



PhUSE EU Connect 2018

Breaking free from Word



Dominik Habel

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Agenda

- // **Word and IT**
- // **Problems with Word**
- // **Alternatives**
- // **Conclusion**



Word and IT

Word and IT





Problems

Problems with Word

Proprietary file format



.doc

- ❑ lack of competitive software
- ❑ risk of vendor-lock-in
- ❑ bad interoperability

Problems with Word

Proprietary file format



.docx

- ☐ ~~lack of competitive software~~
- ☐ ~~risk of vendor-lock-in~~
- ☐ ~~bad interoperability~~

„C-Fonts“

complicated
specification

diverging the standard



Problems with Word

Proprietary file format



HTML



JSON & XML



Problems with Word

Binary file format

“A binary file is any file that contains at least some data that consists of sequences of bits that do not represent plain text.”

- The Linux Information Project

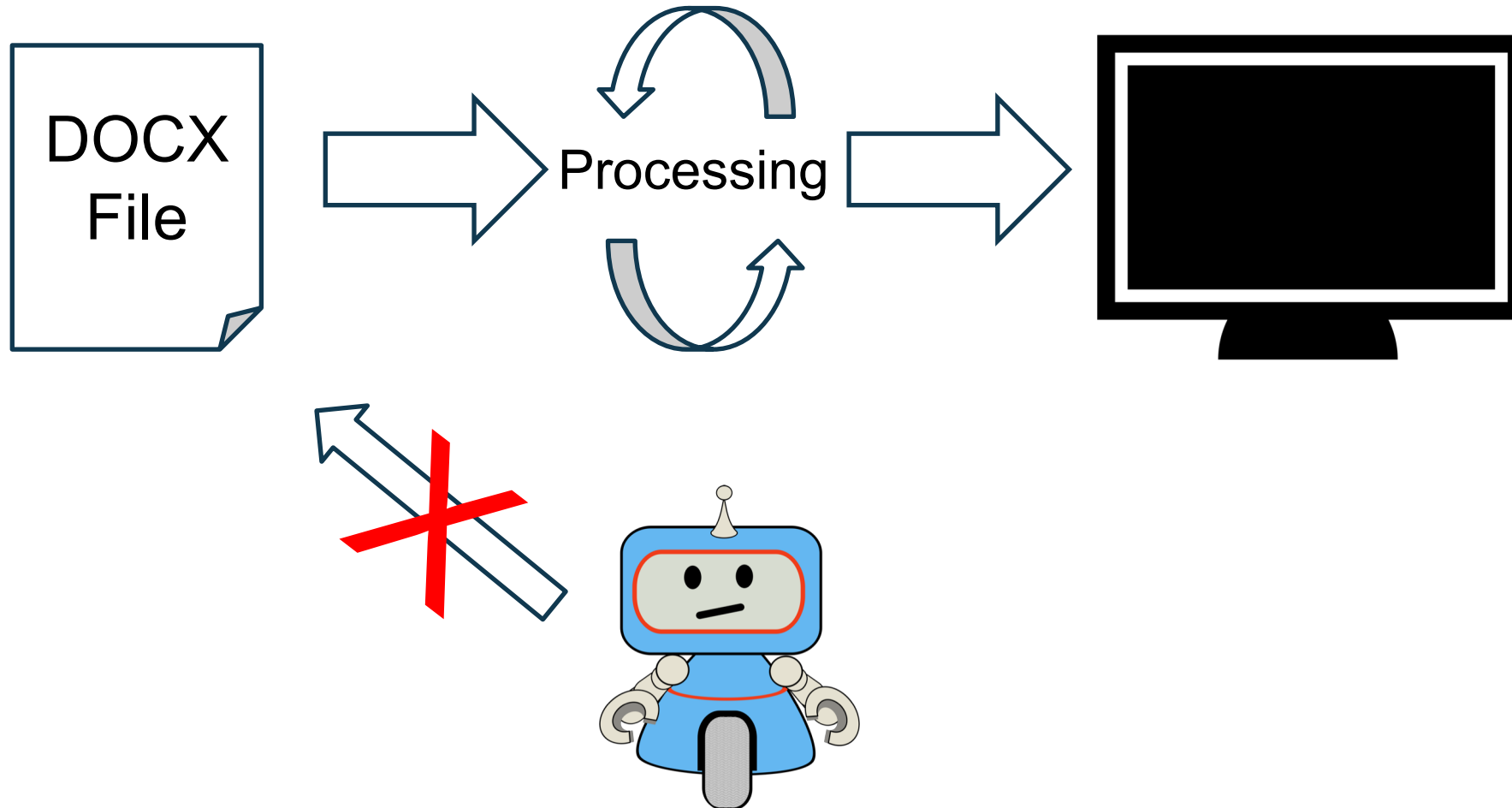
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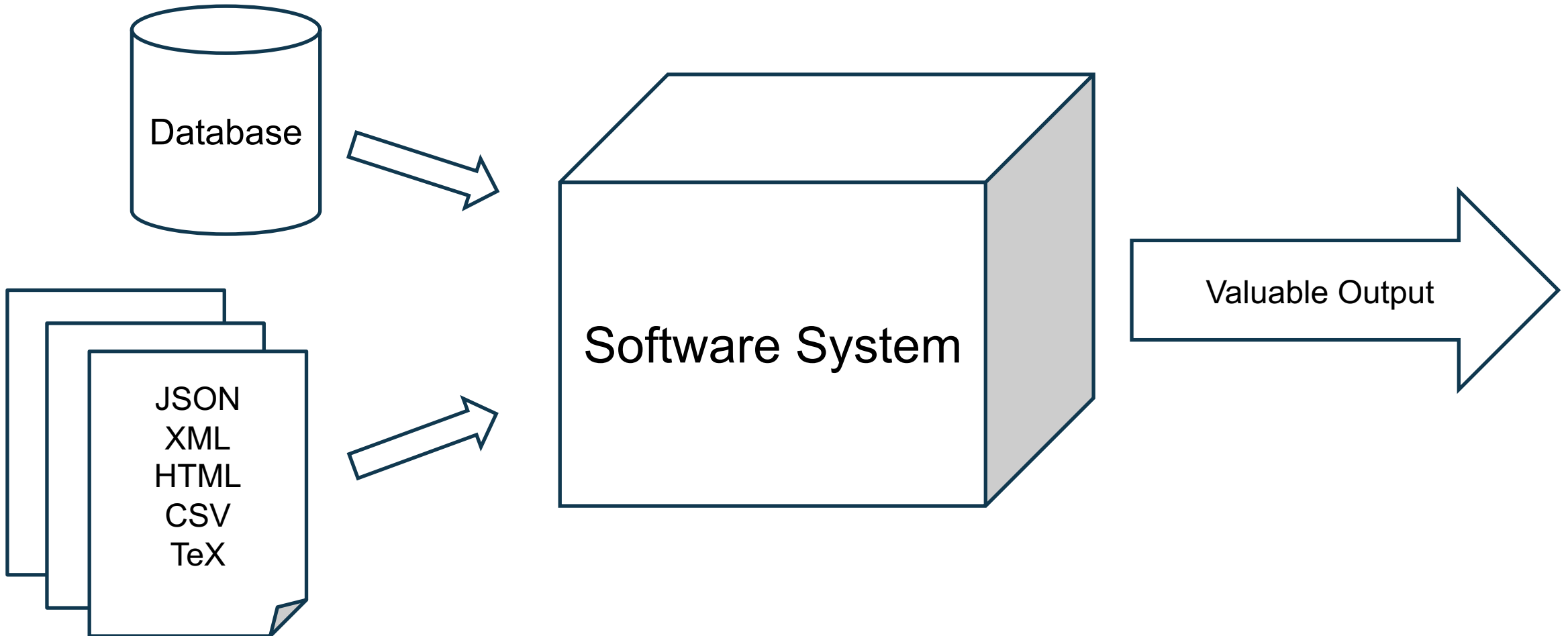
Problems with Word

