

### Business Context

With the challenges of digital transformation, information security and data privacy, businesses are increasingly recognizing the value of correct data.

Data is one of the most important assets of the future.

To become a Data Driven Company starts with intelligent collaboration based on data, managed by a data governance process.

Today, business users are spending more than 50% of their working time using office tools, like MS-Outlook®, MS-Excel® or MS-Word®.

Providing accurate data to the place where it's needed within seconds is key, to support efficient search, data quality checks and the making of right decisions.

**And most important, data governance is guaranteed any time.**

- ✓ Direct Data Access to centralized data with MS-Excel®
- ✓ No coding – just configuration
- ✓ Context based, fuzzy and global search
- ✓ Supports vertical and horizontal spreadsheets
- ✓ 100% permission control. SSO integration possible
- ✓ Supports multi domains and mult table queries
- ✓ Coming soon: 3<sup>rd</sup> Party Gateway (e.g. Address check with Swiss Post Repository)

### About Butos:

Provides compliance and process consulting, out of the box business solutions and implementation services based on requirements of international enterprises.

### Partner of Tibco:

Leading provider of analytical and data management tools since years (rated by Gartner).

Release Reference: smart.Office-R1.0.x  
April 2019 – Butos AG ©

### Solution Vision

This solution provides accurate data, managed by the data governance process powered by smart.Engine, where it's needed. Just with one mouse click in MS-Excel® – this product is designed to provide business users using MS-Excel® a direct and immediate access to data, managed by smart.Engine – regardless of type and domain: master-, reference- or meta-data can be made accessible by a simple configuration - managed by the data owner or administrator. Additional access rules leverage data security.

**100% flexibility with server-side configuration – no additional client distribution needed**

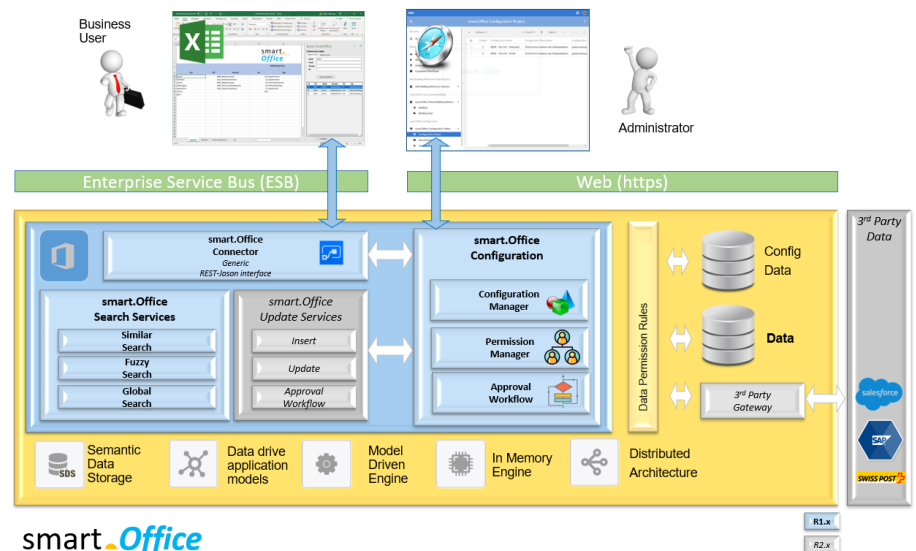
With the smart.Office module major requirements of business cases in data consuming and data quality check integrated in MS-Excel®, such us

- Search master data (e.g. product information, customer, responsible employees) or
- Enter reference data (e.g. building reference, address, securities number) or
- Use the correct code tables (region, country, zip code, industry codes, classifications)
- Validate existing data with bulk check – very powerful feature to guarantee that data using in MS-Excel® is accurate

can be implemented by using the components:

- smart.Office Client (Add-In for MS-Excel®)
- smart.Office Generic Connector (Web Service REST API - Jason),
- Search Services
- Update/Insert Services (future release)
- Configuration Manager
- 3<sup>rd</sup> party gateway (future release)

