

IFC-Banco de Portugal Conference: "Communication on central bank statistics: unlocking the next level"

19-20 September 2022

How to tailor information resources to a target audience – Lessons learned from a Research Data Centre¹

Jannick Blaschke,
Deutsche Bundesbank

¹ This contribution was prepared for the workshop. The views expressed are those of the authors and do not necessarily reflect the views of the Banco de Portugal, the BIS, the IFC or the other central banks and institutions represented at the event.

How to tailor information resources to a target audience – Lessons learned from a Research Data Centre

Jannick Blaschke, Deutsche Bundesbank, Research Data and Service Centre

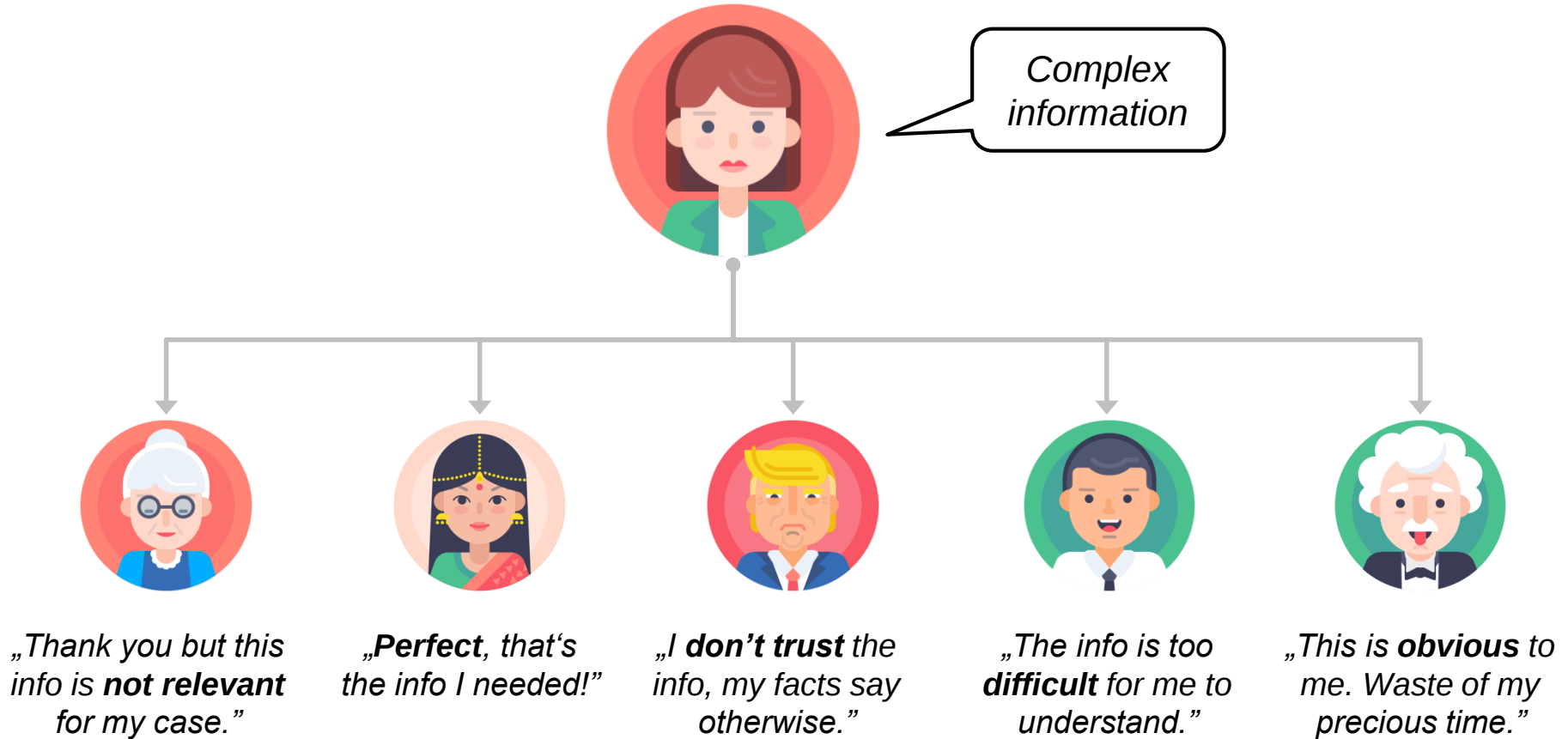
Session 2 | Unlocking new targets

Joint Irving Fisher Committee and Banco de Portugal conference on
“Communication on central bank statistics: unlocking the next level”
held at 19 and 20 September 2022, Lisbon

The views expressed here do not necessarily reflect the opinion of the
Deutsche Bundesbank, the INEXDA network or the Eurosystem.

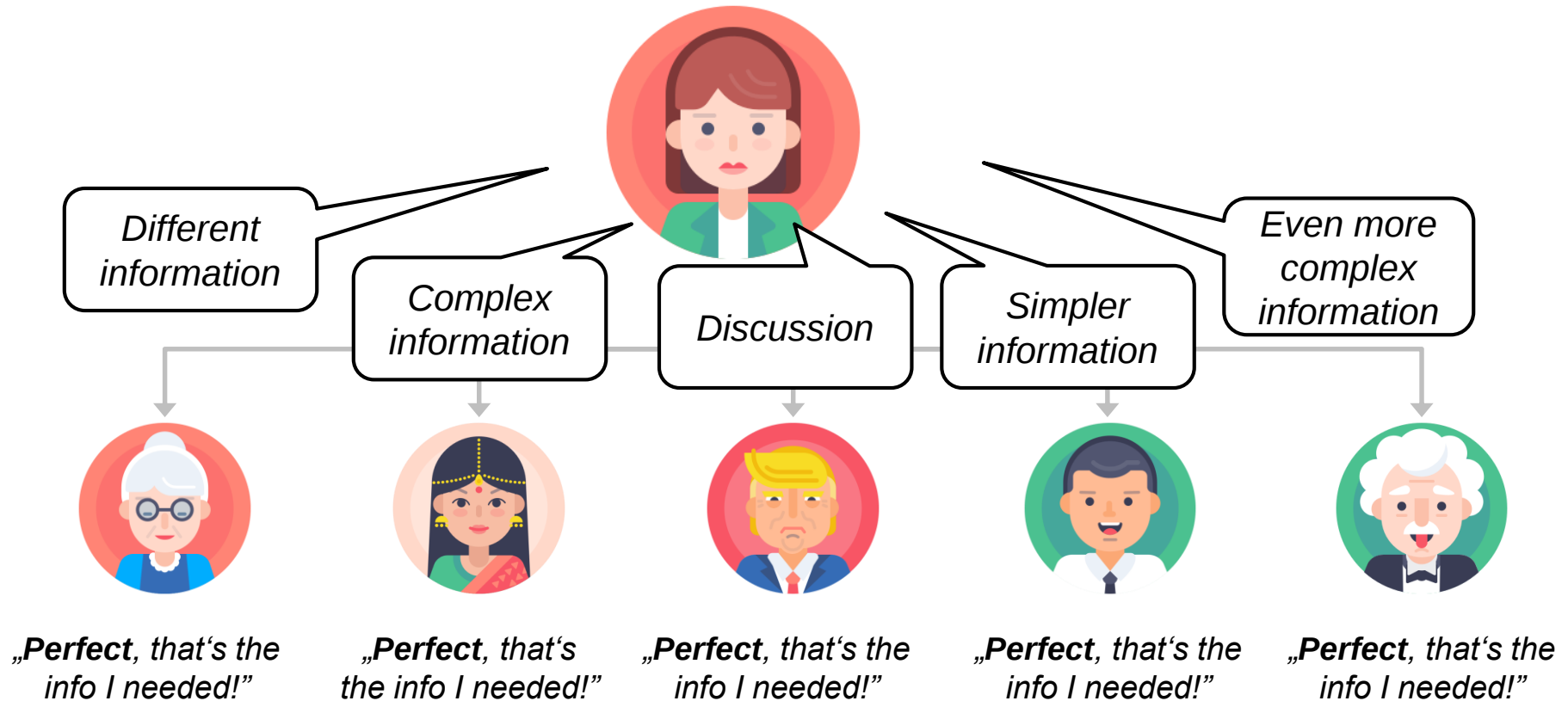
Communicating complex information to a heterogeneous target audience

How to get from this situation ...



