

The Moment of Truth

Risk Maturity Analysis in the German Ministry of Defense

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10th Annual Conference Risk Governance 2022

AGENDA

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3. Risk Management Maturity Model

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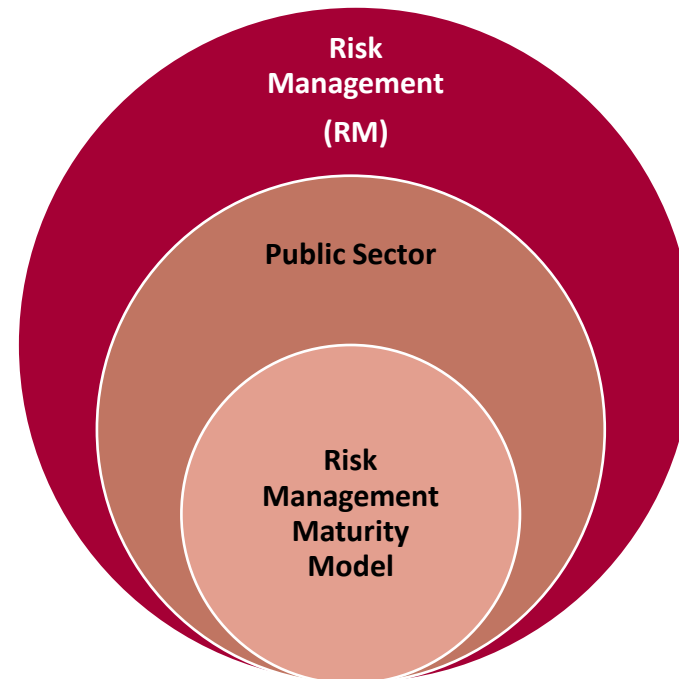
3.3 Assessment

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1. MOTIVATION



My project deals with the **risk management maturity analysis** of a risk management system in the **public sector**, exploring the risk management in the **Ministry of Defense** as a **long-term case study**.



- ... to extend academic literature about risk management maturity assessment
- ... to improve measurement of the current situation
- ... to enhance the improvement of risk management systems in use

2.1 RISK MANAGEMENT



Private sector - legal regulations

KonTraG (AktG, HGB), BilReg, BilMoG, StaRUG, FISG, LkSG

Public sector - low and inconsistent legal requirements

for a systematic risk management

Frameworks

- Modell des BRH 2017
- BSI-Standard 100-3
- COSO II (2017)
- ISO 31000
- FERMA
- ...

2.2 RM IN THE MINISTRY OF DEFENSE

Risks

= are potential events with the possibility of a negative impact on the achievement of goals (time, performance, finances).

Risk class

determined by **probability of occurrence** and the **extent of damage**

With a later further development, consider:

- **opportunities**
- positive impact on the success of the project



2.2 MINISTRY OF DEFENSE

2.1 RISK MANAGEMENT

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Private sector - legal regulations
KonTraG (AktG, HGB), BilReg, BilMoG, StaRUG, FISG, L...

Public sector - low and inconsistent legal requirements
for a systematic risk management

Frameworks
Standard 100-3
(2017)

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2.2 THE MINISTRY OF DEFENSE

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Risks with the possibility of a negative impact
on the achievement of goals (time, performance, finances).

...determined by **probability of occurrence**
and the **extent of damage**

With a later further development, consider:
- **opportunities**
- positive impact on the success of the project

Strategy
- goals
- relation to controlling
- portfolio management

Culture
- risk culture
- transparency culture

Organization
- risk management process
- organizational structure regulations

Methods
- reporting formats
- IT support
- risk identification & risk assessment methods

Staff
- training courses
- training on the job

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- ✓ **The risk management in the MoD has been developed in a conceptually manner**
- **To what extent does the implementation correspond to the concept?**
- Since the implementation of **risk management** is a lengthy process and requires cultural change, it shall be **continuously tracked and adjusted**

