

Architecture—Managing Business Transformation Actively

How many times have we heard management ask what value is there in all this architecture/blueprint stuff? What can you do for us in the next few months? We don't have time for a two (2) year project? Are there any quick fixes or low hanging fruit that architecture can give me? Can you save me any money on this effort? Management perceives architecture in many different ways. In addition to the variety of perceptions, there is a lack of understanding where the value comes from when working with architectures.

A key value of architecture to business management is in support of business transformation. Let us be clear, we mean that business transformation as taking actions that organize people, process and technology to achieve significant change that aligns with the new or updated business strategies and goals (i.e., adopting a new business model). A practical example to show value is to select a typical management situation and demonstrate value to management not just describe what architecture is all about or just document the structure of the enterprise.

As a start, let's choose the task of business transformation as a place to save money. Business transformation has some basic features that architecture can leverage. Transformation implies changing business models and mapping from the old versions of models and their relationship to new ones. This requires documenting and understanding your current business structure and possibly the environment around it.

Assessing the best way to achieve your new direction demands some analytics to more accurately identify the differences between the current ('As - Is') and future ('To - Be') states of the business. These architecture suites imply multiple structural perspectives. This makes architecture from being a passive tool to an "active" ingredient for managing change. While transformation is not a new idea, architecture makes the transformation effort more precise and predictable to achieve resulting in the desired business state and structure after transformation is complete. Further it acts as a single point of control for the transformation efforts by eliminating the need for countless 'assessments' before real work begins. This should result in some cost savings during transformation as well as identify some low hanging fruit to harvest.

Also, it is important to note that even if your organization "does not have an explicit architecture, it has an implicit one." As such, it is useful to make it explicit and part of the 'corporate knowledge' of how the business works. If it is explicit, it can become an 'active architecture' that participates in the management and change of an enterprise.

Linking sets of architectures with an effective set of analytical techniques provide a quick way to respond to the rapid and constant changes in the business environment today. We call this approach the *One Minute Architecture Solution* since it can rapidly represent changes that enable successful business transformation. This is both desirable and acceptable to management since it provides and confirms the variant (as opposed to stable and invariant) elements of the organization's fundamental structure in a meaningful way.

The Skeptical Architect

Here is a simple assumption... “the data structure is supposed to be relatively stable in an enterprise as opposed to processes that change readily to meet the business environment”. In the event that management changes structure of the enterprise via merger, acquisition, divestiture, disposal, and so on, there is a need to assess the impact of the change on the usage of data in the new environment.

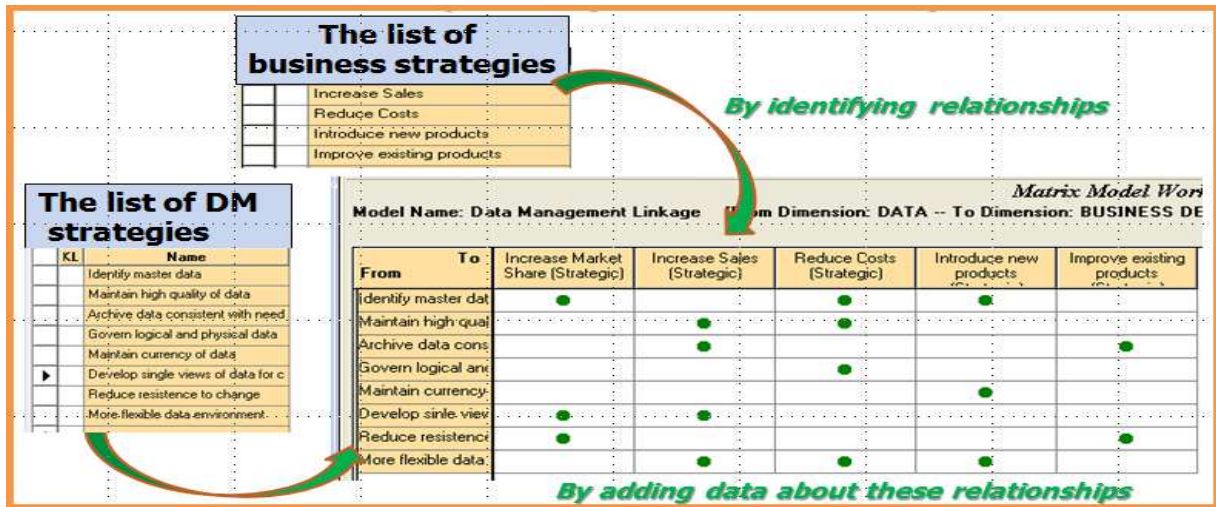
So let’s use this example of a changing management strategy that requires a rapid change in the data management strategy and hence has implications for resources and projects on the data management organization. This describes a step-by-step approach and some quick results.

Business Strategy to Data Management Delivery – A Common Issue

As part of this active architecture approach, a step-by-step (acceptable) methodology can be used to build and quickly assess the alignment of operational data management projects with that of the business’ strategy consistent with a business transformation need. To do this you need certain information and the following actions will generate what’s needed (artifacts):

1. *Create lists of one or more areas of interest* (i.e., business: strategy, goals, initiatives, projects; and data management: functions (using DAMA’s [Data Management Book of Knowledge](#) - DMBOK), strategies, initiatives, projects).
2. *Describe relationships that exist between these areas of interest.* For example, you may have to collect information that already is known or exists within the organizations that relate the following
 - a. Business Strategy-to-Goals
 - b. Business Strategy-to-Initiatives
 - c. Business Strategy-to-Data Management Strategy
 - d. Initiatives-to-Projects
 - e. Projects-to-technology, information, data, decisions, documents, etc.
3. *Build relationship matrices for each area of interest like the one shown below:*

