



Aggregation of Reference Process Building Blocks to Improve Modelling in Public Administration

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Agenda



Introduction

Why is process modelling not widely diffused in P.A., yet?

Aggregation of RPBB

What does aggregation mean?
What are RPBB?

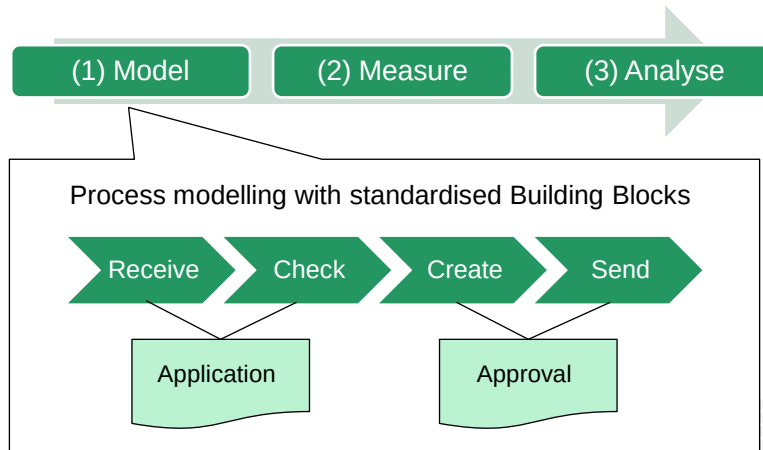
Applicability in P.A.

Is aggregation an eligible approach to model service processes in P.A.?

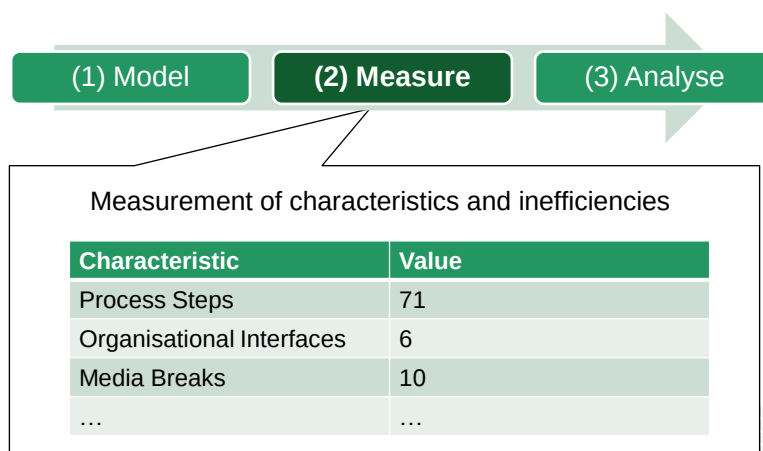
Outlook

What are potential issues to be focused by further research?

