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# EXTENDING ODF-FIELDS FOR SMART DOCUMENT PROCESSING

**CIB**<sup>■</sup>.de

Aarhus  2015  
**CONFERENCE**

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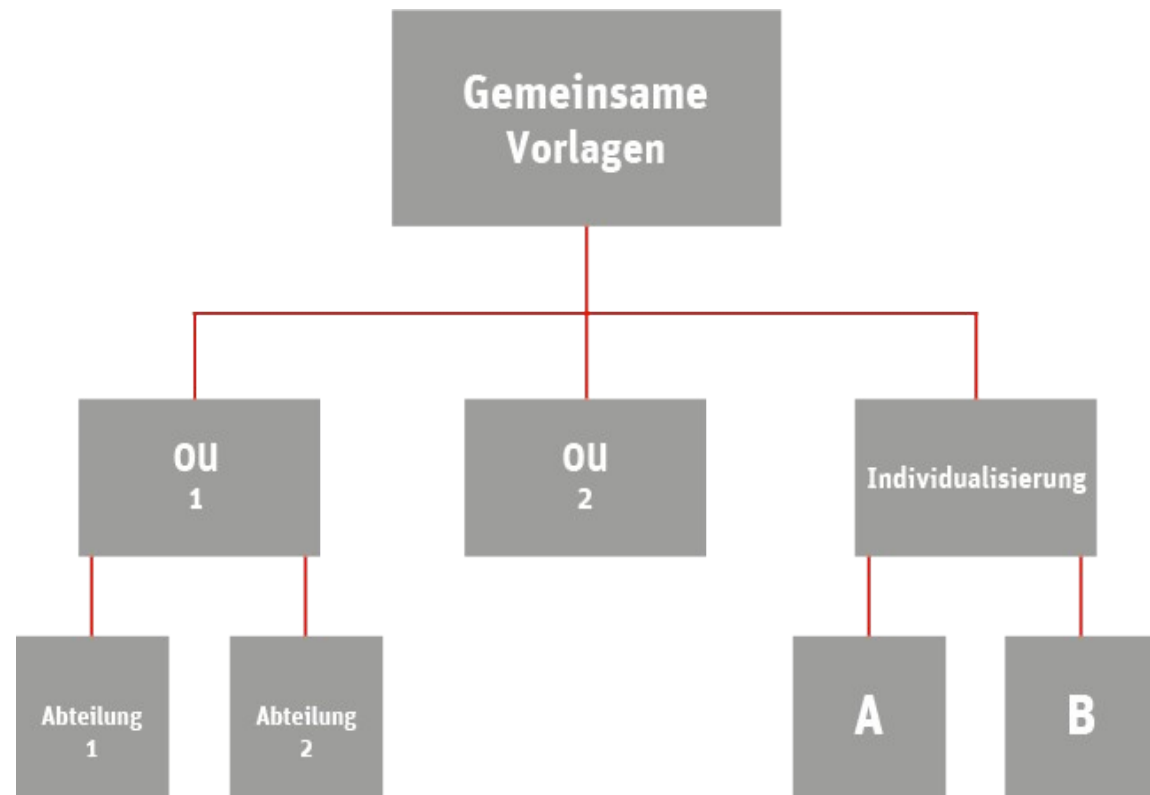
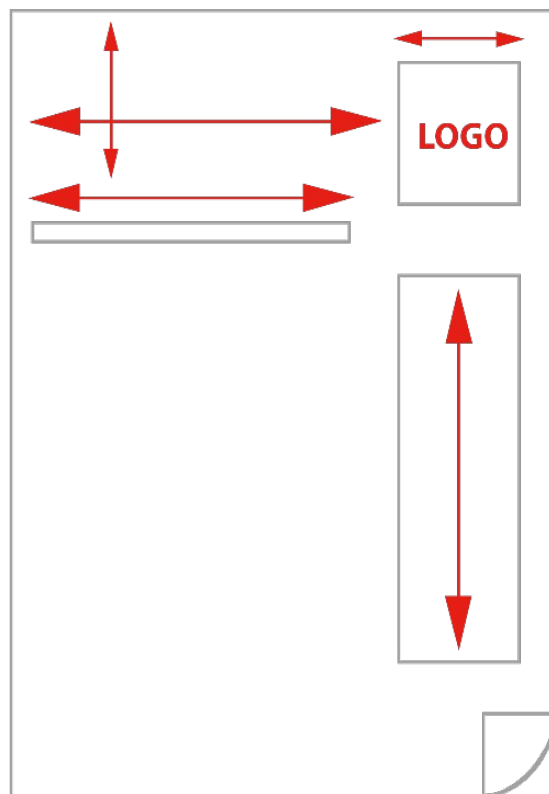
# WHAT ARE WE DOING?

