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Abstract

Many initiatives to improve Business processes are emerging. The essential roles and contributions of Business Analyst (BA) and Business Process Management (BPM) professionals to such initiatives have been recognized in literature and practice. The roles and responsibilities of a BA or BPM practitioner typically require different skill-sets; however these differences are often vague. This vagueness creates much confusion in practice and academia. While both the BA and BPM communities have made attempts to describe their domains through capability defining empirical research and developments of Bodies of knowledge, there has not yet been any attempt to identify the commonality of skills required and points of uniqueness between the two professions. This study aims to address this gap and presents the findings of a detailed content mapping exercise (using NVivo as a qualitative data analysis tool) of the International Institution of Business Analysis (IIBA®) Guide to the Business Analysis Body of Knowledge (BABOK® Guide) against core BPM competency and capability frameworks.

Keywords: Business analysis, Business process management, capability, competency, Body of Knowledge.

1   Introduction

Recent Gartner studies (e.g. Gartner, 2010) identify the corporate management of business process improvement as the number one business and technology priority of CIO's in 2010. Organisations typically use Business Process Management (BPM) as a set of structured methods and technologies to better manage their core business processes. As a result, BPM has become a powerful competitive tool for organisations (Bandara et al., 2009). A wide variety of activities fall under the broad umbrella of "Business Process Management" increasing the need for multi-disciplinary practitioner training in a variety of process techniques (Harmon & Wolf, 2010). As organizations become more process oriented and BPM tools and techniques continue to evolve, the need for BPM expertise increases. The differing roles of process owners, process analysts, process architects, and managers of BPM centres of excellence are just some of the positions for which specialized BPM skills are required (ABPMP, 2009; Bandara, et al., 2009). Hass (2008) argues that the skills of a Business Analyst (BA) are emerging as a valued business competency, especially for IT projects as a BA can hold a leadership role in many projects; focusing exclusively on the business need and adding business value. In practice, business analysis is an essential component of project success, regardless of whether technology is involved or not (Hass, 2008), and at the same time, BPM skills are also highly emphasised for organisational success (Alibabaei, Bandara, & Aghdasi, 2009; Antonucci & Goeke, 2010).

Discussion at Australia's leading BPM practitioner conference (Leonardo ProcessDays 2010) highlighted the fact that the industry is struggling to make a clear distinction between the two professions. By way of example, the function of a Business Analyst is often said to be; to identify, monitor, prioritize and implement enhancements to the target solution, to continue value adding to the business (Hass, Horst, & Ziemski, 2008). Similarly, the role of a BPM practitioner is to manage, coordinate, prioritize and monitor an organisation's process change resources and undertakings (Harmon, 2003). To make matters even more confusing, there are those within the Business Analyst community who have begun to distinguish between business analysts who focus on defining software requirements and those business analysts who are focused on improving business processes. SAP, for example, has set up a website[1] for Business Process eXperts (BPXs), a group of analysts with more extensive business process capabilities.

This vagueness between BA and BPM roles creates confusion in practice and academia, which impacts on role designs, skills assessment, human resource development, recruitment and professional development. The impact of such was made clear at a Leonardo Process Days 2010 conference panel where BA and BPM role differentiation was reviewed. An outcome of this discussion was a consensus that i) Practitioners struggle to recognise and articulate the skills required (BA, BPM or both?) for various organisational initiatives and how to locate appropriate talent to fill these roles ii) Academics fail to position BA and BPM as separate professions and often bundle them as the same in their course descriptions and marketing iii) Students and prospective candidates for employment vacancies therefore remain confused about the specific skill sets required of a BPM professional and/ or a Business Analyst.

Both the BA and BPM professions have made attempts to clarify these confusions. Empirical research on the core capabilities required for BPM (e.g. Antonucci & Goeke, 2010; Rosemann, deBruin, & Power, 2006) and BA (e.g. Evans, 2004) have been conducted. Both the BA and BPM professional domains have commenced efforts to professionalise their discipline areas by creating Bodies of Knowledge. The Business Analysis Body of Knowledge (BABoK Guide) developed by the International Institute of Business Analysis (IIBA, 2009) and the BPM Core Body of Knowledge (BPM CBoK®) by the Association of Business Process Management Professionals (ABPMP, 2009) are examples of such.

