




ANWENDUNGSFELDER VON KI IN DEN MEDIEN

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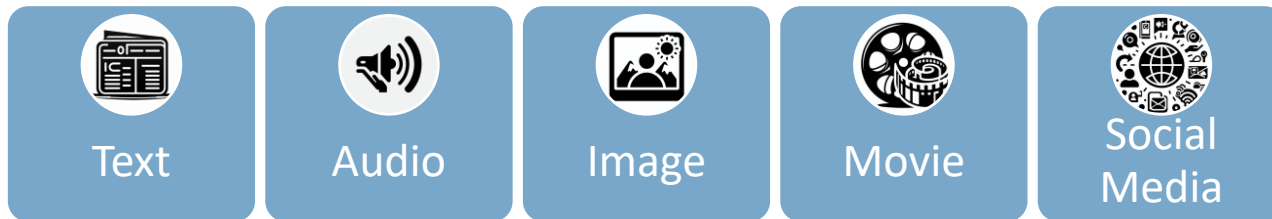
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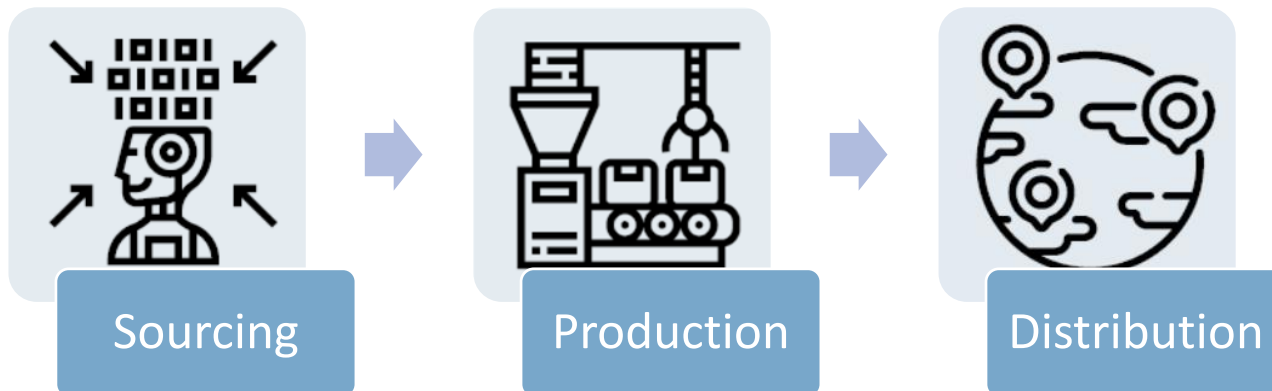
The research leading to these results has been funded partially by the Austrian Research Promotion Agency (FFG) in the programme "Digitale Technologien".

AI APPLICATIONS IN MEDIA

- Media Types



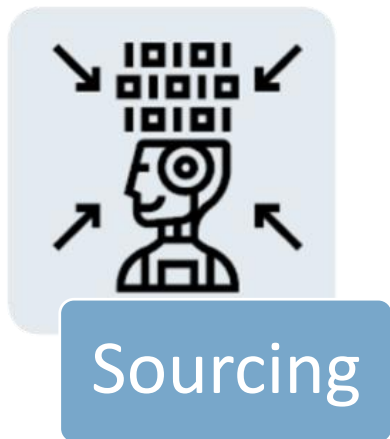
- Media Value Chain



AI APPLICATIONS IN MEDIA – AUTOMATION LEVELS

0 No automation	1 AI-enhanced tools	2 AI-based assistance	3 Conditional automation	4 High automation	5 Full automation
Humans control non-AI-based tools	Humans operate tools using AI for specific tasks in their workflow	AI based tools generate information that is used in subsequent steps, with human verification/correction, no decision	Processes including AI-based decisions, with human intervention required at some points	Fully AI-based processes under human supervision (in particular for consumer facing decisions)	Fully AI-based processes directly interfacing consumers, without human supervision