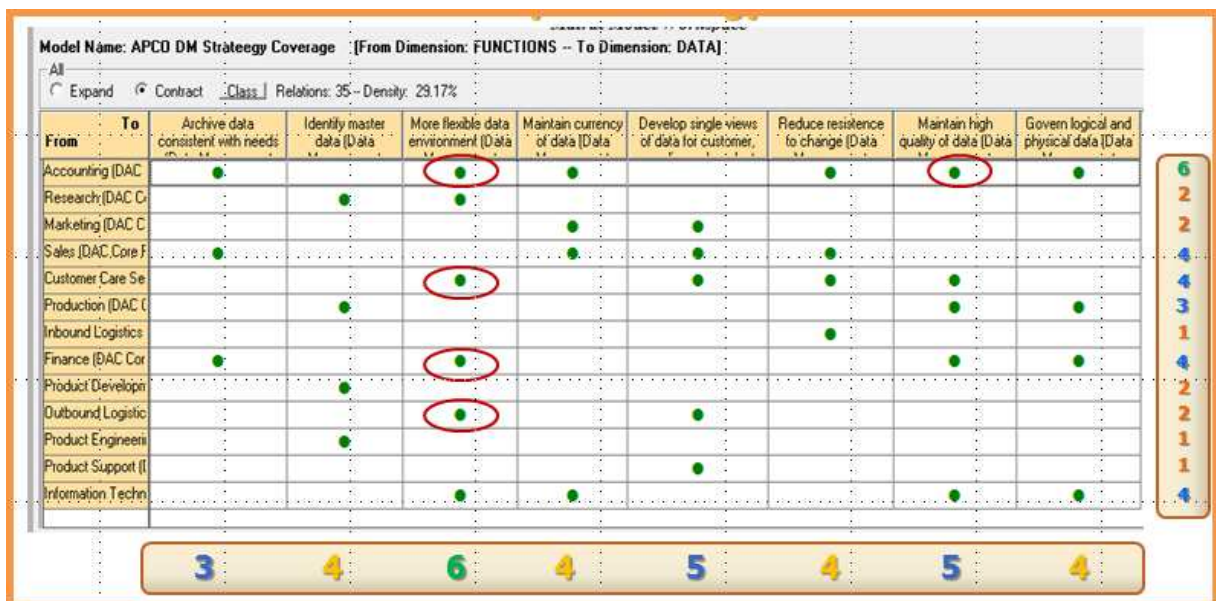
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Obtaining these relationships can be achieved in a number of ways such as: surveys, interviews, and/or meetings with groups of business experts.

4. Add appropriate data attributes

The relationships of business functions to the data management strategies are quickly observed by identifying those business functions and data management strategies that impact the organization or enterprise. Clearly, the higher the number of touch points, the greater the impact of change on the business. In this example, the Accounting function is significantly impacted while the development of a more flexible data environment is considered important and susceptible to change. This provides the management with an insight as to where to focus their monitoring and change management efforts during the change period.



The Skeptical Architect

Adding additional attributes to the relationships (like cost, HR Resources, IT Staff) can further refine the perspective of change using the additional information to understand the more detailed implications of such relationships in traditional business terms.

5. *Assess and interpret impact of multiple inferred relations to make choice about business solution.*

By capturing the business strategies and relating them to the business functions, a matrix representing relationships is produced. Another relationship matrix is done for the relationships of business functions to the data management strategies. As a result, one can build an inferred relationship of the business strategy to the data management strategy as shown below.

The screenshot shows a 'Matrix Model Workspace' for 'APCO DM Strategies and Business Strategies'. It displays a matrix with 5 rows of business strategies and 10 columns of data management strategies. The matrix is populated with green dots indicating relationships. A summary bar at the bottom shows the number of relationships for each column: 3, 5, 3, 3, 4, 4, 4, 4, 4, 4. A vertical bar on the right shows the number of relationships for each row: 8, 7, 1, 4, 3, 7.

From	To	Archive data consistent with	Develop single views of data for	Govern logical and physical data	Identify master data (Data)	Maintain currency of data (Data)	Maintain high quality of data	More flexible data environment	Reduce resistance to
Develop New Mar		●	●	●	●	●	●	●	●
Improve Performa		●	●	●	●	●	●	●	●
Improve supplier r			●						●
Increase market sl			●		●		●	●	●
Increase Market S			●		●		●	●	●
Increase Sales (St		●	●	●		●	●	●	●
		3	5	3	3	4	4	4	4

Once you have produced these inferred relationships, the choice of detail initiatives and projects can be outlined rapidly. Management can see how components of the architecture are rapidly used to support any transformation desired within your organization. This inferred relationship is one of many analytical techniques that can be applied to various architectures (business or information technology) and their components. Such a set of interconnected enterprise architecture components is developed over time dynamically responding to business transformation.

Architecture and Transformational Models

The focus of contemporary architecture discussions relate mostly to information technology. In the scenario just described, we have applied various descriptive models using the active architecture idea to anticipate and decide on changes in business structure (in this case the data management strategies). This idea is easily expanded to assess impact on other dimensions of the business such as products, processes, and all the process enablers not just the data part. Often the complexity shown by these relationships via architecture indicate how fast or slow the management needs to move to achieve transformation success.

The architecture then provides management with a way to control the rapidly changing business and address key environmental considerations that may also require restructuring. Change the relationships, rerun the inference, compare the new result with the old and see the degree of impact that results.

The Skeptical Architect

The active architecture as described by this *One Minute Architecture Solution* encompasses a way for management to view changes that align strategy with operational activities and business success, perhaps even survival follows this effort.