As a result of the efforts made by the BA and BPM communities to articulate the knowledge within their professions (through Bodies of Knowledge and empirical work on capabilities required for the discipline) a comparison of the two professions is now possible. The intent of this paper is to identify

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1 See http://www.sdn.sap.com/irj/bpx for further details, last accessed Dec 08 2010.

the commonality of skills between the two professions, with a focus on identifying the alignment with known BPM capability and competency frameworks and also the distinct points of uniqueness. This comparison of the BA and BPM professions has been developed from a BPM Practitioner perspective through the application of two theoretical BPM frameworks. The study aims to provide clarification to the following question; *how do the core skills of a Business Analyst and a Business Process Management practitioner align?*

To answer this question, the paper is structured as follows: Section 2 outlines the movement(s) to professionalise both the BA and BP domains, followed by Section 3 which provides a theoretical basis for this analysis. Section 4 details the analysis methodology with the resulting findings presented in Section 5. The study concludes with some key findings, limitations and points to opportunities for further research.

2   Background: Attempts to professionalise the BA and BPM domains

There are a number of efforts underway to formalize the various aspects of BPM and BA practice; creating a formal Body of Knowledge (BoK) is one such effort. Bodies of knowledge are artefacts that have a proven track record for accelerating the professionalization of various disciplines. The International Institute of Business Analysis (IIBA) has an established BoK; the Business Analysis Body of Knowledge (BABOK Guide), first published in 2006 and extensively revised in 2009. A BoK for BPM is still emerging. While there are a few different BoKs in BPM related fields [i.e. (i) American Society of Quality (ASQ) Black Belt BoK and Lean Six Sigma Certification (American Society of Quality (ASQ), 2009), (ii) IIBA and the Guide to the Business Analysis Body of Knowledge (BABOK Guide) (International Institute of Business Analysis, 2009), (iii) OMG, Business Process Standards, and Certification (Object Management Group - OMG, 2009), and (iv) ISPI Human Performance Technology BoK (International Society for Performance Improvement - ISPI, 2009) Bandara, Harmon, Rosemann 2010)], the one BoK that falls completely within the area of BPM is the Association of Business Process Management Professionals (ABPMP)'s BPM CBOK®.

While the IIBA BoK is matured and is a widely accepted standard (Bandara, Rosemann, & Harmon, 2010; Harmon & Wolf, 2010), the ABPMP CBOK has been challenged by others (e.g. Bandara, Rosemann, et al., 2010; Kemsley, 2010). Released in April 2009, this guide provides the association's view of nine knowledge areas that should be accepted as BPM practice. The ABPMP CBOK only presents a very high-level overview of topics, rather than an in-depth view, (Bandara, Harmon, & Rosemann, 2010). Though recognised as a step in the right direction, recent criticism of this guide suggests that it is incomplete and does not necessarily reflect the views of the wider BPM community (Bandara, Rosemann, et al., 2010). In an effort to establish BPM as a formal discipline, accelerate the path to professionalism and gain widespread acceptance, Bandara et al (2010) have called for a collaborative industry and academic endeavour to create a BPM BOK. The intent of this initiative is to develop a comprehensive, open source BOK that benefits all of the above communities without belonging to a specific organisation (Bandara, Rosemann, et al., 2010). This international group of BPM key stakeholders are currently actively developing what is referred to as a Process Knowledge BoK (PKBoK)[2]- but this initiative is still in its very early phases, hence was not included in this study's work.

Due to these current initiatives to define both BA and BPM common BoK's, now is the time to clearly differentiate between the professions so that roles and responsibilities are established and understood by existing and future practitioners and employing organisations.

2.1.   Overview of the Business Analysis Body of Knowledge

The Guide to the Business Analysis Body of Knowledge (BABOK® Guide*)* was derived by the International Institution of Business Analysts (IIBA). The IIBA was established in 2003 with an organisational mission to "*develop and maintain standards for the practice of business analysis and*

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2 See http://www.processknowledge.org for further details, last accessed Dec 08th 2010.