➔ **Risk Management Maturity Model**

3.1 RISK MANAGEMENT MATURITY MODELS

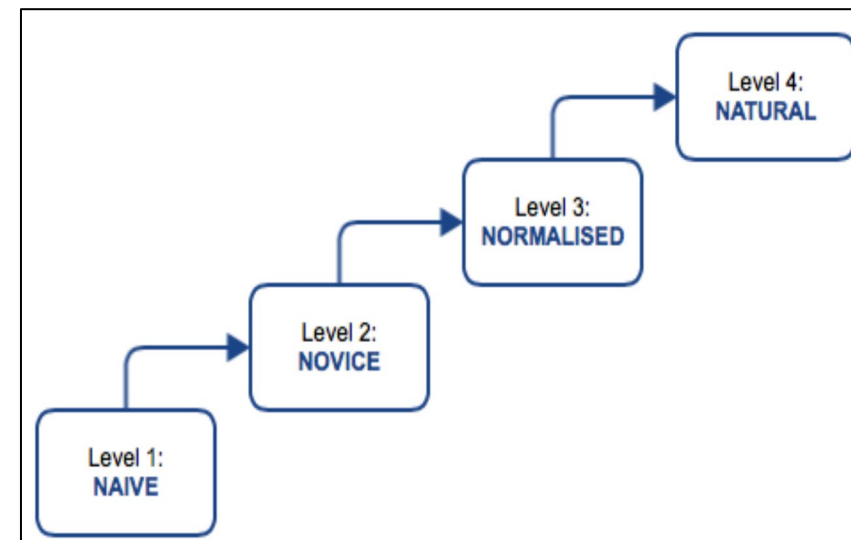


Maturity Model

= structured set of elements that **describes an evolutionary path of improvement from immature to mature** and qualitatively better **processes**.

Maturity

= a state of being complete, perfect, or ready; a fullness of development



	Level 1	Level 2	Level 3	Level 4
Definition	... reactive mgmt	... inefficient RM	... RM routine	... proactive RM
Culture	no awareness	benefit hardly known	accepted strategy	RM culture
Process	not formal	not structured	general proc. in most proj.	RM-inform. actively used
Experience	no knowledge	first experiments	trained internal staff	RM is used in all areas
Application	no structured procedure	RM-App. have no persistence	RM is part of daily Business	Risk-based reporting & decision making

Two Functions

Self-Assessment

Planning
Development

3.2 DEVELOPMENT



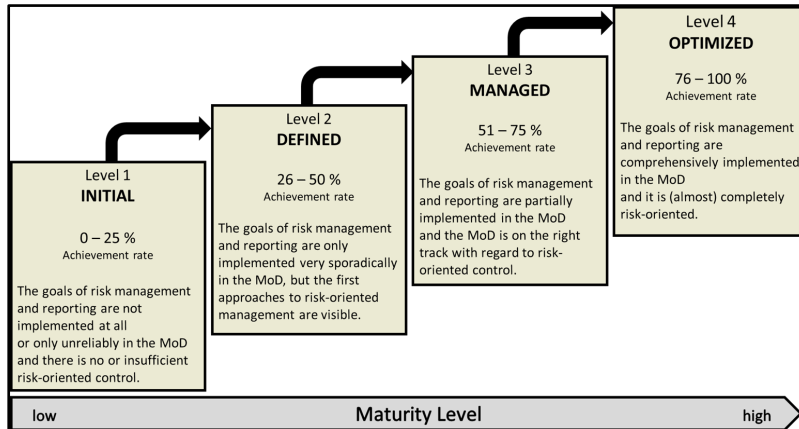
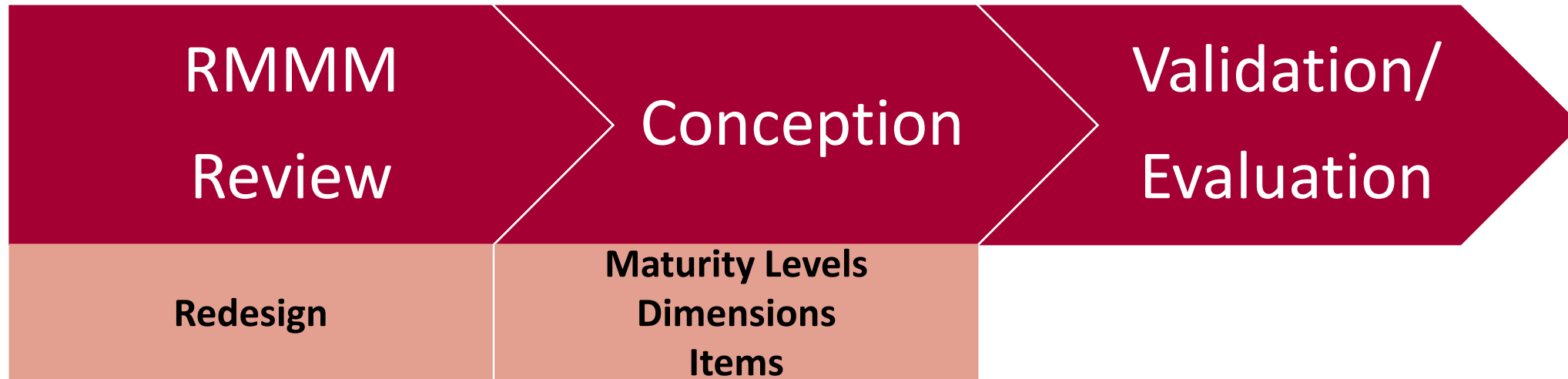
*RMMM = Risk Management Maturity Model

