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Quo Vadis, Digital Privacy? Perceptions, Practices, and Policies

Privacy in Practice – Enhancing Privacy Literacy through an interactive Virtual Assistant (iVA)

BERD@NFDI, January 26, 2023

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Vasilka Stoilova

Thanks to Lars Oberländer

January 2023

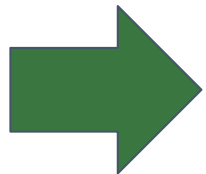


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BERD@NFDI: Consortium for Business, Economic and Related Data (BERD) in the German National Research Data Infrastructure (NFDI)

- Focus on unstructured data in economics and social sciences
- Developing a platform with various data relevant services
- Supporting researchers



**Data Protection is highly relevant in all of these aspects,
but how can we deal with its challenges in practice?**

1. Background



Data Protection Laws & Regulations

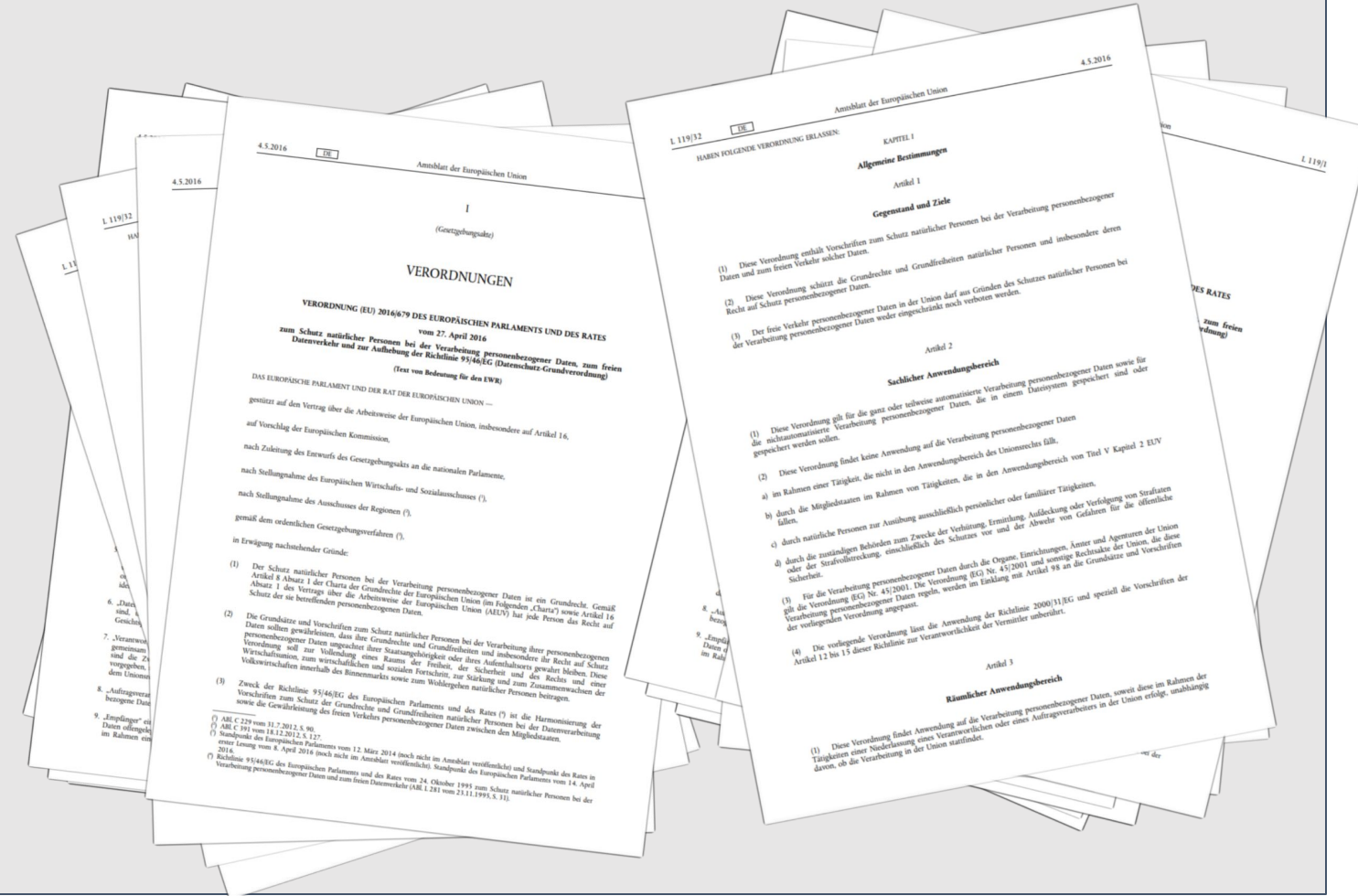
GDPR

German National Data Protection Law

16 Federal State Data Protection Laws

Many special Data Protection Laws

+ regulations, opinions,
recommendations, essays,
commentaries, etc.



How can researchers deal with this?

1. ignore legal developments and carry on as before
2. avoid “risky” research areas relevant to data protection law
3. comply with data protection and conduct research in accordance with the regulations

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→ Research leaves the zone of social and legal legitimacy
2. avoid “risky” research areas relevant to data protection law
→ Research is limited
3. comply with data protection and conduct research in accordance with the regulations
→ Important resources flow from research to legal review and administration

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3. **comply with data protection and conduct research in accordance with the regulations**
→ **Important resources flow from research to legal review and administration**

Why do we need a data protection assistant?