for the certification of its practitioners" (IIBA, 2009). The Institute has over 15,000 members worldwide and offers certification based upon a collection of current knowledge and accepted practice in business analysis, based on its body of knowledge and on formal role delineation studies.
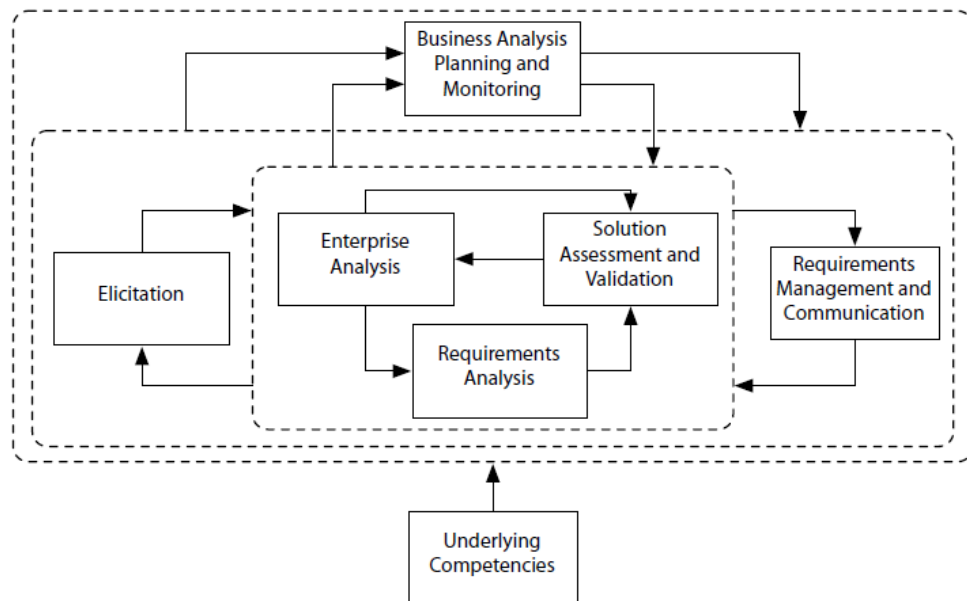

Figure 1. The main knowledge areas of the BABOK Guide.

The IIBA BABOK Guide is a collection of knowledge from the Business Analysis profession and reflects current generally accepted practices. It describes the BA areas of knowledge, their associated activities and the tasks and skills necessary to be effective in their execution (IIBA, 2009). The BABOK Guide has been created to accelerate the Business Analysis profession and create an open and systematic vehicle for the BA community to share, monitor and create new knowledge artefacts.

The definition of a "business analyst" provided by IIBA is intentionally broad and declares it to be "any person who performs business analysis activities" (IIBA, 2009). This definition encompasses all roles which require the performance of the activities stated in the BABOK Guide and can be as broad as encompassing Business Architects, BPM practitioners, Project Managers and more. Knowledge areas define what a practitioner of business analysis needs to understand and the tasks a practitioner must be able to perform. The BABOK Guide defines seven core knowledge areas that can be used to define the skill sets required of a Business Analyst. Figure 1 depicts these knowledge areas and how they relate to each other. These are described below.

1. Business Analysis Planning & Monitoring: describes how business analysts determine which activities are necessary in order to complete a business effort.
2. Elicitation: describes how business analysts work with stakeholders to identify and understand their needs and concerns, and understand the environment in which they work.
3. Requirements Management & Communication: describes how business analysts manage conflicts, issues and changes in order to ensure that stakeholders and the project team remain in agreement on the solution scope.
4. Enterprise Analysis: describes how business analysts identify a business need, refine and clarify the definition of that need, and define a solution scope that can feasibly be implemented by the business.
5. Requirements Analysis: describes how business analysts prioritize and progressively elaborate stakeholder and solution requirements in order to enable the project team to implement a solution that will meet the needs of the sponsoring organisation and stakeholders.

6. Solution Assessment & Validation: describes how business analysts assess proposed solutions to determine which solution best fits the business need, identify gaps and shortcomings in solution, and determine necessary workarounds of changes to the solution.

7. Underlying Competencies: describes the behaviours, knowledge, and other characteristics that support the effective performance of business analysis.

3 Theoretical Underpinnings: BPM Competency and Capability frameworks

The Rosemann and De Bruin BPM Maturity Framework (Rosemann, et al., 2006) and the BPTrends Pyramid (Harmon, 2007) have been chosen as the theoretical reference points for this study's analysis to represent the core competencies and capabilities of a BPM professional. Whilst it is recognised that there are fundamental differences between these two frameworks, the perspective of each offers a complimentary view which supports their joint application to this research. These frameworks were selected because they are globally accepted and have a broad scope. The following sections introduce these frameworks.