AI APPLICATIONS IN MEDIA



- Text analysis
 - Terms & entities
 - Sentiment
 - Classification
 - Summarisation
- Multimedia analysis
 - Speech to text, OCR
 - Speaker identification, person identification
 - Sentiment (content, consumers)
 - Classification (including objects)
- Similarity
 - Similarity
 - Summarisation
 - Technical quality
- Topics & knowledge
 - Semantic enrichment, linking reasoning
 - Topic monitoring
 - Verification
 - Licenses (representation & querying)

AI APPLICATIONS IN MEDIA



Production

- Media generation
 - Text, images, voices, music, video
 - From structured and unstructured information
- Media transformation
 - Automated editing
 - Translation
 - Quality improvement
- Inclusion & accessibility
 - Semi-automatic subtitling
 - Audio discription
 - Sign language
 - Plain language
- Business decision support
 - Predict popularity, consumer acceptance of content
- Content enrichment
 - Automated addition of interaction
 - Identifying spots for product placement

AI APPLICATIONS IN MEDIA



- Recommendation & targeting
 - Personalisation
 - Customisation (device, content length)
- Content placing & linking
- Encoding & streaming
- Moderation (inappropriate content)
- Media monitoring
 - Ads, brands, sponsorship
 - IPR enforcement
 - Diversity (gender, age, ethnicities)
- Conversational Interfaces
 - Chat bots (multimodal)

FAIR AND TRUSTED DATASETS FOR MEDIA COMPUTING

MOTIVATION

- Experience from project “TailoredMedia”
 - Adapted UI and UX make the difference
 - “Understandable AI = trustworthy AI”
- Challenges for AI in the media-business
 - AI as a “Black-Box”
 - Unknown data-sources
 - Bias? BIAS!!
 - Legal issues?!!
 - Media experts are no IT-experts
 - How to tackle challenges above
 - How to adapt/curate/train etc.