To design and conduct research in a compliant manner



To minimize the resources of researchers required for achieving this

4. Process



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Data Protection Laws & Regulations

GDPR

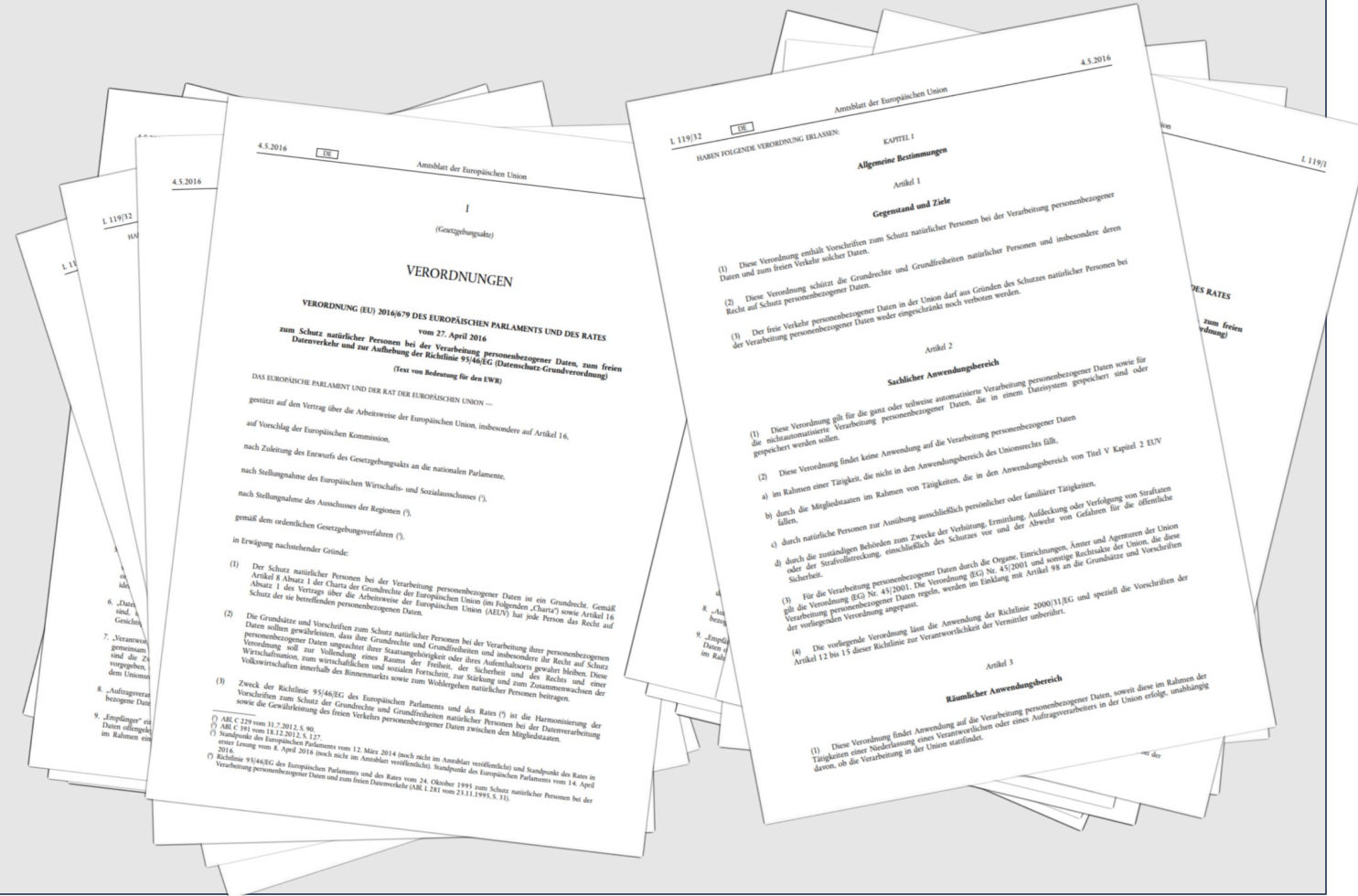
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→ which rules and laws are relevant?