Communicating complex information to a heterogeneous target audience

... to this situation.



Focus of this presentation: Lessons learned from a Research Data Centre

What's the Research Data and Service Centre? (1|2)



The **Research Data and Service Centre** (RDSC) of the Deutsche Bundesbank offers access for **non-commercial** research to (highly sensitive) **micro data** of the Bundesbank.

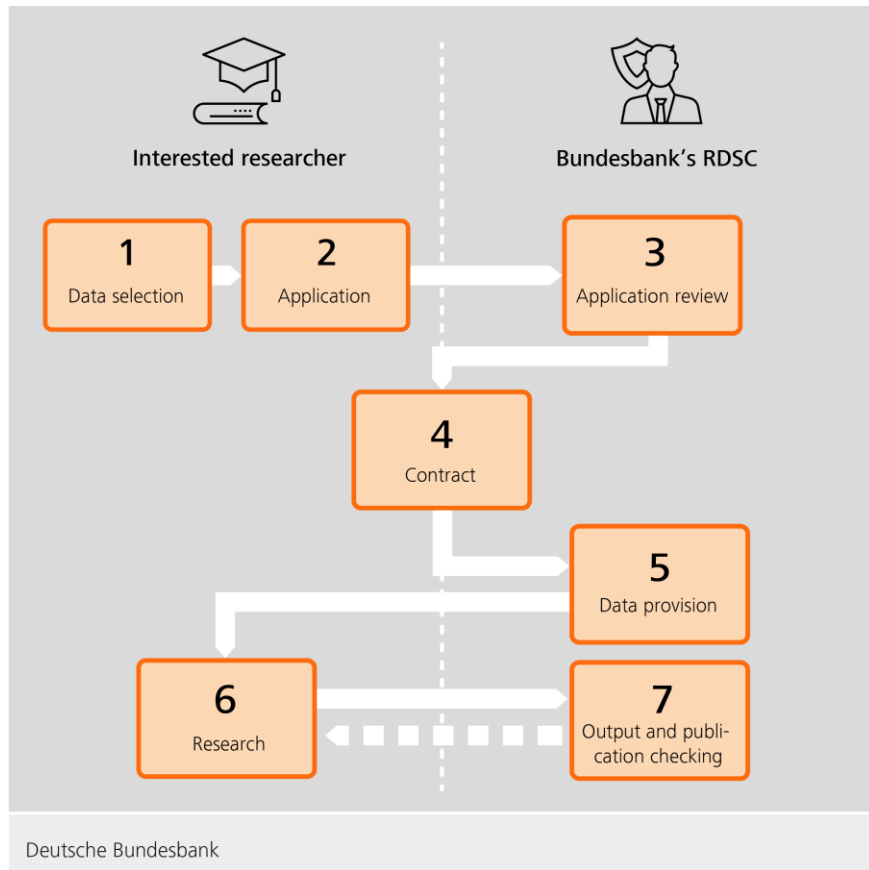
Microdata for banks, companies, securities and households are available:

- Generate (standardized) (linked) micro data
- Offer advisory service on data selection and data access
- Provide data access and data protection
- Document data and methodological aspects of the data
- Work on own research projects
- Organize conferences and workshops



Focus of this presentation: Lessons learned from a Research Data Centre

What's the Research Data and Service Centre? (2|2)



Data access

Depending on the dataset (degree of anonymization and legal foundation) the RDSC grants **access** via **three modes**:

