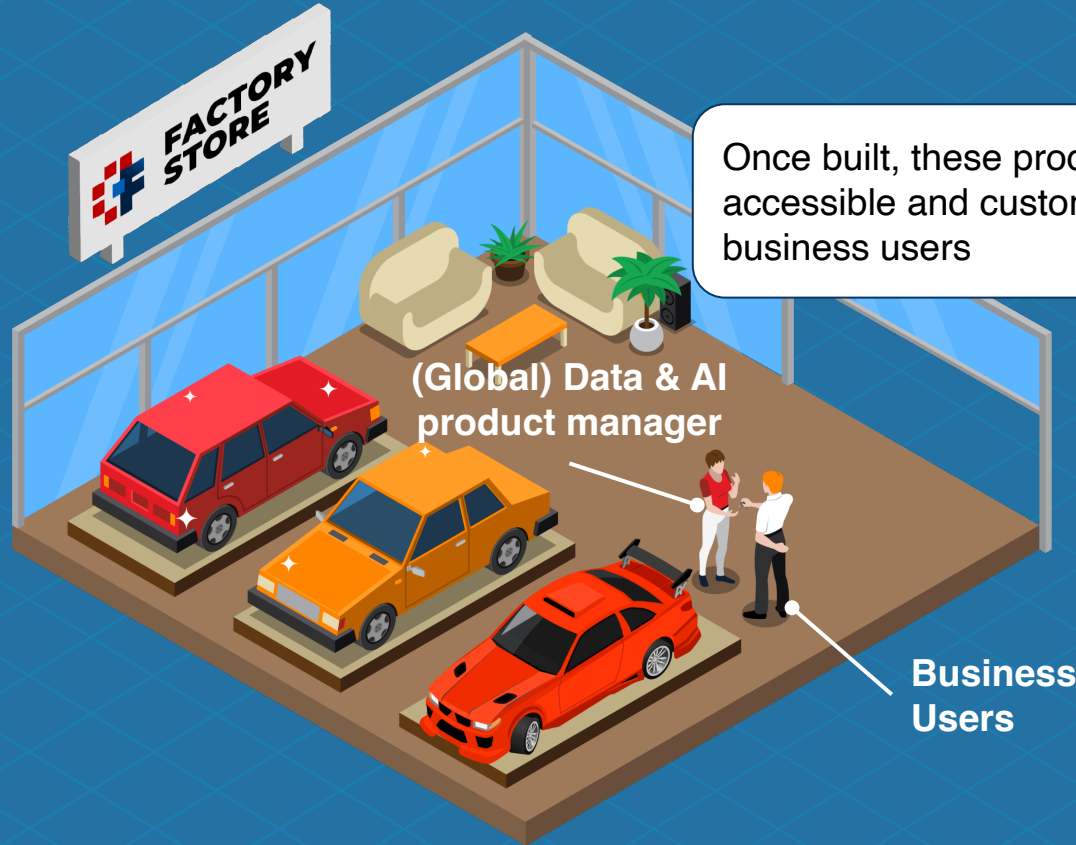


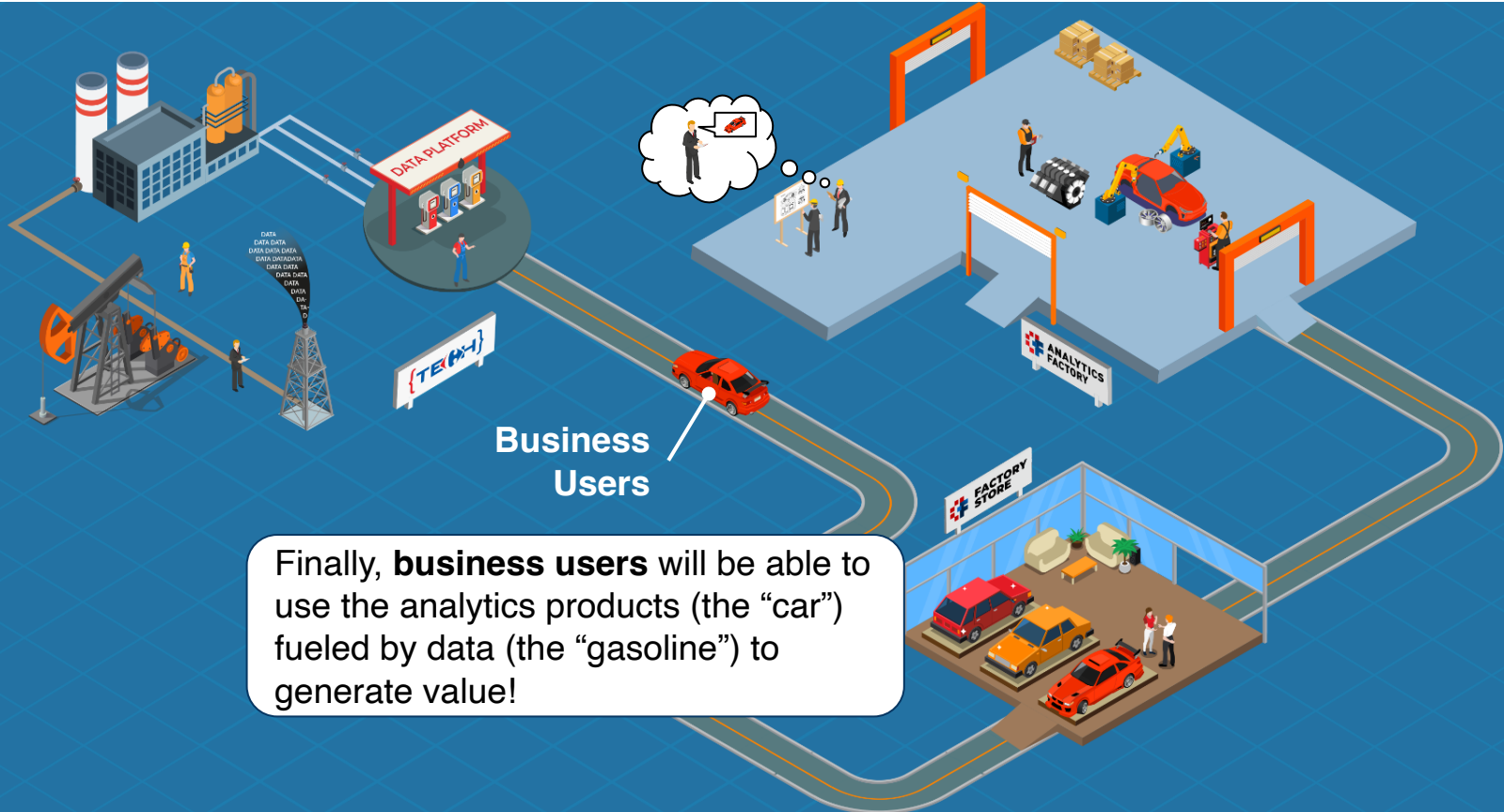
As a data governance analyst, I'm constantly looking for ways to **improve data quality**.

I help to **measure the quality of data**. In a highly systematic manner, I define the appropriate indicators (completeness, consistency, timeliness...) and establishes precise acceptance criteria so Carrefour's data improves across the board, from commercial to operations.

To ensure continuous improvement of data quality, my data governance role also involves defining **frameworks, policies and standards** and implementing **data management tools** like data dictionaries and glossaries







Finally, **business users** will be able to use the analytics products (the “car”) fueled by data (the “gasoline”) to generate value!



