

# SAP Innovation Awards 2022 Entry Pitch Deck

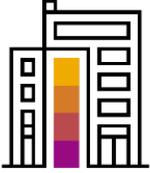
## Automating Short-Time Working Compensations with SAP Intelligent RPA

“Amt für Informatik”, Canton of Zurich, Switzerland

PUBLIC



# Company Information



**Headquarters** Zurich, Switzerland

**Industry** Public services

**Web Site** [www.afi.zh.ch](http://www.afi.zh.ch)

The “Amt für Informatik” of the Canton of Zurich was founded on January 1<sup>st</sup>, 2018. This authority supplies the IT Infrastructure for the Canton and acts as an enabler for the business with a variety of applications and services, including SAP.

With a population of approximately 1.5 million, the Canton of Zurich is the driving force of Switzerland’s economy. In March 2020, when Switzerland was hit by the COVID-19 pandemic and therefore embarked on a lockdown, the number of applications for short-time work in the Canton of Zurich rose to more than 10,000 almost overnight from an average of 10 in the months before: This meant that over a period of three months, about 30,000 payments had to be processed – a task that would take a human at least 25 minutes per payment. This would have meant to increase the staff by at least 70 people in a time where a lockdown was imposed in Switzerland.

Therefore, the Canton of Zurich decided to leverage the SAP Business Technology Platform (BTP) and SAP Intelligent (RPA) to develop an Intelligent RPA application to fully automate the incoming applications and payments.

# Automation with SAP Intelligent RPA

## Amt für Informatik, Canton of Zurich

### Challenge

The challenge was to handle an enormous number of short-time work compensation applications over a period of three months. In times of a lockdown it was impossible to recruit and train 70 additional staff members in a very short time to manually process the applications. The number of applications for short-time work rose to more than 10,000 from an average of 10 per month almost overnight – an amount that can not be administered without a digital solution.

### Solution

With strong support from SAP, an Intelligent RPA application was built to extract, validate, and process short-time working compensation documents. Companies affected by the pandemic had to submit these documents to a web application on a monthly basis.

### Outcome

Within two weeks from first contact with SAP to go-live, an Intelligent RPA application involving two old legacy systems was set up, processing more than 30,000 payment applications over a period of three months. The processing time per application and payment was reduced from 25 minutes to 30 seconds. Therefore no additional staff members had to be employed in the midst of a nationwide lockdown.

# 85%

Very high **automation level** was reached. Only 15% of the documents had to be revalidated by a staff member.

# 30s

**Average processing time** per application and payment (previously 25 minutes).

# < 1 Month

Outstanding **payback period** for this Intelligent RPA project.



***Without this very innovative SAP Intelligent RPA solution, we would never have managed to process and pay the enormous number of short-time working compensations within due course.***



*Christian Truog, CFO of Authority for Economy and Labour, Canton of Zurich, Switzerland*

# Participating Partner Information



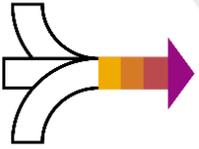
## SAP Services and Support

**SAP Services and Support provided a global team with experience from different departments, an agile approach, and flexible problem-solving ability. SAP Services and Support, collaborating with the “Amt für Informatik” of the Canton of Zurich implemented the project within two weeks, from initiation to go-live, resulting in a short time to value.**

“Thanks to the strong collaboration with SAP Services and Support and SAP Intelligent RPA, we were able to automatically process the thousands of monthly reduced-working-hours compensation forms and pay companies without increasing our workforce.”

- Marc Zeugin, Team Leader Special Applications, Canton of Zurich

# Business Challenges and Objectives



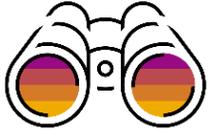
## Business Challenges

- Processing approx. 30,000 short-time working compensations over a period of three months.
- This task would take a human at least 25 minutes per request/payment.
- Increasing staff by approx. 70 FTE's (Full time equivalent) to be able to handle the additional workload during a nationwide lockdown.
- Whole process would have to be managed without any digital help / fully analog.
- Increase self-service capabilities for companies.
- Compliance with regulatory requirements and archiving.
- Strong collaboration between IT, business and external partners/software providers.