Binary file format



Problems with Word

Binary file format



Problems with Word

Large Files



Solutions that other software uses

- ❑ modularisation
- ❑ separation of content from view
- ❑ light-weight document concepts

Problems with Word

Non-specialized





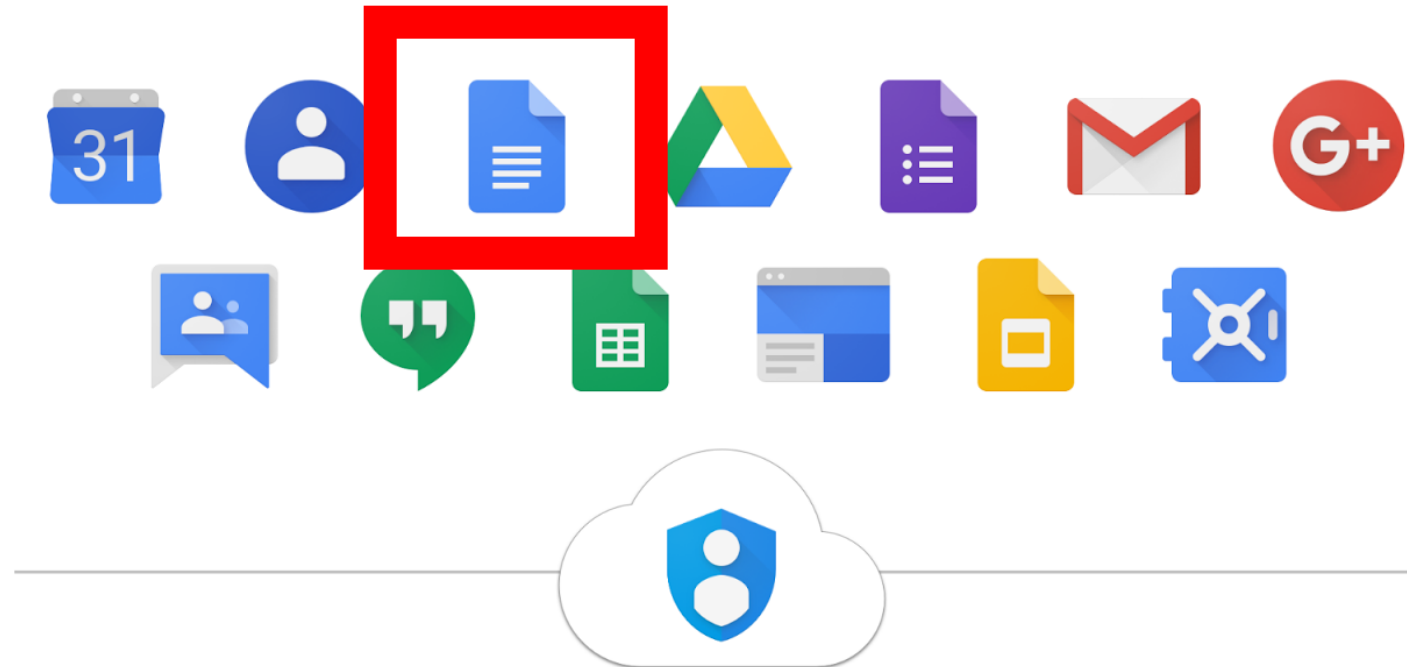
Alternatives to Word

Alternatives

Google's G Suite

Collaboration

G Suite



Cloud Identity



Alternatives

Google's G Suite

The screenshot shows a Google Docs interface with the document titled "Abgabedokument_v3.docx". The document content is as follows:

Studienprojekt

Parallele Programmierung

Team

- Tobias [REDACTED]
- Danilo [REDACTED]
- Dominik Habel Bayer AG
- Paul Schulze [REDACTED]