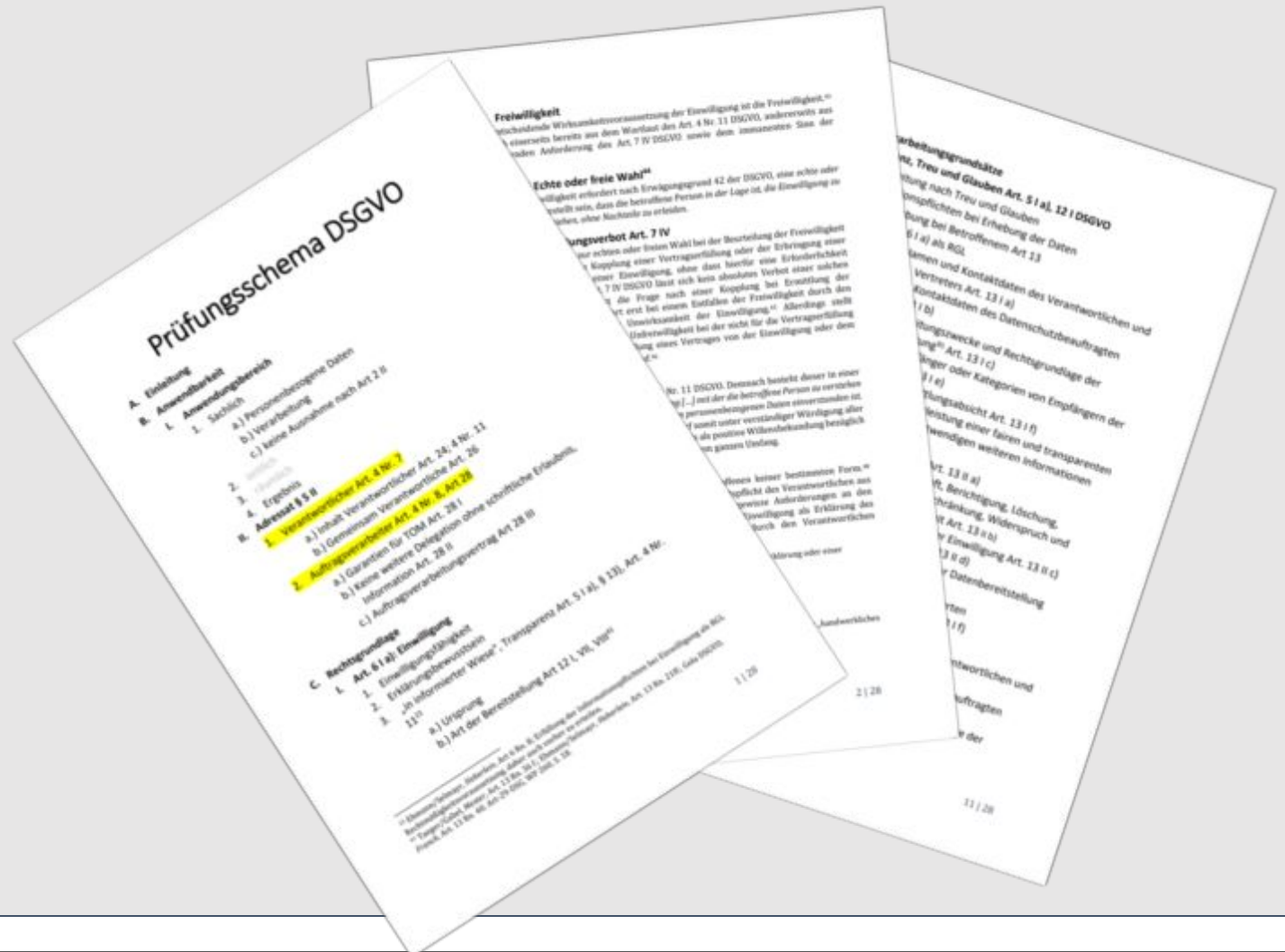
4. Process



A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
Kapitel	Inhalt	Abschnitt	Inhalt	§	Inhalt	Rechtsfolge	Tatbestand	Abhängigkeitsrang	Abhängig von	zusätzliche eigene Anforderung	Berechtigter	Verpflichteter	Öffnungsklausel		nationale Regeln	Prüfungsrelevanz	Rechtsfragen			
													Anzahl	Ort						
1	1	Allgemeine Bestimmungen		1	Ziele			/												
2				2	Sachlicher Anwendungsbereich			0	/	Verarbeitung personenbezogener Daten							Anwendungsbereich			
3				3	Räumlicher Anwendungsbereich			0	/	Verantwortlicher/Auftragsverarbeiter innerhalb der EU							Anwendungsbereich			
4				4	Begriffsbestimmungen										1 Nr. 7		Grundsatz			
5	2	Grundsätze		5	Verarbeitungsgrundsätze			1	Art. 2	Grundsätze		Verantwortlicher		0			Allgemeine Verarbeitungsanforderungen/ Grundsatz			
6				6	Rechtmäßigkeitsgrundlagen			1	Art. 2	Rechtsgrundlage		Verantwortlicher		3 II, III, IV	§§ 5, 13, 14? LDSG		Ermächtigungsgrundlage	- erschöpfende Rechtsgrundlagen, -Möglichkeit kummulativ		
7				7	Einwilligung			2	Art. 6 I a)	Betroffener		Verantwortlicher		0			Ermächtigungsgrundlage			
8				8	Einwilligung Kinder		2+	Art. 6 I a)	Kind, Informationsgesellschaftsdienst			Verantwortlicher		1 I			Ermächtigungsgrundlage			
9				9	Besondere Kategorien			2	// Art. 6 I	besondere Kategorie von Daten		Verantwortlicher		6 II a), g), h), i), j) IV	§§ 22, 27, 28 BDSG, § 9		Ermächtigungsgrundlage			
10				10	Daten über Straftaten			2	Art. 6 I	Daten über Verurteilungen/Straftaten		Verantwortlicher		1			Besondere Verarbeitungsbedingungen			
11				11	Identifikation nicht mehr notwendig		2+	Art. 6 I	Identifizierung für Verarbeitung	Verantwortlicher	Verantwortlicher	Verantwortlicher		0			Allgemeine Verarbeitungsbedingungen			
12				12	Transparente Kommunikation			2	Art. 6 I; 13, 14, 15	/	Verantwortlicher, Kommission	Verantwortlicher		0			Allgemeine Verarbeitungsbedingungen			
13				13	Informationspflicht Erhebung bei Betroffenen		2+	Art. 6 I	Erhebung bei Betroffenen			Verantwortlicher		0		§ 8 LDSG	Allgemeine Verarbeitungsbedingungen			
14				14	Informationspflicht Erhebung bei Dritten		2+	Art. 6 I	Erhebung nicht beim Betroffenen			Verantwortlicher		2 Vc), d)	§ 29 BDSG, § 8 LDSG		Besondere Verarbeitungsbedingungen			
15				15	Recht auf Auskunft		2+	Art. 6 I	/	Betroffener, Verantwortlicher		Verantwortlicher		0 vgl. Art. 89	§§ 27, 28 BDSG, § 9		Rechte			
16				16	Recht auf Berichtigung		2+	Art. 6 I	Unrichtigkeit der Daten	Betroffener		Verantwortlicher		0 vgl. Art. 89	§ 27, 28 BDSG, § 13		Rechte			
17				17	Recht auf Löschung		2+	Art. 6 I	Löschungsgründe	Betroffener		Verantwortlicher		2 Ie); IIb)	§ 10 LDSG		Rechte			
18				18	Recht auf Einschränkung der Verarbeitung		2+	Art. 2	Beschränkungsgründe	Betroffener		Verantwortlicher		? 1	II, vgl. Art. 89	§§ 27, 28 BDSG, § 13	Rechte			
19				19	Mitteilungspflicht bei Berichtigung, Löschung, Einschränkung		2+	Art. 16/ 17 I, 18	Verhältnismäßigkeit und Möglichkeit	Betroffener		Verantwortlicher		0 vgl. Art. 89	§ 14 LDSG		Folge einer Rechtsausübung			
