

# Organization-wide creation of accessible PDF/UA documents: The shortest route to 100% PDF/UA

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Probably  
no-one will be  
looking again...



Super-coolio

# Overview

# Session structure

1. Overview
2. An exercise
3. How to define goals  
for an ‘accessible document company’?
4. Approaches for making a company  
‘100% document accessible’?
5. Conclusions and summary:  
**What’s the most economical  
and most likely successful and  
most likely sustainable approach?**

# A little exercise

# A little exercise...

## **You:**

- **Consultant (MBA), specializing in accessible document infrastructure**

## **Your customer:**

- **Insurance company, hundreds of employees, several departments**
- **All kinds of documents (internal/external communication, publications, forms)**

# The mission

## The mission:

- All documents in the organisation must become 100% accessible by end of 2020

# Your compensation

- **1/3** end of 2017:  
after project launch
- **1/3** end of 2020:  
if all goals have been reached
- **1/3** end of 2025:  
if all goals are still being reached
- **Goals not reached if**
  - Budget exceeded
  - Not all documents accessible
  - Insufficient quality of documents
  - Approach not accepted by staff
  - ...



# Goals

# Goals

All document based documentation must be accessible – what does that mean?

What are the various goals?

Your input please:

- ?
- ?
- ?

# Goals

All document based documentation must be accessible – what does that mean?

What are the various goals?

- All types of documents, namely:
  - b2b communication
  - b2c communication/interaction
  - Investor communication
  - marketing/sales/PR
  - internal communication,
- Consistent high quality; needs monitoring
- Immediately available in accessible form
  - Immediately? Within hours? Within one day? Two days? A week?
- Sustainable
  - Must work now, next year, and ten years from now
- Reasonable and predictable budget

# Which types of documents?

What document types can appear?

Your input please:

- ?
- ?
- ?

# Which types of documents?

- Letters to customers
- Internal memos
- Orders (to external providers of goods/services)
- Contracts
- Invoices
- Statements
- Fillable forms (applications, claims, ...)
- Sales literature
- “Print” ads
- Internal performance/sales reports
- Annual financial report to stakeholders
- ...

# Who is creating documents?

Who are the people creating documents?

Which documents get created by an automated process?

Your input please:

- ?
- ?
- ?

# Who is creating documents?

Who are the people creating documents?

Which documents get created by an automated process?

- Accountants
- Customer service agents
- Secretaries
- Sales representatives
- People in marketing department
- Assistants to the management
- Service providers (e.g. ad agency)
- IT staff in charge of output management
- ...

# Goals – Summary

- **Document based communication must be fully accessible by end of 2020**
  - All documents
  - All types of documents
  - Regardless of author or authoring system
  - Externally provided documents
  - Documents with externally provided content
  - Quality control and monitoring
  - Sustainable – must work fully for at least 10 years
  - **No exceptions!!!**
  - **No strict limit to budget – but:  
No budget without justification**



# Approaches

# How to achieve the goal?

What are possible ways to achieve the goal?

Your input please:

- ?
- ?
- ?

Note:  
Money does play a role...

# How to achieve the goal?

Note:  
Money does play a role...

Various options:

- **Enable staff so they can make every document accessible**
  - Buy tools
  - Provide training
  - Occasional monitoring/quality assurance
  - Just do it!?
- **Install specialized “document services” department**
- **Use automated processes**
- **Outsource to external service providers**
- **And: How do options compare in terms of total cost?**

# How to achieve the goal?

## Additional ideas

Note:  
Money does play a role...

What else to look at:

- **Simplify all documents**
  - Structural (content) / visual organisation (layout)
- **Instead of PDF (PDF/UA) use e.g.:**
  - Microsoft Word, Google Docs
  - EPUB3
  - HTML
- **Use templates**
- **Use web frontend for creating documents**
  - documents as such get created by an automated process
- **Move more document creation to automated processes**
- **Avoid “documents”, use something else**
  - For example, plain text email, web based customer portal

# How much does remediation actually cost?

## Some non-representative examples... :

- **One-offs:**
  - Letter, 1 to 2 pages: 25 EUR/USD
  - 16 page brochure: 250 EUR/USD
- **Framework agreement, self-service portal or automated workflow, high volume of similar documents**
  - Price per page: 1 EUR/USD or even (much) less
  - Letter, 1 to 2 pages: ca. 1 EUR/USD
  - 16 page brochure: ca. 15 to 20 EUR/USD

How to achieve  
the goal?

Possible  
challenges

- **What about**
  - Knowledge
  - Expertise
  - Training
  - Motivation
  - New employees
  - Freelancers
  - Tools
  - Quality control
  - Monitoring

# What are some of the most ugly stumbling blocks?

- **Fillable forms**
- **Diagrams**
- **Mathematical formulas**
- **Icons, symbol fonts**
- **Complex layout**
- **Complex tables**
- **Content from external sources**
- **Legacy content**
- **OCR**
- **...**

**What are  
some of the  
most ugly  
stumbling  
blocks?**

**And how to  
overcome them?**

## Strategies to handle stumbling blocks:

- Awareness
- Procedures for special cases
- Internal task force? External service provider?
- Avoid altogether
  - ... or provide/use alternatives as a complement



# How × Who

<b>How × Who</b>		<b>How</b>		
		<b>Ad hoc</b>	<b>Templates</b>	<b>Processes</b>
<b>Who</b>	<b>Staff</b>			
	<b>In-house service</b>			
	<b>Outsourced service</b>			
	<b>Processes</b>			

**How** × **Who**

# How: Ad hoc

# Document creation

## Ad hoc

How do people create the various types of documents if there are neither rules nor templates?

