

Article SLB-37en

SLB-37en "Enterprise Methodology"

Business Architecture, an asset in enterprise transformation

Objective

This article discusses the general questions raised by enterprise transformation. In so doing, it specifies the scope and content of Business Architecture, a key discipline for ensuring the coherence and effectiveness of transformations, as well as the alignment of means with the needs and direction of the enterprise. The proposed recommendations fall within the Praxeme enterprise methodology, which enables the Business Architecture to be defined from the full understanding of the Enterprise System.

Content

- What needs to be done to transform the enterprise
- What needs to be produced to control the transformation
- How to go about succeeding in one's transformation
- Conclusion: the resources of the open method

Author

Dominique VAUQUIER

Translator

Joanne TOWARD

Version

1.2, August 11, 2012



Contents

	List of tables and figures	ii			
	What needs to be done to transform the enterprise	3			
	What needs to be produced to control the transformation	5			
	How to go about succeeding in one's transformation	8			
	Conclusion: the resources of the open method	13			
Appendices		16			
11	A reference framework that says everything about the enterprise and articulates the areas				
	of expertise	16			
	Bibliography	17			
	Glossary	18			

List of tables and figures

Figure SLB-37_1. Some formulations as a summary	. ii
Figure SLB-37_2. The four facets of the intentional model	6
Figure SLB-37_3. The framework that organizes the aspects of the Enterprise System	8
Figure SLB-37_4. The global dynamics (block diagram)	14
Figure SLB-37_5. Enterprise System Topology	16

Epigraph

"One must know what ought to be in order to judge rightly what is" Jean-Jacques Rousseau, Emile, or on Education, book V

"Dialectics has a dual law: to view from above and hold close." Victor Hugo, Deeds and Words

Figure SLB-37_1. Some formulations... as a summary

Business Architecture is neither a functional architecture, nor an abstract, distant look at the information system.

Speaking about the business, the enterprise, in architectural terms is both a statement of a certain rationality of approach, a desire to control the construction and the requirement for a design effort.

The end goal of enterprise methodology is to make different universes cohabit and to articulate the areas of expertise necessary in the design and transformation of the enterprise.

In practice, enterprise architecture does not correspond to what, in theory, it ought to be.

It is a risk for the enterprise.

The drawing is not the architecture, but only one of its means of expression.

The architecture is only deemed valid when we have demonstrated that its general decisions are compatible with each required detail.

Alone, the architect is nothing without a sponsor who truly wants to build something. The grandeur of the architect is in keeping with the ambition of the sponsor.

The value of architecture lies not only in its capability to accompany the projects. Architecture is, in fact, the means of compensating for the negative effects in the project mode.



Introduction

This paper is aimed at enterprise and government executives¹. Its objective is to demonstrate just how business architecture can help them to transform the organizations that they are responsible for.

Business Architecture is a discipline whose end goal is to ensure the coherence of any transformation of the enterprise and its systems.

Enterprise transformation can take all forms of intervention in the operations, the enterprise structure, its production or its interactions with its environment. Its impact can range from simple improvements made on a local level to deeper and broader changes. In the latter case, the point of view of architecture is, of course, crucial. However, even in the case of gradual and targeted change, architecture brings value by avoiding redundancy and confusion.

We will firstly ask the question of what needs to be done to ensure this coherence and to optimize the value of the projects. Secondly, we will recapitulate the deliverables that embody business architecture and the requirements that guarantee the results. Finally, the third chapter will answer the question of "how does one go about deploying business architecture and the vision it carries with it?" This will be an opportunity to position this discipline among the other transformation disciplines and in relation to management.

What needs to be done to transform the enterprise

Ensure the coherence and sincerity of the objectives

Any transformation begins by formulating the goal to be reached. Objectives can be strategic or they can fit into a more routine process, as is the case with an organization focused on quality and continuous improvement. They apply to all levels of the organization, right down to the individual objectives in the case of management by objectives. In any event, the efficiency of the action and the pertinence of the

transformation require that the objectives be perfectly clarified and analyzed; however, this is never guaranteed. On the one hand, the set of objectives is complex and can be riddled with contradictions. On the other hand, the rational analysis of the objectives and their implications is not always carried to completion and can come up against the insincerity of the approach².

