

# A GENERIC METHOD FOR BEST PRACTICE REFERENCE MODEL APPLICATION

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Abstract: The perceived importance of the topic IT governance increased in the last decade. Best practice reference models (like ITIL, COBIT, or CMMI) promise support for diverse challenges IT departments are confronted with. Therefore, the interest in best practice reference models grows and more and more companies apply BPRM to support their IT governance. But there is limited knowledge about how BPRM are applied and there is no structured method to support the application and lift the full potential of BPRM. Therefore, this paper presents the construction and evaluation of a generic method for the application of BPRM. Following the language-based approach of method engineering, elements of methods will be derived and formally described. The criteria of design science research presented by Hevner et al., 2004 will be applied to the evaluation of the constructed method. Intention of this research is to reduce the inefficiencies caused by the inconsistent use of best practice reference models.

## 1 INTRODUCTION

As a central instrument for the design of corporate information systems within the field of information systems research, information models have traditionally been used for decades. Literature on this subject suggests the concept of reference modeling for an improvement in the development of enterprise-specific models (see Hars, 1994; Becker, 1995; Frank; Scheer, Seel, & Georg, 2002; Goeken, 2002; Becker & Knackstedt, 2002; Loos & Fettke, 2005 among others).

A reference model is defined as a generic *conceptual model* which is useful when developing an individual model of a specific class. It formally presents state-of-the-art knowledge and *best practice knowledge* and is considered as an example for a corporate model (Fettke & Loos, 2003, Rosemann & van der Aalst, 2007). Precisely the mentioned best practice knowledge is contained in the models of IT governance focused on herein. (Co-) produced by practitioners these models contain profound and consolidated knowledge based on experience in the field of IT governance and tend to become quasi-standards (PWC, 2006).

Thus, the part of the definition concerning best practice knowledge is fulfilled by the models of IT governance. However these models are conceived as

structured compilations of best practices rather than semiformal conceptual models. Therefore, the part of the definition which states reference models are conceptual models is not fulfilled by all models of IT governance.

By metamodeling these models they could be described more formally (Goeken & Alter, 2009). A meta model includes the inner structure of the best practice knowledge and it is a first step to model best practices as conceptual models. This conceptualization makes some research findings of reference model application utilizable. However, in order to avoid misleading terms and misconceptions, reference models of IT governance will be referred to as best practice reference model (BPRM) in this paper.

Those BPRM have reached a certain degree of commonness in practice. Their application is still growing, but seems to be inconsistent. The study "IT Governance in Practice - Insight from leading CIO's" quotes one participant on the application: „I use frameworks and standards for inspiration, and we use what we think is useful and relevant for our organization“(PWC, 2006, p.18). Other companies use BPRM even more holistic and with a higher degree of obligation. The missing methodical support for their application results in several forms of inconsistent application of one BPRM.

Additionally to that one-model case the simultaneous use of several BPRM increases in enterprises (PWC, 2006). Simultaneous means that an IT department for instance uses CMMI for the development of new systems and COBIT to provide IT governance. In this multi-model case the inconsistent and simultaneous application can lead to problems (Alter & Goeken, 2009, Sivy, Kirwan, Marino, & Morley, 2008a and b). For example, various different, sometimes contradicting, languages are encountered which complicate cooperative work spanning several divisions. Furthermore, multiple BPRM produce overlaps and contradictions among each other. This leads to redundancies and further inefficiencies. Those inefficiencies are clearly opposed to the nature of reference models since the construction of corporation-specific models based on customized models or model components promises positive effects on effectiveness and efficiency see Fettke & Loos, 2002 (p.9), Goeken, 2002 (p.1) or Becker, Delfmann, & Knackstedt, 2004 (p.1). Therefore this paper presents a method for the methodical and structured application of IT governance BPRM.

## 2 RESEARCH DESIGN

This paper presents a part of broader a research project. This research project is designed as follows. To broaden the understanding of BPRM application the research design includes explorative expert interviews in addition to an extend literature review as a first step. Based on that knowledge, a method has been constructed for the one-model case. The generic method has been evaluated and its usability has been tested by applying it to a specific BPRM (COBIT). After that the methods is extend to the multi-model case. Goal of the research project is to support effective and efficient use of several BPRM. This paper presents the generic method for the one-model case. The illustrated method is a result of a research process using the knowledge base of IS research and the business needs concerning the topic IT governance and BPRM application. Figure 1 shows the position of the research project in the well known conceptual framework of Hevner, March, Park, & Sudha, 2004.

