

Master Data Hierarchy Matching with SAP Leonardo Artificial Intelligence

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PUBLIC

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SAP Leonardo Intelligent Technologies

Unlock the Intelligent Enterprise and transform your business

Embedded Intelligence

Activate innovation

through intelligent capabilities built into SAP core applications

Optimize

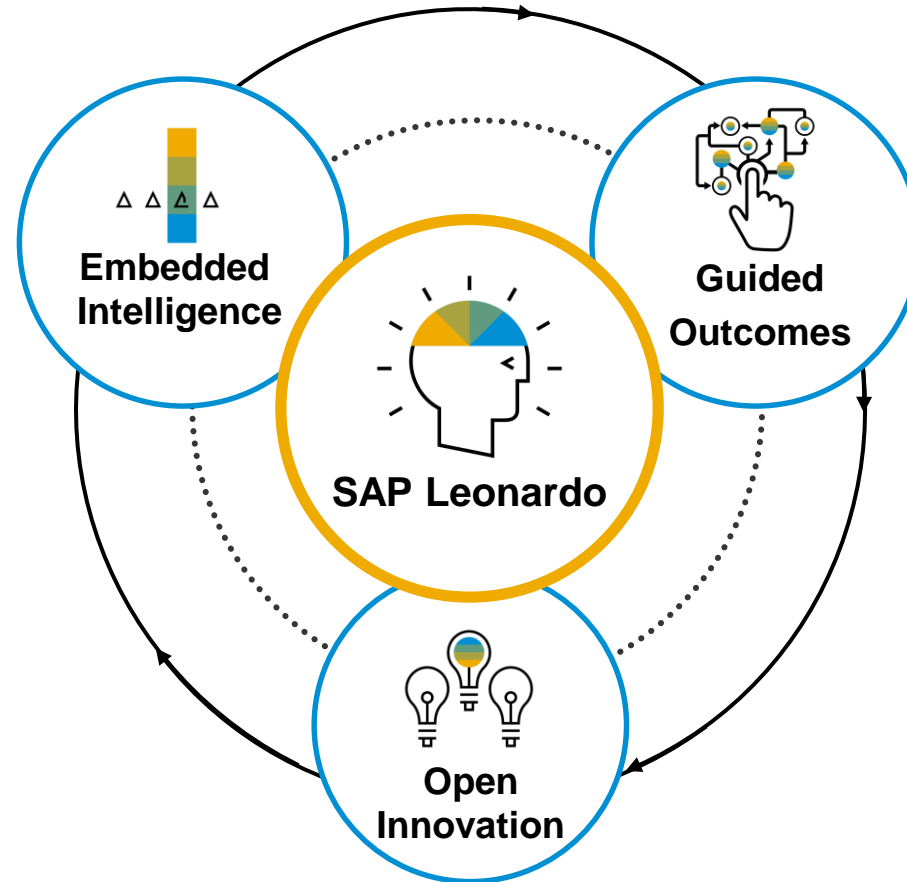
Processes for more efficiency and reliability

Extend

Extend processes to capture new sources of value

Transform

Your value chain or business model



Guided Outcomes

Deploy proven cross-LoB solutions

to drive business value and deliver innovation getting the most from the SAP portfolio

Open Innovation

Address unique needs

by building new solutions using the trusted capabilities of SAP's rich portfolio

Machine Learning will reinvent Businesses

• **60%**

Of human tasks will be automated by 2025

• **97%**

Image recognition accuracy today (better than human rate 95%)

• **95.1 %**

Speech recognition accuracy today (better than human rate 94.1%)