- Secure-on-site Access
- Scientific use files
- Controlled Remote Execution

Currently, the RDSC counts around 300 active research projects



For more information please see the information on our **website**:
<https://www.bundesbank.de/en/bundesbank/research/rdsc/your-research-project-at-the-rdsc>

Motivation of the RDSC

Status Quo (1|2)

To **support researchers** in their projects and especially in output control, the RDSC already provides a **variety of materials**:



Documents

- ✓ Rules for visiting researchers
- ✓ Data reports
- ✓ Technical reports
- ✓ FAQs
- ✓



Software and code

- ✓ SDC* package for R
- ✓ SDC package for STATA
- ✓ Output submitter
- ✓ ...



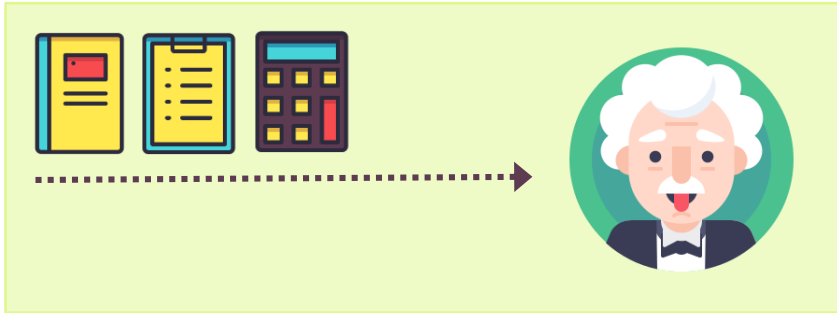
Online resources

- ✓ Website
- ✓ Metadata und persistent dataset identifiers (DOI)
- ✓ ...

Motivation of the RDSC

Status Quo (2|2)

Provision of support materials (e.g. documents, software) can potentially lead to an information overflow. Although all information is potentially relevant.



Scenario 1 - **Little** user support needed

- Small number of datasets
- Easy data structure
- Small dataset size
- Homogeneous legal framework → Similar rules for data access and SDC



Scenario 2 - **Much** user support needed

- Large number of datasets
- Complex data structure (e.g. multiple IDs, missing IDs)
- Large dataset size
- Heterogeneous legal framework → Dataset-specific rules for data access and SDC

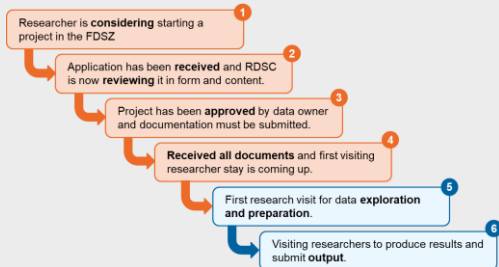
New concept for a streamlined communication at the RDSC

Summary of the RDSC's procedure

Our approach to handle scenario 2:

We defined a multitude of **use cases** and structured them using **three main questions**:

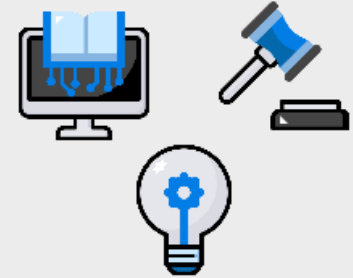
Use Cases



WHEN?



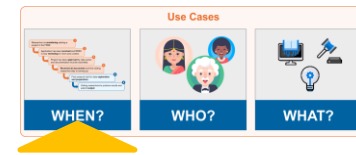
WHO?