According their framework the knowledge base “provides the raw materials from and through which IS research is accomplished. The knowledge base is composed of foundations and methodologies. Prior IS research and results from reference disciplines provide foundational theories, frameworks, instruments, constructs, models, methods, and

instantiations used in the develop/build phase of a research study“ (p.80). Following this definition the knowledge base for this research includes research on reference models and modeling, method engineering and on IT governance but also on research methods like interview techniques.

The environment defines the problem space which includes the phenomena of interest. „In it are the goals, tasks, problems, and opportunities that define business needs as they are perceived by people within the organization“ (p. 79).

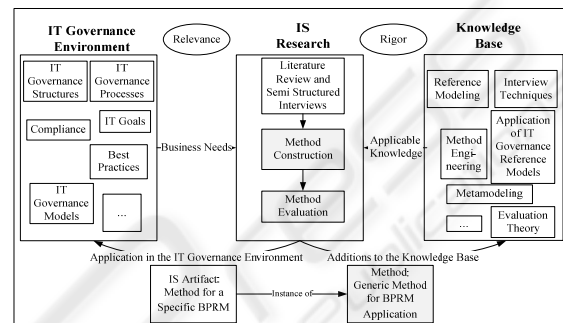


Figure 1: Research project (according to Hevner et al., 2004).

For research on the BPRM of IT governance this environment is composed of IT employees, IT organization, IT goals and processes and the existing best practices.

The research findings could be distinguished in a generic method and several specific methods, derived from the generic method. The construction process of the generic method follows a rigor research design by using the existing and proofed knowledge of IS research. The various specific methods represent relevant IS artifacts which provide support for practical problems. Following Hevner et al., 2004 these practical applications of the presented generic method follow the design science paradigm. The latter is “fundamentally a problem solving paradigm. It seeks to create innovations that define the ideas, practices, technical capabilities, and products through which the analysis, design, implementation, management, and use of information systems can be effectively and efficiently accomplished“ (p.78). That means the practical application of the specific method is an application for the IT governance environment whereas the generic method is a contribution to the knowledge base. The generic method for the one-model case is presented in this paper. Following the argumentation of Hevner et al., 2004 using the knowledge base to support the IT governance environment leads to a rigor research design.

### 3 METHOD CONSTRUCTION

#### 3.1 Preliminaries: Method Engineering

Methods describe a systematic approach to the solving of problems. A problem is defined as a discrepancy between actual and desired state (Becker, Knackstedt, Pfeiffer, & Janiesch, 2007). Focused on the creation of methods, the research area of method engineering is a commonly accepted and frequently debated concept in construction-oriented IS research. Brinkkemper, 1996 defines: “method engineering is the engineering discipline to design, construct and adapt methods, techniques and tools for the development of information systems“(p.276).

Since it is commonly accepted that no universal method exists (see Brooks, 1987, Fitzgerald, Russo, & O’Kane, 2003 among others), tendencies such as "domain-specific method engineering“ (Kelly, Rossi, & Tolvanen, 2005) and "situational method engineering” (Brinkkemper, 1996, Brinkkemper, Saeki, & Harmsen, 1999); (Harmsen, 1997) have developed. Basically, there are two tendencies within this area. Some approaches of method construction emphasize aspects of the construction process and project management (Kaschek, 1999). In contrast, the approach of a language-based construction of method elements focuses on the artifacts created. In recent years the latter approach has been focused on in the field of methods engineering (Brinkkemper, 1996, Ralyté & Rolland, 2001, Karlsson & Wistrand, 2006).

A method is primarily taken as a tuple of a type of exercise and a number of rules (Becker, Knackstedt, Holten, Hansmann, & Neumann, 2001), p.5. According to Zelewski, 1999 however, not all potential tuples are a method per se. In order to qualify as a method, an observation of certain qualitative requirements has to be assured. For instance, all elements and their relations to one another need to have an unambiguous interpretation for the support of which a fairly unified documentation of methods should be used. A language-based reconstruction of method elements and formalized documentation thereof is thus required (Becker et al., 2001, p.6).

