Which Business Process Maturity Model Best Fits Your Organization?

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Business process management is expected to contribute to a more effective and efficient way of working, with a higher customer focus and performance gains. Although these benefits seem attractive, the adoption in particular organizations remains a challenging journey. Many organizations experience difficulties in introducing or advancing in business process management, as process improvements are not easy to realize and a lot of aspects must be taken into account. Therefore, several practitioners and academics have developed a business process maturity model (BPMM) to help organizations gradually adopt business process management for specific processes and/or for the whole process portfolio. Some well-known BPMMs are CMMI (2009), OMG (2008), or from scholars like de Bruin and Rosemann (2007) and Hammer (2007), as discussed in previous BPTrends Articles (Harmon, 2009).

A BPMM offers a road map towards a more advanced use of business process management, organized according to a sequence of levels. For instance, the subsequent maturity levels of OMG's BPMM are called: (1) initial, (2) managed, (3) standardized, (4) predictable, and (5) innovating, respectively representing a higher degree of business process maturity. A BPMM thus typically presents a sequence of levels and a step-by-step guide with goals and best practices to reach the desired level, depending on your needs. Indeed, a pragmatic approach is required as organizations must strive for their optimal level instead of blindly striving for the highest level for all processes.

To determine your current level in business process maturity, a BPMM measures and aggregates different capabilities that facilitate business process management. As such, business process maturity is an indicator for the expected performance of an organization (i.e. based on its present capabilities, or how an organization can perform). Some BPMMs (like CMMI or OMG) focus on the maturity of particular business processes, whereas other BPMMs (like the model of de Bruin and Rosemann) focus on the maturity of the whole process portfolio in an organization. Only few BPMMs (like Hammer's model) allow combining both maturity types.

The interest in this topic is growing. For instance, in 2012, the BPTrends BPM survey reported a major increase in business process maturity by organizations. Nonetheless, many BPMMs already exist given the practical value of BPMMs. In 2010, we collected 69 (!) BPMMs to assess and improve generic business processes (applicable for any process type), supply chains or collaboration processes (to include end-to-end value chains) (Van Looy et al., 2012). Hence, the first and foremost question remains which BPMM (out of the wide array) best fits your organization?

This Article presents an understanding of our research into business process maturity. We first introduce a typology for business process maturity to obtain a common understanding (Van Looy et al., 2011; 2012). This typology demonstrates that different maturity types are present based on what existing BPMMs actually measure and improve (i.e. by also taking into account the capabilities, instead of only the number of business processes addressed). As more differences exist among BPMMs, we subsequently introduce a tool to individually examine which BPMM (out of our sample) best fits a particular organization, and this by answering 14 questions on BPMM characteristics.

Typology for business process maturity

Our typology for business process maturity (Figure 1) extends the business process literature in two ways. First of all, it goes beyond the current consensus that maturity types are merely defined by the number of business processes addressed during a maturity assessment. Secondly, it

structures the critical success factors for process performance (as proclaimed in the literature) into a framework based on established theories and validated by our sample of 69 BPMMs.