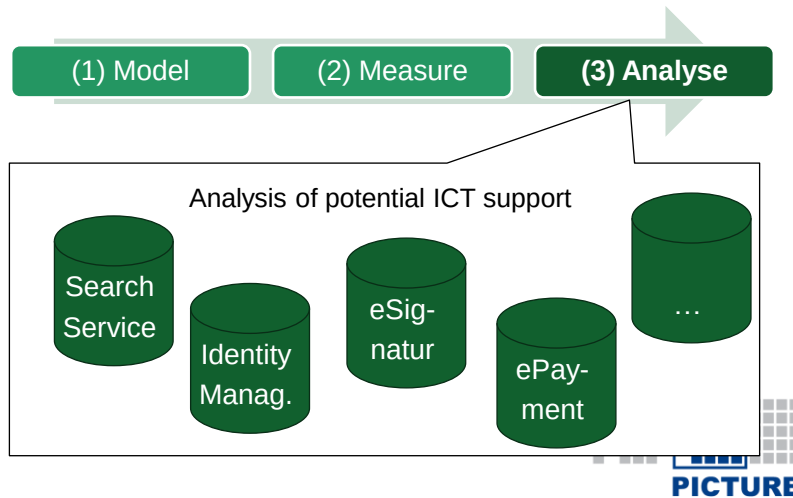
Introduction



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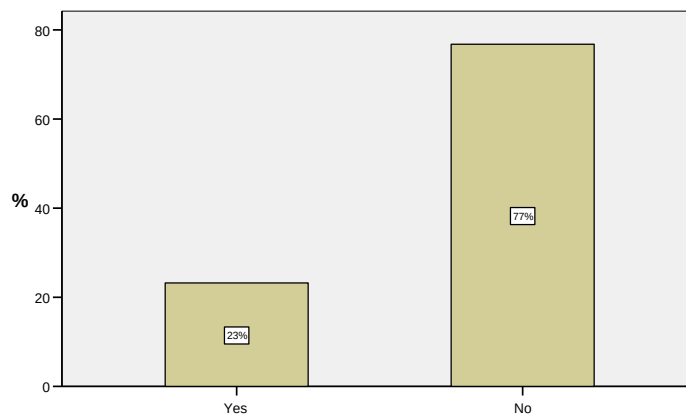


Introduction



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Has process modelling already been done in your administration or are you planning to do this?



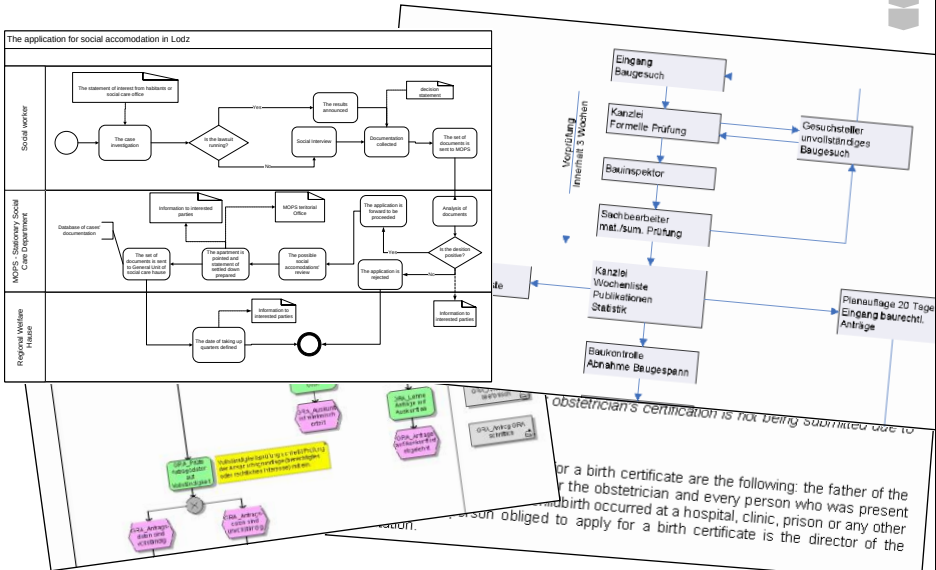
Introduction



What are the reasons for abandoning process modelling?

		applies fully	...	...	...	...	does not apply
No money	%	35.3%	19.0%	20.2%	11.2%	6.2%	8.1%
No personnel	%	34.1%	27.1%	18.2%	11.2%	3.9%	5.4%
No know-how	%	35.7%	24.0%	20.2%	9.7%	4.7%	5.8%
No usage	%	11.6%	11.6%	31.0%	18.2%	14.3%	13.2%
No demand	%	16.7%	15.5%	26.7%	16.7%	13.2%	11.2%
No adequate software/modelling tool	%	41.1%	18.2%	17.8%	10.1%	5.0%	7.8%

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Aggregation of RPBB Concept of Reference Modelling (RM)