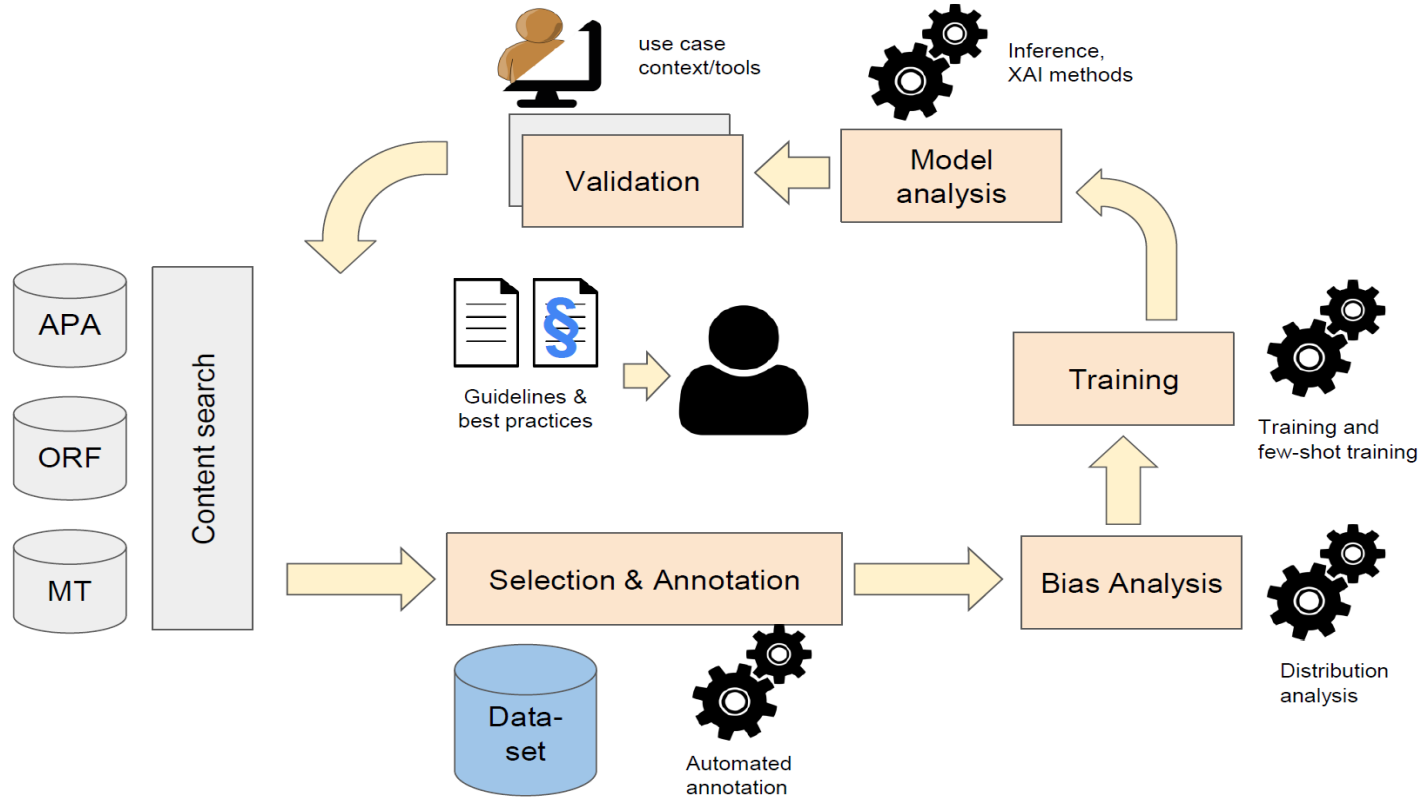
FAIRMEDIA

FAIR AND TRUSTED DATASETS FOR MEDIA COMPUTING

- Aims
 - Toolchain for domain experts: curate/annotate/train (no-code / low-code)
 - Methods for adapting classification and question answering models to similar tasks with limited data availability
 - Methods for bias analysis and post-hoc explainability
 - Validate tools and user interfaces
 - Guidelines for dealing with intellectual property and privacy issues
 - Two datasets for the Austrian media sector
 - Linking the Austrian community to international activities, e.g., EU Media Data Space TEMS
- Start 11/2023, duration 2 years
- Partners



FAIRMEDIA – WORKFLOW



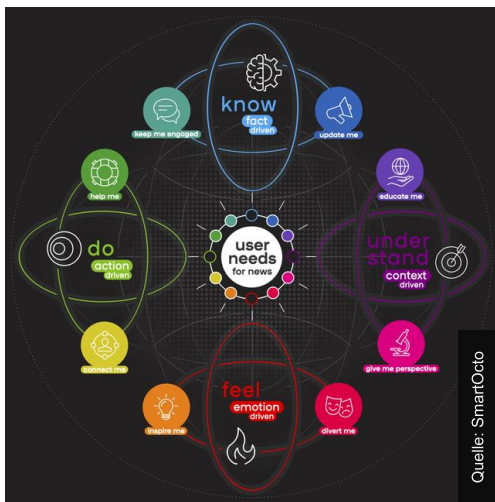
FAIRMEDIA – USE CASES

- Classification

- According to information needs
 - know, understand, feel, do (D. Shishkin)
- Ensure produced content is (equally) covering the different needs

- Question answering

- Use content from trustworthy sources to verify content
 - Trustworthy = own production or similar organisation
- Specifically for regional content




FAIRMEDIA – LEGAL ISSUES

- What content (from production, in archives) could be used to train AI methods? Specifically ...
 - in view of GDPR
 - In view of the abolished media privilege in Austria
- Which exception could be applied for specific types of organisations?
 - Different aims for operating an archive
 - Different legal basis to collect content in the first instance
 - Different rights on content

THANK YOU!

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