Particularly, the critical success factors that we found in a comprehensive literature review are re-arranged in six main capability areas (Van Looy *et al.*, 2011) and 17 sub areas (Van Looy *et al.*, 2012), as visualized in Figure 1. The capability areas related to modeling, deployment and optimization are explained by theories regarding the typical business process lifecycle, whereas the capability areas related to management, culture and structure are explained by organization management theories in Van Looy *et al.* (2012). By means of this theoretical approach, our typology consolidates and generalizes other findings on business process capabilities (which were mainly developed during the design of particular BPMMs). For instance, during their BPMM design, de Bruin and Rosemann (2007) also built a framework with six main areas, each with five sub areas: (1) strategic alignment, (2) governance, (3) methods, (4) information technology, (5) people and (6) culture. Although their areas determine the outline of a recent BPM Handbook (vom Brocke and Rosemann, 2010), we deliberately opted to start from a BPMM-unbiased context. Only afterwards, the capability areas of 69 existing BPMMs were mapped to their theoretical equivalents to validate comprehensiveness.
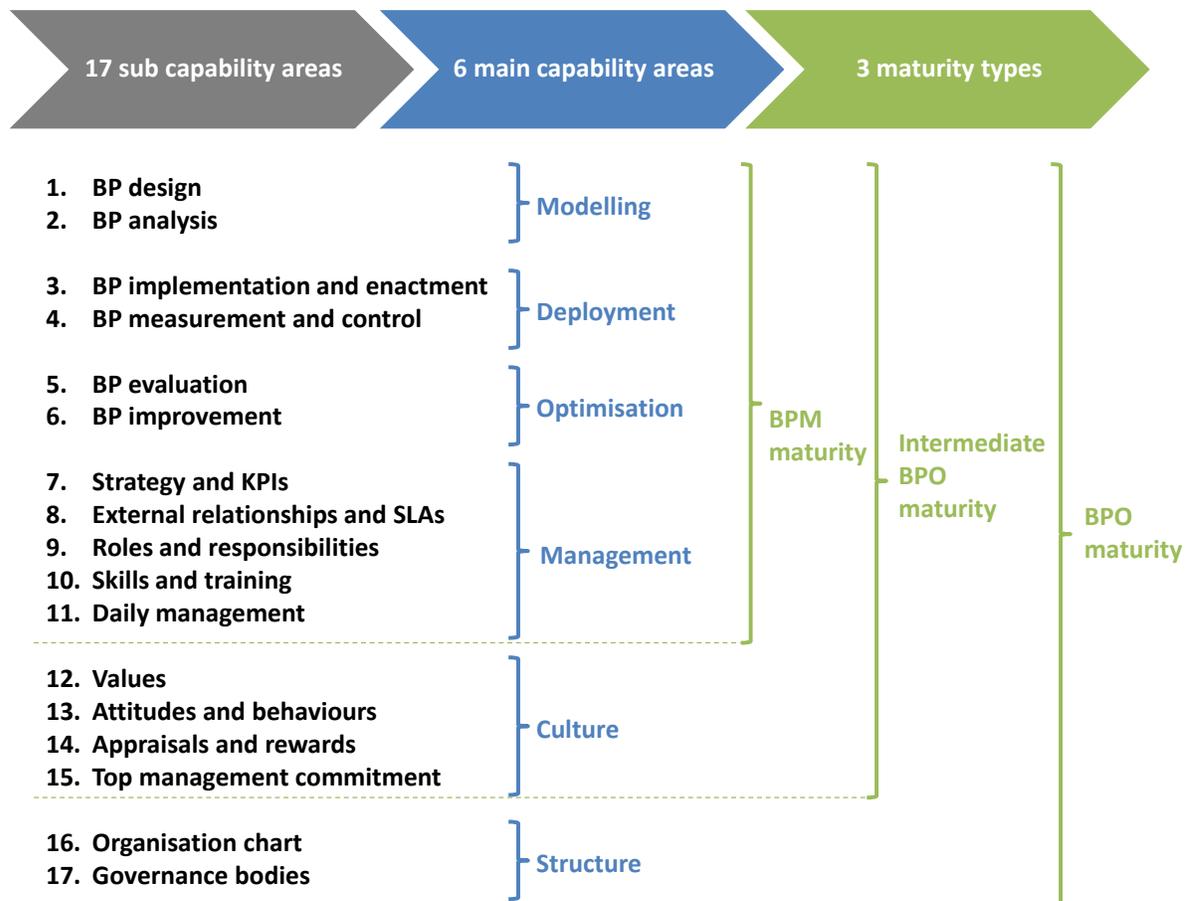

Figure 1. Typology for business process maturity, as explained in Van Looy *et al.* (2012).

Based on the mapping of existing BPMMs to theoretical capability areas, we applied statistical classification techniques (i.e. exploratory cluster analysis and confirmatory discriminant analysis) in order to evaluate what BPMMs actually measure. This resulted in three maturity types:

- **Business Process Management (BPM) maturity** = assessing and improving the characteristics of (one, more or all) business processes

- **Business Process Orientation (BPO) maturity** = BPM + cultural and structural characteristics of organizations
- **Intermediate BPO maturity** = BPM + cultural characteristics of organizations

It is important that an individual organization chooses a maturity type that best fits its particular context. For instance, some smaller organizations may not need BPO maturity with structural reconfigurations or organizations new to process improvements may just want to be introduced to the basics of BPM maturity, etc. But which BPMMs exist? Which BPMM (out of the many BPMMs out there) measures which maturity type? And which other characteristics should be taken into account while selecting a BPMM? In the following section, we take a closer look at how organizations can make an informed decision on which BPMM can be applied in which situations.