The St. Gallen description model of method engineering includes a schematic composition of the elements: meta model, result, activity, technique, tool, and role. According to its language-based interpretation, the description of these elements offers a systematic development of a method (Heym, 1993, Gutzwiller, 1994, Becker, 1998).

Unlike the St. Gallen model, the method

presented herein presumes a relation between activity and technique for the application of BPRM. Two of the required method elements, namely role and tool, will not be addressed in this paper. The paper does not primarily deal with personnel related and psychological aspects of the element role. It neither deals with the specific technical aspects of tools. Thus, the generic elements *result*, *activity*, and *technique* will be included in the construction of the method in accordance to the language-based approach. Following the description of the generic method element types, the relations between these elements will be exemplified on a detailed level by presenting instantiations of the generic types.

#### 3.2 Method Element: Result Type

Results of the suggested method are several different models. These belong to certain result types which can be divided by two dimensions. The first division is between two abstract levels, the meta level and the model level. The second dimension distinguishes between reference level and corporate level. Figure 2 depicts a metamodel of the method element result type. The relationships shown in Figure 2 represent possible transformations between several result types. Their dynamic aspect will be described in detail in section 3.4.

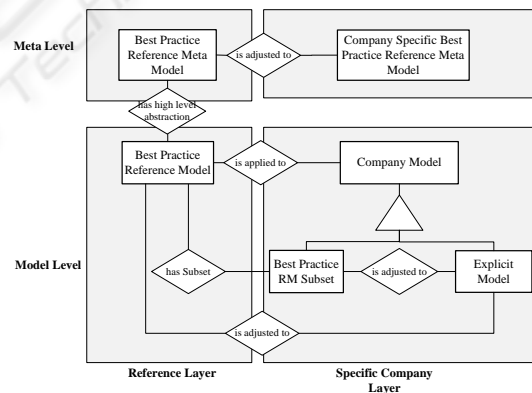


Figure 2: Meta classification of result types of the generic method.

Hence, result type *best practice reference model* is defined as a model on model and reference level. A possible instantiation of this type would be the BPRM COBIT 4.1. Result type *best practice reference model subset* has partly been adjusted to corporate-specific conditions, and is thus a result type of the company layer. An exemplifying instantiation is a COBIT 4.1 subset which contains PO processes exclusively. The *explicit model* shows the externalized consensus of individual subjects in

relation to corporate reality (Becker, Niehaves, & Knackstedt, 2004). The explicit model is more closely adjusted to corporate conditions than is the BPRM subset. Both are instantiations of the (meta) type *company model*. Additionally, the method is familiar with various forms of company models apart from the aforementioned result types. All of them are associated with the lower right section of the matrix. Building a company model it could be necessary to change the meta model the model is based on. These changes of the *best practice reference meta model* result in a *company-specific best practice reference meta model*. These two abstract result types complete the result types used for the presented method.

### 3.3 Method Element: Technique Type

Technique is defined as “a procedure, possibly with a prescribed notation, to perform a development activity” (Brinkkemper, 1996), p.276. Structured interviews or questionnaires are common examples for techniques used in methods. Techniques used for the application of best practice reference models support activities transforming models to other models. Therefore, techniques used in this method are defined as adaptation mechanisms transforming a reference model step by step to a company’s model. These techniques could be derived from available research on reference model application. Conclusions from research on reference models can be included especially if the methods themselves are formally represented by models. The method presented herein contains several models as result types (shown in section 2.2). Thus, the concepts of reference model application provide important information about the design of techniques within the presented method.

Becker et al., 2004 provide two types of adaptation mechanisms: The *mechanisms of generative adaptation* describe all modes of a reference model’s configuration, given the existence of rules which determine how to adjust the reference model depending on mechanisms of configuration. These rules should be included in the reference model. As mentioned, best practice reference models of IT governance are conceived as structured compilations of best practice rather than conceptual models. Therefore, BPRM do not usually contain explicit rules for model configuration.

Apart from configuration, Becker et al., 2004 describe four *mechanisms of non-generative adaptation*: what generally characterizes mechanisms of non-generative adaptation is “that while they support the creation of specific model

variants, they leave room for variety to be filled by the user of the reference model” (Becker et al., 2007 p.1). As this matches the situation in the area of BPRM, the four non-generative adaptation mechanisms will be concisely described and integrated into the method as technique types.