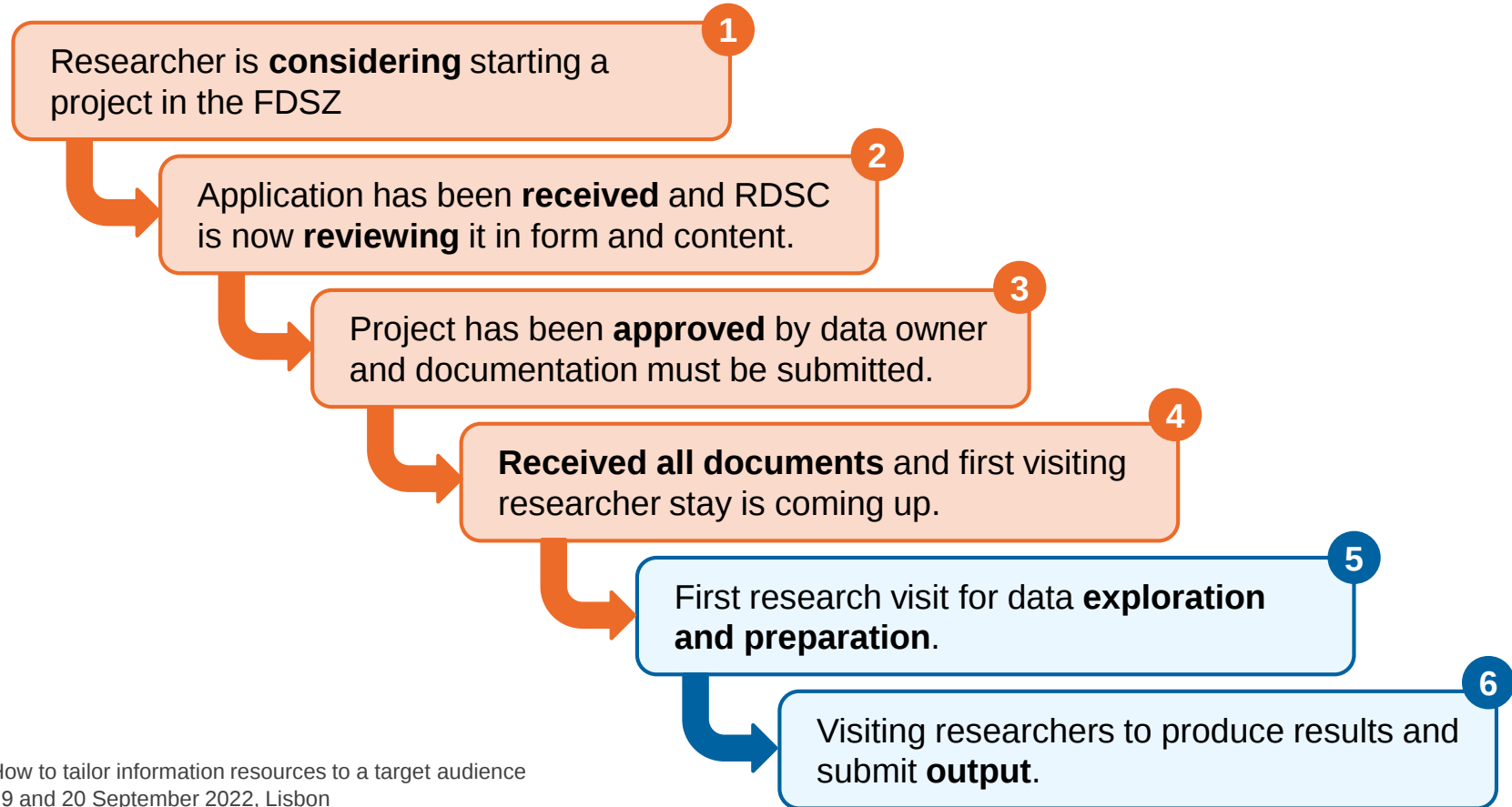
WHAT?

New concept for a streamlined communication at the RDSC

WHEN?: Milestones

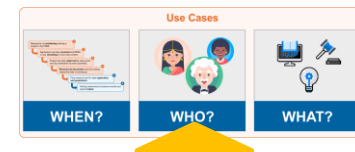


*Structuring the research process into **six milestones**.*



New concept for a streamlined communication at the RDSC

WHO?: Defining the target audience



*The RDSC decided to divide its target audience into **three groups**:*



Group A

Previous experience ...

- ✗ at the RDSC
- ✗ with the requested dataset(s)



Group B

Previous experience ...