3.1. Rosemann and de Bruin (2006) BPM Maturity Framework

Rosemann and de Bruin (Rosemann, et al., 2006) have developed a Business Process Management maturity framework that supports the evaluation of organisational BPM capabilities. This maturity framework is a reflection of an organisation's BPM development and, by extension, these capabilities will also be reflected in the staff required to undertake the BPM functions. This approach offers a holistic BPM Maturity (BPMM) model based upon earlier work, developed to better identify and refine BPM requirements and complexities (deBruin, Freeze, Kaulkarni, & Rosemann, 2005). The model has been designed as a diagnostic tool to compare and evaluate the BPM capabilities of different organisations as well as a way of highlighting opportunities for organisational learning. Their model supports not only the identification but also the assessment of the BPM maturity of organisational policies and procedures (deBruin & Rosemann, 2004). As Figure 2 depicts in summary, this organisational maturity framework provides a view of the optimum capabilities required to achieve BPM success across six different factors, namely: Strategic Alignment; Governance; Methods; Information Technology; People; and Culture.
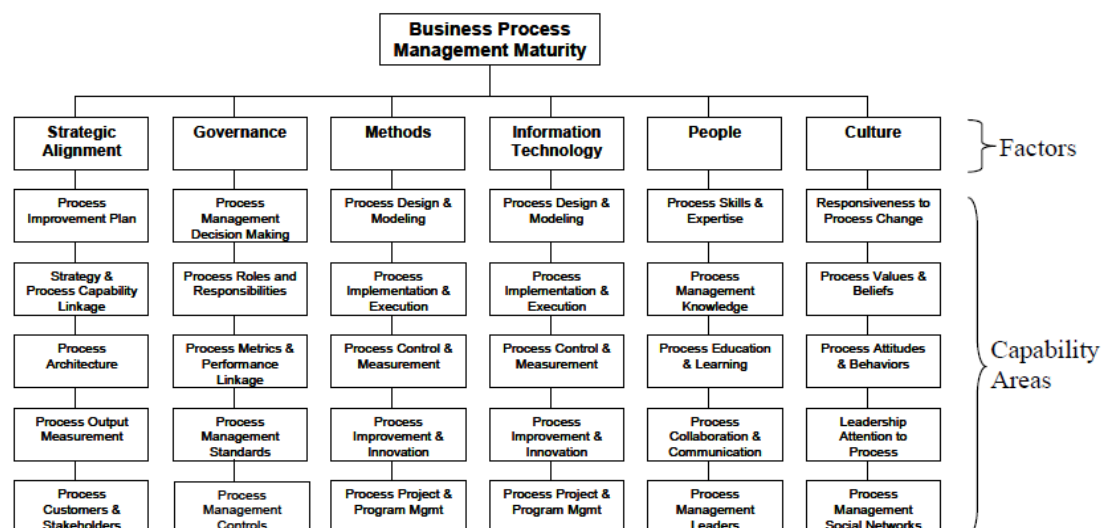
Figure 2. Rosemann and de Bruin (2006) BPM Maturity Framework.

Each of the six BPM capability factors has underlying organisational and therefore individual capabilities which must be in-place to support BPM success. For example, several of the factors refer to the capabilities of process management and improvement which according to Rosemann (Rosemann, 2008) require the essential skills of process analysis and creativity combined with

specific domain knowledge. This multidimensional framework was selected as it is based on an established theoretical foundation; has a broad scope; has high applicability supported by a wide range of industries; and finally the model supports the requirements of a wide range of stakeholders (Rosemann, 2008). Though each of the factors in this framework are independent of the others, the overarching targeted outcome is a positive organisational impact and success of the BPM initiative (deBruin, et al., 2005). The use of this organisational maturity framework provides us with a view of the required employee capabilities in BPM at various levels, to achieve BPM success.

3.2. BPTrends Pyramid

The second BPM framework applied is the BPTrends Pyramid (Harmon, 2007), which is presented in Figure 3. The framework was originally developed in reaction to Zachman's enterprise architecture framework (Zachman, 1987) to show a process centric view that illustrates the various types of BPM-related activities within an organisation. The Pyramid presents three different levels of how a company might organize to manage processes (Harmon & Wolf, 2010). The BPTrends pyramid provides a holistic view to the link between organisational strategy, business processes and technology (Marjanovic & Bandara, 2010).
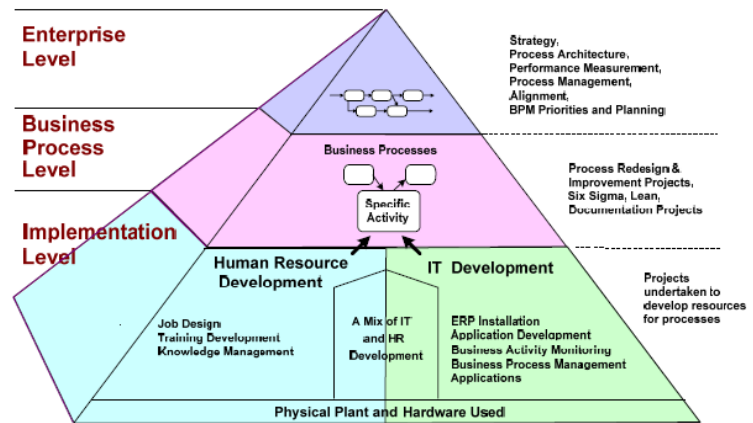

Figure 3. BPTrends Pyramid.