Ad 1) Aggregation requires the reference model to be divided into its components which are recomposed by aggregation for new solutions. Combinations can be limited by defined joints.

Ad 2) Instantiation ultimately describes the existence of deliberately vague formulations or blank spaces as placeholders to be specified by users. In order to develop a BPRM into an explicit model system, placeholders have to be filled in a corporation-specific way. A BPRM is more freely and individually adaptable through instantiation than through aggregation.

Ad 3 and 4) analogy construction and specialization are very free forms of adaptation in which prescriptions for adjustment are mostly absent. However, Becker et al., 2004 stress that even these free adaptation mechanisms should give details for the user about which model elements are suitable for specialization and analogy (p.259).

The use of adaptation mechanisms of reference models within the area of method construction has been accomplished several times. For instance Harmsen, 1997 or Brinkkemper, 1996 use the mechanism aggregation, whereas Baskerville & Stage or Patel, de Cesare, Iacovelli, & Merico, 2004 use specialization. A broad overview is given from Becker et al., 2007, p. 5, table 1. The herein presented method includes the following types of technique: aggregation, instantiation, specialization, and analogy construction (their degrees of prescription about adjustment in descending order).

### 3.4 Method Element: Activity Type

The method for reference model application described by Fettke & Loos, 2002 includes two phases. The phase reuse follows after the phase construction of the model. Reuse is divided into four sub phases, which adapt the model to the corporate-specific situation. These sub phases represent activities according to the language-based approach of method engineering. A possibility to distinguish these activities is presented by Schütte, 1998. Firstly, compositional activities means that individual parts of a model are erased, altered, or added in order to improve a reference model’s fit. Secondly, generic adaptation activities means explicitly described rules of adaptation. These rules are defined explicit within the model to be observed for adjustment of the reference model. Thus,

activities needed to be taken before applying a reference model to a corporate-specific model.

Generic adaptation activities are not usually employed since most BPRM do not contain rules for adaptation. Furthermore compositional adaptation activities need to be divided into more parts. For the presented method, there is a difference between the two compositional adaptation activities “choice of model components”, i.e. alteration of the model (e.g. by erasing certain parts Gammelgard, Lindstrom, & Simonsson, 2006) and “adaptation to corporate conditions” (e.g. corporation-specific indices).

The generic method considers this by the activity types *subset selection* and *adjustment*. If a BPRM is not entirely used, it is limited by selecting a BPRM subset to the part relevant for a corporation. The reason for this decision does not necessarily based within the model itself but can be entirely strategic (Bowen, Cheung, & Rohde, 2007). Hence activity type subset selection is take place before activity type adjustment. During the subsequent adaptation, the chosen subset is continuously adjusted to the corporation. The activity type *application* completes the generic activity types. In the following, all three types of activity will be described in detail jointly with their proposed techniques. The order of the activity types in the method is depicted in Figure 3.

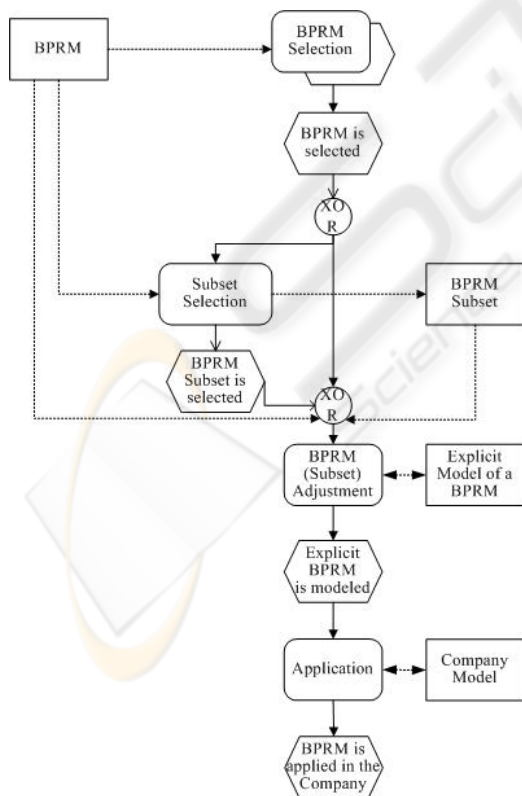


Figure 3: Event-driven-chain the proposed method.