## Project Objectives

- To rapidly find and develop an appropriate solution to support the business side in handling 30,000 compensations.
- To reduce additional staff on the business side as much as possible. The new solution must have a high level of automation.
- To go-live with a solution within just two weeks.
- Ensure compliant and highly qualitative process supported with innovative digital means.
- Agile and flexible methodology to ensure all requirements from the business side are met.

## Project or Use Case Details



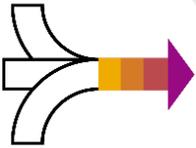
The target of this project was to replace an old-fashioned way of processing short-time work compensations with an Intelligent RPA solution within two weeks.

In addition to the challenge of developing an Intelligent RPA application in a very short time, a tenant for Canton of Zurich had to be set up on the SAP Business Technology Platform. In addition, firewall rules had to be changed to connect SAP BTP to the Intelligent RPA agents installed on three inhouse PCs in the authority “Economy and Labour”.

The targets were only achieved by using an agile project methodology and having a highly performing project team. Daily stand-up meetings were held in the morning, setting targets for each day. After this, the two Intelligent RPA developers from SAP started coding the defined parts of the application. Every evening, project members from the business side conducted the application tests and gave their feedback to the developers and the project team.

Because of the very short project time and the lack of legacy test systems after go-live, the developers were working on the project for another two weeks to ensure smooth running of the Intelligent RPA application.

# Business Process Details



## Process Before

- A Microsoft Excel file had to be downloaded.
- This Excel file had to be filled in, and some parts even had to be filled in manually.
- The form was printed and sent by mail.
- Form and attachments had to be scanned and uploaded to a document management system.
- This process always led to a lot of data being inaccurate and/or incomplete.
- Target system was a AS400 (Cobol), hosted by the Federal Government – a 30-year-old system with a complex interface.
- There was an average processing time of 25 minutes per compensation.

## Process After

- Registration and data input can be done online in a Web form. Data and attachments are stored in an XML file.
- XML file is fetched and extracted by the Intelligent RPA application and stored locally.
- Quality of data is validated by business rules of Canton of Zurich.
- If these rules are not fulfilled, a log is written and the documents are checked manually.
- When rules are fulfilled, the information is typed in an AS400-System by the Intelligent RPA. Payment is automatically released.
- In addition, all data and attachments are uploaded into a document management system by the Intelligent RPA.

# Benefits and Outcomes



## Business or Social

- 85% of incoming applications are handled fully autonomously by the robots.
- The registration and input of the data necessary can be done online in a Web form.
- The processing time per application and payment was reduced from 25 minutes to 30 seconds.
- No additional staff had to be employed.
- <1 Month payback period.

