Examining Capabilities

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Introduction

Just like several BPTrend subscribers, I am trying to figure out the importance and necessity of capabilities. I am a little skeptical of the capabilities approach and its value proposition as is described by the supporters of the Business Architecture Working Group (BAWG), which is now the Business Architecture Special Interest Group (BASIG). And like many readers of the BPTrends discussion on LinkedIn titled "Business Processes and Capabilities - are they really different?"[1] initiated by Roger Burlton, I am seeking to understand the intention of capabilities as described by the BASIG.

The Intention of a Capabilities Approach

I too, believe the term capability is very broadly defined as referenced by contributor comments in the BPTrends discussion on LinkedIn. I certainly do not find capabilities enigmatic by nature, but I sometimes get perplexed by the different ways in which capabilities are interpreted and applied, perhaps delivering results from useful to redundant. Abstract or generic examples of capability models available in the public domain of the web with a simple "point and click" of my mouse are a little hard to find. However, I did find a good generic example in a BPTrends Column written by Mike Rosen titled, "Business Processes Start with Capabilities."[2] Case study examples of Business Architecture capability models and mapping are also a little hard to find in the public domain of the web with a simple "point and click" and I find this peculiar. If capabilities are so valuable, important and necessary, shouldn't I find numerous examples and references throughout the web? Oh, I know some research and analytical articles provide more in depth coverage of this topic, but you must have purchased multiple subscriptions to obtain access to these articles. I even think a couple of books provide some small scale examples, but where is the reasonably descriptive capability model that was requested in the BPTrends discussion on LinkedIn? I will satisfy this request by providing a descriptive example of capability mapping available with the "point and click" of your mouse later in this article.

A review of two articles on capabilities - "Capabilities and Processes"[3] and "Capabilities, Again"[4] – along with the BPTrends discussion on LinkedIn just noted, will find some honest inquiries regarding the purpose of "capabilities" as well as some confusion surrounding its value. Many proponents of capabilities intend to use them as a structural element of the Business Architecture and vital to business process analysis--a use that I believe is inappropriate especially for architectural purposes. I once read or heard somewhere that if something sounds confusing it may be because its intention is unknown. If "capabilities are not synonyms for functions and processes" as asserted in the opening paragraph of "Capabilities, Again," then what is the intention of capabilities as envisioned by the OMG sponsored BASIG?

While trying to figure out the BASIG's intentions with capabilities, you must consider the mission statement presented on the OMG BASIG home web page.[5] Under **Our Mission Statement** it says: *"Promote industry consensus and develop a set of standards to support the concept of building, evolving and aligning business blueprints."* It also asks the question, **"What is a Business Architecture?"** The answer provided is: *"A blueprint of the enterprise that provides a common understanding of the organization and is used to align strategic objectives and tactical demands."* Unfortunately, the links to the **Business Architecture Charter** and **Architecture Ecology Charter** are not available as of this writing unless you are an OMG member. And a review of the **Business Architecture Overview** from this home web page states in the first two sentences: *"Business Architecture defines the structure of the enterprise in terms of its governance structure, business processes, and business information. In defining the structure of*

the enterprise, business architecture considers customers, finances, and the ever-changing market to align strategic goals and objectives with decisions regarding products and services; partners and suppliers; organization; capabilities; and key initiatives." There are several other links to related articles and documents on this page, some available with a simple "point and click" and others that are restricted to OMG members.

From the OMG BASIG home web page, you might conclude that the intention of using capabilities is for "alignment" as noted in the three quotations above. This might suggest that the reason to focus on capabilities is to provide a means by which to enable "alignment" of the enterprise's implemented systems with management's intentions.[6] The key word here is "alignment." This point is substantiated in an article titled "The Business Capability Map: The 'Rosetta Stone' of Business/IT Alignment" (access requires a paid subscription) which states in the conclusion: *"The metaphor* (that of the Rosetta Stone) *suggests that a disparity exists between the intentions of the business and the IT systems used to automate it. …..The capability view of the business provides the high-level foundation for alignment and bridges the business/IT chasm."* [7] Even the title of this article contains the word "alignment."

In a related article presented to BASIG[8] titled, "A Business-Oriented Foundation for Service Orientation" by Ulrich Homann, the author states: *"In their most abstract senses, business capabilities and Web services are both black boxes whose connections are important, related to but separate from their inner workings. Intuitively, this parallelism bodes well for marrying the two."* And later on states: *"Business capabilities are the structural elements (black boxes) that provide a stable foundation aligning service-orientation projects with their business drivers."*[9] In a similar context, the Column previously mentioned by Mike Rosen states, *"Business capabilities provide the link between two complex, disparate environments; that of the business and IT architectures. The capability view of the business provides the high-level foundation for alignment between them."*[10] In another article titled, "From Capabilities to Services: Moving from a Business Architecture to an IT Implementation" by Ulrich Homann and Jon Tobey, the authors state in the first sentence of the introduction: *"In our previous article we talked about the importance of using business architecture as the basis for a service-oriented architecture. In that article, we argued specifically that a business architecture modeled as a network of capabilities offers an architecture foundation that is ideally aligned with service-orientation."*[11] And when discussing Microsoft's Motion methodology in the same article, the authors state: *"Understanding a business as a set of capabilities has the additional advantage that such views translate well into services and service-oriented architectures."*