• **\$18B**

Enterprise Machine Learning Market by 2020

Process Automation

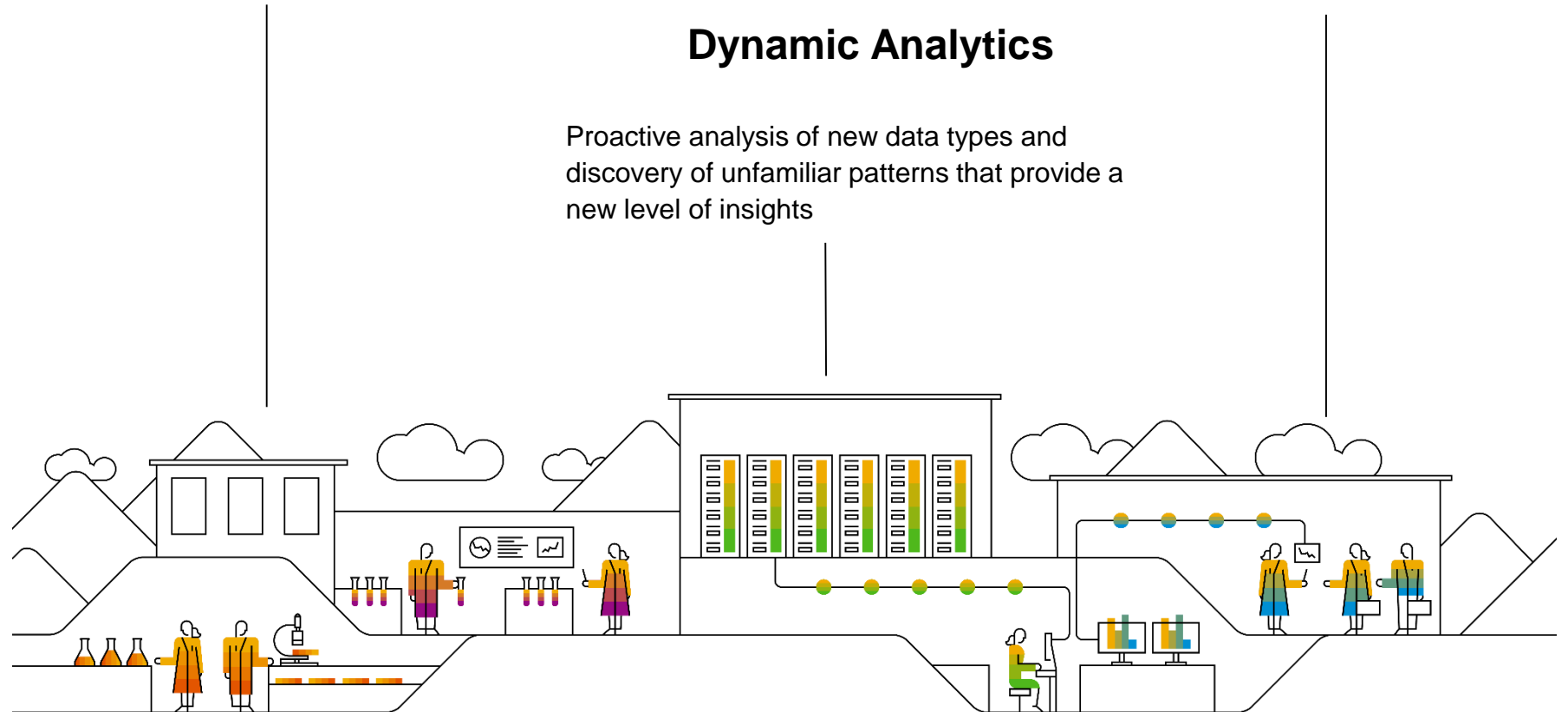
Full automation of business processes, from HR to payments processing, to workflow approvals for purchase orders and sales execution

Next-gen UX


User experience based on voice, vision and messaging will replicate how people interact in real life and increase business productivity

Dynamic Analytics

Proactive analysis of new data types and discovery of unfamiliar patterns that provide a new level of insights



How SAP Leonardo AI helps to deliver the Intelligent Enterprise

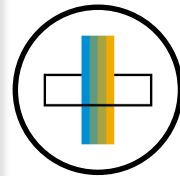


77%
of the world's transaction revenue touches an SAP system

26
Industries

7
lines of business

The world's largest business network



Open and flexible building blocks

Intelligent Applications

- Conver-sational AI
- Intelligent Process Automation
- ML & Data Science Platform

On SAP Cloud Platform & SAP HANA



Business Outcomes

- Increase revenue
- Re-imagine processes
- Quality time at work
- Customer satisfaction
- Enabling innovations

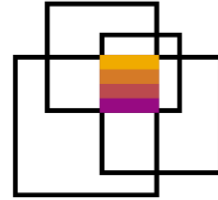
SAP Intelligent Services for Master Data Management



Consistent master data is the basis for a smooth running enterprise. It is the key for well-founded data-driven decisions and enables Machine Learning capabilities in different lines of businesses.



Retrieve the treasure of your master data!



Gain early market insights for new products



Match incoming information to your own data hierarchy



Speed up master data generation

Hierarchy Matching

Automate master data management tasks

SAP Leonardo Machine Learning Foundation



Use free text, numbers and category features to classify entities such as products, stores and users into multiple classes, that may form a hierarchy.

The service includes inference as well as training capabilities to fit a model using a custom dataset.

Use Cases

Hierarchy Matching

Match point of sales information to your own product hierarchy



Business Problem

Analyzing point of sales data reveals important information for strategic decisions. The incoming data usually does not match the product hierarchy and needs to be matched manually which costs valuable time.