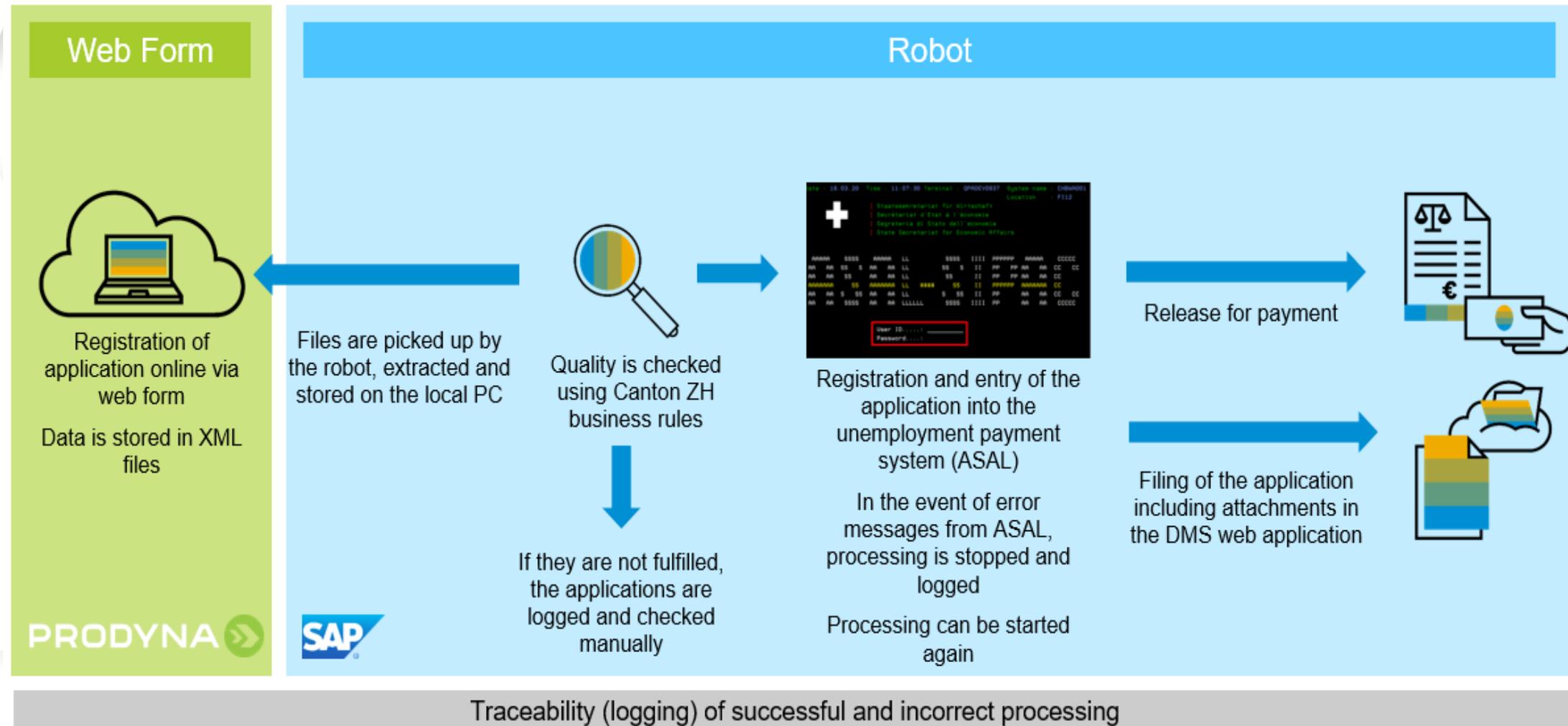
## IT\*

- Two old legacy systems are connected to the Intelligent RPA. There was no need to develop expensive and time-consuming interfaces.
- No in-house installation of the server-side part of the Intelligent RPA was required.

## Human Empowerment

- New knowledge was created on how to use a modern Intelligent RPA application in a legacy system environment.
- Extensive experience gained on how efficient and productive an agile project methodology can be.

# Architecture



# Deployment Details 1 of 2



**Deployment status** Live

**Date** April 2020

**Number of end users** 3 Intelligent RPA robot users

**Number of customers** Approx. 10,000

**Transaction Volume** Approx. 30,000 compensations

## SAP® technologies used:

	SAP product	Primary product	Deployment status LIVE or POC [proof of concept]	Contribution to project
1	<b>SAP Intelligent Robotic Process Automation</b>		Live	Intelligent RPA was at the heart of the project. We developed an Intelligent RPA application, using three bots to automate the incoming applications and payments as much as possible. Two old, non-SAP legacy systems are connected to the Intelligent RPA. There was no need to develop expensive and time-consuming interfaces.
2	<b>SAP Business Technology Platform</b>		Live	We leveraged the SAP BTP to install SAP Intelligent RPA. The SAP BTP handles all basic and backend functionalities for Intelligent RPA. Thanks to the quick deployment we were able to start the project immediately.

# Deployment Details 2 of 2



The following offerings from SAP Services and Support were utilized during the implementation or deployment phase

- SAP MaxAttention™
- SAP ActiveAttention™
- SAP Value Assurance
- SAP Advanced Deployment
- RISE with SAP for Industries
- SAP Advisory Services
- SAP Customer Experience Solutions
- SAP Innovation Services
- SAP Innovative Business Solutions
- SAP Preferred Success
- SAP Enterprise Support
- SAP Solution Manager
- SAP Cloud ALM

## Contribution to the project

SAP Services and Support provided a global team (following the sun principle) with experience from different departments, an agile approach, and flexible problem-solving ability. SAP Services and Support, together with the “Amt für Informatik” of the Canton of Zurich, implemented the project within two weeks, from initiation to the go-live event, resulting in a very short time to value.