From the very start, that is to say when the objectives are formulated, we can see that transformation runs the risk of being led up blind alleys, unable to find a way out. One essential task is, therefore, to maintain the sincerity and coherence in the objectives tree. This task should be transversal and global at the enterprise level. These features are characteristic of the activity of architecture.

Recording and managing the intentions that drive the enterprise are necessary conditions to establish readability in the enterprise and to ensure coherence in the transformation activities. Alone, they are not enough. The signification and implication of each objective must be made explicit and the relationships between objectives analyzed, and potential contradictions or support revealed. Substance must be given to the slogans and the concept behind the term shown. Thus, it is often vital to restore meaning to expressions that have become routine, almost incantatory, like "customer focus", "innovation", "enterprise culture", etc. Such expressions tend to be rooted in ritualized management speech and lose their meaning. In order to sidestep this disastrous phenomenon, the only way is to exercise constant vigilance and to fill the concept with an activity of observation and analysis. This activity cannot be undertaken by management due to the obvious conflict of interest.

¹ We will henceforth use the term "enterprise" to refer to any form of organization or organized action.

² To give an example: an "innovation" department is set up in response to a strategic objective but, if we do not fully grasp the consequences of what a true innovation culture requires, the transformation will pass us by.



Elucidate the values

There is a prerequisite to the work on objectives: an objective is only meaningful if it is based on the presuppositions that drive and limit it. Here, more fundamental elements intervene and provide, as it were, the Cartesian coordinates, against which the

objectives will be able to be defined: namely values. It has become customary for enterprises to communicate around their values. One can but applaud this as it reveals the fundamental nature of the enterprise as an overall phenomenon, not only an economic instrument or production force but also a collective space where subjectivity begins. Values, though, form a subtle phenomenon; many possible deviations from them lie in wait:

- Communicated values, artificially established, may differ from the deep and genuine values, patiently built up over the history of the enterprise.
- Each element of the enterprise down to the individuals has its own value system. For example, engineers in the R&D department, as much by education as by function, value certain virtues that have formed the scientific ideals, whereas, in other functions, we will sacrifice more on the alter of Mammon! It is unrealistic to think that the value systems of the different elements of the enterprise will spontaneously fit or merge as one.
- Ideal values may conflict with actual practices or prevent the enterprise from adapting to its environment...
- The value hierarchy of individuals may change, as in the obvious case of parenthood.

These factors, as subtle as they may be, directly affect the behavior and performance of individuals and organizations. It is with good reason, therefore, that they are taken into account in the equation of the Enterprise System.

Capture business knowledge

It seems obvious that before changing an object, we need to know about it. However, when the object is as complex as the enterprise, the knowledge often remains diffuse, informal, distributed in the heads of individuals, each of them carrying a part.

Moreover, knowledge seems to be valorized in proportion to hierarchical position, at least in some cultures. All too often, this happens to the detriment of operational knowledge and business fundamentals, even though these forms of knowledge ought to be considered the greatest wealth of the enterprise.

Besides this problem of recognition, the knowledge is often difficult to share and risks being lost, as it is not formalized. Yet, when it comes to innovation, optimization or a better customer response, new ideas spring up purely from the meeting and combined efforts of different cognitive universes. It is therefore essential to create the conditions that will allow for serious thought about the business to be resumed, anew. Among these conditions, business modeling, that is to say its formal representation, counts for a lot. It requires an effort of listening and of abstraction but this effort is more than rewarded by the creativity which arises as a result.

Analyze performance

The main function of management is to drive performance. This strategic management will be all the more effective if the mechanisms of the activity have been analyzed in detail. This task is not confined only to modeling: it involves establishing the hierarchy

of factors that contribute to the enterprise performance. It requires surveying the field and is translated by a series of interconnected indicators. These indicators not only make it possible to guide the person driving performance but also to compare the performances of several entities with each other and to learn from it. Unlike the approaches that reduce analysis to a selection of indicators present in dashboards, here the requirement is to understand, in an objective manner, how the value is created, in some situations lost, or in others goes to waste.