- ✓ at the RDSC
- ✗ with the requested dataset(s)



Group C

Previous experience ...

- ✓ at the RDSC
- ✓ with the requested dataset(s)

New concept for a streamlined communication at the RDSC

WHAT?: Classification of our existing materials (1|2)



*The RDSC provides many different materials to researchers. However, the **type of information** is different. Here are some examples:*

The screenshot shows the 'Rules for visiting researchers at the RDSC' document. It includes a list of rules for visiting researchers, such as '1. Representability of program codes', '2. Representability of software', '3. Representability of data', '4. Representability of publications', and '5. Representability of publications'. It also mentions 'Principle D.4: Economical use of resources'.

iii RDSC Rules

Plain text with list of rules that need to be adhered to.

The screenshot shows the 'Working with large data at the RDSC' document. It includes a diagram of the 'Data science project cycle' and a bar chart showing the 'Size comparison of selected datasets'. The bar chart compares the size of datasets: 'M4' (100), 'CDS' (100), 'M4' (100), and 'M4' (100).

iii Tips for data handling

Text with explanations and examples.

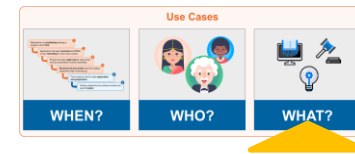
The screenshot shows the 'How to use nobsreg5 with particular regressions' document. It includes a code example for using the 'nobsreg5' command in Stata, showing the output of a linear regression analysis.

iii User guide for SDC tools

Step-by-step instructions with code examples.

New concept for a streamlined communication at the RDSC

WHAT?: Classification of our existing materials (2|2)



*Existing and planned materials are assigned to a **material type**.*



Reference*

Information-oriented

- ✓ Visiting researcher rules
- ✓ Contracts
- ✓ Confidentiality agreement briefing
- ✓ Website
- ✓ ...



Explanation

Understanding-oriented

- ✓ Data reports
- ✓ Website
- ✓ Technical reports on selected topics
- ✓ RDSC Wiki with FAQ
- ✓ ...



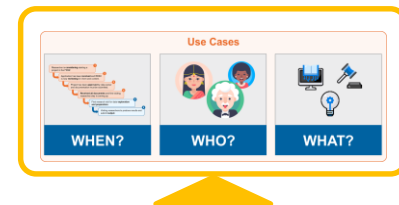
Tutorials

Learning-oriented

- ✓ Instructions for using the SDC packages in Stata and R with examples
- ✓ Example project
- ✓ Tool for automatic checks of certain rules
- ✓ ...