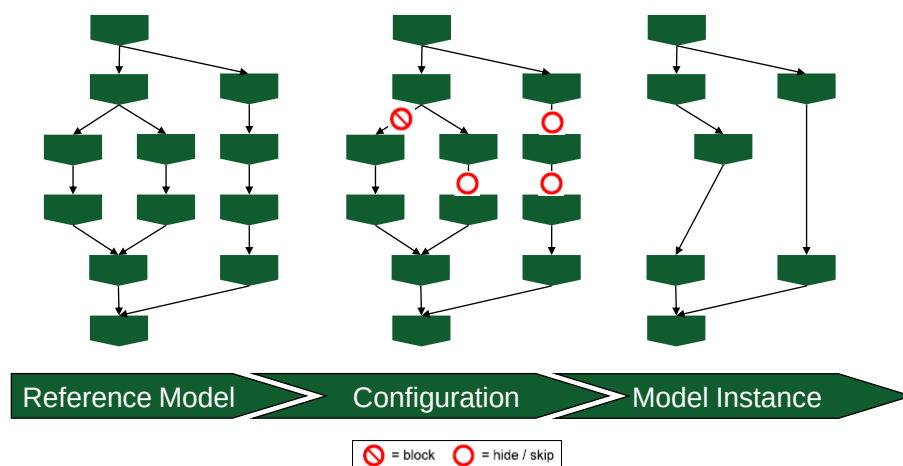


- What is a “Reference Model”?
 - General applicability and recommendatory nature → **?!**
 - Adaptive re-use of models or model components → **OK**
 - Focus on Reference *Process* Models
- Why do we assume that the idea of reference models (esp. the aggregation mechanism) can improve the quality of process documentation in Public Administrations (P.A.)?
 - Predefinition of models or model components can
 - ... simplify the modelling process (application period),
 - ... reduce the room for individual interpretation and
 - ... enable the design of consistent models.

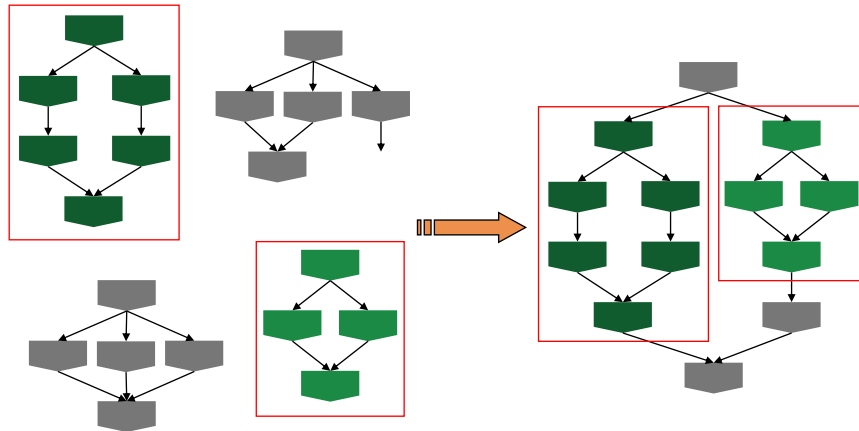
Aggregation of RPBB Concept of Reference Modelling (RM)

- Cycles of Reference Modelling:
 - Development/Design/Construction
 - Application (re-use in practice) → adaptation necessary
- Adaptation of reference models needs mechanisms, such as Configuration, Analogy-based Construction, Specialisation, Instantiation and Aggregation

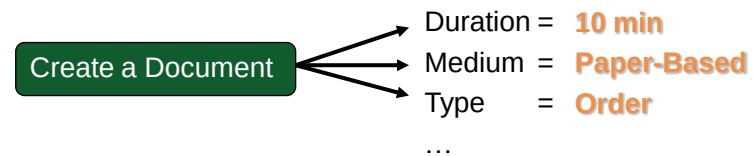
Aggregation of RPBB Concepts to Adapt RM - Configuration



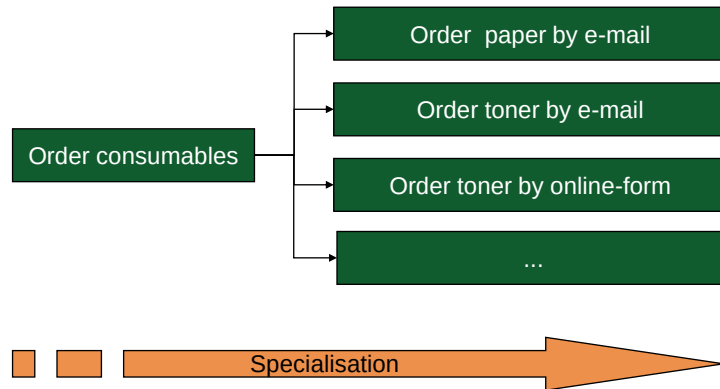
Aggregation of RPBB Concepts to Adapt RM - Analogy-based Construction