Studienbereich

Technik

Studiengang

Informatik

Jahrgang

2014

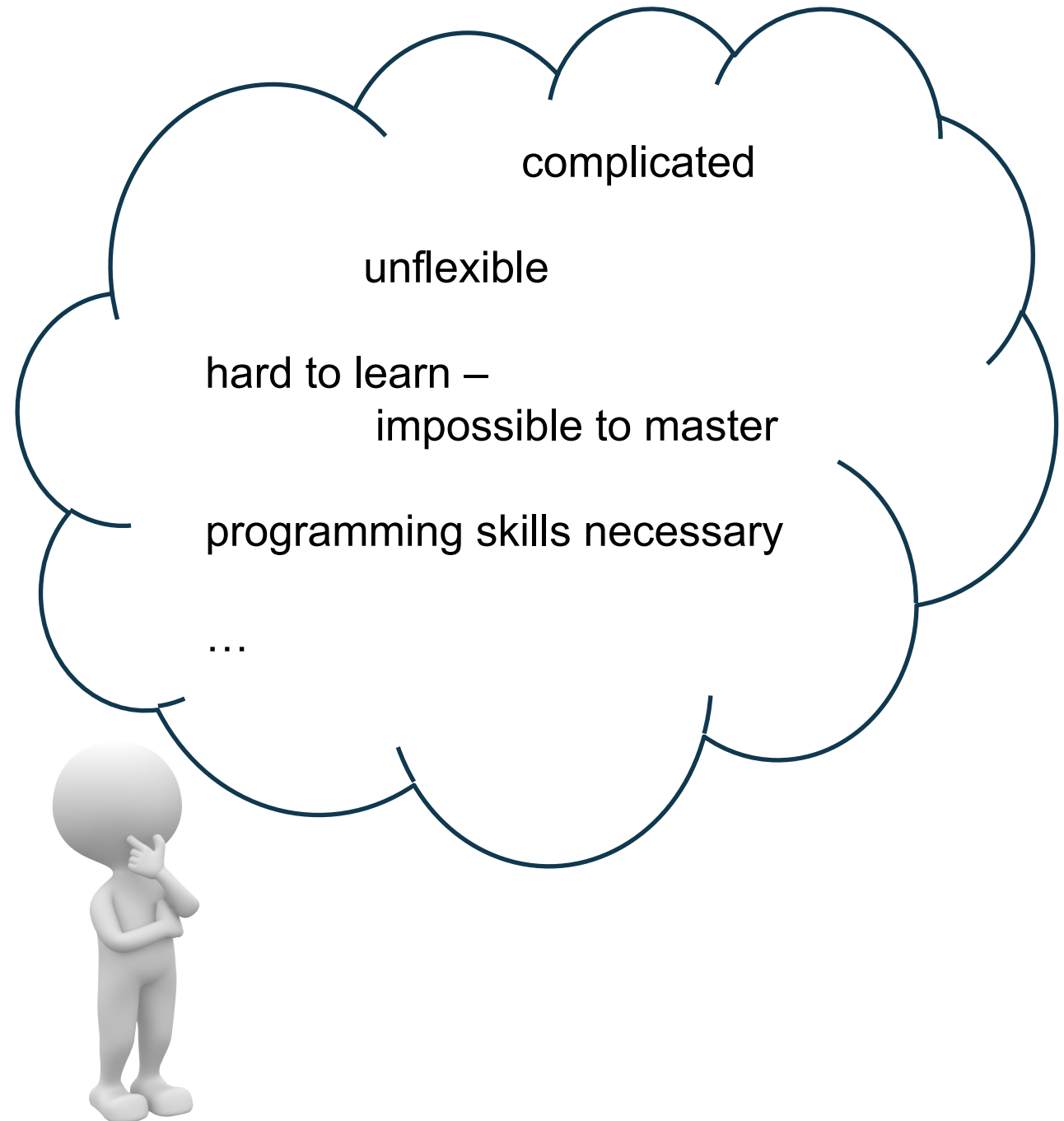
Betreuer

Prof. Dr. Gerrit Kalkbrenner

Alternatives

LaTeX

L^AT_EX



Alternatives

LaTeX

Layout

```
%-----
% HEADERS AND FOOTERS
%-----

\RequirePackage[markcase=used]{scrlayer-scrpage}
\providepair{pagestyles}{thesisSimple}{%
  \clearpair{pagestyles}%
  \automark{chapter}{chapter}
  \ihead{\headmark}% Inner header
  \ohead{\pagemark}{\pagemark}% Outer header
}
\ifoot{}% Inner footer
\ofoot{}% Outer footer
\pagestyle{thesisSimple}
\providepair{pagestyles}[thesisSimple]{thesis}{%
  \automark*{section}{}%
}
\providepair{pagestyles}[thesisSimple]{review}{%
  \ofoot[\shorttitle/\authorname]{\shorttitle/\authorname}
  \ifoot[\today]{\today}
}
\pagestyle{thesis}
\ifbool{headsepline}{\KOMAoption{headsepline}{true}}{}
\PreventPackageFromLoading[\ClassError{\classname}{Package 'fancyhdr' is
incompatible\MessageBreak with this class}{The pagestyles are defined
using package 'scrlayer-scrpage', please consult the\MessageBreak
KOMA-script documentation for details.}]{fancyhdr}

\newcommand{\blank@p@gestyle}{empty}
\newcommand{\chapter@p@gestyle}{plain}
\NewDocumentCommand{\blankpagestyle}{m}{%
  \ClassWarning{\classname}{\string\blankpagestyle\space is
  obsolete,\MessageBreak use \string\setblankpagestyle\space instead}\renewcommand{\blank@p@gestyle}{\#1}}
}
\NewDocumentCommand{\setblankpagestyle}{m}{\renewcommand{\blank@p@gestyle}{\#1}}
\NewDocumentCommand{\setchapterpagestyle}{m}{\renewcommand{\chapter@p@gestyle}{\#1}}
}
\DeclareDocumentCommand\cleardoublepage{}{\cleardoublepage\if@twoside \ifodd\c@page\else
\hbox{}
\thispagestyle{\blank@p@gestyle}
\newpage
\if@twocolumn\hbox{} \newpage\fi\fi\fi}
}
```