Imagine the future enterprise

Management is involved in the strategy, both in its elaboration and in its implementation. However, the strategy is not the vision: on the one hand, it does not describe in sufficient detail the desired future state of the enterprise; on the other hand,

Praxeme Institute ☐ http://www.praxeme.org Ref. SLB37en-PxBusArch.docx v. 1.2



it is marked by circumstances and sees its horizon ever closer³. Vision, on the contrary, projects the enterprise into the distant horizon: the long term is required, the only element able to make deep transformation possible. A function, separate from management, is therefore required to manage this long-term vision. This prospective and creative function should not, under any circumstances, dominate the enterprise. Its role is to bring ideas and ensure continuity in investments over the long term.

Stay on course

Transform, deploy the strategy in concrete actions, and firmly root projects in the

For the same reasons as above, transformation programs are always at risk of veering off course, taken over by a new concern, regardless of the consequences for the construction that was underway. Already, breaking down a program into initiatives and projects can also endanger the coherence of the vision. It is a necessary exercise but one which may lead to a dilution of inspiration and ruin the initial ambition. A mechanism must therefore be put in place to thwart these tendencies, firmly root the projects in the vision and continue to instill the spirit of transformation, against all odds.

In the transformation of the enterprise, the manager expresses the desire and carries the stakes. To succeed, he/she must be assisted so that the coherence and pertinence of the objectives be guaranteed and that certain conditions for success be united, notably: the elucidation and negotiation of values, the formalization of business knowledge, performance analysis, and the design of the target. During the transformation, new elements may surface or initiatives may deviate from their trajectory. The manager must be informed about them and, to this end, must be assisted by resources able to detect the unexpected detail while, at the same time, keeping the vision in mind.

What needs to be produced to control the transformation

The Enterprise Model

The actions indicated above toss around vast amounts of information and call for countless decisions to be made. If this mass remains expressed in natural language, spread across hundreds of texts, there is no likelihood of controlling either the content

or the structure. Without this control, the enterprise is condemned to a huge loss of energy and a high rate of redundancy. Worse still, it may miss out on opportunities for improvement or economy because it is incapable of bringing that which can be brought closer together. How can we imagine that an object as complex as an enterprise can be described with several texts and that nothing will escape us?

Enterprises which take transformation seriously begin by describing themselves and their vision: what they want to become. This description should be quite well structured and formalized so that it becomes an infallible support for decision-making and action. It therefore conforms to a formalism that ensures certain qualities. This is what we call a model: a formal representation of a portion of reality for specific ends. We speak of the "enterprise model" to refer to a set of rigorously articulated models that describe the enterprise in all its aspects.

We can over-formalize or destroy the communicative power of a model. However, one thing is certain: in the absence of a model, management navigates by sight or rather feels its way along, with its own understanding of the enterprise as its only guiding light. The enterprise model is that which articulates how management perceives the enterprise with representations made by other enterprise stakeholders, internal or external. It coordinates the multiple perspectives, each one revealing a necessary aspect of the enterprise.

It is not necessary to have fully developed the enterprise model, in all its details, before beginning to act, thank goodness! But it is essential to throw down the foundations very early on, to set the structuring principles, so that

³ Due to an uncertain economic environment, the given time horizon for an enterprise strategy is reduced. In some cases, even, the strategy can be revised several times in the year ("sliding" strategy). If this phenomenon were to continue, we would have to admit that we had gone from a strategic exercise to a purely tactical one; hence, the importance of vision.



later the repository can be enriched by all the work done and the enterprise model can be developed harmoniously, step by step.

The methodology analyzes the Enterprise System through seven carefully articulated aspects, which we will present below.

The intentional aspect

To begin with, the so-called "intentional" aspect gathers the elements which make up the finalization system of the enterprise: values, wants, valorization and vocabulary (the four facets). These elements are relatively intuitive; at least their nature does not

present any particular difficulty and they have the advantage of being perceptible by all the enterprise actors. The table below shows these four facets and their contribution.

Figure SLB-37_2. The four facets of the intentional model

Facet	Type of element	Examples	Discipline	Action examples
Values	Value, ideology	Respect of the individual, enterprise responsibility, justice	Axiology	Elucidate the values Negotiate the values
Wants	Objective, requirement	"Capture a market" "Design a new, adapted product"	Teleology	Elaborate the strategy Motivate the personnel
Valorization	Indicator, measure, improvement potential	Revenue progression, productivity, success rate of sales appointments	Metrology	
Vocabulary	Term, definition		Terminology	Collect the glossaries, give a canonical definition

These four approaches are closely coordinated. For example, the indicators materialize an objective and enable it to be "objectified"; in return, a potential improvement detected from the performance analysis may itself lead to a new objective. The terms and their definitions are essential to ensure that the objectives, requirements and indicators are properly understood. The relationship between objectives and values is a particular sensitive one.