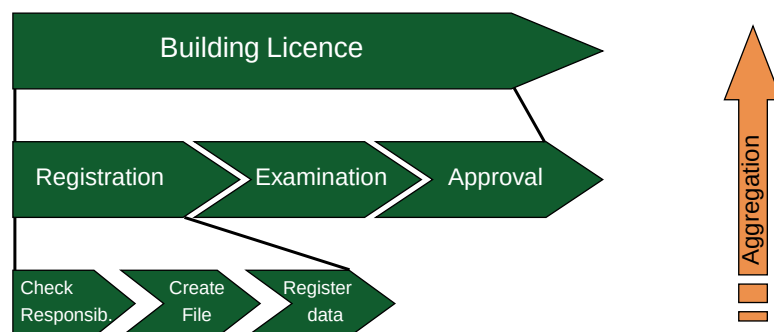
Aggregation of RPBB Concepts to Adapt RM - Instantiation



Aggregation of RPBB Concepts to Adapt RM - Specialisation



Aggregation of RPBB Concepts to Adapt RM - Aggregation



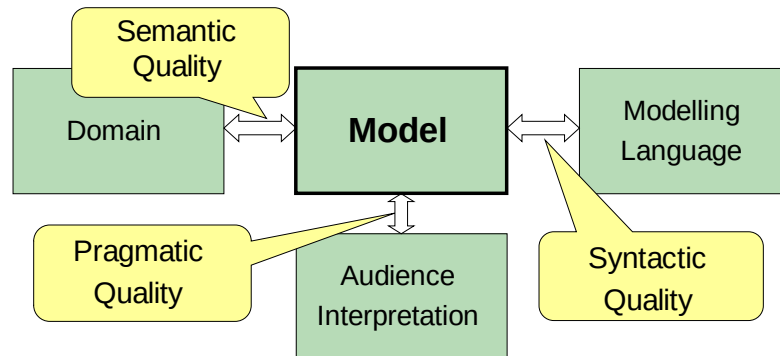


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Applicability in P.A. Perspectives of Evaluation



Applicability in P.A. Characteristics of Public Service Delivery

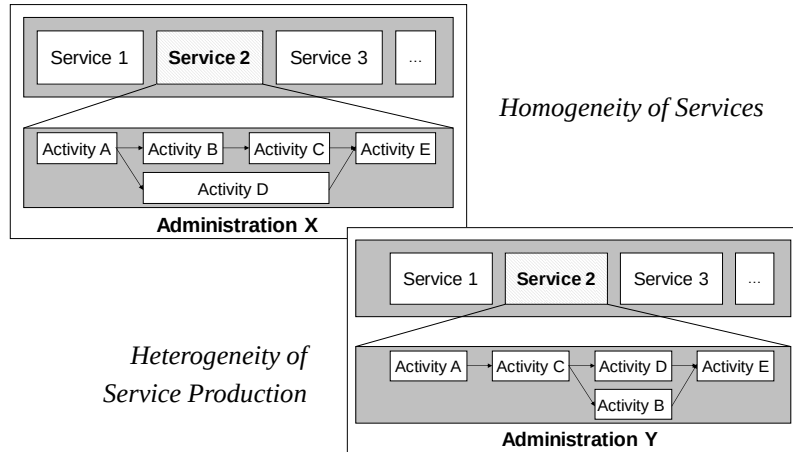


- § → Regulation of services
- § → Regulation of service production
- § → Regulation of decision criteria

