Swiss Federal Railways SBB

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Swiss Federal Railways SBB.

We are shaping the mobility of the future.

Martin Zandegiacomo
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Passenger Division
1 250 000 pass. per day

SBB Cargo
210 000 t of freight per day

Real estate
3 500 Buildings

Infrastructure
3 230 km of rail network
10608 trains on the network per day

Information Technology

We move Switzerland – every day.
With 32,300 employees from 98 countries in 150 different occupations, SBB is one of Switzerland’s largest employers.
These are our challenges.

- **Customer requirements and mobility patterns** are undergoing a transformation.
- **Competition from other forms of transport** is increasing, due not least to increased transparency.
- Whilst rail operators are facing rising **overall costs**, other carriers can potentially cut theirs by half.
- **New technologies** are accelerating developments (safety, capacity, flexibility, environmental sustainability).
- **Coordinated planning of road/rail capacity** is required.
- **Regulatory and spatial planning requirements** are intensifying.
- **Public funds** are growing scarcer.
About the Speaker & Team.

Martin Zandegiacomo
Technical Consultant Office 365

- With SBB for 4+ years
- Started with PowerApps in March 2018
- In IT since 2009
- Coming from a system engineering path, not a software developer

Rapid Solution Unit

- Providing fast, reliable and economic software solutions for our internal customers
- 26 Engineers
  - 2 Engineers for PowerApps, Flow and Power BI

- Technologies provided
  - MS PowerApps, Flow, Power BI, SharePoint Online, Azure
  - MS Access, .NET, VBA
  - Lotus Domino, Java Web, Opentext DMS
PowerApps journey: from forms to apps.
Project «Form Migration»: Challenges.

Migrating 300 forms from ‘on premise’ to the cloud in order to be used in our award-winning intranet posed different challenges.
Overtime Reporting App.

- Overtime reporting for train crews
- 90% mobile users
- Used 4500+ times since January
- Used by 2200+ Users
Adding value to the forms.

One App instead of 7 forms

Reporting using Power BI

Language Switch
Architecture.

- R/W data from SPO lists
- Read translations from SPO list for multi-language support
- Used on mobile & desktop devices
- Flows connected SharePoint
- Sends emails to the responsible Business Unit or System
- Power BI reports connected to SPO lists
- Show a summary of the data collected

180+ PowerApps  
Supporting flows  
Power BI reports

Gateways and connectors
SharePoint Online is used to store data of the Form
Project «Form Migration»: Timeline.

- 300 forms migrated into 170 Apps
- Time used: 7 months

- July 2018
  Started with 300 forms
  1 Engineer, 1 PM

- October 2018
  120 forms to 70 apps
  8 Engineers, 1 PM

- January 2019
  220 forms to 165 apps
  2 Engineers, 1 PM

- May 2019
  180+ apps in production
Project «Form Migration»: Process established.

- **Initialization**
  - Check business needs
  - Add form owner
  - Ensure financing
  - Expenditure estimate

- **Architecture**
  - Forms
  - PowerApps
  - SPFx Solution

- **Acceptance**
  - Form owner approval

- **Realisation**
  - Realisation on test environment
  - Realisation on prod environment

- **Testing**
  - Form owner tests the form
  - Embedding on intranet site
Business units supported:

**HR**
- Contract requests
- E-Dossier management
- Internal reporting system
- Expense application
- Change workplace
- +23 more

**Passenger Div.**
- Reporting overtime
- Ticket refunds
- Report maintenance tasks
- Vacation requests
- Catering order
- Business trip ordering
- ~ 50 more

**Finance**
- Request a credit check
- Submit project completion
- Request financial competence adjustments
- Change master data request
- +5 more

**Cargo Division**
- Locomotive request
- Report delays
- Oil train customer notifications
- Sick leave reporting
- Document change request
- Locomotive fault report
- +34 more

Business units supported.
Business Impact.

165+ Apps

On time within budget

Leveraged Office 365 investment

Value+

Requirements covered
Going beyond forms: CareBase app.
CareBase App.

- App to support the work of emergency psychological care givers
  - Guides through a standardized questionnaire
  - Provides instant Feedback on the condition of a person
  - Solution to report time and conversations
- 100% Mobile Users, rolled out in January
- Used by 60+ Users
- Replaces a paper and Excel based solution
- Will be enhanced with Power BI reports
Learnings and looking ahead.
Learnings.

- Challenge the business
- Onboard the business
- Check limitations
- Start with a Plan
- Make use of MS support
- SharePoint online dependencies
Looking ahead.

**Center of Competence**
- Support Business Users
- Trainings
- Community

**Operation**
- Validate Platform Setup
- App Gouvernance
- App Maintenance

**Projects**
- New Requests
- Further Development
- Form consolidation continued
Thank you for your attention.