The BPTrends Pyramid introduces a concept of levels, enabling us to further refine our analysis of the BPM workforce and separate the BPM-related needs at the Enterprise level and positions typically held by corporate executives and the Business Process level, which is typically the concern of line of Business and middle management. The pyramid was developed with a focus on defining the kinds of activities that organizations undertake to produce value – hence point to a set of useful proxy competencies that are essential to achieve these tasks.

4   Analysis Methodology

This section presents the steps followed to answer the research question: *how do the core skills of a Business Analyst and a Business Process Management practitioner align?*

As identified above, the Rosemann and De Bruin BPM Maturity Framework (Rosemann, et al., 2006) and the BPTrends Pyramid (Harmon, 2007) were chosen to assist with the identification of the core capabilities of a BPM professional. Further, the defined Business Analyst capabilities were studied from the IIBA *BABOK Guide*. This section describes (a) how the selected BPM capability frameworks were set up in the qualitative database (NVivo) as coding schemas, and (b) how knowledge areas from the *BABOK Guide* were coded in the tool, in preparation for the analysis required to answer the research question. A qualitative data management and analysis application, NVivo was chosen to support the systematic coding and analysis of data within a single repository. This tool can be used to explore trends; build and test theories; manage coding, and interpret and analyse qualitative data by eliminating the need for many of the manual tasks traditionally associated with qualitative analysis (Sorensen, 2008).

As discussed previously, the Rosemann and de Bruin (Rosemann, et al., 2006) and BPTrends Pyramid (Harmon, 2007) BPM capability and maturity frameworks were used to derive the main classification schema. Tree level nodes[3] were created for each defined BPM capability. A parent tree node (folder) was created within NVivo to represent each of these two frameworks and their respective hierarchal

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3 A tree level node is a physical location within the NVivo tool, like a folder which is catalogued in a hierarchical structure.

structures. Related tree level nodes (child node labelled with a capability) were assigned to the parent, to capture the different capability factors. Figures 4 and 5 depict extracts of how these frameworks were set up in the NVivo tool.
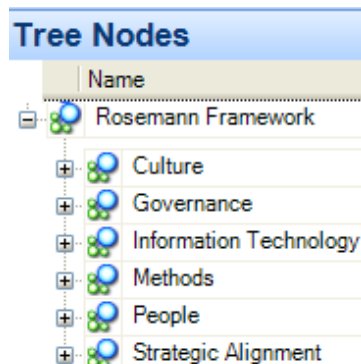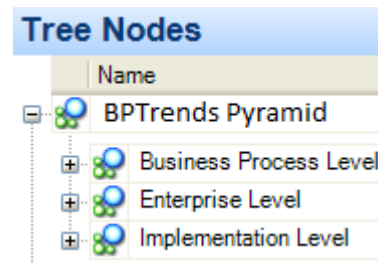

Figure 4. Rosemann Model Tree Level Nodes

Figure 5. BPTrends Pyramid in Tree Level Nodes

Table 1 provides a summary of the full tree node structure used for representing these capability frameworks.

BPM Capability Factors		Definition	Capabilities
Rosemann and de Bruin Framework	Strategic Alignment	Alignment to corporate strategy & mission	Strategic Focus; Process Management; Communication; Leadership; Negotiation
	Governance	Organisational implementation of BPM and responsibilities for assigned tasks	Process Management; Leadership; Project Management
	Methods	Methods for all BPM relevant tasks	Process Modelling; Process Frameworks; Process training; Process Model development; Workshop facilitation; Stakeholder interviews
	Information Technology	Technology which supports & enables BPM	Software Skills; Process Modelling; Process Management; Project Management
	People	Competencies of people involved in BPM	Process expertise; Process Management; Process qualifications; Communication; Leadership; Negotiation; Communication; Collaboration
	Culture	Common values towards BPM & process change	Adaptable to change; Process thinking; Leadership; Communication; Collaboration
BPTrends Pyramid	Enterprise Level	Organisational strategic alignment and governance	Strategy, Process Architecture, Process management, Program/project management
	Business Process Level	Process design and improvement	Process analysis, Process improvement, Methodologies, Process modelling and documentation
	Implementation Level	Process execution via technical, human and infrastructure resources	Knowledge Management, BPMS knowledge, Role definitions, Employee skill development, Software development

Table 1. Rosemann and de Bruin and BPTrends Pyramid BPM Capability Factors

An electronic version of the *BABOK Guide* (a pdf file as available from the IIBA web site) was included as the main source data for this analysis. As NVivo cannot handle files that are too large, each of the chapters of the *BABOK Guide* that described the core BA Knowledge Areas (Chapters 2-8) were extracted as separate documents and inserted to the Database.