Solution

Our model can identify relevant matching patterns. Following those patterns it predicts to which representation in your hierarchy the incoming product record belongs which helps you to gain direct insights in the incoming Point of Sales information.



Availability

The machine learning service is natively integrated in SAP Demand Signal Management.

For customers using other applications or versions, the offering can get connected individually.

Hierarchy Matching

Predict the right value for complex fields

Planned - Subject to change

Business Problem



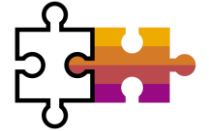
Maintaining master data also includes filling complex fields (commodity code, for example) with the right values. Today this task is supported by rules which often leads to inconsistencies and left-overs for manual processing.

Solution



The model can predict the correct value for the respective field by learning the logic behind complex fields and the dependencies to data attributes.

Availability



A native integration into S/4 HANA is planned for 2019.
As of delivery in Q1 2019, the service can get connected to any system in use from the customer.

Hierarchy Matching

Get suggestions of material class and its characteristics

Planned - Subject to change



Business Problem

Creating new material requests can be a big effort, e.g. because of many requests coming back due to incorrectly chosen material class. Smart suggestions of material class and its characteristics accelerates the process and reduces the effort for new material creation.



Solution

Hierarchy Matching enables intelligent master data governance at companies struggling with the creation of new material requests. It can be used for bulk classification of materials, accelerating scaling across SAP ERP for new companies.



Availability

A native integration into S/4 HANA is planned for 2019.