It appears the "premise" of these references focuses on business/IT alignment. If you question this statement, then please closely investigate the sources referenced and make your own decision. However, the information just presented along with some other research leads me to surmise that the intention of capabilities is to achieve business/IT alignment from an IT-centric perspective; and "alignment" is a good thing. In John Zachman's exceptional article titled, "You Can't 'Cost-Justify' Architecture," the value proposition for architecture is discussed.[12] The reason to undertake an architectural initiative is to achieve four things that the enterprise cannot achieve without architecture – alignment, integration, change and reduced time to market. As you can see, alignment is important, but so are integration, change and reduced time to market. If architecture is to have significant value, then it must address all four of these areas.

Perhaps the "alignment focus" has purposeful roots in a functionally centric paradigm. Since the vast majority of IT is functionally centric, alignment to a business view that is also functionally centric seems quite logical and maybe even necessary. Another perusal of the **Business Architecture Overview** from the BASIG home web page finds this statement: *"The Business Capabilities view describes the primary business functions of an enterprise and the pieces of the organization that perform those functions. This view further distinguishes between customer-facing functions, supplier-related functions, business execution, and business management functions."*[13]. However, it is possible that the perceived value for capabilities mapping is recognized when some of its mappings illustrate the true cross-functional relationships of the enterprise. If capability mapping is an attempt to breach the vertical walls of the functionally

centric enterprise, then why not start with a customer centric paradigm that uses key end-to-end "cross-functional" processes instead? Is it because the capabilities approach chooses to avoid any requirement to change the paradigm from functionally centric to customer centric? I do not know.

From an historical perspective, just consider various IT methodologies such as, structured analysis, object-oriented and service-oriented. What will happen if the service-oriented methodology evolves or changes over the next several years? Will this require the business to evolve or change away from capabilities to something else in order to keep the IT alignment? Again, I do not know.

In an article titled, <u>"Business-Capability Mapping: Staying Ahead of the Joneses"</u> by Denise Cook, the author states: *"Business-capability mapping is the process of modeling what a business does to reach its objectives (its capabilities), instead of how it does it (its business processes). The goal of this approach is to model the business on its most stable elements."* [14] And this position about a *"stable foundation"* was shared by Ulrich Homann, in the quote by him just referenced. [15] This stability results since a capability, "defines the what, not the how," and the "what" rarely changes, but the "how" is always in a state of flux. If business capabilities are relatively stable, how useful are they in managing change?

This contrasts somewhat with one of John Zachman's four reasons to do architecture, and "change" is one of the four reasons.   He states: *"Architecture is the set of descriptive representations that are required in order to create an object. If you can't describe it, you can't create it. Also, if you ever want to change the object you created, Architecture constitutes the baseline for changing the object once it is created, that is, it is the baseline for changing the object IF you retain the descriptive representations used in its creation and IF you ensure that the descriptive representations are always maintained consistent with the instantiation."*[16]   This represents two very different points of view when using various models and approaches to manage change.

So, why is there a fixation on alignment and stability? Perhaps with the BASIG's roots in OMG, there is an IT-centric proclivity in the development of Business Architecture standards. Obviously, this is an assumption on my part, but a fair one based on the information available. The difficulty of finding detailed real world examples of capability mapping with the "point and click" of my mouse, coupled with the restricted access of BASIG documents results in this assumption. I find the lack of serious and enlightening rebuttal of the BPTrends discussion on LinkedIn started by Roger Burlton peculiar also.

Seeking Clarity

While seeking to understand capability mapping and its value to Business Architecture, I ultimately decided that the best thing to do was to build a capability map for myself and see if I think it is of value. It is interesting to note that many contributors to capability discussions have requested to see a case study example, too.   I based my development of a capability map on the following three sources:

The definition of capability was provided in an article by Ulrich Homann: *"A capability models what a business function does—its externally visible behavior (versus how it does it, its internal behavior)—and the expected level of performance."*[17] This article was also referenced by Mike Rosen.