# Advanced Technologies



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

	Technology or use case	Product *	Contribution to project and how product used integrates with SAP products
1	<b>Intelligent technologies</b> <b>A) Machine learning or artificial intelligence</b> Conversational AI, AI-based knowledge graph, AI Business Services, Robotic process automation	SAP Intelligent Robotic Process Automation	Intelligent RPA was at the heart of the project. We developed an Intelligent RPA application, using three bots to automate the incoming applications and payments as much as possible. Two old, non-SAP legacy systems are connected to the Intelligent RPA. There was no need to develop expensive and time-consuming interfaces. Thanks to the quick deployment of the SAP BTP and the activation of the SAP Intelligent RPA services, we were able to start the project immediately.
	<b>B) Blockchain</b>		
	<b>C) Internet of things</b>		
2	<b>Intelligent data management</b> Multi-cloud and or hybrid deployment, data virtualization & governance, privacy compliance, cloud data lake service		

# Advanced Technologies (2 of 2)

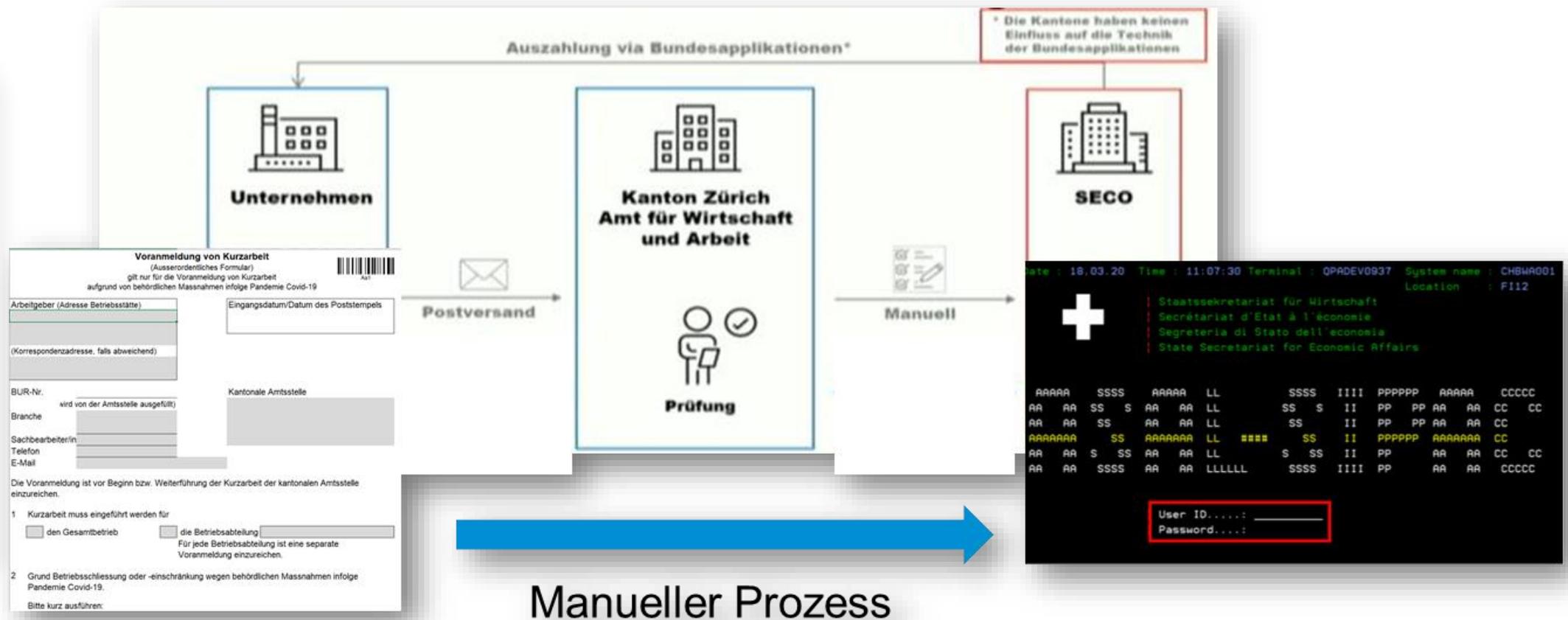


The following **advanced technologies** were part of the project.