Content

```
\chapter{Breaking Free from Word}

The intent of this paper is not to convince readers to abandon Word. It is way too embedded in the professional and even private office environment, so that it would be problematic to get rid of it. Additionally, Word can be the correct choice in a lot of use cases, where the advantages outweigh the problems. Nevertheless, it seems that especially larger companies simply choose Word for everything forgetting that sometimes there are better alternatives available. Breaking free from Word means starting to question the use of Word, it means to reconsider its use when it makes sense to the department/company and to open up for other software on the market. Unfortunately, there is no blueprint on where to replace Word, it has to be discussed and evaluated on an individual basis.

When looking at startups, a big factor of their innovation power and fastness certainly is their flexibility in software they use and that they go through this selection process. They are not bound to legacy software or license deals. Instead they can search the market for the best option available and what works in conjunction with each other which can lead to a significant increase in speed, quality and efficiency that large companies are in danger to lose.

In the following section, a few alternatives that have the potential to supersede Word in bigger use cases will be described. Additionally, such a project from the experience of the author will be presented shortly.

\section{Google Docs}

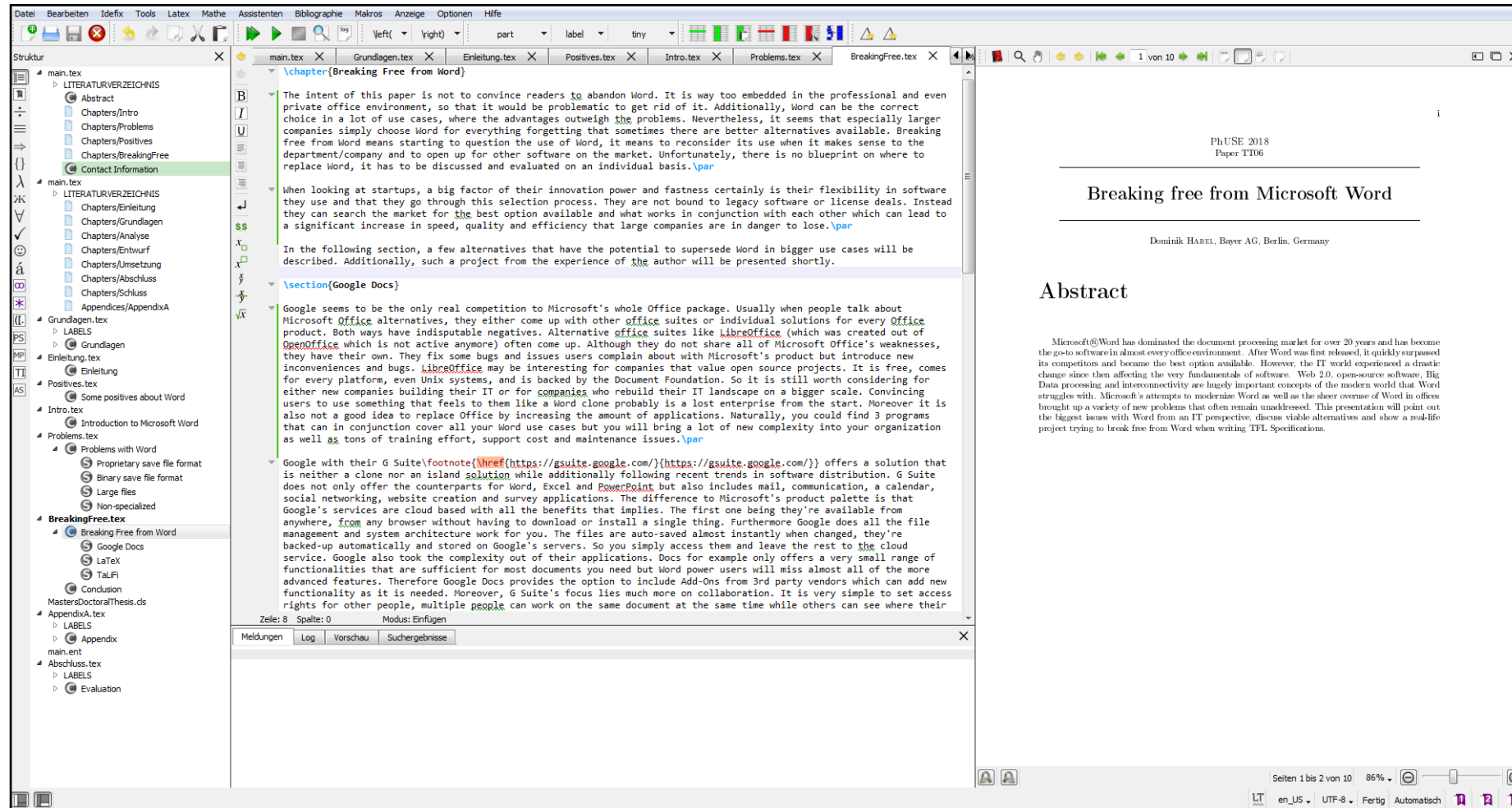
Google seems to be the only real competition to Microsoft's whole Office package. Usually when people talk about Microsoft Office alternatives, they either come up with other office suites or individual solutions for every Office product. Both ways have indisputable negatives. Alternative office suites like LibreOffice (which was created out of OpenOffice which is not active anymore) often come up. Although they do not share all of Microsoft Office's weaknesses, they have their own. They fix some bugs and issues users complain about with Microsoft's product but introduce new inconveniences and bugs. LibreOffice may be interesting for companies that value