An "abstract or generic" example of capability mapping was provided in a BPTrends Column by Mike Rosen.[18]

A "simple" example of a level one capability map was provided in an article by William Ulrich and Neal McWhorter.[19]

Readers wishing to examine my capability map example can <u>visit my web site</u>[20] to review the associations for a generic build-to-order manufacturer that are depicted in Figure 1. Just click on the "very small capability map" that looks like Figure 1, at the top, just right of center on the web

page displayed by the embedded link. Please use Internet Explorer as the navigation and hyperlinks are configured for this browser; other browsers do not support the navigation and hyperlinks. Clicking on the "compass heading arrows icon" takes the reader down to the next level of capabilities while clicking on the "international currency symbols icon" maps to the corresponding value stream or business process.
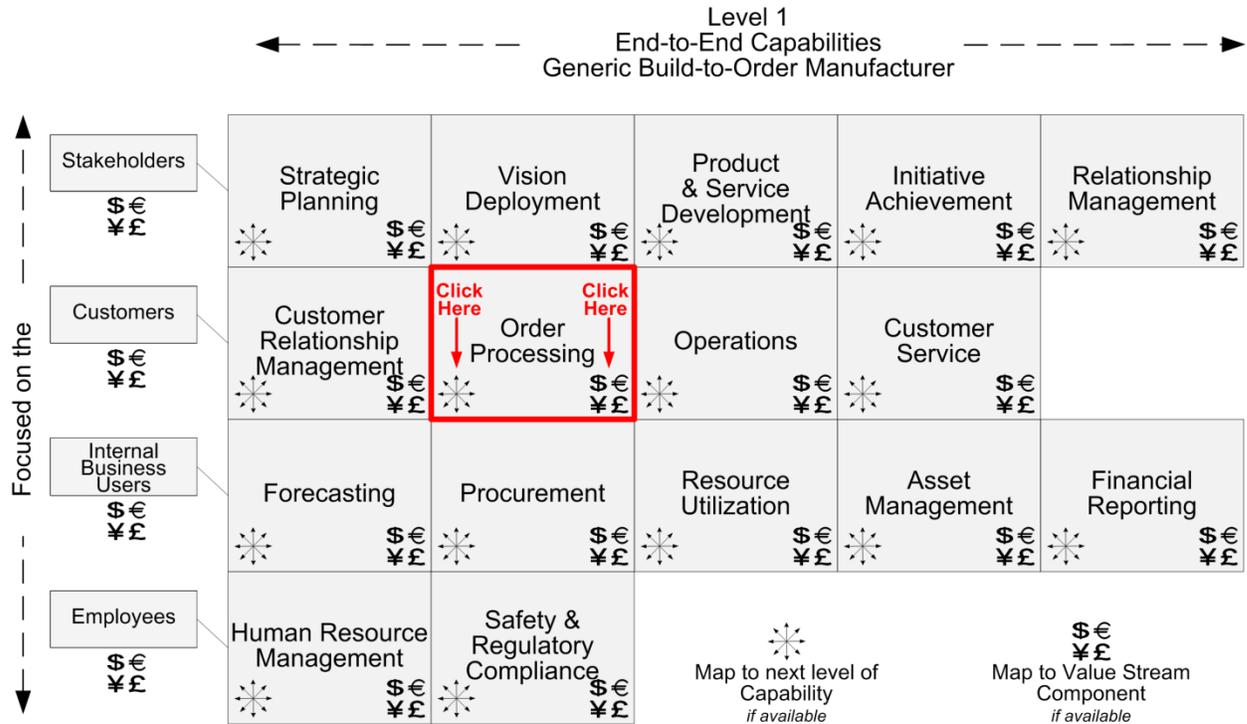

Figure 1. A Generic Build-to-Order Manufacturer's Level One Capability Map

Every "level one" capability in Figure 1 decomposes down to a "level two." For example, if the reader "points and clicks" on the capability mapping icon (the compass heading arrows icon) in the "Order Processing" box which is denoted in a red rectangle in Figure 1, then its level two capabilities are revealed for analysis. If the reader then clicks on the Order Fulfillment capability mapping icon in the level two map, then its level three capabilities are revealed for analysis. While for every level one capability in Figure 1, level two maps are available, only the "Order Fulfillment" capability is illustrated down to level three. All capabilities map to a value stream or business process model, and are available for viewing by clicking on the "international currency symbols icon" in each box. This example is obviously not an exhaustive one, but one descriptive enough from which I was able to draw some conclusions.

Most capability mapping examples presented in various articles found with the "point and click" of my mouse appear somewhat fragmented, and are not supported by a clear reference to a more complete and comprehensive enterprise capability model and its mappings. I do not understand why this occurs as I find it rather peculiar. Is this another manifestation of functional thinking? I have no idea. I would really like to see a reasonably complete capability mapping example, at least somewhat similar to the one presented in this Article so as to place it in the context of the whole enterprise. Perhaps it represents a reluctance to share ideas as these more complete models are considered proprietary in nature; and of course, this I understand.

The capability map was relatively easy to create since I already had built an Enterprise Business Architecture organized by value streams for a generic build-to-order manufacturer. Value streams are widely used and understood in Six Sigma, Lean Manufacturing, strategic BPM initiatives and many Business Architecture approaches. I also decided to logically organize (or group) the level one capabilities, in rows by the consumer or benefactor of the value streams.

