



Streamlining Business Processes with Devex PLM

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THE STORY OF MAPEI



With strength and passion, since 1937.

1937

Rodolfo Squinzi began producing Auxiliary Materials for the Building Industry, MAPEI (Mapei in Italian stands for “Materiali Ausiliari Per l’Edilizia e l’Industria”).

70’s

Mapei revolutionized the world of ceramics by offering a range of products that made the laying of ceramic tiles easier and safer.

80’s

Internationalization and research and development made Mapei a global player.

2019

Veronica and Marco succeeded their father Giorgio and took over the management of the company.



FUTURE OF MAPEI



The challenges thrown down by the market require an increasingly wider vision, as well as more innovation and a focus on sustainability.

WE KEEP THINKING

BIG

Gold Coast, Australia
Jewel

Mapei and internationalization

The Group's growth and its consolidation on international markets have been enabled by a careful internationalization strategy, begun in 1978 with the opening of a plant in Canada, and constant commitment to developing its know-how and seeking new solutions for the construction chemical sector.

Mapei's products range has thus expanded to 24 lines offered today plus those of the Group's other 13 brands in Europe.



ADESITAL

H Cer Col
Adesivi e prodotti speciali per l'edilizia



MAPEI MARINE
IMAGINE DESIGN BUILD



POLYGLASS
MAPEI GROUP

profilpas
MAPEI

Rasco
Bitumentechnik GmbH

Resipoly
Soluzioni em Resinas Sinteticas
MAPEI

Sopro

tecnopol

VAGA
AGGREGATI E MANI PER EDILIZIA

VINAVIL

24 Product Lines



An incomparable range offered for every site around the world.



1. Products for ceramics and stone materials



2. Complementary products for installation work



3. Products for cleaning, maintaining and protecting surfaces



4. Products for resilient, LVT, textile materials



5. Products for sports flooring



6. Products for wooden flooring



7. Products for cementitious and resin flooring



8. Products for acoustic insulation



9. Products for building



10. Admixtures for concrete



11. Architectural stone paving



12. Architectural exposed aggregate concrete surfaces



13. Products for CFS industrial flooring



14. Products for structural strengthening



15. Products for masonry restoration



16. Products for thermal insulation



17. Wall protective and decorative coatings



18. Products for waterproofing



19. Products for waterproofing



20. Products for underground constructions UTT



21. Elastic sealants and adhesives



22. Products for the marine industry



23. Cement additives C-ADD



24. Asphalt pavements

Streamlining business processes: what it means?

Streamline
verb [I or T]

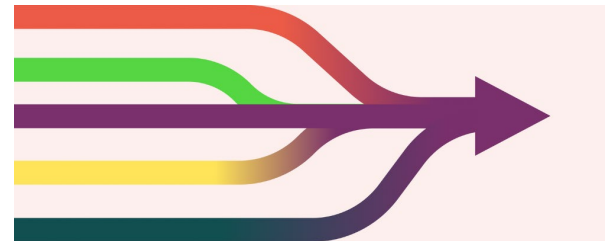
to make a business, process, activity, etc. simpler and more effective by reducing costs, the number of people involved in it, etc.

Effective
Adjective

successful in producing a desired or intended result

Which basically means:

THINK AND ANALYSE FIRST, THEN PLAN AND BUILD!
Software is not a Magic Wand, but can greatly improve your effectiveness if you shape its usage in the right way

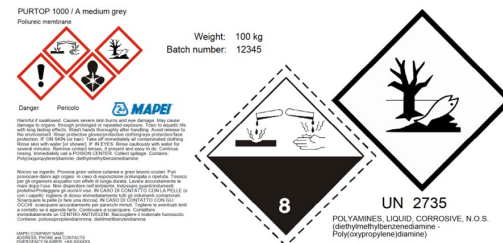
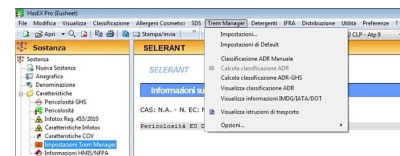


Mapei and Trace One

Mapei has started using Trace One products since the start of the availability of products to author safety data sheets and labels. For many years, the usage of this kind of software was very specific to this topic, also due to the client-server structure of Eusheet that was more difficult to export in other countries.