20				20	Recht auf Datenübertragbarkeit		2+	Art. 6 I a), b), 9 I	automatisierte Verarbeitung	Betroffener		Verantwortlicher		? 1	III, vgl. Art. 89	§ 28 BDSG	Rechte			
21				21	Recht auf Widerspruch			Art. 6 I e), f), 89	besondere Situation	Betroffener		Verantwortlicher		0 vgl. Art. 89	§§ 27, 28 BDSG, § 13		Rechte			
22				22	Recht gegen automatisierte Einzelentscheidungen			Art. 6 I	beachte IV!	Betroffener		Verantwortlicher		1 II b)			Rechte			
23				23	Beschränkungen durch EUR oder natR	Öffnungsklausel		0	Art. 12 - 22, 34		Mitgliedsstaaten			1 I						
24				24	Verantwortung			1	Art. 6 I	Art. 4 Nr. 7		Verantwortlicher		0			Allgemeine Verarbeitungsbedingungen			
25				25	Technikgestaltung und Voreinstellung			1	Vorfeld Art. 2			Verantwortlicher		0			Allgemeine Verarbeitungsbedingungen			
26				26	Gemeinsame Verantwortliche			3				Verantwortlicher & Auftragsverarbeiter		1 I			Allgemeine Verarbeitungsbedingungen			
27				27	Verantwortliche außerhalb der EU			3	Art. 3 II			Verantwortlicher		0			Besondere Verarbeitungsbedingungen			
28				28	Auftragsverarbeiter			3	Art. 4 Nr. 8	Auftragsverarbeitung		Verantwortlicher & Auftragsverarbeiter		4 III S.1; III a), g); IV			Besondere Verarbeitungsbedingungen			
29				29	Verarbeitung auf Weisung			1				Auftragsverarbeiter, unterstellt		1			Besondere Verarbeitungsbedingungen			
30				30	Verzeichnis der Verarbeitungstätigkeiten			1				Verantwortlicher, Auftragsverarbeiter		0			Allgemeine Verarbeitungsbedingungen			
31				31	Zusammenarbeit mit Aufsichtsbehörde			3			Aufsichtsbehörde	Verantwortlicher, Auftragsverarbeiter		0			Allgemeine Verarbeitungsbedingungen			
32				32	TQM		2+					Verantwortlicher & Auftragsverarbeiter		1 IV			Allgemeine Verarbeitungsbedingungen			
33				33	Meldepflicht bei Verletzung		2+				Aufsichtsbehörde?	Verantwortlicher & Auftragsverarbeiter		0			Pflichten bei Verletzung			
34				34	Benachrichtigung Betroffener bei Verletzung		2+				Betroffener? Aufsichtsbehörde?	Verantwortlicher		0		§ 11 LDSG	Pflichten bei Verletzung			
35				35	Datenschutz-Folgenabschätzung						Aufsichtsbehörde?	Verantwortlicher, Aufsichtsbehörde		1 X			Besondere Verarbeitungsbedingungen			
36				36	Konsultationspflicht der Aufsichtsbehörde						Aufsichtsbehörde	Verantwortlicher, Aufsichtsbehörde		1 V			Besondere Verarbeitungsbedingungen			
37				37	Benennung eines Datenschutzbeauftragten						Unternehmensgruppe	Verantwortlicher, Auftragsverarbeiter		1 IV						
38				38	Stellung des Datenschutzbeauftragten						Datenschutzbeauftragter, Beauftragter	Verantwortlicher & Auftragsverarbeiter		1 V						
39				39	Stellung des Datenschutzbeauftragten															
40				40	Stellung des Datenschutzbeauftragten															

Legal Assessment

- Comprehensive legal assessment for answering the main question ("is my handling of data legal")
- Bundling of all necessary information
- Resolving legal uncertainties and problems