For over 25 years CIB has been successfully providing Document Lifecycle Management solutions.

- CIB software aids in all phases of the document lifecycle
  - Consulting, PDF and RTF technology
  - 160 employees, HQ in Munich, with offices in Karlsruhe, Hamburg, Münster, Minsk and Las Palmas
  - Customers in Europe throughout the Middle East – more than 300 large and medium-sized businesses
  - More than 160,000 private customers
  - More than 2 million licenses in use world-wide, strong presence in the German financial/insurance/banking sector
  - CIB technology is helping our customers to produce more than 500 million documents per year
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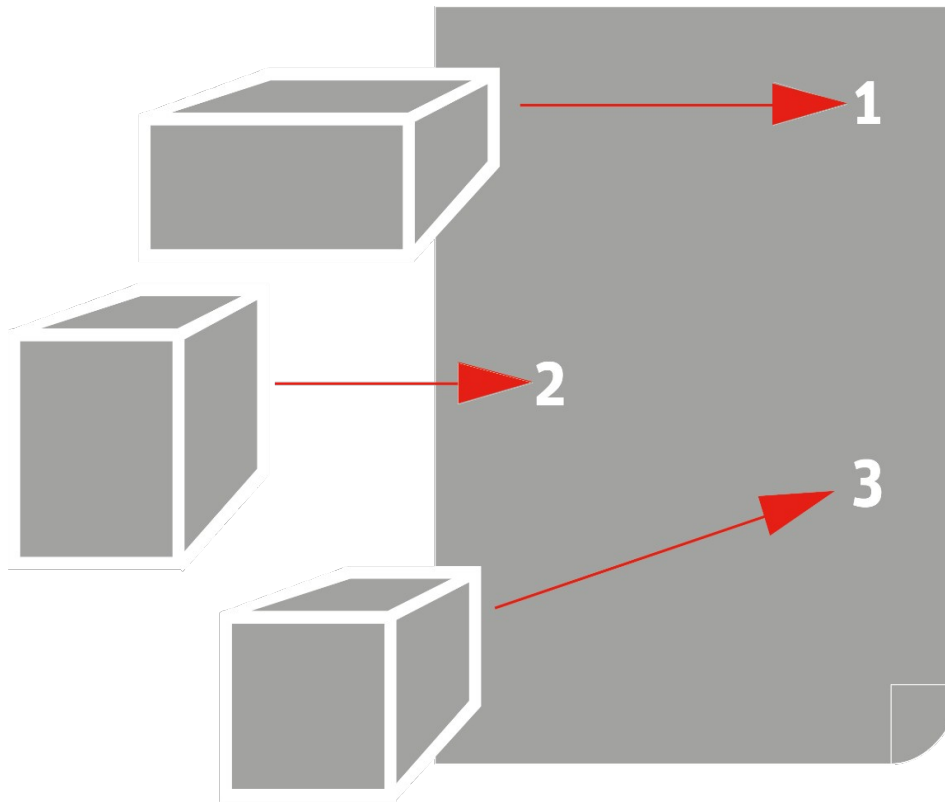
# REQUIREMENTS ON PROFESSIONAL DOCUMENT GENERATION