Two researchers coded the entire content independently. To ensure reliability, the fundamental meanings and definitions of the BPM frameworks (at main factors and sub-construct levels) and the core sections of the BABOK guide were discussed, confirmed and documented in the NVivo database. The authors of the two BPM frameworks and the Vice President of the IIBA (the main editor of the BABOK Guide) were contacted to clarify any terminology ambiguity and confusions that were identified early on. An initial pilot was conducted with first coding only BABOK Guide's Chapter 2 content to clarify and validate the coding procedures and only a few sections were coded at any given time, to minimize coder fatigue and safeguard reliability (Neuendorf, 2002). A 'coding

comparison query'[4] was run in the NVivo database to determine inter-coder reliability. The percentage agreement reached between the coders was more than 91% across all coded content (all Kappas were over .85). The overall research findings and the analytical activities that were applied to support these findings are presented in detail in the next section.

5 How do the core skills of a Business Analyst and a Business Process Management practitioner align?

As an outcome of the qualitative mapping exercise outlined in section four, it is now possible to compare the core skills of the BA and BPM professions through content analysis of the codified BPM frameworks and the *BABok Guide* (with limitations as outlined in section six). Table 2 was designed from the qualitative data analysis results from the NVivo database. This table reflects how the key capability factors from the BPM frameworks; the BPTrends Pyramid (Harmon, 2007) and the BPM Maturity Model (Rosemann, et al., 2006) aligned to the seven identified knowledge areas of the *BABoK Guide*. The "X's" depict areas where overlap existed and the greyed areas highlight points of uniqueness; those topics that are identified in the BPM space but not covered in the BABoK *Guide*. As demonstrated in Table 2, there remains a high level of correlation between the two fields but also some distinct point of uniqueness.

BPM Framework Capabilities			Business Analyst Knowledge Areas						
			Business Analysis Planning and Monitoring	Elicitation	Enterprise Analysis	Requirements Analysis	Requirements Management and communication	Solution Assessment and Validation	Underlying Competencies
BPTrends Pyramid (Harmon 20007)	Enterprise Level	Process Architecture							
		Process Management							
		Program/Project Management	X	X			X	X	
		Strategy			X		X		
	Business Process Level	Methodologies				X			
		Process Analysis	X		X		X	X	
		Process Improvement			X			X	
		Process Modelling /Documentation	X		X	X	X	X	
	Implementation Level	BPMS Knowledge							X
		Knowledge Management		X			X		
		Role definitions							
		Employee skill development							
		Software development							
Business Process Management Maturity Model (Rosemann et al. 2006)	Culture	Leadership Attention to Process							
		Process Attitudes & Behaviours	X					X	
		Process Management Social Networks							
		Process Values & Beliefs					X		
		Responsiveness to Process Change	X				X		
	Governance	Process Management Controls	X						
		Process Management Decision Making	X					X	X
		Process Management Standards	X				X		
		Process Metrics & Performance Linkage	X					X	
		Process Roles and Responsibilities	X						

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[4] A coding comparison query enables one to compare coding done by two users; through the calculation of the percentage agreement and *Kappa coefficient*. Percentage agreement is the number of units of agreement divided by the total units of measure within the data item, displayed as a percentage. *Kappa coefficient* is a statistical measure which takes into account the amount of agreement that could be expected to occur through chance.

Category	Capability							
Information Technology	Process Control & Measurement	X		X			X	
	Process Design & Modelling	X		X	X	X	X	
	Process Implementation and Execution						X	
	Process Improvement & Innovation			X			X	
	Process Project & Program Management	X	X			X	X	
Methods	Process Control & Measurement	X		X			X	
	Process Design & Modelling	X		X	X	X	X	
	Process Implementation and Execution							
	Process Improvement & Innovation			X			X	
	Process Project & Program Management	X	X			X	X	
People	Process Collaboration & Communication	X				X	X	X
	Process Education & Learning							X
	Process Management Knowledge		X					X
	Process Management Leaders							X
	Process Skills & Expertise						X	X
Strategic Alignment	Process Architecture							
	Process Customers & Stakeholders	X				X		
	Process Improvement Plan	X		X				
	Process Output Measurement	X						
	Strategy & Process Capability Linkage			X		X		