**Activity 1. Subset Selection**

By selecting a model subset the BPRM is transformed resulting in a BPRM subset. The process of selection itself with its internal organizational and communicative aspects is not addressed in this paper. However, possible kinds of this subset are interesting for this research. The criterion to classify subsets is completeness. Two cases occur in the first place, complete and partial use. The former makes the result type subset obsolete as the BPRM and the subset are identical. But if some parts are selected while others are not, the following applies to the contents described within the model:  $BPRM \text{ Subset} \leq BPRM$ .

For detailed specification, further classification criteria are required. These criteria can be derived by abstraction of BPRM into a best practice reference meta model. A meta model created by semantic abstraction can show possible sub divisions of the case “partial application” by means of content and structure (Alter & Goeken, 2009). A model’s structure is defined by its meta model components. A Limitation of the applied meta model components typical for a reduction of a model’s range, for instance a subset which only contains the meta model component COBIT control objectives (Simonsson & Johnson, 2008, De Haes & van Grembergen, 2008). It turns out that the structure of a model is changed. Still, chosen model components need to be aggregated into BPRM subset, the form of aggregation being defined by internal relations within the meta model. A coherent subset does not, for instance, allow the use of metrics of the COBIT processes unless the goals of the process are used as well. This is because the component goal links process with metrics. Thus, the meta model shows options of aggregation.

The second case to be regarded is defined by reduction of the model’s profundity. Accordingly, all meta model components are employed in respect to the COBIT model but not all model components. Thus the content is reduced. These subsets leave the model’s structure unchanged (Gammelgard et al., 2006). The reduction of model components results in different problems than the reduction of meta model components does. This is due to interconnections of content, such as predecessor-successor-relations, which can cause successors to be left without any input or the output of a process to remain unused even though links within the meta model are intact. Hence, model components have to be aggregated on a model level as well. This aggregation of model components (e.g., several COBIT processes) can be supported by the connection among meta model

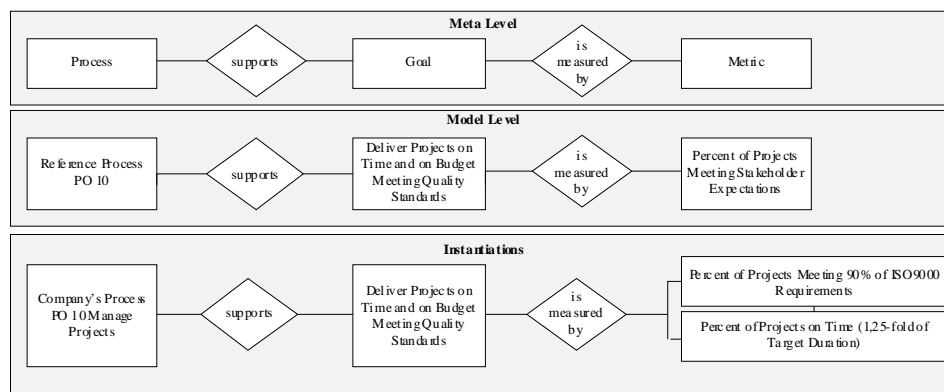


Figure 4: Instantiation of a COBIT metric.

components. These convenient options of aggregation can be derived from the meta model. For the COBIT meta model, the meta model component result proves to be an initial point for interconnection of model component process.

It turns out that connections occur on a meta model level when transforming generic BPRM into specific BPRM sections that can be used for aggregation. With its components, the meta model of a BPRM offers possibilities for aggregation of both meta model components and model components. Hence, the quality of meta models in best practice reference models is crucial for this research project (Alter & Goeken, 2009, Goeken & Alter, 2009).

### Activity 2. Adjustment to Corporate Conditions

Once the relevant BPRM subset has been selected, the next step is the transformation into the explicit model particular to one specific BPRM and one specific corporation. During instantiation the user specifies those model sections which formerly remained deliberately vague. However, it usually remains unclear for BPRM which model sections have remained vague on purpose and require instantiation.

Order and design of the model component "metric of process x" in the COBIT model allow the assumption that metric is a components which requires instantiation. Exemplary in character, the metrics of a COBIT process should be completed with individual metrics. Along with the mechanism of adaptation in the present example, Figure 4 depicts the instantiation of the metric placeholder for a number of corporate-specific metrics.