open source projects. It is free, comes for every platform, even Unix systems, and is backed by the Document Foundation. So it is still worth considering for either new companies building their IT or for companies who rebuild their IT landscape on a bigger scale. Convincing users to use something that feels to them like a Word clone probably is a lost enterprise from the start. Moreover it is also not a good idea to replace Office by increasing the amount of applications. Naturally, you could find 3 programs that can in conjunction cover all your Word use cases but you will bring a lot of new complexity into your organization as well as tons of training effort, support cost and maintenance issues.

Google with their G Suite\footnote{\href{https://gsuite.google.com/}{https://gsuite.google.com/}} offers a solution that is neither a clone nor an island solution while additionally following recent trends in software distribution. G Suite does not only offer the counterparts for Word, Excel and PowerPoint but also includes mail, communication, a calendar, social networking, website creation and survey applications. The difference to Microsoft's product palette is that Google's services are cloud based with all the benefits that implies. The first one being they're available from anywhere, from any browser without having to download or install a single thing. Furthermore Google does all the file management and system architecture work for you. The files are auto-saved almost instantly when changed, they're backed-up automatically and stored on Google's servers. So you simply access them and leave the rest to the cloud service. Google also took the complexity out of their applications. Docs for example only offers a very small range of functionalities that are sufficient for most documents you need but Word power users will miss almost all of the more advanced features. Therefore Google Docs provides the option to include Add-Ons from 3rd party vendors which can add new functionality as it is needed. Moreover, G Suite's focus lies much more on collaboration. It is very simple to set access rights for other people, multiple people can work on the same document at the same time while others can see where their
```