New concept for a streamlined communication at the RDSC

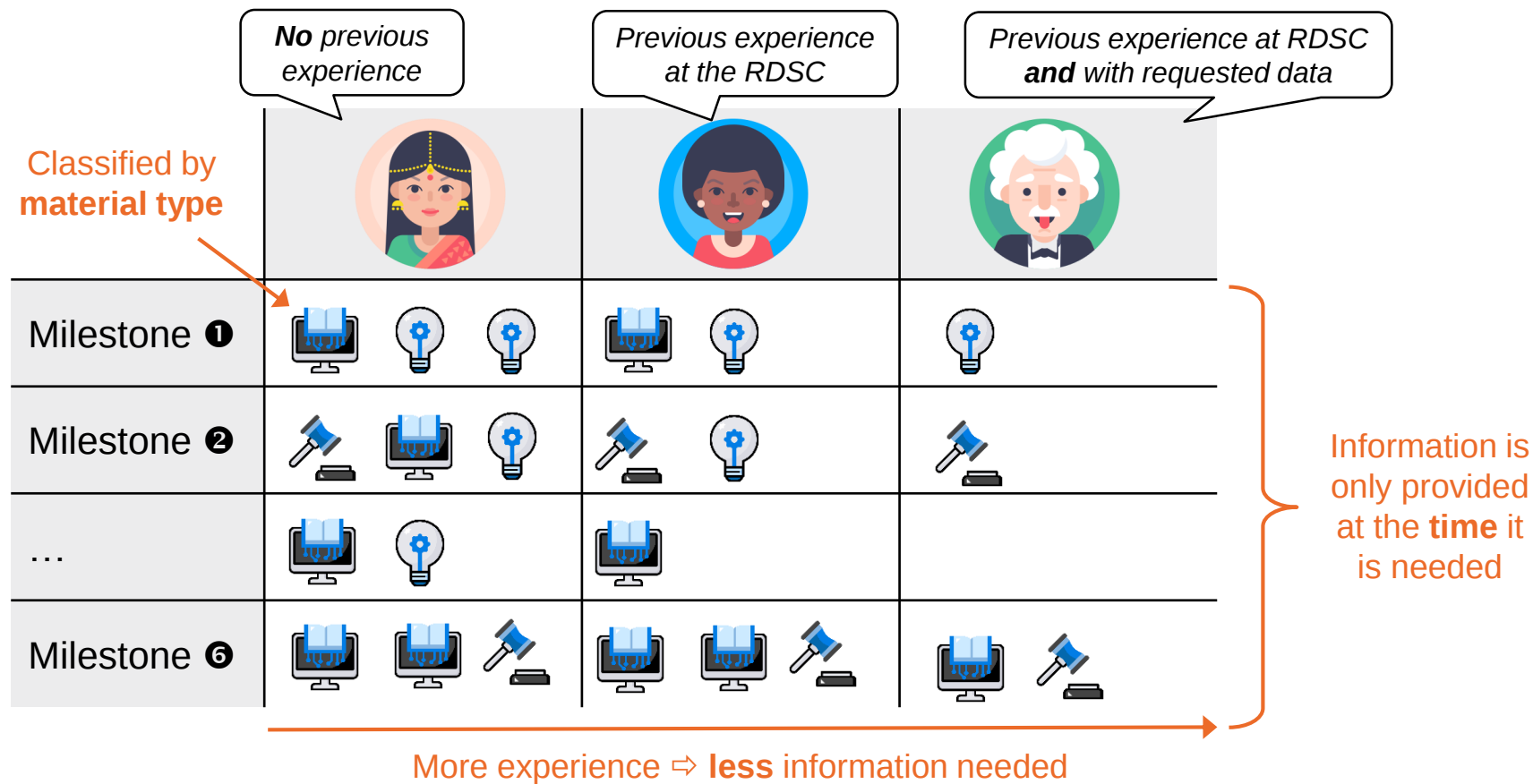
Assignment of milestones - Use cases - Researcher type - Material type



Use case	Milestone	Researcher type	Material type
Researcher would like to get an overview of all data that can be requested in the RDSC.	❶ Researcher is considering starting a project	All	 Reference
...	...	...	...
RDSC wants to ensure that researchers understood the rules at the secure environment.	❺ First research visit for data exploration and preparation	Groups A and B: New / inexperienced researchers	 Explanation
...	...	...	...
Researcher would like to use the nobs commands in Stata, following guidance and examples.	❻ Research visits to produce results and submit output	All	 Tutorial

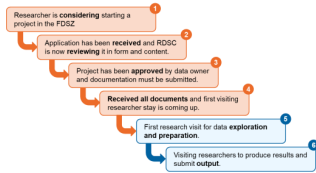
New concept for a streamlined communication at the RDSC

Simplified outcome



New concept for a streamlined communication at the RDSC

Summary of the three steps procedure



WHEN? Identify **milestones** that mark important stages of a research project to learn when resources are needed.



WHO? Classify researchers by their skill set into different buckets to learn about the **target audience** of the resources.



WHAT? Identify the appropriate **type of resources** needed (e.g. formal legal reference vs. user guide with many examples). The RDSC uses a simplified version of the Diátaxis framework (<https://diataxis.fr/>).

Thank you!



Jannick Blaschke (jannick.blaschke@bundesbank.de)

Website: www.bundesbank.de/rdsc