	Technology or use case	Product *	Contribution to project and how product used integrates with SAP products
3	<b>Advanced cloud integration</b> New business models using API's, Connecting business partner(s) with API's, Integration Advisor, Digital integration hub architecture, Event Mesh		
4	<b>Advanced and augmented analytics</b> Real-time and streaming analytics, spatial analytics, natural language processing, machine learning to identify trends, patterns, and outliers, predictive analytics and planning)		
5	<b>Combined transactions and analytics on single data set</b> Reduce data latency and footprint from dedicated data marts, data warehouses and data lakes (> 1TB)		

# Additional Information

Overview of the manual process involving a downloadable Excel-file which had to be filled in and sent by mail to the authority “Economy of Labour”, Canton of Zurich.



# Additional Information



Media coverage of Intelligent RPA robot in the Swiss press:

Themen Organisation

← Zurück zur Übersicht



## Massive Auswirkungen der Pandemie auf Arbeitsmarkt und Betrieb: Digitale Lösung beschleunigt Auszahlungen

Medienmitteilung 15.04.2020

Im Kanton Zürich sind in den letzten Wochen die Neuanmeldungen auf den RAV und die Voranmeldungen von Kurzarbeit massiv angestiegen. Zur Bewältigung der hohen Antragsvolumen setzt das Amt für Wirtschaft und Arbeit auf personelle Verstärkung, Prozessoptimierung und neu auf eine digitale Verarbeitung der Kurzarbeitsentschädigung.

## Wegen Corona: Im AWA Zürich arbeitet nun ein Software-Roboter

SCHWEIZ, E-GOVERNMENT, CORONAVIRUS, AUTOMATISIERUNG

Von Keystone-ada/ym, 15. April 2020 16:30 Letzte Aktualisierung: 16. April 2020 17:58



Und ab Freitag können Unternehmen beim Amt für Wirtschaft und Arbeit Kurzarbeits-Anträge online einreichen.

## Computerworld

Mobile | Technik | Software | Security | Tests | Studien

Homeoffice Fintech Start-ups Interview Ricoh SAP Schweiz Best Practice Whitepapers

Analytics Breakfast Sessions Alle Themen

Business-IT > Kanton Zürich verarbeitet Kurzarbeitsgesuche neu digital

2020, 15:16 Uhr

### Zürich verarbeitet Kurzarbeitsgesuche neu digital

zeichnet einen «massiven» Anstieg bei den Kurzarbeit. Um diesen bewältigen zu können, setzt das Amt für Wirtschaft und Arbeit neu auf eine digitale Verarbeitung.

MEISTGELESENE

- Microsoft schliesst Sicherheitslücken in Exchange 03.03.2021
- E-ID-Gesetz abgeschmettert vor 3 Tagen
- Neon: die Schweizer Internet-Bank im Test 27.06.2019
- CPO Talk: Beschaffung im

SAP Produkte Branchen Service und Support Schulungen Community Partner Über SAP COVID-19

Über SAP SE / SAP Switzerland Pressebereich / Unternehmen

### SAP Switzerland Digitalizes the Processing of Reduced Working Hours Payments in Swiss Cantons

Jun 17, 2020 von stephanefreise

Über SAP SE / SAP Switzerland Pressebereich / Lösungen

### SAP Schweiz vergibt Innovationspreise an SBB und Kanton Zürich

November 5, 2020 von stephanefreise

SAP Produkte Branchen Service und Support Schulungen Community Partner Über SAP COVID-19

Über SAP SE / SAP Switzerland Pressebereich / Lösungen

### SAP Schweiz vergibt Innovationspreise an SBB und Kanton Zürich

November 5, 2020 von stephanefreise

Microsoft PowerPoint 2019 Administration Expertenratstag (ERS) 2021

Über SAP SE / SAP Switzerland Pressebereich / Unternehmen

## Fragen & Antworten

Kanton Zürich Finanzdirektion Amt für Informatik Kanton Zürich Volkswirtschaftsproduktion Amt für Wirtschaft und Arbeit

PRODYNA THE BEST RUN SAP

Request control