Alternatives

LaTeX





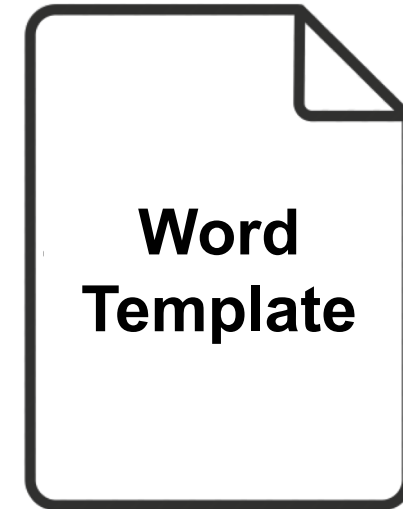
Alternatives

TaLiFi

Standard table/listing catalogs

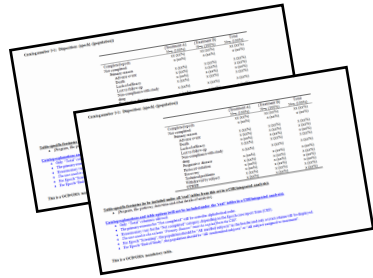


TLF Specification Template



Alternatives

TaLiFi



manually maintained
catalogs



catalogs with unified
layout



```
{
  "chapters": [{
    "tables": [],
    "id": 1,
    "display_name": "Subject disposition",
    "enum": "1."
  }, {
    "tables": [],
    "id": 2,
    "display_name": "Subject validity status",
    "enum": "2."
  }, {
    "tables": [],
    "id": 3,
    "display_name": "Subject disposition",
    "enum": "3."
  }, {