Since 2014: start of Devex implementation
Starting from 2016: worldwide adoption of Devex

The first step was to correctly manage all different GHS and regulations in the world, but through the years we have developed it to be also a repository of regulatory and chemical information, and connect it to other platforms.



Main processes related to Product Safety

Inside Mapei, the product safety evaluation of a product or raw material is made since the very beginning of the qualification.

This means that the following procedures involve the usage of Devex to be completed:

- Raw material qualification
- Formulas qualification
- Finished products qualification
- Compliance checks
- And, in future, other procedures will be moved further to Devex as data repository



Safety Data Sheet



Labelling



But most of all... data and documents!



Decision drivers for business processes

-> Starting point: some Product safety activities are business critical!

In our case, several drivers were found that obliged us to review our procedures and, therefore, our software:

- Reduced availability of raw materials, and the lead time to order it
- Worldwide availability of transport classification data to ship products quickly and correctly
- Commercialization of products in other countries and regulatory areas
- Possibility to fulfill orders coming from other regulatory areas

Some drivers are critical also to manage suppliers and obtain better collaboration

-> Final target: Helping company grow correctly!



Our software structure

Devex



Custom software

ERP (AX/Dynamics365)

+ a data aggregator

Our IT and developers have worked with Trace One to build a more extended structure and connect this data with our processes and requirements

Building a collaboration between software with different targets is an extremely important activity which all companies must, one day or another, consider and improve

Question 1: How to sell products worldwide? With the Chemical inventory check

This regulatory module has been conceived for two main reasons:

- Quickly verifying compliance of a product to multiple chemical inventories
- Becoming a regulatory calculation engine to perform other chemical calculations

The core of this development is a highly configurable engine which can cover multiple chemical regulation with a «status» structure, and interact with SFE views to give additional information or apply the calculation at multiple levels.

In the future, this data will be the base of a specific regulatory document to help customers.

▼ AUSTRALIA

AICIS - Status	<input type="text"/>	<input checked="" type="checkbox"/>	AICIS - Additional notes	<input type="text"/>	AICIS - Status - Date	<input type="text"/>
AICIS - Specific information requirement	<input type="text"/>	<input checked="" type="checkbox"/>	AICIS - Specific information requirement - Additional notes	<input type="text"/>	AICIS - Specific information requirement - Date	<input type="text"/>

AICIS CATEGORIZATION AND ALLOWED QUANTITIES

AICIS categorization <input checked="" type="checkbox"/>	Allowed quantity (in kg)
There are no entries	


▼ CANADA

DSL - Status	<input type="text"/>	<input checked="" type="checkbox"/>	DSL - Additional notes	<input type="text"/>	DSL - Status - Date	<input type="text"/>
NDSL - Status	<input type="text"/>	<input checked="" type="checkbox"/>	NDSL - Additional notes	<input type="text"/>	NDSL - Status - Date	<input type="text"/>
NDSL - Annual allowed quantity in kg	<input type="text"/>					


Calculation


Calculation Results: Global Inventories

DZMAP_GLOBAL_INVENTORIES.0

Overall Result  Passed

Execution Mode

Comparison Result  No Data Available.