Table 2. BPM frameworks and BABOK Guide comparison

BPTrends Pyramid – Enterprise Level: Aside from some knowledge of strategic alignment and Program/Project Management factors, the *BABOK Guide* does not necessarily extend to knowledge of process architecture, standards and controls. The current version of the *BABOK Guide* covers most project management aspects such as communication plans, resource, time, and cost plan and project scope. It also covers Change Management activities very well but doesn't cover Process Management and Process Architecture capability factors. In the current version, process architecture seems to be taken as a 'given' - as an input into the BA activities. This is because the framework focuses on BA activities at the project level -within the individual change initiatives (and not organisation wide changes). One can expect future editions to the BABoK Guide to incorporate Process Architectures more clearly. The Enterprise Level capabilities are certainly required by organisations with a mature process environment. Up to 95% of organisations are not in a matured process state (Harmon & Wolf, 2010). This could be the reason to why the currently listed *BABOK Guide* Knowledge Areas do not align with Process Architecture and Process Management capability factors. Another reason could be the fact that "the skills and knowledge used to create a good process architecture are not well defined" (Harmon, 2010).

BPTrends Pyramid – Business Process Level: As Table 2 shows, BA roles align well with all Business Process Level capabilities; Process analysis, Process improvement, Methodologies, Process modelling and documentation, which are essentially Process design and improvement capabilities. In many organisations the primary role of a Business Analyst is to understand the current situation and users requirements; to gather and document the information then alternatively to identify opportunities for automation to hand off to IT to build (Gentle, 2007; Harmon, 2010). To be able to perform these tasks a BA needs to have a solid ability to analyse the current situation, modelling and document business processes, then apply methodologies to identify improvement opportunities. These are core BA skills which have been covered in the *BABOK Guide* and are well aligned with BPM capabilities.

BPTrends Pyramid – Implementation Level: This level relates to the creation of the specialised resources required to implement new process designs. BA knowledge areas cover Knowledge Management and also discuss Business Process Management Systems (BPMS) indirectly in a very limited fashion as an underlying competency. They discuss some tools that a business analyst may

use, and mention BPMS in this context. Minimal alignment with BPMS is probably due to the perspective that the BABOK Guide's development team has taken. They expect a BA working on a BPM effort to learn such tools but don't go into detail. This might need to change in the future. Harmon (2010) argues that BPMS knowledge is a required expansion for the BA role which is often referred more in the recent/ emerging position title; "Business Process Expert". He describes how other organisations (like SAP) suggests that today's Business Analysts need to evolve into Business Process Experts in order to be able to support the BPMS work that organizations are increasingly relying on. The move towards process centric organisations forces the role of some BA's to become more extensive as they are now required to design, analyse and monitor end-to-end process in a way not previously required (Harmon, 2010). To conduct this role successfully, a BA will also need the skills typical of a process design specialist. As the BPM domain matures and more organisations move to higher maturity levels, they will require staff who can create, manage and improve enterprise wide process initiatives, this maybe the future role of a BA (Harmon, 2010).

BPM Maturity Model – Culture: It appears that Change Management aspects have been covered well in the *BABOK Guide*, where concepts such Stakeholder values and attitudes, communication aspects and responsiveness to the change have been discussed. However, other concepts such as; culture, Leadership attention to Process and Process Management Social Networks are not mentioned.

BPM Maturity Model – Governance: The *BABOK Guide* has stressed that a BA needs to identify the roles and responsibilities in the organisation, to understand the standards, to defined and determine the performance metrics. Some examples from the BABOK Guide include: *"The roles, responsibilities, and authority over the requirements for each stakeholder or stakeholder group must be clearly described" (p 24); "Business analysts must be effective in understanding the criteria involved in making a decision and in assisting others to make better decisions." (p 141);* "D*etermining the metrics that will be used for monitoring business analysis work" (p 17).*

BPM Maturity Model – Information Technology & Method: BA Knowledge areas cover all Information Technology and Method capability factors directly, except for Process Implementation and Execution – which is covered indirectly. In the context of the BABOK Guide, a process is perceived as a solution. Implementation is addressed here, as is monitoring the performance of the process and investigation of issues. Process implementation and execution is not typically a BA function. A BA primarily focuses on identifying opportunities for automation and gathering and documenting software requirements and then handing it off to IT for implementation (Harmon, 2010). The BABOK Guide focuses more on Process documentation and modelling than the other capabilities in this category.