So, the intentional model is the starting point for all transformation: it enables the end goal of the transformation to be clarified and communicated and plays a key role in employee motivation. Provided that it respects a minimum of formalism, it also prepares the other models of the Enterprise System.

The "business" aspects

When we think of the enterprise description, we often think of process models. Indeed, they enable the enterprise activity and its interactions with its environment to be represented. However, these representations suffer from several defects, the main one

being their organizational nature: a process always carries with it organizational choices and ways of doing things. These representations are certainly necessary but, by their nature, are difficult to share and do not encourage innovation. The essentials should be extracted from these activity models: the business fundamentals that do not change when the organization changes. This essential model establishes the fundamental business knowledge. Today, one effective technique of doing that is semantic modeling, which produces a "business object" model. This model responds to the requirement to capitalize on the business knowledge. It also acts as a platform of support to revisit the fundamentals and so innovate in a radical manner.

The semantic model answers the question "what?" (what does the enterprise make? what does it handle?); the activity model – or pragmatic model – answers the question "who?" (who does what?). To fully describe the



business, the question of "where" must also be answered (where does the activity take place?). A third model, the geographic model, is therefore needed.

These models are structured according to different criteria. Here is a point with serious consequences. Indeed, the structure of these aspects should be reflected in the IT and logistics system which must be aligned with the business.

Projection in the technical system

The aspects presented up until now define the business, its intentions, its practices and its geographic deployment. The vision – or target state of the enterprise – also includes aspects linked to the equipments and automation of activities. The method therefore

introduces a "logistics" aspect which includes the machines and software components that are distributed there. As this aspect is more technical, it requires specialized competences, which makes communication with the business actors and executive management of the enterprise difficult. To facilitate this communication, the method introduces an intermediary aspect, a link between the business and the technique. This intermediary aspect is known as the "logical aspect". Here, metaphors are used, such as the urbanization of information systems or service oriented architecture. Due to this, the logical aspect is the common ground for meetings and conversations between business representatives, particularly the business architect, and the designers of the technical solutions and logistics and IT system.

The value of the logical model also lies in the opportunity that it offers to effectively rethink the optimal system architecture that tools the value chain. Indeed, rather than just referring to existing solutions, and in so doing removing all possibility of innovation, the logical model is derived from "upstream" models which describe the business as is or as we want it to become. Thus freed from existing solutions and preconceived ideas, the logical model paves the way for innovative solutions and a full rethink of tooling.

On the other hand, the design work for the optimal technical system requires specific competences from outside the domain of the business architect. The business architect only intervenes to check the alignment of the design with the business, its needs and directions. For example, the strategic direction towards the digital economy has been specified in business model terms, perhaps with a redefinition of the product and services catalog and adaptation of the processes, under the guidance of the business architect who has ensured the coherence and maintained the inspiration. The business architect still has to verify that the IT architect has drawn the necessary conclusions regarding the IT system and that the impact on the system structure has been well perceived. Another example is customer focus: it occasionally leads to the business model being turned upside down and certain processes totally overhauled; it does not tolerate the redundancy rate which affects current IT systems well.

The enterprise model enables the target state to be described towards which the enterprise wants to head. Without such a model being sufficiently developed, transformation will remain superficial or will run into serious difficulties. Opportunities for improvement will be wasted and disarray will ensue.

This enterprise model is made up of several models which each deal with one aspect of the Enterprise System. The first of them is the intentional model through which management, followed by the rest of the enterprise, specifies and negotiates their objectives and their values. The business is described through:

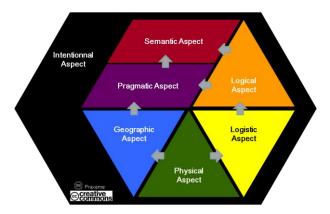
- a semantic model, which fixes the fundamental knowledge,
- an activity model, which describes the organization and the processes,
- a geographic model which deals with questions regarding the localization of the activities.