The rows – Stakeholders, Customers, Internal Business Users and Employees – seemed more logically related to value streams than the references to capabilities that I had seen that used Strategic, Value-Add and Commodity. The literature that I found seemed ambiguous in the organization of level one with regard to an association with value streams. If I had skipped past the value stream structure and organized around the more typical business processes by function, then Strategic, Value-Add and Commodity would have made more sense. Since I found Mike Rosen's abstract example more comprehensive and logical with his value stream illustration, I chose to organize level one according to value streams. Therefore, my capabilities in Figure 1 are really "end-to-end" capabilities rather than functionally oriented ones. I presume the Strategic, Value-Add and Commodity organizational level one mapping, using business processes organized by function would work, but I am not clear how it would map to the value streams. I am unsure as to how to link from level one capabilities organized by functions to value streams which are cross-functional in nature. Perhaps a level one or lower level capability will map to multiple value streams. Either I misunderstood the mapping approach with regard to value streams, or capabilities are firmly rooted in functional thinking, or this is just another peculiar aspect of capabilities.

Perhaps it is necessary to briefly explain the Enterprise Business Architecture built around value streams,[21] so as to complement the reader's analysis of this capability mapping example. Similar to organizational or functional hierarchies, the value stream structure in Figure 2 is a classification framework (value streams are sometimes referred to as core cross-functional processes or key end-to-end processes). However, considering the rigorous method by which value streams are designed, derived and inter-connected via what each produces that is of value - the inputs and outputs - it goes beyond a simple classification of processes. The value streams, denoted by the colored vertical rectangles in Figure 2, reflect customer centric end-to-end flows throughout the enterprise and explicitly capture dependencies and relationships between cross-functional processes in terms of their business artifacts or their inputs and outputs. And of course, the focus on a client, consumer, guest, passenger, patron, citizen, internal business user (or end user), C-level executive, stakeholder, employee and other similar terms are just as valid as customer. In a metaphorical sense, it is similar to a manufactured product's "bill of materials" (BOM); hence, Figure 2 represents an enterprise's "bill of value streams." Just as a BOM is hierarchical in nature with the top level representing the finished product, the elements in Figure 2 are hierarchical in nature with the top level representing the whole enterprise (or business unit). It is certainly okay for one to consider the architectural representation of a BOM as a classification of components, but a classification or some group of interesting things is not necessarily an architecture.
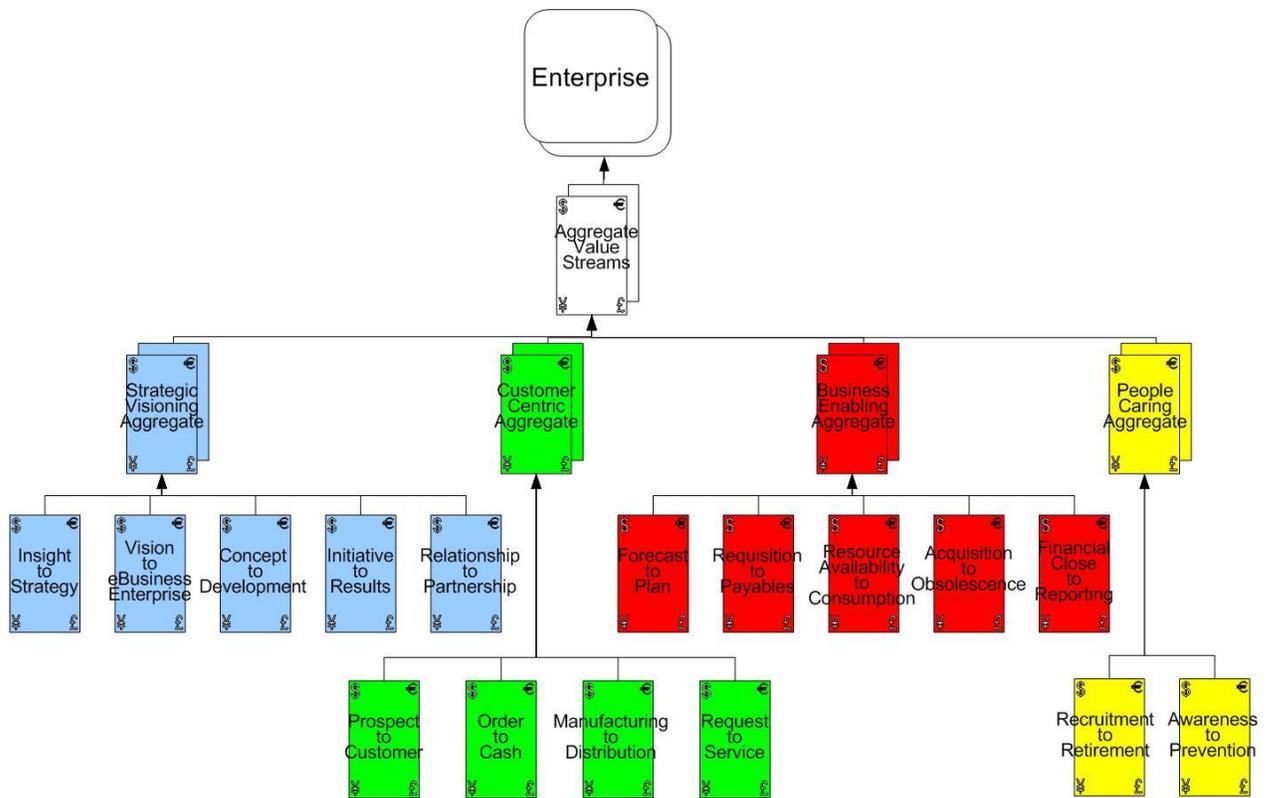
Figure 2. A Generic Build-to-Order Manufacturer's "Bill of Value Streams"