Wrapping this up: the 'core' Data & Analytics roles



Arnaud,
The Chief Data Officer

Data
{TECH}

Data engineers



the infrastructure
builder



Data translators



Etienne,
the expert
interpreter



Data scientists



Yang,
the engine
expert



Dataviz specialists



Damien,
the dashboard
designer

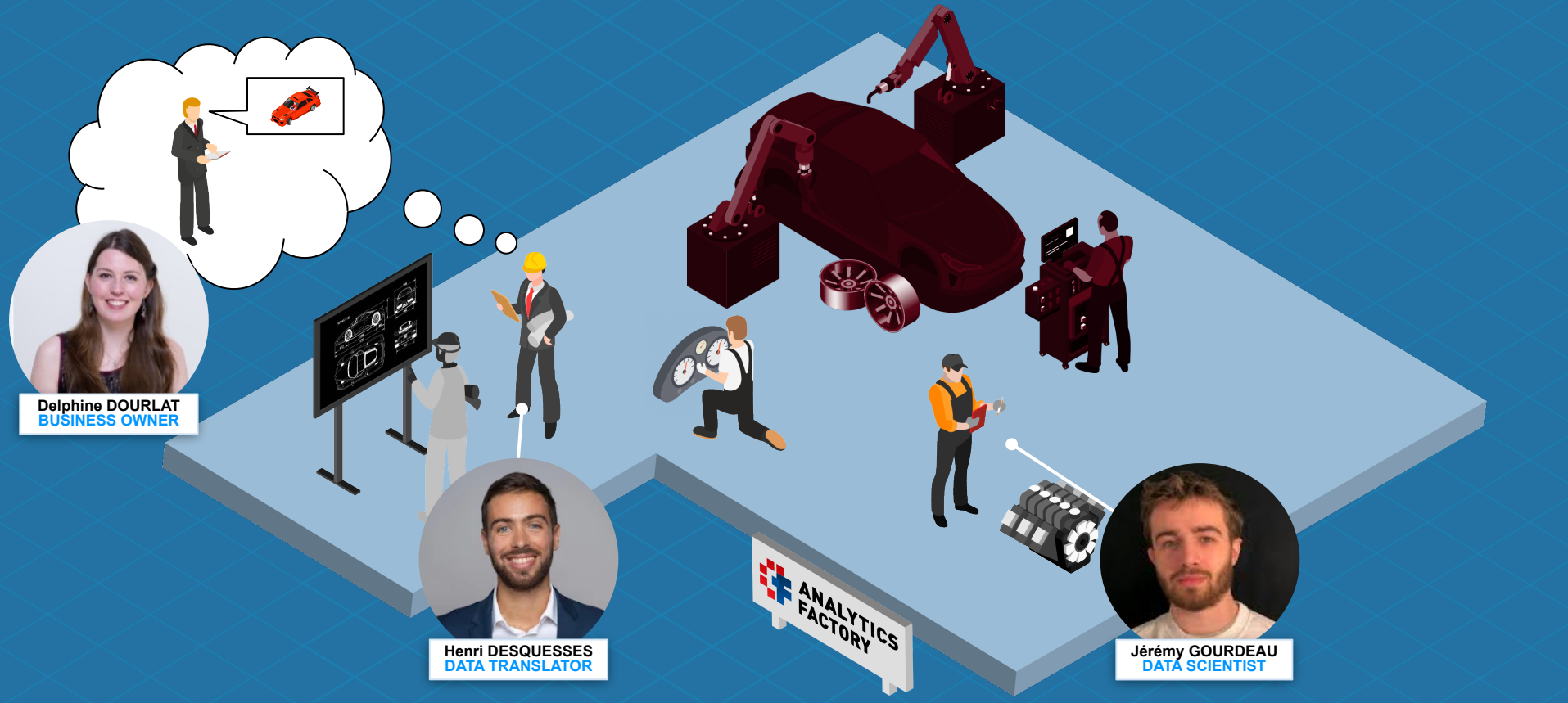


Data governance



Isabel,
the warden





Delphine DOURLAT
BUSINESS OWNER

Henri DESQUESSES
DATA TRANSLATOR

Jérémy GOURDEAU
DATA SCIENTIST

**ANALYTICS
FACTORY**