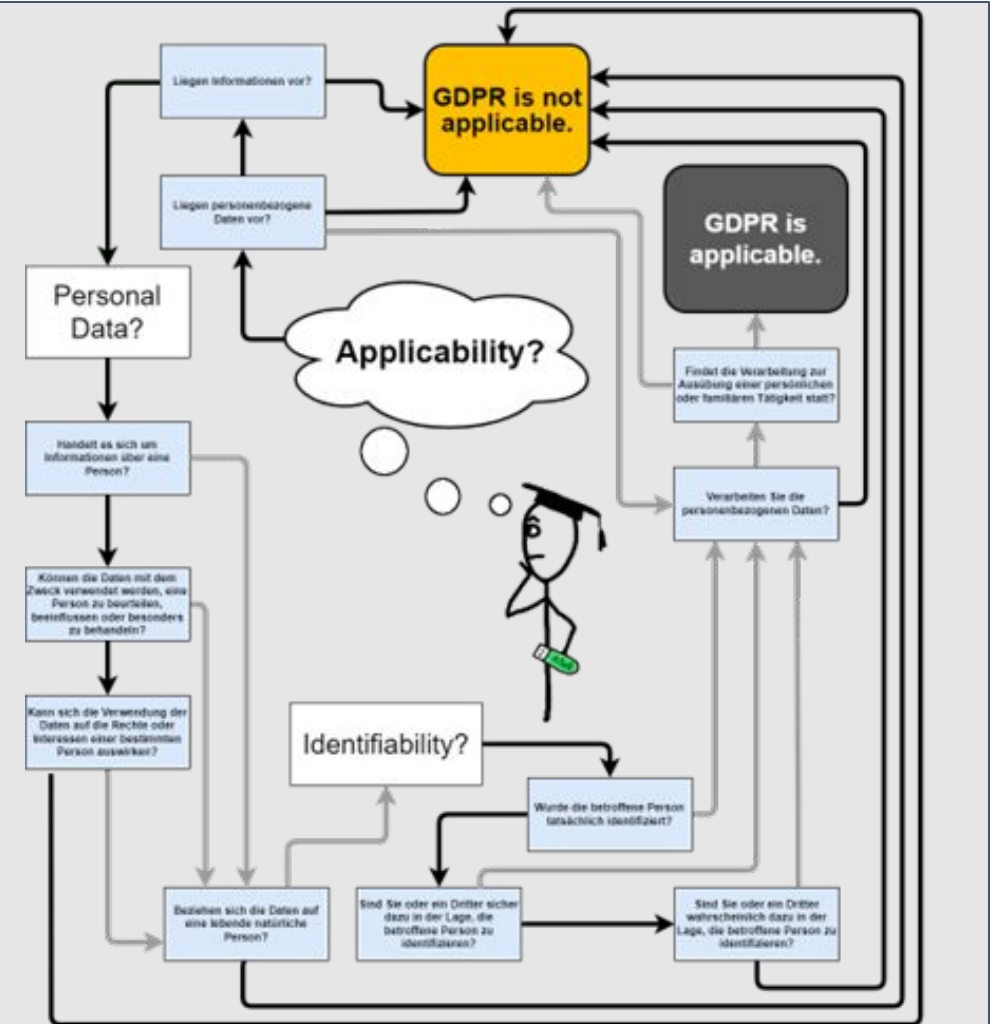
Decision Tree

Advantages:

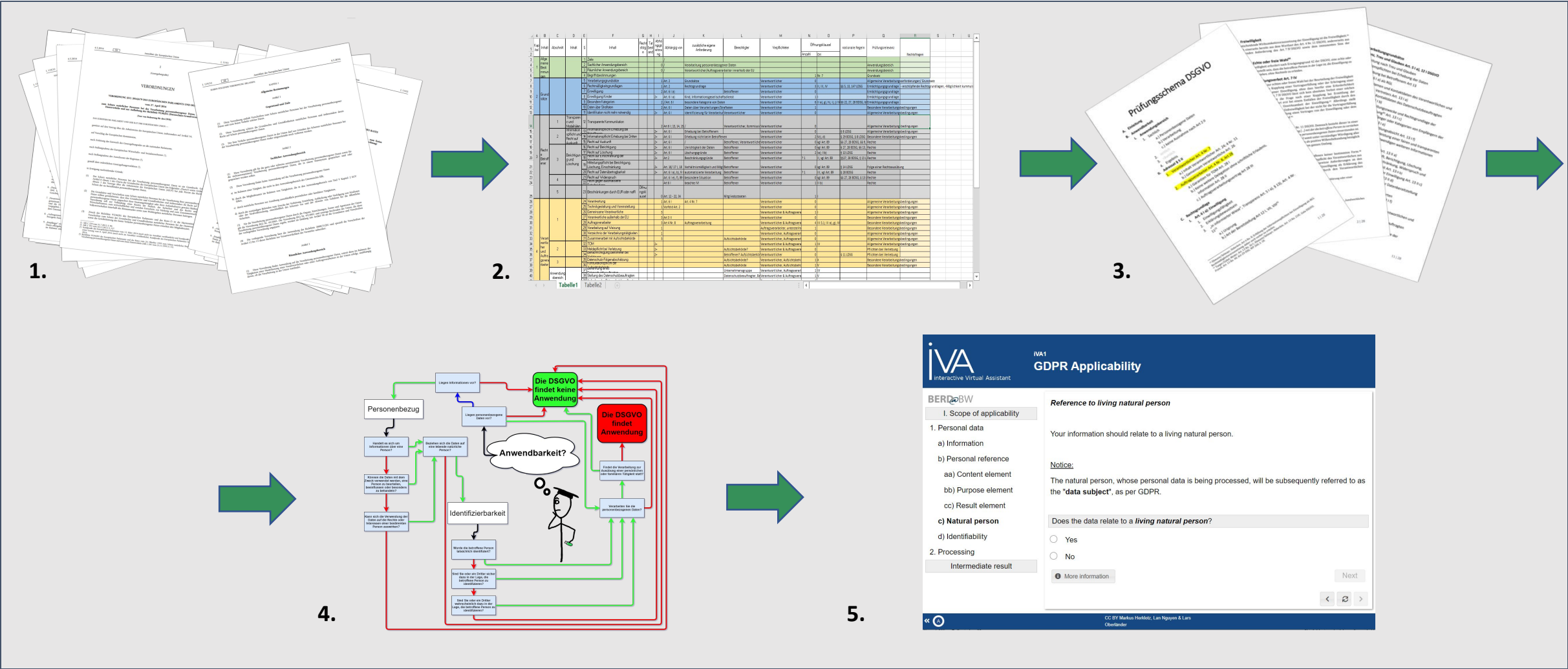
- + Clearly comprehensible structure
- + Legal consequences presented uniformly
- + Reduction of extensive information to binary questions