BPMM Smart-Selector: http://smart-selector.amyvanlooy.eu/

Besides capabilities and the number of business processes, other BPMM characteristics might become relevant too when choosing a BPMM to start with. Examples are the assessment duration or the direct costs to access and use a BPMM, etc. Therefore, we conducted an international Delphi study with 22 BPM experts (involving major thought leaders from both academia and practice) to elicit and discuss the most relevant decision criteria and their trade-offs. The findings are implemented as an online survey with 14 questions (called "BPMM Smart-Selector") that allows organizations to do a self-assessment of their fitness with existing BPMMs. The BPMM Smart-Selector can be freely accessed via the following link: http://smart-selector.amyvanlooy.eu/. Being part of on-going research, it concerns a proof-of-concept to validate how the tool works, based on our large sample with BPMM design documents of 2010 or earlier.

The BPMM Smart-Selector consists of two parts: (1) a questionnaire with 14 questions and trade-offs regarding relevant BPMM characteristics, and (2) a selection table with BPMMs that match the responses given. By answering the questionnaire, the selection table will be gradually refined towards the best matching BPMM (like in a decision table). As such, participants of the survey receive an immediate analysis of their personal results (see Figure 2).

How to use the questionnaire?

- Please start with answering those questions that are most relevant to you (and use other questions to refine your results afterwards), or follow the proposed sequence.
- If a question seems not relevant, select "I don't know" to navigate to the next question, or directly click on the title of another question.
- Multiple answer options can be chosen per question.
- At any time, you can switch between the questionnaire and the matching maturity models to obtain the best solution (see Figure 2), or retake the questionnaire.

How to use the selection table?

- The table shows your responses in green, lacking information in red and new information in black.
- If multiple maturity models match your selection, please compare them, refine by answering more questions or request additional information to find the best solution.
- If no maturity model fits a question to which you still want to respond, please make concessions on less relevant questions and first answer the most relevant questions.
- You can click on a question or maturity model to obtain a description.

💡 Your selection

| ← Back to questionnaire | Show/hide additional info | Ready? Give us your feedback! | ◄◄ Previous | Page 1 of 1 | Next ►► |

	IDS ℹ	OMG ℹ	ROS ℹ	SEI ℹ
Capabilities ℹ	Basic + Culture + Structure	Basic + Culture + Structure	Basic + Culture + Structure	Basic + Culture + Structure
Architecture type ℹ	Both	Only staged	Both	Both
Architecture details ℹ	Implicit prescriptive	Explicit prescriptive	Implicit prescriptive	Explicit prescriptive
Type of business processes ℹ	Generic	Generic	Generic	Generic
Rating scale ℹ	Both	Both	Only qualitative data	Only qualitative data
Data collection technique ℹ	Only subjectively	Only objectively	Both	Only objectively
Purpose ℹ	Raising awareness Benchmarking	Raising awareness Benchmarking Certification	Raising awareness Benchmarking	Raising awareness Benchmarking Certification
Validation ℹ	Yes, for the application	Yes, for the application	Yes, for the application	Yes, for the application
Nr. of business processes ℹ	All	More	All	More
Assessment duration ℹ	Day Week	Week Longer than a week	Longer than a week	Longer than a week
Assessment availability ℹ	Fully known	Fully known	Fully unknown	Fully known
Functional role of respondents ℹ	No, only internal respondents	Yes, also external respondents	No, only internal respondents	No, only internal respondents
Nr. of assessment items ℹ	0-19	300 or more	300 or more	300 or more
Direct costs ℹ	No, charged	No, charged	Missing	No, charged

Figure 2. Screenshot of the BPMM Smart-Selector: selection table with BPMMs matching your responses given so far.

After selecting a BPMM, you are free to evaluate the BPMM Smart-Selector by clicking on the button "Ready? Give us your feedback!" (see top of Figure 2) You will be navigated to a separate feedback form with questions regarding the effectiveness, efficiency, utility, and quality of the tool. You will also be asked to rate your satisfaction with the decision criteria, their formulations, and the sequence in which they appear (see Figure 3).

At this stage, we invite all readers involved in process work to use and evaluate the BPMM Smart-Selector. Hence, readers can verify which BPMM best matches their responses (i.e. their organizational needs), and consider to start using it afterwards in their organization. Or if a BPMM is already in use, readers can critically reflect whether that BPMM is appropriate, and if necessary, suggest alternatives.

Figure 3. Screenshot of the BPMM Smart-Selector: part of the individual feedback form to evaluate the tool.

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