## BUSINESS LETTER IN CORPORATE IDENTITY, OPTIONALLY INDIVIDUALIZED



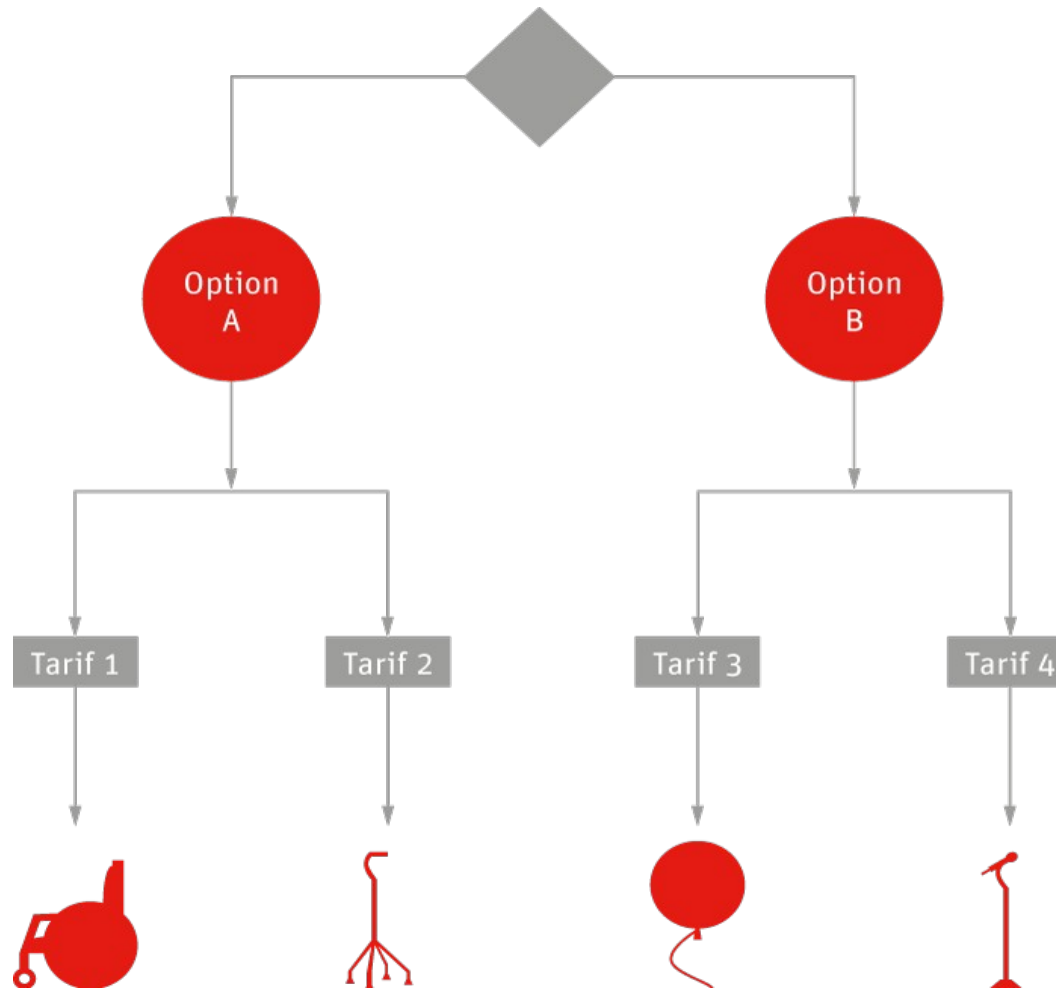
# REQUIREMENTS ON PROFESSIONAL DOCUMENT GENERATION

**SEPARATE TEMPLATES OUT INTO BUILDING BLOCKS (INCLUDE FEATURE)**



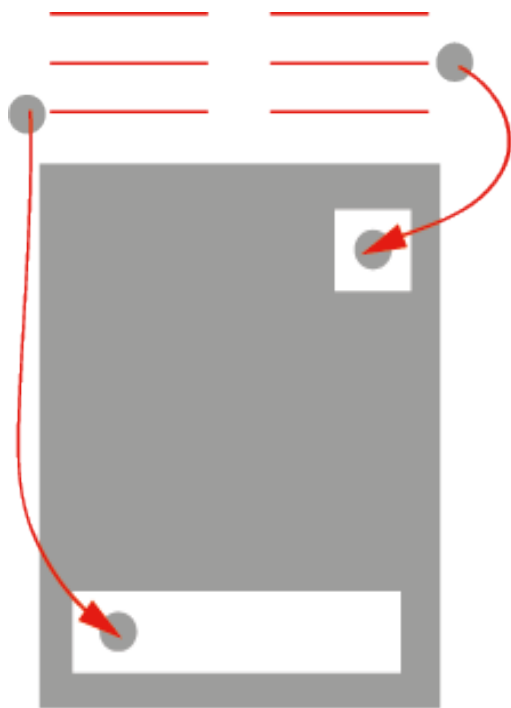
# REQUIREMENTS ON PROFESSIONAL DOCUMENT GENERATION

## IMPLEMENTATION OF COMPLEX LOGIC

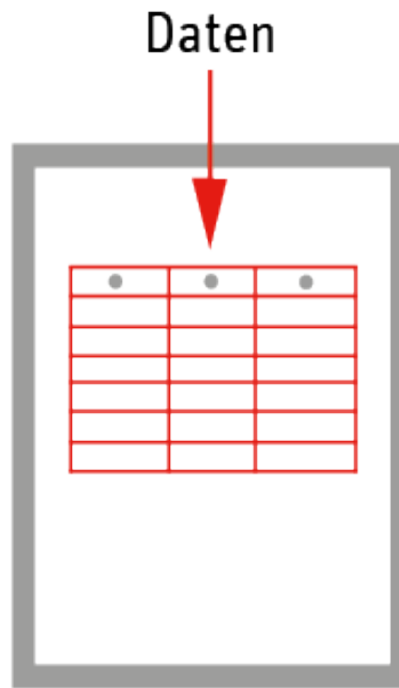


# REQUIREMENTS ON PROFESSIONAL DOCUMENT GENERATION

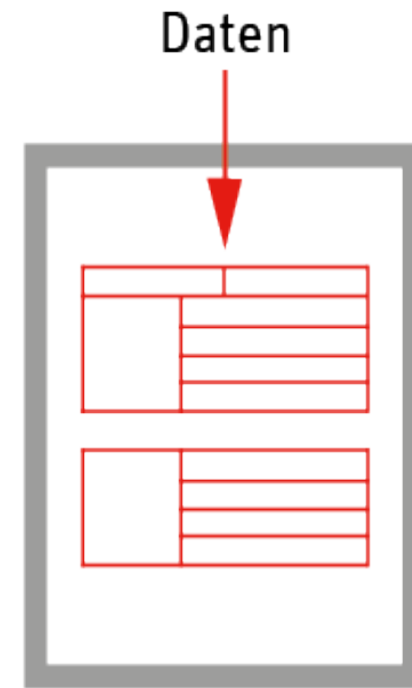
## FILL RESULTING DOCUMENT FROM DATABASE



Simple key-value pairs



Lists



Complex reports:  
Lists of lists

# WHAT'S MISSING IN ODF FIELDS?

- > Include statements
  - > Ability to do complex text formatting within fields
  - > Loops, and conditions
  - > Arbitrary code, e.g. for custom number formatting, and other processing of database content
  - > Dynamic content, e.g. tables or list of lists
-

# REMEDY, ROUND ONE

In content.xml:

```
<text:p text:style-name="P1">  
  <text:user-field-get text:name="cibBlockStart">{ </text:user-field-get>  
  <text:span text:style-name="T2"> FIELD CONTENT </text:span>  
  <text:user-field-get text:name="cibBlockEnd"> }</text:user-field-get>  
</text:p>
```

Visual appearance:

{ **FIELD CONTENT** }

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# JSMERGE FIELD TYPES

Script fields:

```
{ # script }
```

Content fields:

```
{ content field }
```

```
{ '# content field }
```

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# JSMERGE API FUNCTIONS

- text()  
`{# text("Hello World!"); }`
  - include()  
`{# include("header.odt"); }`
  - getProperty() / setProperty()
  - Database control functions:  
`getData(), setData(), mergeRec(), nextRec(), resetRec()`
-

**DEMO**

# WHY WOULD WE?

- **Flexibility**

- Free to extend by new programming languages
- Free to use different template programming concepts

- **Simplicity**

- Minimal amount of hardcoded functions
- Usage of a known language

- **Universality**

- Supported roundtrips in alien formats
  - No fundamental problems to support other formats
-

# REMEDY, ROUND TWO

## Conceivable ODF markup extension:

In content.xml:

```
<text:p text:style-name="P1">  
  <text:field-begin field:type="script|content|complex"/>  
  <text:span text:style-name="T2"> FIELD CONTENT </text:span>  
  <text:field-end/>  
</text:p>
```

Plus a few pre-defined operators, like e.g. include

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**THANK YOU!**

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