Disadvantages:

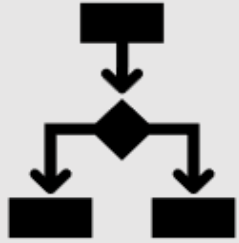
- Missing information for answering binary questions
- No interactivity
- Several decision trees



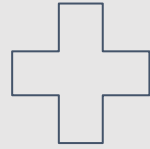
5. Process Overview



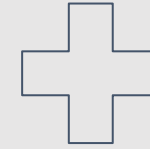
6. Definition



Structure of the
Decision Tree



Including information
needed for navigation



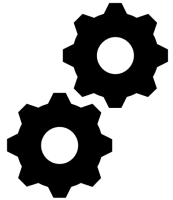
interactive
Object

iVA
interactive Virtual Assistant



For the users

- Comprehensive formulations
- Sequenced information
- Structured layout
- Useful end result



For the development

- Existing open source toolkit instead of own development
- Graphical user interface with freedom in customizability



Xerte Online Toolkits

8. Implementation & Functionality



iVA1
GDPR Applicability



Introduction

iVA1 assists you on your way to achieving compliance with data protection regulations relevant for your research project.

The European General Data Protection Regulation (GDPR) takes precedence over federal and state laws (in Germany: BDSG, LDSG). Therefore, you will be guided step by step through the regulations of the GDPR to determine whether the GDPR applies to your case.

For this purpose, iVA1 provides you with questions and the relevant information to answer them. Please keep in mind your own use case as well as the exact requirements and specifics of your research project.

You should discuss the obtained result with the data protection officers responsible for you. iVA1 is for information purposes only and does not provide nor replace individual legal advice.

Next

< ↺ >

<< A

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iVA1
GDPR Applicability



Navigation tips

For your orientation, you will find a **layout** on the left-hand side of the application, in which the respective step of the examination process is highlighted.

You can find more information on the respective questions under **"More information"**.

You can get to the next question by clicking on the **"Next"** button.

The **arrow buttons** at the bottom right corner can be used to navigate through the questions that have already been answered.

At the end, you can create an overview of your given answers with the **"Overview"** button and copy it to the clipboard with the **"Copy"** button.

Next

< ↺ >

<< A

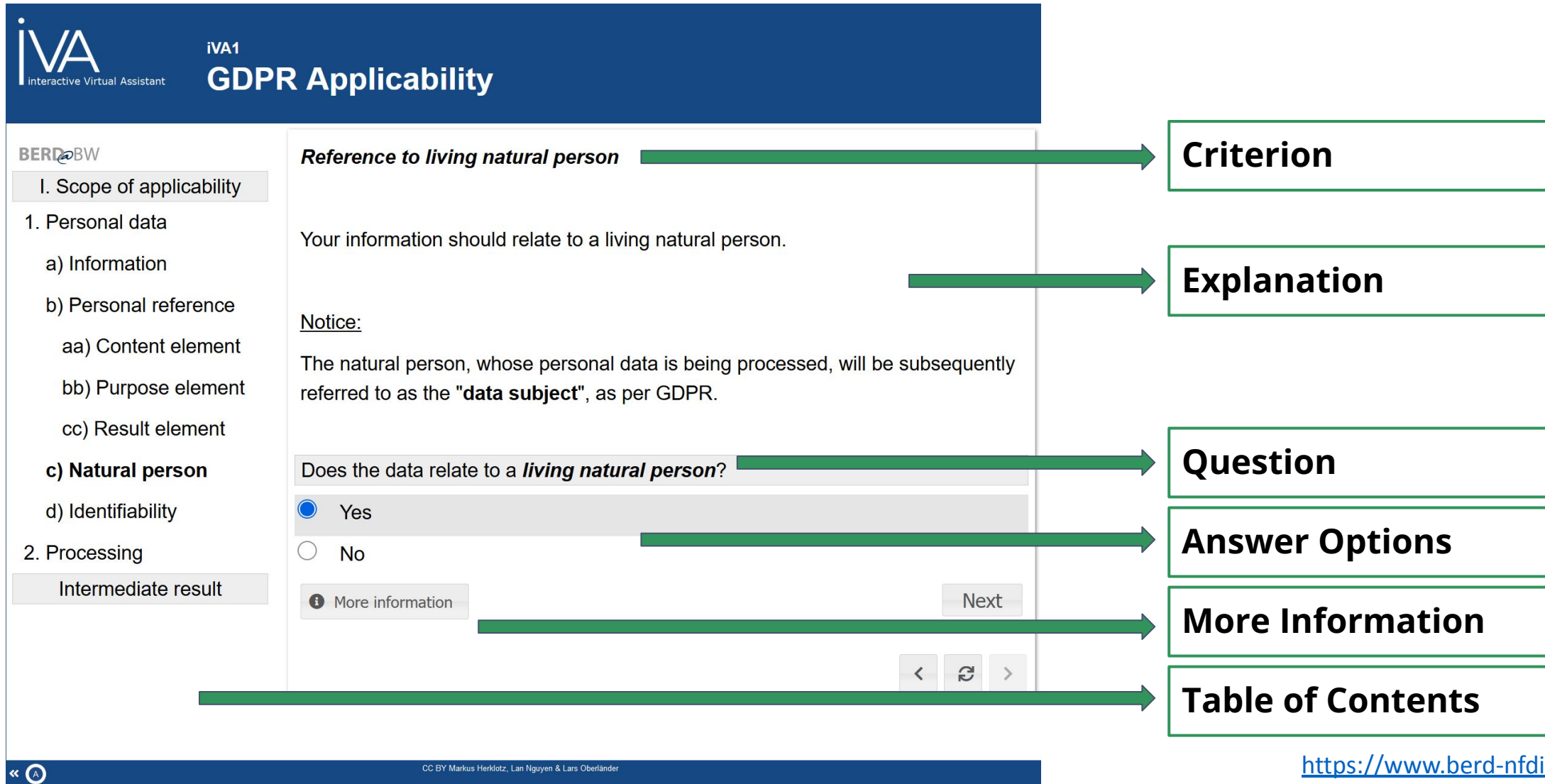
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<https://www.berd-nfdi.de/iva1/>