3.2 DEVELOPMENT

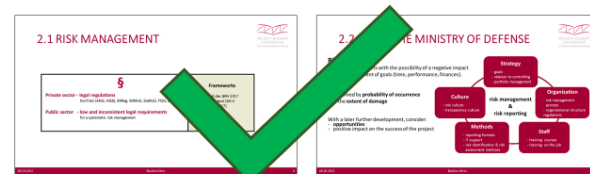


	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Hillson (1997) Risk Maturity Model	Naïve	Novice	Normalised	Natural		
RMRDPC (2002)	Ad hoc	Initial	Repeatable	Managed		
Hopkinson/ Lovelock (2004)	Naïve	Novice	Normalized	Natural		
P3M3 (2006)	Initial	Pepeatable	Defined	Managed	Optimized	
Gleißner/Mott (2008)	Schadensmanagement	Regulatorisches Risikomanagement	Ökonomisches Risikomanagement	Integriertes wertorientiertes Risikomanagement	Embeddes Risikomanagement	
Mikes (2009)	Risk Silo Management	Integradet Risk Management	Risk-based Management	Holistic Risk Management		
Gleißner/Stein/Wiedemann (2021)	Kein Risikomanagement	Schadenmanagement	Regulatorisches Risikomanagement	Entscheidungsorientiertes Risikomanagement	Integriertes wertorientiertes Risikomanagement	Risk Governance
...						

3.2 DEVELOPMENT



2.2 MINISTRY OF DEFENSE

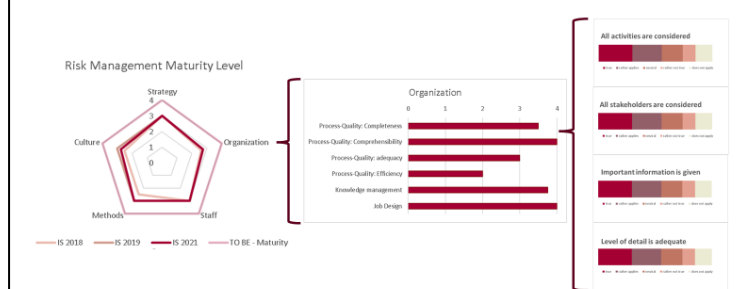


✓ **The risk management in the MoD has been developed in a conceptually exemplary manner**

- To what extent does the implementation (realization in practice) correspond to the concept?
- Since the implementation of risk management is a lengthy process and requires a cultural change, it shall be **continuously tracked and adjusted**

→ **Risk Management Maturity Model**

DIMENSIONS – ITEMS – QUESTIONNAIRE



Risk Management Maturity Level

Legend: IS 2018 (red), IS 2019 (orange), IS 2021 (yellow), TO BE - Maturity (green)

Dimension	IS 2018	IS 2019	IS 2021	TO BE - Maturity
Strategy	0	1	2	3
Organization	0	1	2	3
Staff	0	1	2	3
Methods	0	1	2	3
Culture	0	1	2	3

Additional criteria for questionnaire:

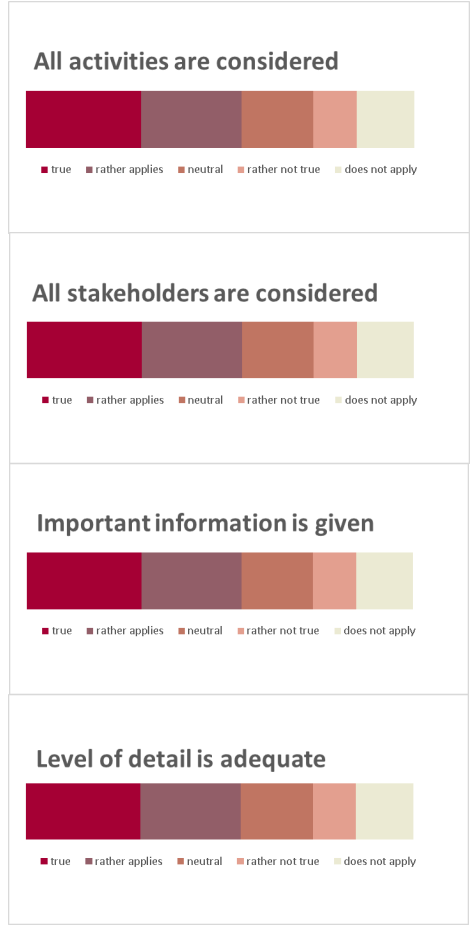
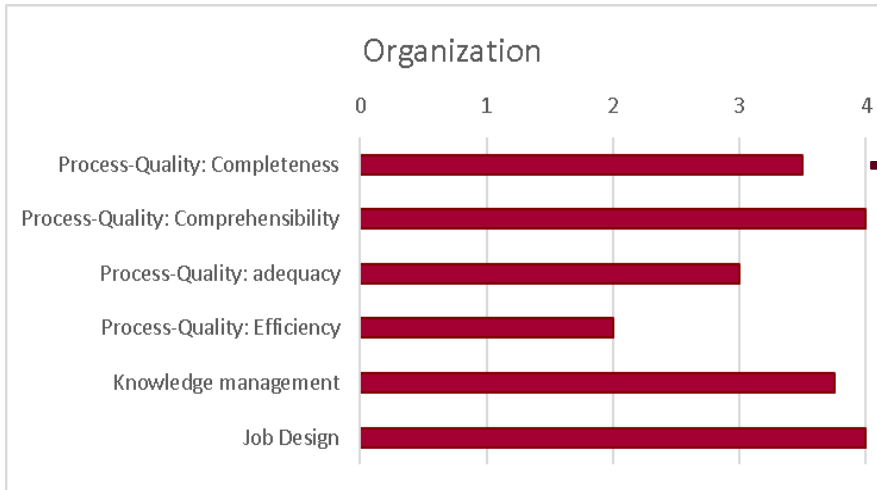
- All activities are considered
- All stakeholders are considered
- Important information is given
- Level of detail is adequate