### Solution Architecture



### Component Set

#### smart.Office Client (MS-Excel Add-In)

- Search
  - Several search strategies are provided, to support the business user in finding information:
    - Similar Search (Search criteria's will be mapped to data base attributes) – depending on filter:
      - 0 record is found (not found)
      - 1 record is found (exact match)
      - N record are found (multiple results)

## Component Set

smart.Office Client (MS-Excel Add-In)	
<ul style="list-style-type: none"> <li>Search data</li> </ul>	<ul style="list-style-type: none"> <li>Similar search with filter (starts with, ends with, contains)</li> <li>Fuzzy search (search criteria's will be used as fuzzy filter) – always multiple results will be delivered, ordered by fitting probability.</li> <li>Global search (Search criteria will be searched in any attribute of a record - many records can be returned)</li> </ul>
<ul style="list-style-type: none"> <li>Result list</li> </ul>	<p>Result of search will be shown as a list of records.</p> <ul style="list-style-type: none"> <li>Sort feature based on attributes</li> <li>Dynamic grouping feature (Hierarchies) based on attributes</li> <li>Max records can be configured</li> </ul>
<ul style="list-style-type: none"> <li>Result details</li> </ul>	<p>Details of a selected record in the list are shown. If required all data can be presented in a separate pop-up window.</p>
<ul style="list-style-type: none"> <li>Select record</li> </ul>	<p>Data can be transferred to the MS-Excel spreadsheet</p>
<ul style="list-style-type: none"> <li>Data quality check (bulk processing of selected data)</li> </ul>	<p>Validate existing and selected data with bulk check – very powerful feature to guarantee that data using in MS-Excel® is accurate</p>
<ul style="list-style-type: none"> <li>Write back</li> </ul>	<p>Send changed or inserted record to backend. Record in approval process can be flagged. With refresh approvals can be notified as well.</p>
<ul style="list-style-type: none"> <li>Show configuration</li> </ul>	<p>Presents current loaded context with version, date and configuration details.</p>
<ul style="list-style-type: none"> <li>Set backend URL</li> </ul>	<p>Configuration feature to enter URL to appropriate backend system. (e.g. Dev, Test, Prod)</p>

smart.Office Backend (powered by d)	
<ul style="list-style-type: none"> <li>smart.Office Connector</li> </ul>	<p>Generic interface, to provide any data stream of the data model (table &amp; attributes)</p>
<ul style="list-style-type: none"> <li>Search Services</li> </ul>	<p>Backend services to provide data in the frontend (client)</p>
<ul style="list-style-type: none"> <li>Update Services</li> </ul>	<p><i>Backend services to provide update or insert feature. (Future Release)</i></p>
<ul style="list-style-type: none"> <li>Configuration</li> </ul>	<p>Administrator enters configuration with context, table and attributes, that are required to provide data into MS-Excel.</p> <p>Labels can be defined in multiple languages.</p>
<ul style="list-style-type: none"> <li>3<sup>rd</sup> Party Gateway</li> </ul>	<p>Access to 3<sup>rd</sup> party data such as, CRM information in Salesforce, ERP information in SAP or Addresses in Swiss Post Repository (Future Release)</p>

**Component Set**

**Roles & Permissions** (customization by client needs)

Role	C	R	U	D	A	M	P	WF <sup>2</sup>
<b>Business User</b>	-	<b>x</b>	-	-	-	-	-	-
<b>Data Owner</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	-	-	-
<b>Product Owner</b>	-	-	-	-	<b>x</b>	-	-	-
<b>Data Steward</b>	<b>x</b> <sup>1</sup>	<b>x</b>	<b>x</b> <sup>1</sup>	-	-	-	-	-
<b>smart.Office Admin</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	-	-	<b>x</b>	-
<b>System Admin</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>

**C=create, R=read, U=update, D=delete, A=approve, M=data model, P=permission, WF=workflow**

<sup>1</sup>needs approval of Data Owner

<sup>2</sup>Workflow configurations

**Solution Roadmap (next releases)**

- Fuzzy Search based on attributes
- Configuration of external data access
- Update and insert services for data changed in MS-Excel®
- Multi table relations (views)
- Advanced and validation search
- Add-In for MS-Outlook® and MS-Word®