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8. Implementation & Functionality



The screenshot displays the iVA1 GDPR Applicability interface. The left sidebar shows a navigation menu with sections: I. Scope of applicability, 1. Personal data, 2. Processing, and an Intermediate result. Under 1. Personal data, there are sub-items: a) Information, b) Personal reference, c) Natural person, and d) Identifiability. The main content area is titled 'Reference to living natural person' and contains the text: 'Your information should relate to a living natural person.' Below this is a 'Notice:' section stating: 'The natural person, whose personal data is being processed, will be subsequently referred to as the "data subject", as per GDPR.' A question is posed: 'Does the data relate to a *living natural person*?' with radio button options for 'Yes' (selected) and 'No'. There is a 'More information' link and a 'Next' button. At the bottom, there are navigation arrows. Green arrows point from specific elements to labels on the right: 'Reference to living natural person' to 'Criterion', the text 'Your information should relate to a living natural person.' to 'Explanation', the question 'Does the data relate to a living natural person?' to 'Question', the 'Yes' radio button to 'Answer Options', the 'More information' link to 'More Information', and the bottom navigation bar to 'Table of Contents'.

iVA
interactive Virtual Assistant

iVA1
GDPR Applicability

BERD@BW

I. Scope of applicability

1. Personal data

a) Information

b) Personal reference

aa) Content element

bb) Purpose element

cc) Result element

c) Natural person

d) Identifiability

2. Processing

Intermediate result

Reference to living natural person

Your information should relate to a living natural person.

Notice:

The natural person, whose personal data is being processed, will be subsequently referred to as the "**data subject**", as per GDPR.

Does the data relate to a *living natural person*?

☒ Yes

☐ No

More information

Next

Criterion

Explanation

Question

Answer Options

More Information

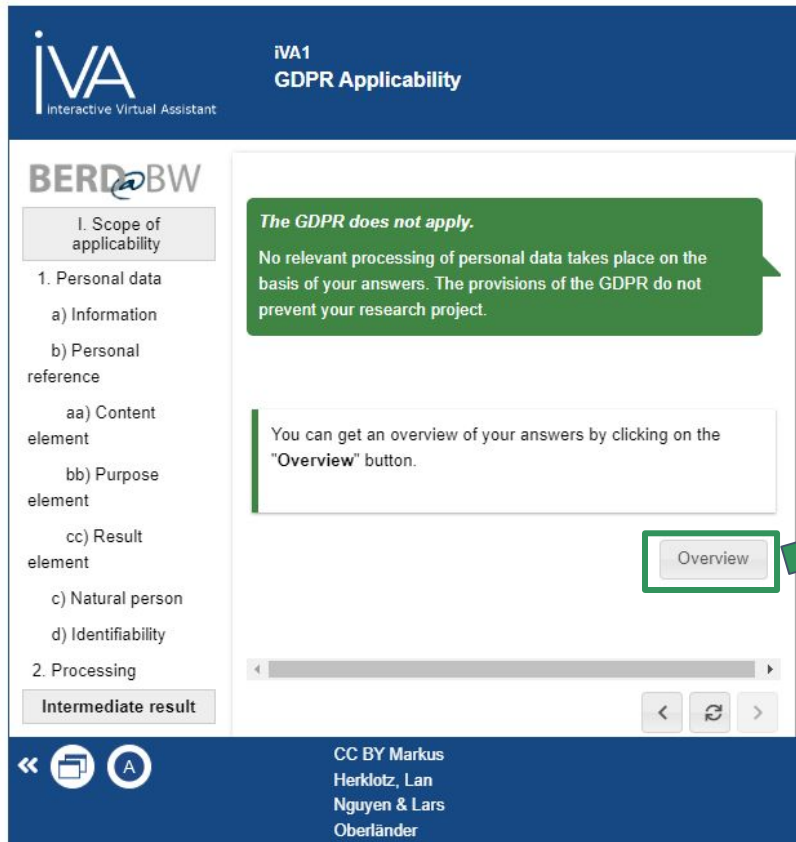
Table of Contents

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<https://www.berd-nfdi.de/iva1/>