```

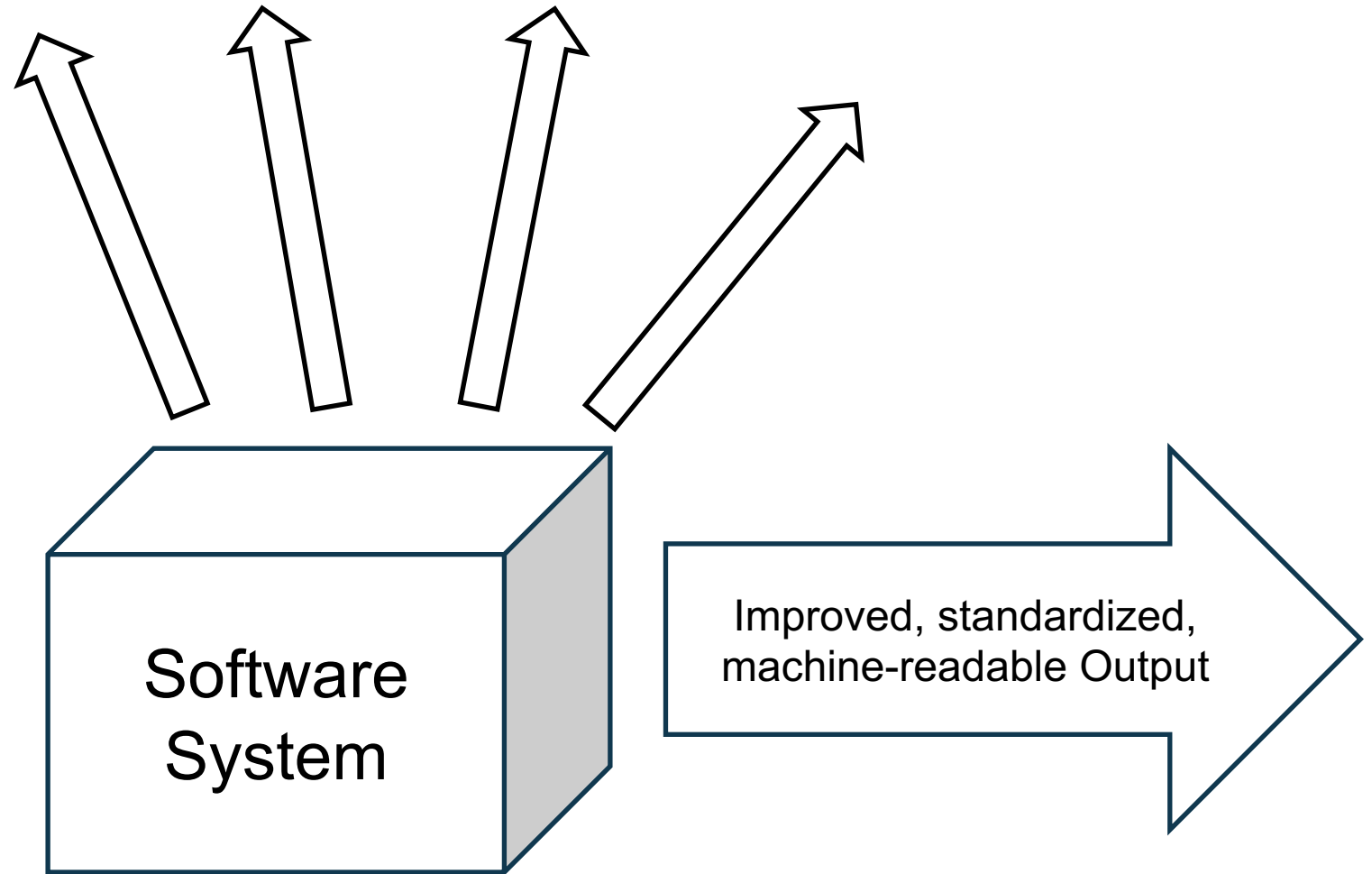
catalogs in JSON
format

Alternatives

TaLiFi

New opportunities

Happy content creators





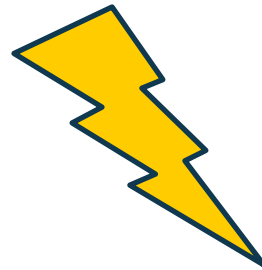
Conclusion

Conclusion

Key messages

Word for informal documents and system outputs!

Word



Automation

lots of alternatives worth exploring!



Are there any questions?

Thank you!



Contact:

dominik-habel@web.de (private)

dominik.habel@bayer.com (business)





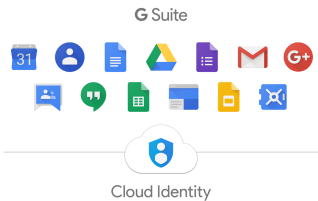
Image Attributions



<http://opendocumentformat.org/img/topbar.png>



https://upload.wikimedia.org/wikipedia/commons/thumb/6/61/HTML5_logo_and_wordmark.svg/2000px-HTML5_logo_and_wordmark.svg.png



<https://4.bp.blogspot.com/-m0yS8PbqIKY/WVGhfInvy0I/AAAAAAAAAFwU/HkPzrMRj26AgcwFO55kruHsAHeYfJrrswCLcBGAs/s1600/Cloud%2BIdentity%2Bheader.png>



https://upload.wikimedia.org/wikipedia/commons/thumb/9/92/LaTeX_logo.svg/1200px-LaTeX_logo.svg.png

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