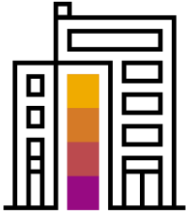




SAP® Innovation Awards 2020 Entry Pitch Deck

Business Data and Integration Hub Boosts Intelligent Endress+Hauser
Endress+Hauser InfoServe



Company Information

Headquarters Endress+Hauser

Industry Process Automation and Instrumentation

Web site <https://www.endress.com/>

- Endress+Hauser is a global leader in measurement instrumentation, services and solutions for industrial process engineering. We provide process solutions for flow, level, pressure, analytics, temperature, recording and digital communications, optimizing processes in terms of economic efficiency, safety and environmental impact.
- Endress+Hauser InfoServe is the innovative IT partner of the Endress+Hauser Group, providing powerful IT solutions which are simple to use. We focus on the customer experience and productivity using SAP since 1985 in a close partnership.
- Artificial Intelligence helps to make things easy, even if they are not. But to built intelligent solutions, you need to have the right data at your finger tips. Therefore Endress+Hauser InfoServe has built the Business Data and Integration Hub powered by SAP Cloud Platform.

Business Data and Integration Hub

Endress+Hauser InfoServe



Endress+Hauser

People for Process Automation



Digitalization is key at Endress+Hauser and the Business Data and Integration Hub is an essential pillar to drive Endress+Hauser into the age of data.

It is a game changer for us, enabling new offerings for our customers and new data insights for ourselves.

For us, it's data driven intelligence!

Jürgen Schrempp,
Director Applications

Challenge

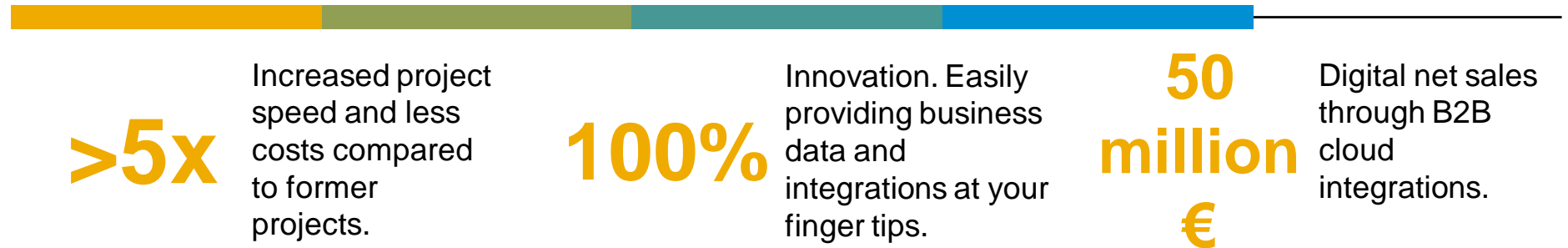
Business data was kept and owned by the application owners and their departments. There was no possibility to combine, integrate and reuse data in a standardized and easy way. No Data Thinking was present and new IT solutions had to be built on new data silos, reinvented from scratch.

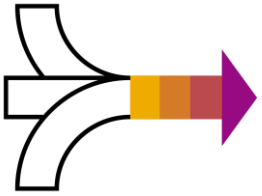
Solution

With our new Business Data and Integration Hub (BDIH), we founded an innovation platform based on the SAP Cloud Platform mastering the challenge. It helps us to boost our innovation topics like Machine Learning, B2B customer integrations and Data Science and moreover enables end-to-end integrated business processes.

Outcome

The BDIH is the new core of our intelligent enterprise. It delivers the data we need to generate new IT solutions, just a few clicks away. Intelligent product configuration based on Machine Learning and ad-hoc data science using SAP Data Intelligence is just the beginning.

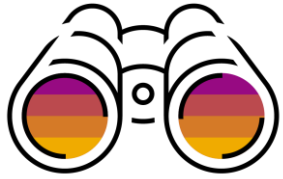




Business Challenges and Objectives

- No agile method available to satisfy business data and integration needs.
- High demand for EDI customer integrations (Order-to-Cash processes).
- Lack of a central business data model as foundation for new business solutions.
- No Data Thinking was present, data was hidden in silos.
- No ability to combine and reuse business data in a standardized way.
- Hardly able to comply with legal integration requirements.