 **Input Parameters**

Plant code

Material code

Formula version

Formula alternate

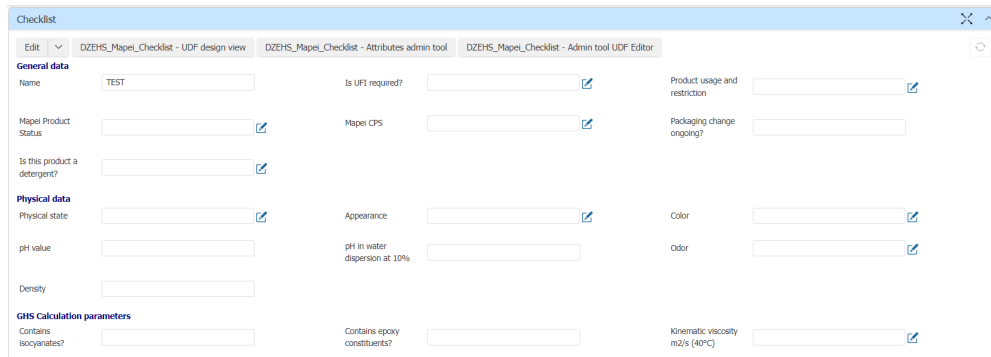
Show not classified ingredient

Question 2: How to simplify execution time? Introduction of the Devex Checklist

While Devex has improved over the years, it is almost impossible to find a standard setup that fits all companies and all markets.

The Devex checklist is a simple page in Devex, which aggregates the most important data of materials, and simplify the daily workload of qualification for raw materials and formulas.

The content of the checklist is updated and expanded as long as our procedures change and/or regulations change structure. The next step of this work will be to make them even more accurate and customized according to different areas and regulations.



The screenshot shows a web application window titled "Checklist" with three tabs: "DZEHS_Mapel_Checklist - UDF design view", "DZEHS_Mapel_Checklist - Attributes admin tool", and "DZEHS_Mapel_Checklist - Admin tool UDF Editor". The form is organized into sections:

- General data**
 - Name:
 - Is UFI required?:
 - Product usage and restriction:
 - Mapel Product Status:
 - Mapel CPS:
 - Packaging change ongoing?:
 - Is this product a detergent?:
- Physical data**
 - Physical state:
 - Appearance:
 - Color:
 - pH value:
 - pH in water dispersion at 10%:
 - Odor:
 - Density:
- GHS Calculation parameters**
 - Contains isocyanates?:
 - Contains epoxy constituents?:
 - Kinematic viscosity m²/s (40°C):

Keep
it
Simple

Question 3: How to monitor effectiveness? Data aggregation and checks

After many years of work on different IT systems, the quantity of data generated (and not correctly allocated) was very high.

We have then started a work of data aggregation which also involved changes in Devex attributes structure and data exchange between Devex and other systems.

This work involves:

- Reviewing and re-structure data for further usage (and eventual migration of them)
- Checking multiple test data and consolidate them
- Establish a master system for each type of data



Question 4: How to follow company growth? Data import and usage of OC

Reliability of data is one of the main priorities for a multinational company; and, as long as Devex becomes the main reference system for GHS and Transport classification, and some chemical and physical data, it is extremely important to make an effective check on data, and schedule eventual data import to merge data.

Open Connector, even if it's a «old» software, can be very useful to perform specific import and simplify some tedious activities.

It is, for example, very useful in case of new company acquisition, or change of structure of some companies.



Training, monitoring and reliability

A software and process is reliable as long as you also put effort in monitoring software usage and how certain operations are made.

Software like Devex, which store a huge amount of data and perform a big number of tasks, can be used in many different ways, with different results and different time consumption.

In addition, each user has different ways to interact with the software. Find time to work with users and learn from their day to day work.



Take-home messages

1) Always evaluate available solutions, but be open minded about them

A common misconception of users is to think that current process is probably the best; the reality is sometimes different!

As market, regulations and technology change, software changes too and the same should apply to procedures

2) Never underestimate usability!

Users are frequently frustrated by poor usability or loss of time, with the result of losing accuracy too

3) Look for collaboration

Devex has many functions and data that can be shared with other users in your company; collaboration is a great key to make the system more complete



Thank you!



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