8. Implementation & Functionality



IVA1
Interactive Virtual Assistant

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I. Scope of applicability

- 1. Personal data
 - a) Information
 - b) Personal reference
 - aa) Content element
 - bb) Purpose element
 - cc) Result element
 - c) Natural person
 - d) Identifiability
- 2. Processing

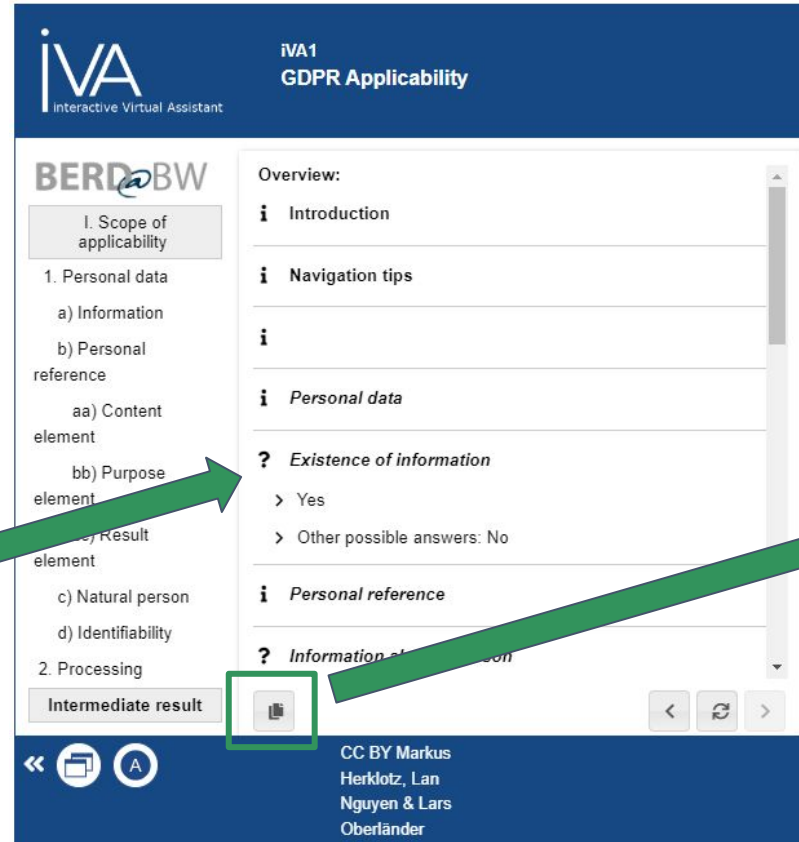
Intermediate result

The GDPR does not apply.
No relevant processing of personal data takes place on the basis of your answers. The provisions of the GDPR do not prevent your research project.

You can get an overview of your answers by clicking on the "Overview" button.

Overview

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IVA1
Interactive Virtual Assistant

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I. Scope of applicability

- 1. Personal data
 - a) Information
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 - d) Identifiability
- 2. Processing

Intermediate result

Overview:

- i** Introduction
- i** Navigation tips
- i** **Personal data**
- ? Existence of information**
 - > Yes
 - > Other possible answers: No
- i** **Personal reference**
- ? Information about person**

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IVA1
Interactive Virtual Assistant

BERD@BW

I. Scope of applicability

- 1. Personal data
 - a) Information
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- 2. Processing

Intermediate result

Overview:

Press Ctrl + C to copy

Overview

Introduction IVA1 assists you on your way to achieving compliance with data protection regulations relevant for your research project. The European General Data Protection Regulation (GDPR) takes precedence over federal and state laws (in Germany: BDSG, LDSG). Therefore, you will be guided step by step through the regulations of the GDPR to determine whether the GDPR applies to your case. For this purpose, IVA1 provides you with questions and the relevant information to answer them. Please keep in mind your own use case as well as the exact requirements and specifics of your research project. You should discuss the obtained result with the data

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Applicability of the GDPR

iVA 1 shows you if the General Data Protection Regulation (GDPR) applies to your research data.

[Start here \(DE\)](#)

[Start here \(ENG\)](#)



Consent as legal basis

iVA 2 helps you identify what you have to keep in mind to get a lawful consent for data processing.

[Start here \(DE\)](#)

[Start here \(ENG\)](#)



...other legal bases

We are currently working on iVA 3, which is going to teach you the requirements of lawfully processing personal data without consent of the data subjects.

Is privacy law non-transparent and incomprehensible?
Not necessarily.

<https://www.berd-nfdi.de/servicetools/legal-questions-in-data-science/>

Thank you!

Funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) – 460037581

<https://www.berd-nfdi.de/>

<https://www.berd-nfdi.de/newsletter-en/>

Overview of iVA:

<https://www.berd-nfdi.de/servicetools/legal-questions-in-data-science/>

iVA1:

<https://www.berd-nfdi.de/iva1/>

iVA2:

<https://www.berd-nfdi.de/iva2/>

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