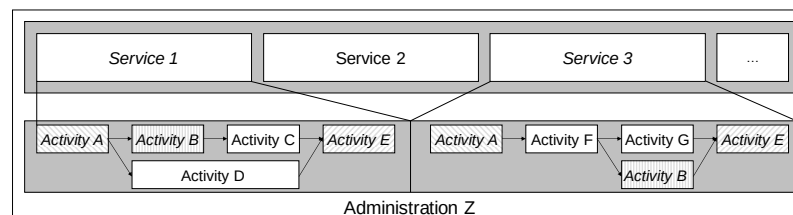
- Limited flexibility
- Avoids revolutionary approaches of change
- Evolutionary concepts (CPI) are needed



Applicability in P.A. Characteristics of Public Service Delivery

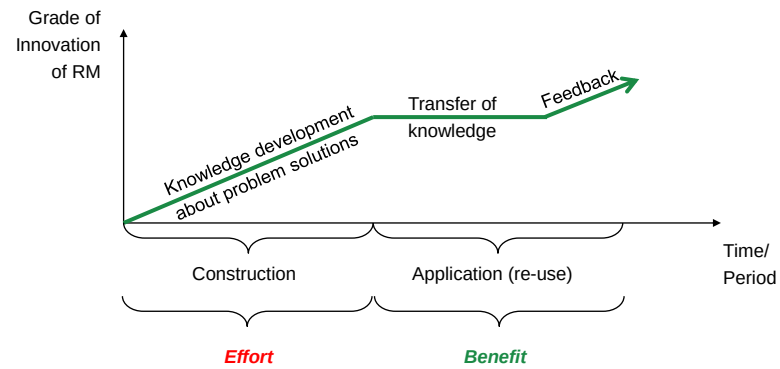


Applicability in P.A. Characteristics of Public Service Delivery



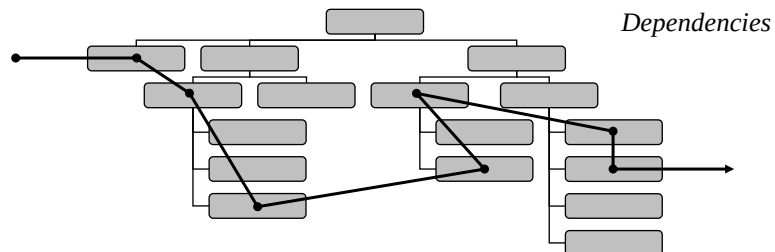
*Recurrence of similar
Activities (=RPBB)*

Applicability in P.A. Efforts & Benefits of Reference Modelling



Applicability in P.A. Characteristics of Public Service Delivery

Distributed "Production"



Decentralised Responsibilities

Fragmented Processes

Applicability in P.A. Advantages of RPBB Aggregation



Advantages of RPBB Aggregation in P.A.	Syntactic	Semantic	Pragmatic
Flexible modeling (creation of individual/suboptimal models/CPI) and adequately support of characteristics of service in P.A. (branches, etc.)		X	X
Re-usability of generic (domain-independent) RPBB	X	X	
Common terminology			X
Comparability of processes	X	X	X
Distributed process modeling at comparable levels of detail and abstraction as well as the joining of resulting parts of process models	X	X	
Notation-independent specification	X	X	
Rules can limit combinations of RPBB depending on the context		X	X
Improvement and automation of plausibility/consistency checks	X	X	
Automated analysis of weaknesses		X	
Re-use of resulting models for other purposes (e.g. transformation for workflow management, SOA, etc.)	X	X	X