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- Creating a new platform delivering the business data and integrations we need, through state-of-the-art integration tools and technologies.
 - Establish a Business Data Lake as single point of truth for all business data starting with asset and product master data.
 - A change in mindset moving forward to Data Thinking and generic APIs driven by IT.
 - New B2B integration process based on the Machine Learning capabilities of the Integration Content Advisor.
 - Use standardized integration packages provided by SAP - wherever possible. (E. g. legal integrations)



Project or Use Case Details

The starting point of the project was an R&D initiative, having the vision to create a new centralized business data model combined with state-of-the-art integration technologies for the whole company group. Making it easily possible to build new applications and creating a platform for integration, data science and innovation.

InfoServe's answer to this is the Business Data and Integration Hub (BDIH), powered by the latest SAP Cloud Platform tools.

The ideas behind the BDIH are, simplicity by using SAPs PaaS offering, not reinventing the wheel from scratch. Using data integration tools to combine and synchronize big data. Not to think in applications, silos or departments, but rather to think in data and services. Providing generic APIs and a clean data model for everyone on a global scale.

The BDIH is the new foundation for our intelligent enterprise enabling new innovative solutions. Intelligent product configuration based on Machine Learning on our website, ad-hoc data science using SAP Data Intelligence and intelligent B2B customer integrations are just the beginning.

That's data driven intelligence for us!



Benefits and Outcomes

Business or Social

- Introduced Data Thinking in the company group.
- The Business Data Lake supports new business models like IIoT.
- Increased customer satisfaction by intelligent product configuration.
- Provide a standardize platform for data scientists to effective and timely use of enterprise data.
- Self-service analytical capabilities in SAC.

IT

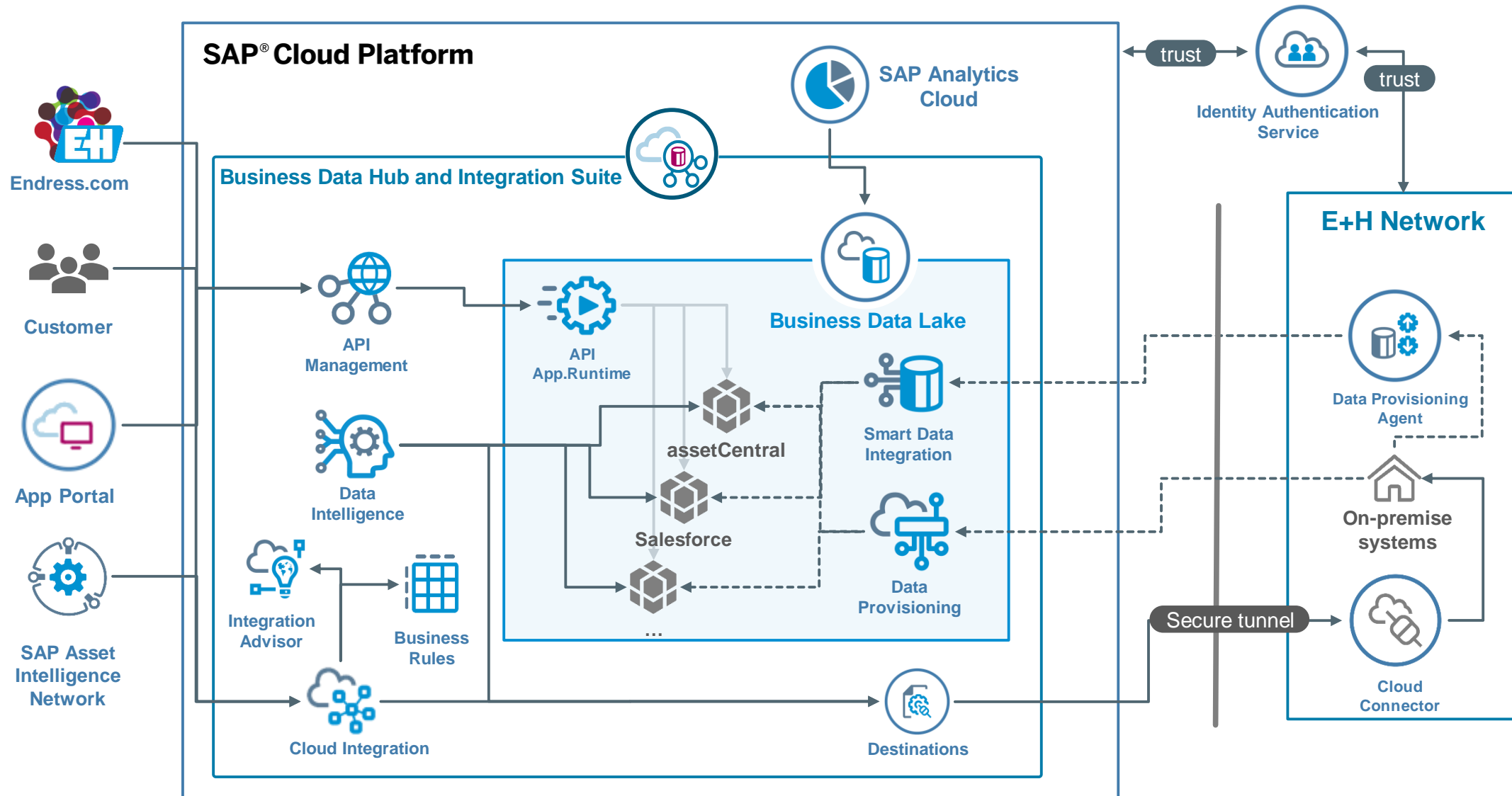
- Better IT project efficiencies, empowering IT staff to do more in an agile manner.
- Greater control and visibility of enterprise data.
- Increased developer productivity by introduced reusable APIs.
- Flexible and high available integration suite.
- Easy global scaling within SAP Cloud Platform.