Other mechanisms are applied during the development of the explicit model as well. Supporting the instantiation both specialization and analogy construction should be primarily used in the following third step. This is due to the relation between the BPRM and the explicit model. Here, the

explicit model is taken as an altered part of the BPRM, which should basically remain recognizable in this intermediate result. Control by IT auditors is thus facilitated in case of COBIT. This can change due to the more variable mechanisms of model adaptation, which is why too much room for variation in adaptation mechanisms should be avoided in this activity.

### Activity 3. Application to the Corporate Model

Depending on the BPRM the corporate model can consist of either the process model of IT processes or a smaller part such as a model of IT project management. Specialization and analogy construction are important mechanisms during this phase since BPRM of IT governance usually specify *what* to do rather than *how* to do it. Those challenges of establishing have to be fulfilled by means of analogy construction in which the explicit model serves as a state-to-be and to inspire ideas. „Analogies can be drawn from any aspect of the reference model which can be indicated by the annotation of analogy construction advices“ (Becker et al., 2007, p.3).

## 4 METHOD EVALUATION

In a second step the method obtained in a design-oriented research process for the application of BPRM is to be evaluated. The evaluation can be carried out in two ways (Hevner et al., 2004). Firstly, the method itself can be focused on; secondly, the process of constructing the method plays a role as well. Although Hevner's guidelines were meant to enhance the probability for a publication of design science research, they are also used for support of a systematic evaluation of research (Arnott & Pervan, 2008, Zelewski, 2007).

According to these criteria both artifact and research process will be examined in the following (Hevner et al., 2004).

1. The first guideline states that construction-oriented research is supposed to create an innovative artifact for the accomplishment of one task and to solve an existing problem. While the application of best practice reference models has not been supported by scientifically developed methods, the systematic design of the application process is a manifest problem in corporate practice, particularly in a multi-model case (Cater-Steel, Tan, & Toleman, 2006, Siviy et al., 2008a and b). Thus, construction of a method applicable to several BPRM solves an existing problem.

2. The relevance of the scientific problem characterizes the importance of the problem for scientific practice. This importance might result from specific sentences of relevance or the obvious notion of problems within the respective decisive constituent community (Zelewski, 2007). IT governance is the relevant field of research for this artifact. Various results provide a certain evidence for an effect of applying BPRM on the achievement of a corporation's goals. Simonsson & Johnson, 2008 prove the effect of governance maturity on IT within a corporation. Governance maturity itself is raised by use of BPRM. Wagner, 2006 presents a case study in which a specific BPRM (ITIL) has a positive effect of IT on corporate success. Studies by Tuttle & Vandervelde, 2007 are based on the positive influence of the use of COBIT on risk management performance. Heier, Borgman, & Maistry, 2007 prove the positive association of governance software, governance processes, and IT value contribution by empirical research. In another case study they conclude that the performance of governance processes is a critical factor for the success of corporate goals (Heier, Borgman, & Hoffbauer, 2008). An empirical study proves a measurable connection between IT governance software and a corporation's IT value contribution (Heier, Borgmann, & Mileos, 2009). Based on this connection, the case study by Larsen, Pedersen, & Anderson, 2006 analyses 17 tools of IT governance, including the BPRM of IT governance dealt with herein. A Delphi study by De Haes & van Grembergen, 2008 presents the ten most important COBIT processes for achievement of IT goals and, indirectly, corporate goals. As the author of this paper points out, this implies that certain goals are probably achieved by the application of COBIT or its individual processes. Lunardi, Becker, & Macada, 2009 examine the financial influence of „IT governance mechanisms' adaptation“ within

Brazilian companies. They distinguish between two cases, adaptation by means of BPRM (ITIL, COBIT) or without BPRM. The procedure of this adaptation is not described. Debreceeny & Gray, 2009 present a case study on the effect of the BPRM COBIT on maturity of processes and on IT capability. A survey by de Espindola, Rodrigo Santos, Luciano, & Audy, 2009 proves that successful adaptation of BPRM affects various corporate goals.

To sum up, literature frequently states that the application of BPRM has, if only indirectly, positive effects on the achievement of a company's goals. It has been shown that the “constituent community” uses BPRM without dealing with their application in great detail. The scientific and practical relevance is proved but scientific work on the application is almost entirely lacking. The method presented herein fill parts of this gap by developing a method for the application of BPRM.