Building the Capabilities Model and Map

Setting up the level one capabilities map as mentioned was relatively easy. Since the architecture presented in Figure 2 already existed, it was a simple matter to create capabilities (using nouns) to map to the architecture of value streams. The value streams were named in the "from something to something else" format (e.g. Order to Cash and Prospect to Customer) and the decomposed business processes were named with an action-oriented verb-noun (e.g. Fulfill Order and Acquire New Customers). For a few additional examples of capabilities mapped to value streams and business processes, please closely scrutinize the associations in Figure 3. As you might imagine, the names of value streams, business processes and capabilities selected in these examples are a matter of personal preference rather than a strict adherence to some sort of conventional naming standard.
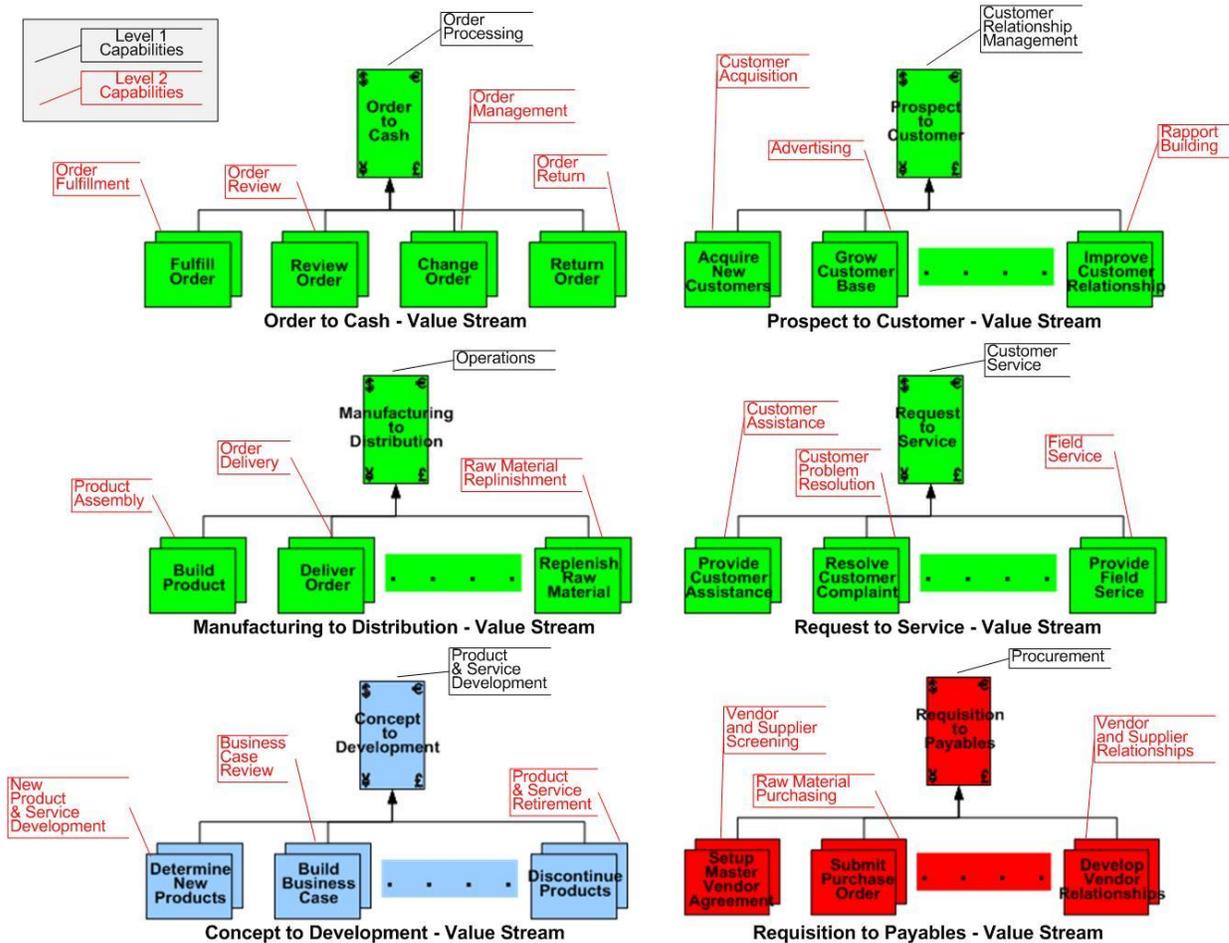
Figure 3. Capabilities Mapped to Value Streams – Partial List