Human Empowerment

- Happy integration developer.
- Fun to use PaaS motivates employees in their daily work.
- Data scientist have a new home and greater visibility within the company group.
- Easy access to business data and B2B interfaces for end customers.



Architecture





Deployment

Deployment status Live

Date June 2019

Number of users 100+ users

SAP technologies used:

	SAP product	Deployment status (live or proof of concept [POC])	Contribution to project
1	SAP Cloud Platform, SAP HANA service	live	Backbone of the Data Lake
2	SAP Cloud Platform Integration Suite	live	Used for management of Java APIs and for publish and subscribe mechanisms
3	SAP Data Intelligence and SAP Analytics Cloud	live	Two “consumers” of the Data Lake
4	SAP HANA Smart Data Integration	live	Data Integration tool for filling the Data Lake

5 If you have used one of the services or support offerings from SAP Digital Business Services during the implementation or deployment phase, please select with one or more of the following offerings:

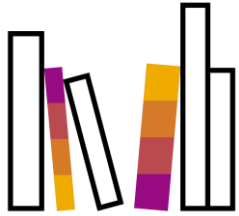
- | | | |
|--|--|--|
| <input type="checkbox"/> SAP MaxAttention™ | <input type="checkbox"/> SAP ActiveAttention™ | <input type="checkbox"/> SAP Advanced Deployment |
| <input type="checkbox"/> SAP Value Assurance | <input type="checkbox"/> SAP Model Company | <input type="checkbox"/> Others: |
| <input type="checkbox"/> SAP Innovation Services | <input type="checkbox"/> SAP Innovative Business Solutions | |