3. The evaluation of research results includes usefulness, quality, and effectiveness Results are to be evaluated by strictly scientific evaluation methods as Hevner et al. 2004 emphasize. They suggest a number of methods for detection of misbehavior of the artifact, prove of usefulness, etc. The evaluation of the generic method includes two steps due to the characteristics of the artifact. As the method described has a generic character, it is partly evaluated in a first step by application to a specific case, in which its general usability is proven. The specific methods then have to be evaluated individually. The degrees of coverage and separation of the elemental types in generic constructions have been examined in a research project. It is questionable whether all method elements required in a specific method are available in the generic model and whether they can unambiguously be matched to model component types. If this is not the case, the generic model needs to be adjusted.

4. Construction-oriented research, as any research, has to contribute to the progress within a field of research. Three characteristics are generally employed for this: novelty, general validity, and relevance. In addition, it is recommended for design-oriented research to create an artifact providing significance for an unsolved problem of scientific community or a new application of existing knowledge.

**Novelty.** Currently, there is no complete method for the application of BPRM in IT governance. Existing methods for application of reference models have partly been included in the artifact. Apart from this, experience from the area of BPRM and their application in corporate practice have been integrated and theoretically dealt with. Also, the

artifact is a novelty as it recombines existing knowledge from model theory and research on method construction.

**General Validity.** The developed artifact is generally valid. The method can be used to support any BPRM. The degree of abstractness corresponds with the differences between existing and future BPRM of IT governance. If, for example, the method is to be applied to a BPRM which does not require subset selection this step can be omitted. This is the case if a desired certificate is linked to a complete use of a model.

**Relevance.** The relevance of the artifact for the field of IT governance is demonstrated in the presented research papers mentioned in guideline 2. The described method allows a systematic application of BPRM in scientific practice.

**Significant Use for an Unsolved Problem.** The method presents a systematic procedure for the application of BPRM for a corporation's support. The procedure is directly useful to solve company's problems. It also provides an indirect use as a basis for the application of multiple BPRM for the multi-model case.

5. This guideline prescribes a rigorous use of scientific methods when constructing and evaluating the artifact. According to Hevner et al., the scientist's experience is required for „skilled selection of appropriate techniques” (Hevner et al., 2004, p.80). Also, they stress that scientific rigor is based on consequent definitions, consistence within research, and formal representation of the topic. Scientific methods for evaluation have already been described. The process of construction meets the criteria of language-based method engineering. The artifact components have been selected by means of the St. Gallen approach of method engineering. Design and composition of components have been obtained by application and aggregation of available knowledge taken from a broader literature review and structured interviews with practitioners.

6. This guideline provides that “search for an effective artifact requires utilizing available means to reach desired ends while satisfying laws in the problem environment” (Hevner et al., 2004, p.81). They describe means as a set of actions and resources available to construct a solution. Thus, the research process should follow a generate-test-cycle. After creating a design alternative it has to be tested against requirements and constraints. The construction of the presented method follows this cycle. The method is and will be tested and adjusted several time during the research project.

7. This guideline deals with the communication of research. It is crucial to present results adequate to the appealed audience. It is also important that the audience „understand [s] the processes by which the artifact was constructed and evaluated” (Hevner et al., 2004, p.90). By publishing and presenting the results in academia and practice results can broaden the knowledge base for further research efforts and construct solutions for practitioners.

## 5 CONCLUSIONS

By using the knowledge base of IS research and business needs concerning BPRM application, we have constructed and partly evaluated a generic method for best BPRM application. This generic method is on the one hand an addition to the knowledge base of IS research and on the other hand a possibility to support the application of BPRM in practice. For this practical use the generic method has to be instantiated to a specific method.

The paper follows the language-based method engineering approach by presenting formally described static method element types and their instantiations. Furthermore the presentation includes dynamic aspects by describing processes and procedures concerning the transition between various instantiations of the method element types. This method aims to be an addition to the knowledge base of IT governance research and a practical solution for challenges IT departments are confronted with.

In an ongoing research process a specific method for the BPRM COBIT is derived from the presented generic method. This specific method supports the methodical application of the COBIT BPRM. These research findings were also used to develop a governance tool, based on semantic software which supports the application of COBIT. Furthermore, the method provides a sound basis for the construction of methods for applying several BPRM, i.e. in the multi-model case.

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