My most difficult task was trying to arrange individual capabilities in the various levels without knowing the inputs/outputs, results, outcomes and expectations; information that all business process models clearly provide. Therefore in my opinion, it is imperative that one have an existing enterprise (or business unit) model in the form of an Enterprise Business Architecture built using value streams or at least a significant number of structured and well organized business process models from which to develop each level of capabilities. Without this detailed information - the business process with its inputs/outputs, results, outcomes and expectations – I do not see how the capabilities are created, organized and assigned to a particular level with any consistency. With intellectual capital from prior engagements, an "industry specific" capability model would provide an excellent starting point for a capabilities focused initiative. Remembering the stability described by both Ulrich Homann and Denise Cook, a consulting firm might develop and preserve as intellectual property, a predefined set of capabilities down to level three or four by industry segment (e.g. financial or insurance) for use in its engagements.

Observations and Comments

Reflecting back on Ulrich Homann's "black box" metaphor, please consider the value streams in Figure 2. Each value stream's name, (e.g. Order to Cash or Prospect to Customer) essentially, describes "the 'what' it does." By clicking on any value stream (the colored vertical rectangles) its decomposition is revealed, allowing one to look inside the proverbial "black box" to understand its complexity, inputs/outputs, details and other relationships. This internal behavior describes "the

'how' the value streams achieve results." The level one to level two, and lower level capability mapping is the same as the decomposition of a value stream into its lower level business processes and ultimately to its lowest level swim lanes models. There is some obvious redundancy here between the higher to lower level capability mapping, and the value stream and business process decomposition.

I can imagine talking with a C-level executive and conversing about capabilities. However, unless we both have the same capability map, the metaphorical "Rosetta Stone," some confusion may result. Keeping our conversation focused on the same strategic opportunity or operational problem is achievable with either a capability map or an architecture of value streams. Perhaps the capability map provides a less detailed view, but with the mapping of the lower levels, the details are available if mapped to the actual value streams, business processes and IT. The same holds true for the bill of value streams and business processes if used in lieu of, or with a capability map.

Capabilities define the enterprise in business terms, for example, "Marketing, Billing and Accounting" at the highest level.[22] Generally speaking, this is similar to the conventional functional groupings used for decades to characterize the enterprise. As previously noted, a similar point regarding functions was made in the opening paragraph of <u>"Capabilities, Again."</u> However, consider this question: During strategic planning is it better for the executives to focus on functionally centric capabilities which define "what the enterprise does," or for them to focus on "the results delivered to customers from its value streams," or possibly both? The answer depends on what kind of company the C-level executives are designing and building; an enterprise that is functionally centric or one that is customer centric. It is their decision to make. And by the way, using the capabilities functionally centric model and deciding on a strategic customer centric type initiative does not make the capabilities approach inherently customer centric. Capability maps are usually functionally centric, representative of an "Industrial Age" mindset. Functional thinking is okay as long as your competition remains functionally oriented as well. However, Business Architecture value streams and strategic BPM initiatives are customer centric and representative of an "Information Age" mindset.

I could have continued mapping the capabilities in Figure 1 to IT artifacts, but I very much prefer integrating the Business Architecture with the IT Architectures. For example, I use the inputs/outputs from the value streams and decomposed business processes to link to the entity relationship diagrams (ERDs) defined in the Data/Information Architecture. I described this integration technique in a BPMInstitute article titled, <u>"The Business Architecture Core Artifact."</u>[23] After all, architectural integration is very different from capability mapping; a map is not architecture.

The Quandary

So why is capability mapping seemingly so popular? Since capability mapping is much simpler to do than designing architectures, many business professionals may prefer it to the engineering disciplines and rigor of architectural endeavors. After all, the BA is about the business and the business is frequently considered a non-engineering entity.

In its most simple terms, an architecture represents one element linked to other elements to form, collectively, a structure.[24] These "structural elements" require integration through engineering disciplines and rigor, not through simple, nondescript connecting lines between several juxtaposed elements. Juxtaposing is not architecture; therefore, while mapping capabilities may present an interesting and useful view of the business, it does not represent engineering disciplines. At times capability mapping seems better suited for stating high-level requirements and expectations in an artifact of the strategy rather than as a structural artifact or structural element of Business Architecture and Business Process development. However, a value stream and/or business process may deliver a capability in an enterprise, but this association does not intrinsically make a capability a structural element.

Consider the evolution of BPM over the past several years. Initially, business processes were modest in scope and simply sketched out in swim lane linear flow diagrams. In the very early days the models were hand drawn and photo copies distributed to colleagues for analysis. Fast forward to today and consider the sophistication of the numerous BPM suites of software available in the public domain. The ability to design, analyze and implement truly engineered, optimized and significantly improved business processes has increased dramatically with these BPM tools. And the business professionals who led and participated in these strategic BPM initiatives have grown dramatically as well. They learned to apply engineering disciplines and rigor to achieve significant improvements in business process effectiveness and efficiency. Since these business professionals succeeded and along the way, developed new engineering skills during the BPM initiatives, the enterprise may rightly expect them to succeed again in a Business Architecture initiative since they have a successful and proven track record. Is it possible that capability mapping will "fall from grace" as the equally challenging BA engineering disciplines and rigor type skills develop and mature in today's business professional just as they developed and matured for BPM? What do you think?