Advanced Technologies

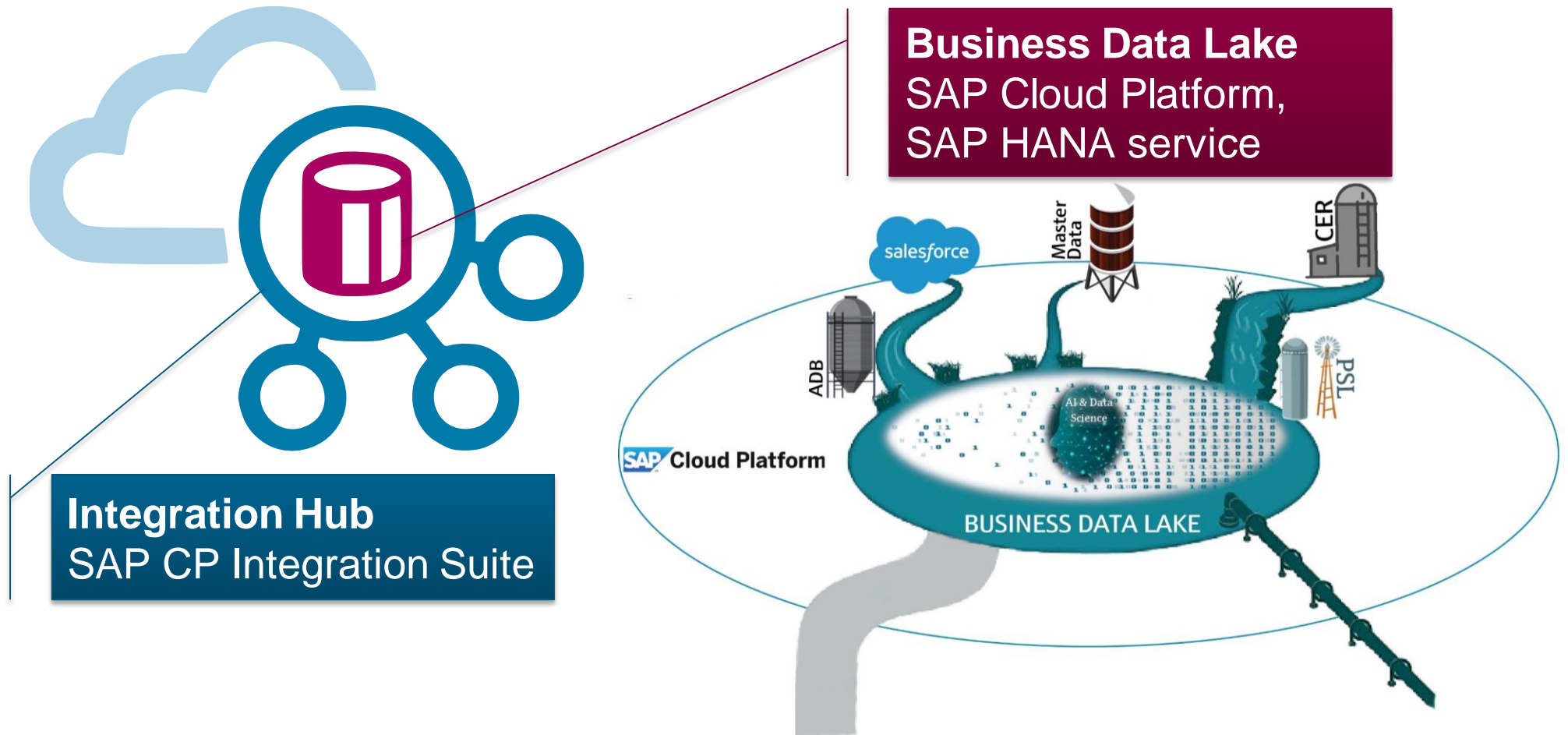
The following **advanced technologies** were part of the project.

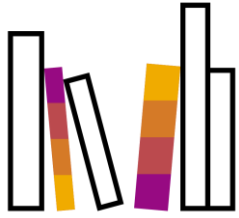
	Technology or use case	Yes or No	Contribution to project
1	3D printing	No	
2	Blockchain	No	
3	Internet of Things (IoT)	No	
4	Machine learning or AI	Yes	Jupiter notebooks, phyton applications and SAP Data Intelligence use the Business Data and Integration Hub
5	Conversational AI	No	
6	Robotic process automation	No	
7	Data anonymization	No	
8	Augmented analytics	No	



Additional Information

- Official BDIH logo showing the main building blocks: SAP Cloud Platform, the Business Data Lake and the Integration Hub combined with an illustration of the Business Data Lake.





Additional Information

- Ideas behind the project:

1	Simple	SAP PaaS	<ul style="list-style-type: none">• Do not reinvent• Use existing services
2	Data Integration	Move data in real-time	<ul style="list-style-type: none">• Synchronization of big data• Ability to transform data
3	Data Thinking	Combine data from any source	<ul style="list-style-type: none">• Independent data model• Not limited by applications
4	Interfaces	State-of-the-art integration	<ul style="list-style-type: none">• Generic APIs• Specific interfaces
5	Guideline	Integration solution advisory methodology	<ul style="list-style-type: none">• Using the right tools