BPM Maturity Model – People: The BABOK Guide covers most of the people related aspects within the 'Underlying Competencies' knowledge area. The BABOK Guide has a very strong emphasis on Change Management aspects which include elements such as: collaboration & communication, education & training and skills & expertise. Process Management Leadership is more of a management task, than a typical BA task. It relates to the commitment and accountability to take responsibility and ongoing development. These could be listed as duties for a Senior BA who may also be accountable for management duties.

BPM Maturity Model – Strategic Alignment: The BABOK Guide directly covers and emphasises the Strategy & Process Capability Linkage, Process Customers & Stakeholders and Process Output Measurement. It also indirectly covers Process Improvement Plans as part of the strategic alignment of change initiatives (under the Enterprise Analysis knowledge area) and overall planning of BA work (under the Business Analysis Planning and Monitoring knowledge area). As discussed earlier, it doesn't cover Process Architectures (but will mostly likely do so in future versions)

In summary, organisation wide process management capabilities have not been mentioned in the BABOK Guide; a possible reason being that Business Analysts are not the ones who manage end-to-end enterprise processes in an organisation and the BABOK Guide has a very project specific focus (instead of an organisational wide view). For example, Process Architecture is not covered; as Business Analysts are not the ones who create and develop the "Process Architecture" (but are primary users of Process Architecture - as an input to analyse current situations and propose

solutions). Process Improvement and implementation plans are only covered within the BABOK Guide with a project specific scope. Some culture related capabilities (such as 'Process Management Social Networks' and 'Leadership Attention to Process') were not mentioned in the *BABOK Guide*. The reason for this might be that these capabilities are more relevant to positions more senior to the average BA and do not pertain to the most common BA capabilities- that the BABOK Guide currently is focused on. BPMS are only indirectly covered and are positioned as any other tool that a BA may need to apply. However, present BPMS applications are designed to provide real-time performance intelligence (Harmon & Wolf, 2010) which could help BAs to identify improvement opportunities and hence BPMS tool capability can be seen a primary competency that a BA should posses- especially as BPMS are more widely adopted and become integrated with organisational processes.

6   Conclusion

The objective of this paper was to explore the alignment between the role of a Business Analyst as identified in the IIBA Body of Knowledge (BABOK Guide) and those of a BPM practitioner as identified in two widely accepted BPM competency and capability frameworks. To meet this objective, the paper commenced with an introductory background and then discussed recent attempts at professionalising the BA and BPM disciplines. Next, the research method was presented which discussed how the data was collected, coded and analysed; to determine the alignment between the professions. The outcomes and observations of this research were then presented. A key finding is that whilst there exists a high degree of correlation between the professions, there are also points of uniqueness namely in the knowledge areas of process strategy, governance and general organisational process awareness. These "higher-level" capabilities are typically utilised by the BPM profession due to the specificity of the domain.

This is the first attempt to systematically map the alignment between the BA and BPM professions and the authors acknowledge the limitations of the findings presented, as even though the research methodology has been designed to ensure rigour and process repeatability, assumptions were made and some limitations remain. Firstly, an assumption was made that the BABOK Guide is the most appropriate guide pertaining to the discipline of Business Analysis. Secondly, an assertion is made that there does not currently exist a comprehensive BoK for BPM to be used for this comparative study and rather two accepted BPM capability frameworks are deemed more appropriate.

 The findings presented here can be used by existing and future BA and BPM practitioners to better understand the differentiation, inform organisations to better define employment opportunities and support Universities and other education providers in the creation of more specified BA and BPM curriculum to help their students to fine tune their skills or acquire complementary skills. Also the outcome of this study could be beneficial to BPM and BA research, as it illustrates the two domains, the similarities and overlaps clearly.

This research can now be further validated and extended through a series of case studies and surveys to elicit and validate the core tasks and descriptions of what BA and BPM professionals engage in. Finally, it has been identified that the traditional role of a BA in most organisations is to identify, document and monitor improvement opportunities. In the future process driven organisation will the typical BA move towards the BPM domain and consequently will a proportion of our future BPM professionals come from a Business Analyst background? If the BABOK Guide represents the core skills that a BA is expected to have, the results of this analysis confirms that regardless of some organisational level process related skills that are not mentioned in the current version of the BABOK Guide (which IIBA is currently in-progress of addressing), "Business Analysts are well-placed to become the Business process practitioners for the future" (Harmon, 2010). As organisations become more process-focused, an increased alignment of these capabilities, drawing upon the combined strengths of both professions, may see the development of a true common BoK for a comprehensive guide to organisational success.

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