The Conundrum

What are the unique attributes or characteristics of capabilities? Consider the findings in the project described by Denise Cook with regard to capabilities: *"Throughout this exercise, we listed attributes for each capability and service level expectation. We captured key attributes such as the inputs and outputs for each capability, its owner, its customers, performance requirements, and information about what supports it such as people, IT, or process. We eventually used this critical information to translate the business architecture into the technical architecture."*[25] All of these attributes are redundant; usually captured in the value streams and business processes. If one cannot define a unique capability attribute, but discovers attributes that are characteristics of other value streams, business processes or functions, then one might conclude that capabilities are redundant and, consequently, need "mapping to something else" to give it meaning. If it is the "mapping" that gives uniqueness and meaning to capabilities, perhaps creating some sort of gestalt, then this might manifest some missed opportunity or problem with the way the enterprise is designing and integrating its processes, services and components. If so, then what is the purpose of the gestalt other than to identify a weakness in design, or to illustrate the poorly modeled and documented artifacts of an EA framework, or to highlight a cross-functional requirement? The protean nature of capabilities as in practice today seemingly lacks the focus required for use as a structural element in an EA framework, but it may define some high-level requirements or expectations that were overlooked in an initiative undertaken during BA development. The use of capability mapping and its organization at various levels (i.e. level one, two, three and lower) may perhaps become a useful analytical or diagnostic tool, but not as a structural element.

Consider the metaphor of an architect on a building's construction site holding the blueprints in hand and talking with the construction foreman. They need the engineering discipline and rigor of the structural elements provided in the blueprint to complete construction of the building, not a table of capabilities. However, perhaps the capabilities helped with defining the building requirements and were supported by the building codes. What was intended by Ulrich Homann and Jon Tobey in the introduction of <u>"From Capabilities to Services: Moving from a Business Architecture to an IT Implementation?"</u> They state: *"While there are many methodologies for determining business architecture in terms of business processes, there are not currently as many options for decomposing the business requirements into interconnected capabilities."*[26] This interconnectivity may be the unique attribute or characteristic of the capability, but I still do not see it as a structural element.

I recently saw a webinar from an EA tool vendor illustrating its ability to produce and use capability maps. It presented a one page model similar to Figure 1 called a "heat map" that was color coded to represent capabilities that needed attention. One comment suggested that when presenting EA information to executives that the presenter stay away from the typical EA artifacts and focus on "executive friendly" capability artifacts. This annoys me. Is this the "dumb it down"

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approach employed to communicate critical enterprise information to executive leadership or is it the old argument that Enterprise Architects are unable to present and to effectively communicate with executives? Capabilities with its supporting mapping may communicate requirements to executives at a higher level far better that the typical EA framework artifacts and they may also illustrate better the cross-functional nature of a genuine business requirement if value streams are absent from the analysis. However, with the customer centric cross-functional nature of strategic BPM initiatives and Business Architecture value streams, are capabilities masking the real problem? Just maybe the real problem is a functionally centric enterprise grounded in the Industrial Age mindset, rather than a 21st century customer centric enterprise prospering in the Information Age.

Closing Thoughts

Since there are different EA and BPM methodologies, it is fair to expect that different Business Architecture approaches and methodologies will evolve as well; some will use capabilities and some will not. I can use capabilities, but I do <u>not</u> see a compelling reason to develop them. While capability mapping may be somewhat useful, I clearly see some redundancy. And I do not believe capabilities are a suitable structural element for the Business Architecture. I am led to this conclusion when I consider a statement by John Zachman in an article titled <u>Architecture Artifacts Vs Application Development Artifacts</u>; *"…….Enterprise Architecture is the set of primitive, descriptive artifacts that constitute the knowledge infrastructure of the enterprise. It is purely structural."*[27] Just consider a simple example. From a composite model in the Business Architecture or any business process model, you can integrate and link a technology related input/output, such as an update to a repository of data or a web transaction, to the entity relationship diagrams (ERDs) found in the Data/Information Architecture. In this example, the input/output is the "integrating or connecting mechanism," metaphorically equivalent to the connection between the various parts and components in your laptop or smartphone. Try assembling your laptop or smartphone using a "capability map" instead of its bill of materials. Again, a capability may illustrate some high-level requirement or expectation, but it is not a structural element.