- ?
- ?
- ?

# Document creation

## Ad hoc

How do people create the various types of documents if there are neither rules nor templates? **Challenges:**

- **General accessibility know-how**
- **Understanding of the various document types**
- **General tool know-how (e.g. Word, InDesign)**
- **Availability of special tools**
  - Overcome limitations of mainstream tools
  - Is IT / procurement flexible enough?
- **Help with quality assurance**
  - When is it good enough?
- **Strategy for handling “road blocks”**
  - For example, bugs in the software, overly complex layout
- **How is monitoring / supervision carried out**
  - Quality (e.g conformance with PDF/UA)
  - Use of resources (e.g. employee time – how long does it take?)

# How: Templates

# Document creation

## Template based

How do people create the various types of documents based on templates?

- ?
- ?
- ?



# Document creation

## Template based

How do people create the various types of documents based on templates? **Challenges:**

- **Who provides and maintains the templates?**
  - External service provide? IT department?
  - Quality assurance for templates and template output?
- **Roll-out of templates (and special software)?**
- **How many different templates are needed?**
  - Can every real world situation be covered by templates?
- **What if the template ‘does not fit’?**
- **How much training is still needed?**
- **Does it work with different software versions?**
- **Monitoring?**
  - What if employees use templates in the wrong way?

# How: Processes

# Document creation

## Process based

How are documents created by processes?

- ?
- ?
- ?

Document  
creation

Process based

## How are documents created by processes? Challenges:

- **Only suited for certain types of documents**
  - Good for
    - documents based on structured data/content
    - High volumes of repetitive content types
  - Not very flexible, major effort for
    - Each new type of document
    - Modifications
- **Only one time invest?**
  - Relatively inexpensive once implemented
- **Can be combined with template strategy**
  - Web based front end for writing into template
  - Document management systems
- **What about “highly designed” documents?**

How × Who

# Who: Staff

# Who is in charge?

- ?
- ?
- ?

# Staff

# Who is in charge?

## Staff

- Each and every employee writing/compiling documents?
- Who, and how many, are those employees?
- Do they need special software?
- How to train, and keep staff trained?
- What about motivation?



**Who:**

**In-house service**

# Who is in charge?

- ?
- ?
- ?

Specialized  
department:  
In-house service

## Who is in charge?

Specialized  
department:  
In-house service

- **For which types of documents?**
  - Communication such as letters to customers or business partners?
  - Internal memos and reports?
  - Sales brochures?
  - Contracts?
- **What type of skills are needed?**
- **Is it allowed to change design or even content?**
- **How to scale the service?**
  - E.g. handling peak times

# Who: Out-sourced

# Who is in charge?

- ?
- ?
- ?

Out-sourced:  
Remediation  
service

# Who is in charge?

## Out-sourced: Remediation service

- The most expensive but easiest way?
- Requirements:
  - Reliable relationship and framework agreement
  - Well defined procedures
  - Some kind of ‘interface’ (e.g. automation or portal)
- Advantages:
  - Monitoring and QA can be outsourced as well
  - Typically “experts at work” – good quality and relatively fast
  - Scales well
  - No needs for own infrastructural efforts
  - Predictable cost

# Who: Processes

# Who is in charge?

- ?
- ?
- ?

# Processes



# Who is in charge?

## Processes

*(also see above)*

- **Must fit into the overall IT structure**
  - Widely used IT based processes must already exist, or
  - Need to be implemented first
- **Only suited for certain types of documents**
  - Good for
    - documents based on structured data/content
    - High volumes of repetitive content types
  - Not very flexible, major effort for
    - Each new type of document
    - Modifications
- **Only one time invest?**
  - Relatively inexpensive once implemented
- **Can be combined with template strategy**
  - Web based front end for writing into template
  - Document management systems
  - No more desktop tools such as Word?

# Summary

# Summary

- Findings
- Fairy tales
- Surprises
- Controversial

What were the most important insights for you?

- ?
- ?
- ?

## Summary

- Findings
- Fairy tales
- Surprises
- Controversial

What were the most important insights for you?

- Every employee an accessibility specialist  
neither cost efficient nor sustainable
- Simpler documents always cost less
- Less documents cost less (maybe)
- Remediation not always most expensive option
- External content can spoil everything
- 100% coverage + perfection = tough

# Conclusions

## Conclusions

What would you recommend to those who were not in this workshop?

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- ?
- ?
- ?

## Conclusions

What would you recommend to those who were not in this workshop?

What would you recommend to those who were not in this workshop?

- **Plan comes first**
  - Inventorize overall situation and needs
  - Calculate total cost before making decisions
  - Determine medium-term sustainability
- **Focus on low hanging fruit**
  - Keeps motivation up, provides learning opportunities
- **DIY by staff only if training not necessary**
- **Do as much by means of processes as possible**
- **Everything else goes to a service provider**
  - in-house departments do not scale well

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