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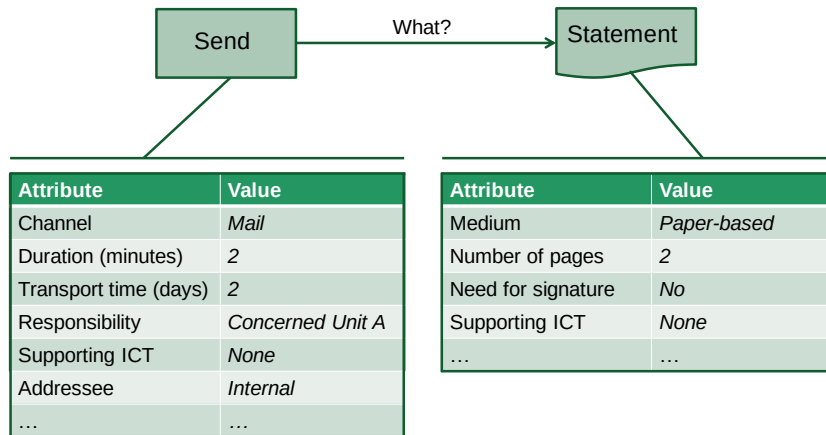
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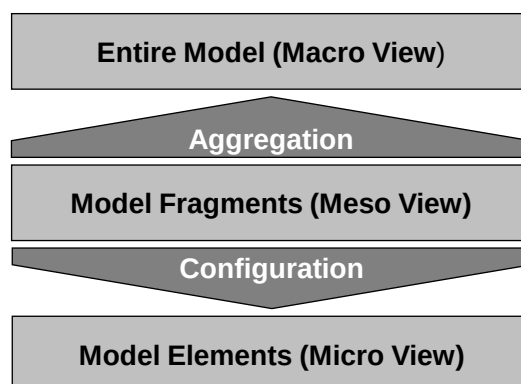
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Outlook Combination of Aggregation, Specialisation and Instantiation



Outlook Combination of Aggregation, Analogies and Configuration



Thank you for your attention!



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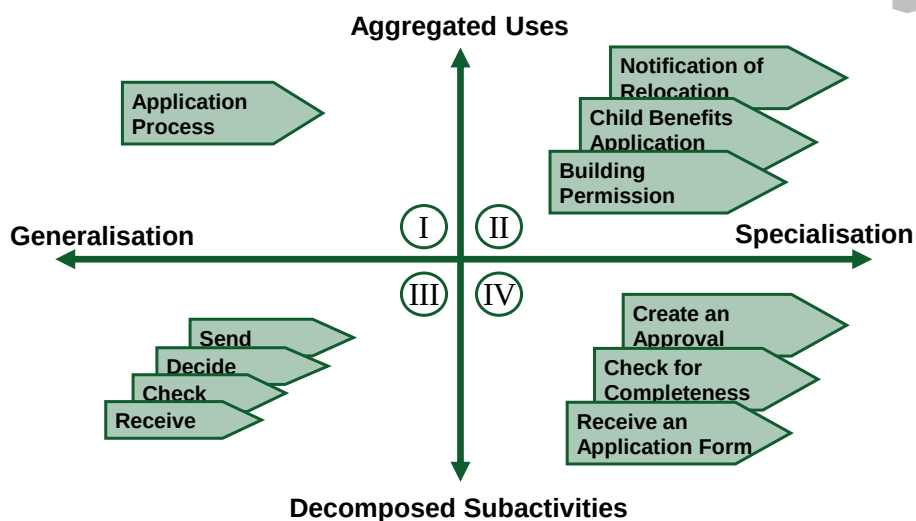


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Backup Concepts to Adapt RM - Process Compass



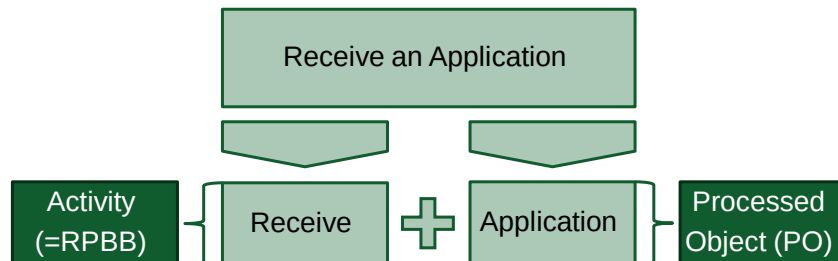
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Following: Malone et al.: *Organizing Business Knowledge - MIT Process Handbook*, The MIT Press, Cambridge Massachusetts et al., 2003, p 17
And: Winter: *Modelle, Techniken und Werkzeuge im Business Engineering*, in: *Business Engineering - Auf dem Weg zum Unternehmen des Informationszeitalters*, 2. Ed., Springer Berlin Heidelberg New York, pp. 87-118.

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Backup Differentiation of Activity and Processed Object



Backup Meta Model of RPBB