The view provided in a capability model similar to Figure 1 and further illustrated in Figure 3 may represent a higher or more abstract view of the enterprise. However, does this model really provide the enterprise with any genuine information for analysis? Any strategic analysis will have to investigate the "mapped to" business processes, value streams and IT, which contain the inputs/outputs, results, outcomes and expectations. And different names for essentially the same thing, for example, the capability "Order Fulfillment" (described by a noun) maps to the business process "Fulfill Order" (described by a verb) seems to have marginal value. It may provide a shorthand technique for mapping a capability to a business process and then to IT, but this same relationship should be defined in the business process models themselves. If not, then awareness of this deficiency provided by the mapping is useful, but since the relationship is not explicitly defined in the business process models, this merely identifies an area that needs defining and documenting. Expanding the tabled entries in Figure 1 with IT relationships is quite informative, but if no supporting detail is available due the lack of or the deficiency in the business process models, then all one has is a relationship between a capability and IT; an IT-centric view.

I just do not see the significant value of using a capability model similar to that of Figure 1, with the architecture of value streams presented in Figure 2. I see the value of formally integrating the Business Architecture with the IT Architectures using the constructs of a rich modeling language, and I believe this integration is extremely important. Some may be unfamiliar with these integration techniques and approaches. However, using the technique of capability mapping with expanded entries for IT in Figure 1 or through a connection using non descriptive mapping lines seems of minimal value. Therefore, I seem to be in general agreement with the views expressed in both of the articles - <u>"Capabilities and Processes"</u> and <u>"Capabilities, Again."</u>

If I choose to use capabilities, then I prefer them in a "strategic context" as so eloquently described in a "Harvard Business Review" article titled, <u>"Competing on Capabilities: The New</u>

<u>Rules of Corporate Strategy.</u>"[28]   The article describes the basic principles of capabilities-based competition: *"The building blocks of corporate strategy are not products and markets, but business processes. Competitive success depends on transforming a company's key processes into strategic capabilities that consistently provide superior value to the customer. Companies create these capabilities by making strategic investments in a support infrastructure that links together and transcends traditional SBUs and functions. Because capabilities necessarily cross functions, the champion of a capabilities-based strategy is the CEO."* The authors go on to state: *"The longer and more complex the string of business processes, the harder it is to transform them into a capability--but the greater the value of that capability once built because competitors have more difficulty imitating it."* Getting the C-level executives and their strategy focused on these kinds of "strategic capabilities" is a necessary objective and achieving this result by using the Business Architecture is imperative.

In light of this reference to capabilities in a "strategic context" and for "capabilities-based competition," perhaps capabilities might better fit as an artifact of the strategy, and referenced in all strategic and Enterprise Architecture initiatives. Using capabilities in a "strategic context" as just described in the "Harvard Business Review" article, is different from the way BASIG and some authors just referenced in this Article are describing capability mapping. Some proponents of capability mapping might consider the article noted above as describing a "super" capability or some sort of higher level capability above those presented in the table in Figure 1. If this "super" capability is not present in the heat map then you must again ask "what is the intention of capabilities?" Are we back to alignment? I am not sure, but I do know that <u>the complex string of business processes integrated together that provides superior value to the customer is hard for a competitor to imitate</u>. And that can lead to a competitive advantage. Now that is my idea of how to build a "strategic capability."

Notes

[1] Sign in to LinkedIn, in the upper right section of the web page, select "Groups," then type in "BPTrends Discussion" using quotation marks and click on the search icon. After the web page displays, click on the entry titled "BPTrends Discussion." After the web page displays, scroll down to the bottom and click on "show more," then look for the discussion by Roger Burlton titled, "Business Processes and Capabilities - are they really different?"

[2] Rosen, Mike. "Business Processes Start with Capabilities." BPTrends, December 2010 www.bptrends.com/publicationfiles/12-07-10-COL-BPM%20%26%20SOA--BusProcesses%20begin%20with%20Capabilities%201003%20v01--Rosen.pdf

[3] Harmon, Paul. "Capabilities and Processes." BPTrends, July 2011 www.bptrends.com/publicationfiles/07-12-2011-ADV-CAPABILITIES%20AND%20PROCESSES-HARMON.pdf

[4] Harmon, Paul. "Capabilities, Again." BPTrends, October 2011 www.businessprocesstrends.com/publicationfiles/advisor20111025.pdf

[5] Object Management Group (OMG) – Business Architecture Special Interest Group (BASIG) Home Page. (bawg.omg.org).

[6] Zachman, John A."You Can't 'Cost-Justify' Architecture." Zachman International, 2001, http://links.enterprisearchitecture.dk/links/files/You_Cant_Justify_Architecture.pdf

[7] Ulrich, William, and Michael Rosen. "The Business Capability Map: The 'Rosetta Stone' of Business/IT Alignment." Cutter Consortium, Enterprise Architecture, Vol. 24, No.4, 2011. www.cutter.com/architecture/fulltext/reports/2011/02/index.html

[8] Object Management Group (OMG) – Business Architecture Information Day sponsored by OMG. http://bawg.omg.org/Business_Architecture_Info_Day_Boston_2010-final.pdf

[9] Homann, Ulrich. MSDN Architecture Center, "A Business-Oriented Foundation for Service Orientation," February 2006, http://msdn.microsoft.com/en-us/library/aa479368.aspx

[10] Rosen, Mike. See 2.

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