3.2 DIMENSIONS – ITEMS – QUESTIONNAIRE

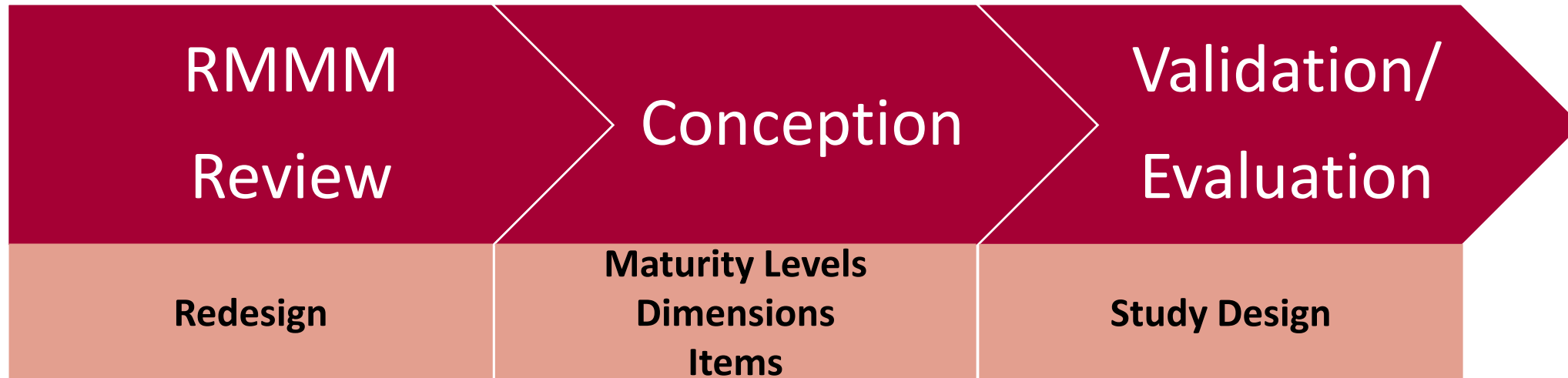
Risk Management Maturity Level



IS 2018 IS 2019 IS 2021 TO BE - Maturity



3.2 DEVELOPMENT

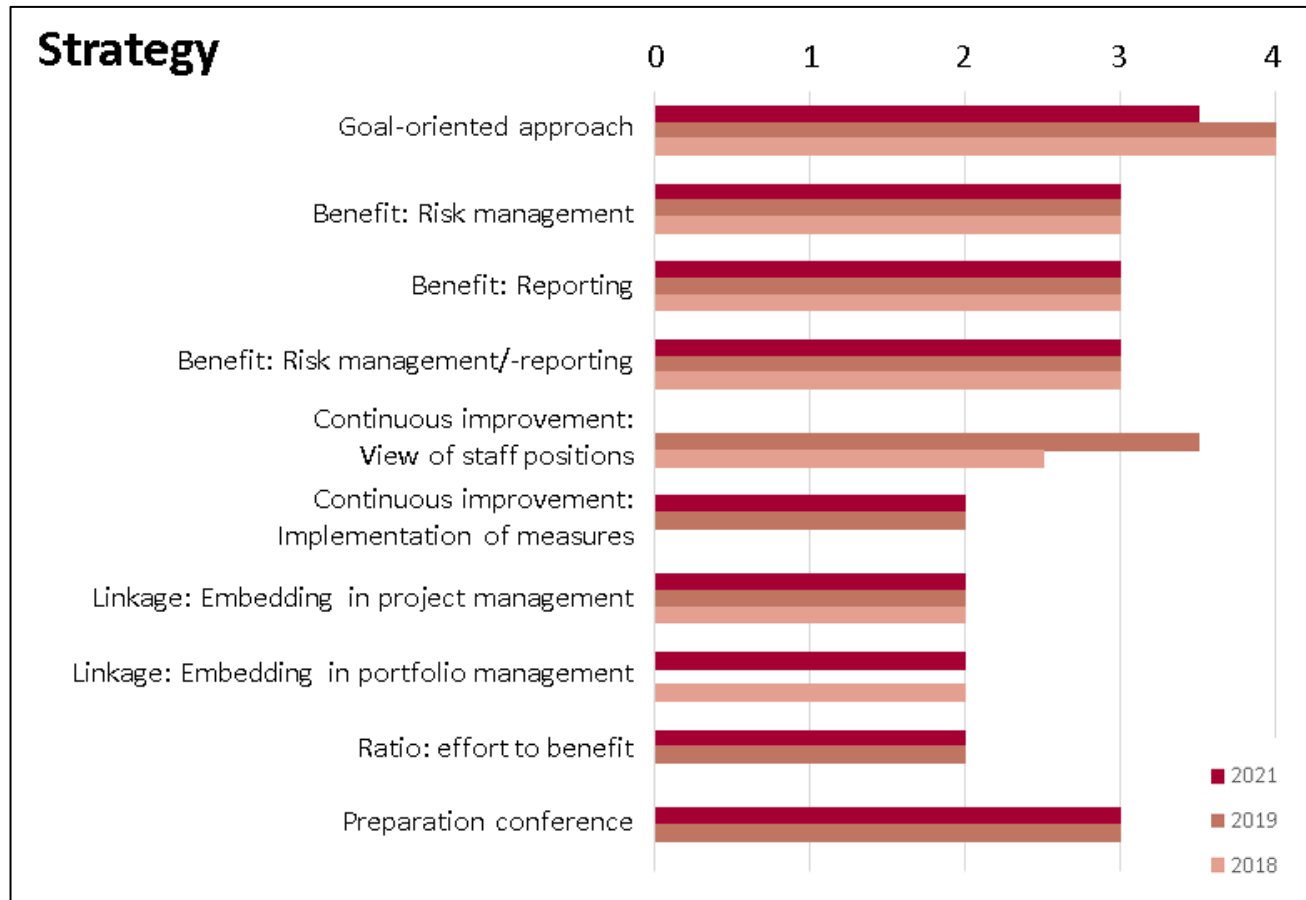


<ul style="list-style-type: none"> ▪ annual test query ▪ adaptation of the questionnaire ▪ annual evaluation ▪ adaptation of the questionnaire 	Study Design		
	Online Survey	Interviews	Database

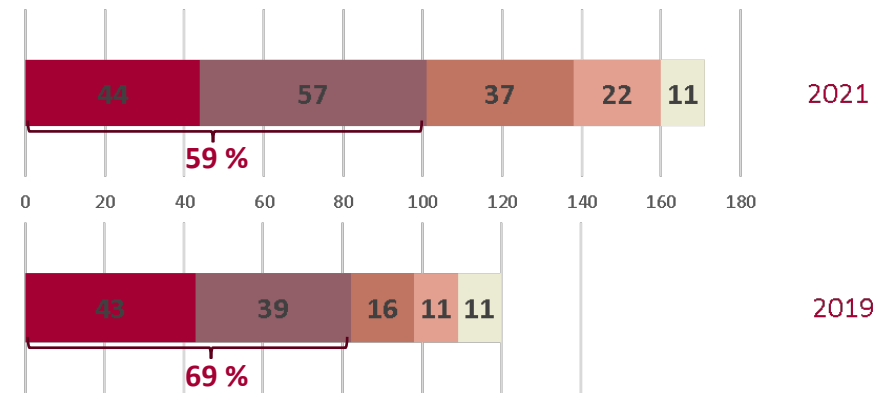
3.3 DATA SAMPLE AND METHODS

	2018	2019	2021
Sample All employees involved in risk management	283	341	389
Data collection Online survey / executive interviews conducted	272/11	328/13	378/11
Final sample size Completed questionnaires (including interviews) Return rate	162 61 %	130 42 %	179 49 %
Calculation of the model Lime surveyry			

4. EXEMPLARY RESULTS



Benefit: Reporting
... direct communication



... top management integration



4. RESULTS



Dimension	Performance 2018	Performance 2019	Performance 2021
Strategy	3	3	3
Organization	2,625	2,75	2,75
Staff	3	3	3
Methods	2,5	3	3
Culture	2,5	3	2,75



4. KEY FINDINGS

achievements	field of action
increased transparency	unclear benefits regarding the performance, time and financial framework of the projects
direct communication	high effort (individual feedback)
fast escalation channels	limited decision-making and control options in senior management
→ risk management is established in defense management	→ develop risk management <ul style="list-style-type: none">• beyond the current circle of participants (e.g. human resources, contractors in the defense industry)

5. CONTRIBUTION

- **to academic literature**

- **extending the literature** on risk management and corresponding maturity model practices in the public sector
- **increasing the number of case studies** and make a **new implementation context** accessible
- **contributing to further development** of risk management systems

- **to business practice**

- **preventing naive concept transference**
- improve public administrations' understanding of implementation and **improvement of risk management**
- presenting a tool to analyse risk management implementation
 - to identify design weaknesses
 - to guide investment
 - to create a mutual basis for communication

6. LIMITATIONS

- number of samples: only 1
- specific character of the organization
- **limited generalizability**
- subjectivity
- dependence on the knowledge of the respondents

& FURTHER RESEARCH

- ❑ **further comparative case studies** in public administration should be sought **for further validation**
- ❑ regarding the limited number of comparable national contexts, **international comparisons** should be sought
- ❑ the **updating, further development and distribution** of the maturity model is desirable from a practice-oriented point of view
 - methodological enhancement: expansion of relevant survey groups, e.g. inclusion of external participants
 - content expansion: e.g. opportunity management

Thank you for your attention!



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