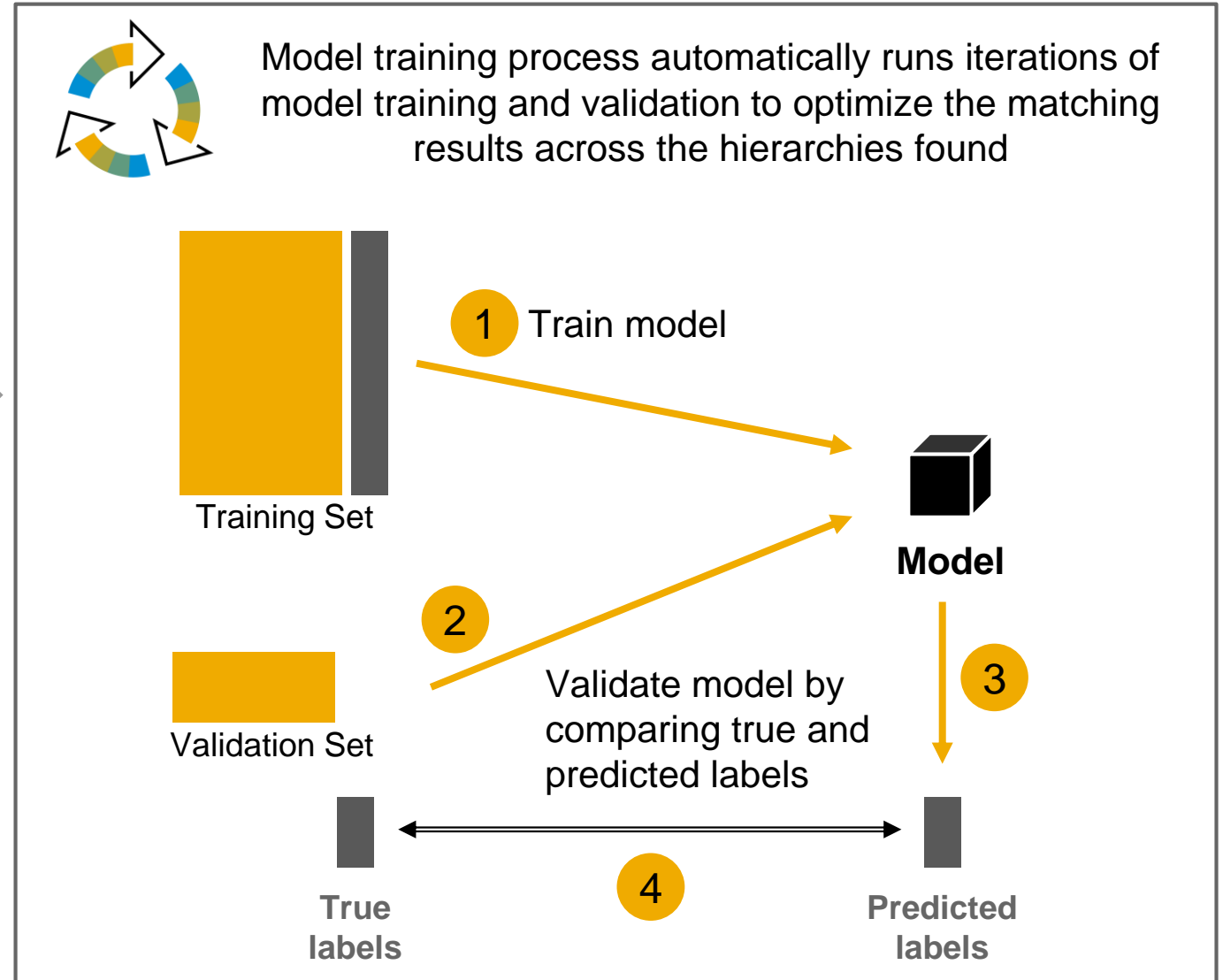
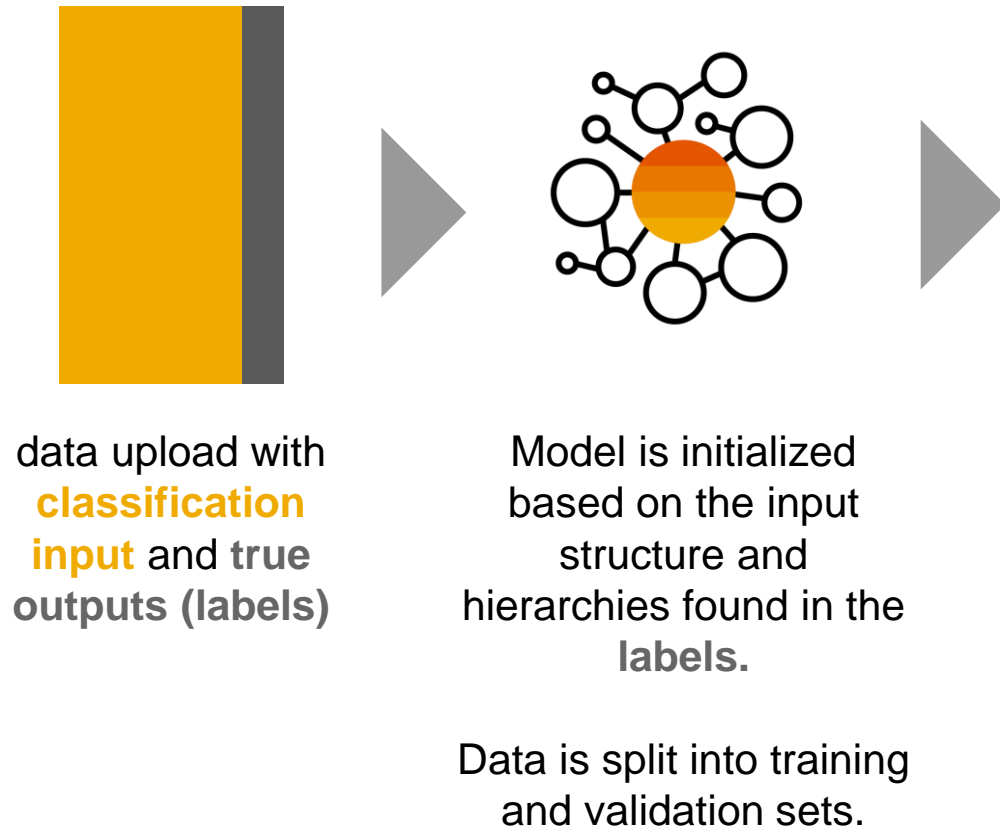
As of delivery in Q1 2019, the service can get connected to any system in use from the customer.

Demo



How does Machine Learning work?

Model Training



Future Machine Learning Services for Master Data Management

Deduplication

Detect master data duplicate entries and correct or merge them

In POC- Subject to Change



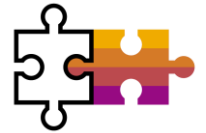
Business Problem

Duplicate entries in master data cause delays, miscommunication and losses for a company. Especially during mergers and acquisitions, system consolidations or master data creation companies avoiding duplicates is crucial.



Solution

Our model is able to detect duplicate entries and to recommend how to correct or merge them in the system. Additionally, the service can support customers during merger and acquisitions, system consolidations and master data creation to avoid duplicates in the system.



Availability

This service is currently in Co-Innovation phase and is planned to be productized throughout 2019.

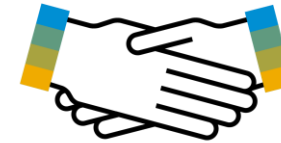
Engagement options

Ready to Use



- Hierarchy Matching is available as a service on **SAP Leonardo Machine Learning Foundation**

Ready to Co-Innovate*



- New features/integrations for Hierarchy Matching
- For Deduplication service

Thank you.

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