These models are rigorously articulated in such a way as to ensure the coherence of the design. They provide a successful expression of the strategy and specify its implications. Furthermore, because they respect precise rules, they can be reused by the designers of the technical system (logistics and IT) who tool the business.



Figure SLB-37_3. The framework that organizes the aspects of the Enterprise System

The appendix contains a more detailed presentation of the reference framework (see p. 16).



How to go about succeeding in one's transformation

Conditions of success

The first condition of transformation success lies in the desire and sincerity of the change. The second is the seriousness given to defining the transformation. This presupposes that the existing state and reasons for change have been analyzed, as well

as describing the future state with sufficient rigor. Finally, once the target is known, the most delicate task remains to be done: establish the trajectory, after having anticipated the difficulties as best as one can.

At each stage of the transformation process, Business Architecture has an important role to play:

- As seen before⁴, it helps to analyze the real intentions and to add weight to the key concept.
- With the help of the right models, it specifies the contours of the future Enterprise System, at least in these purely business aspects.
- It contributes to elaborating the transformation trajectory, by bringing its knowledge of the stakes and constraints of the different enterprise functions. In this exercise, it is characterized by its concern of the whole and the long-term: preoccupied with the coherence and quality of the whole, it acts as a counterweight to the decisions focused on the preoccupations of the moment.

The value of business architecture⁵ lies principally in its holistic approach and its concern of expressing and structuring the business in an optimal way, through the organization, processes, but also knowledge. Its contribution is linked to simplification and innovation.

The question becomes: how to go about deploying business architecture and the vision it embodies?

The level of detail

Firstly, we should ask ourselves what those in architecture do. Presenting all there is to do in order to transform the enterprise may alarm because of the mass of information that must be gathered or produced. We have spoken of models which can be extremely precise and detailed. Do all these tasks fall within the domain of the business architect? The practical response is already found in the organizations: they do not hire enough architects to cover such a workload. In fact, the architect is not the modeler. What characterizes the architect is his/her scope of view: it covers the whole enterprise. The price to pay for this effort is, of course, not being able to get down to the details.

All the same, the relationship between global/local or general/detail is not so simple. Indeed, it would be too easy to map the enterprise and architect it without having checked its behavior and its feasibility⁶. The architecture is only

8 Praxeme Institute ☐ http://www.praxeme.org Ref. SLB37en-PxBusArch.docx v. 1.2

⁴ See Ensure the coherence and sincerity of the objectives p. 4, and "The intentional aspect" p. 6.

⁵ See "Business Architecture Value Proposal", cf. bibliography.

⁶ We must speak out against the abuse of presentations here: a slide is not an architecture.



valid once we are sure that all the details will find their rightful place without ruining the quality of the whole. It is important, therefore, that the architect has the capability of anticipating the infinite diversity of the elements that will be housed within the proposed architecture. This is what makes this job difficult.

From this situation, a skill requirement is derived: the architect must be or have been a modeler; at least, he/she should understand the problems that the modeler faces, in all the aspects covered by business architecture. Ideally, architects should have a level, or have had modeling practice to the level where they are able to abstract the rules and principles that underpin the quality of the models.

This does not mean that the business architect acts as a modeler: it is not his/her responsibility to produce the details of the models; what we expect the business architect to do, is to elaborate the structures into which the models will fall. The business architect should do it with full knowledge of the facts and awareness of the implications. For example, the way the domain boundaries are cut up by the business architect will lead to organizational effects and may come up against impossibilities when the business architecture is projected in the technical system.

The continuity principle

One point often neglected and yet which determines the effectiveness of the investments is the continuity between the grand vision of the architecture, on the one hand, and the local implementations, on the other. This continuity must be perfect and

each element should fit together naturally in the whole.

Let us take an example in the semantic aspect. The architect will not spend the time necessary to develop a true semantic model: however, he/she must be able to read it and to detect, among other things, whether the genericity has been taken far enough or not. The architect will check, in particular, that the semantic model is not polluted by organizational or technical considerations which will reduce its scope and stability. The architect should be able to detect any difficulties linked to the structure that he/she recommended for the semantic aspect. The architect will notice, for example, that the coexistence of a Client class and an Employee class will generate redundancy. He/she will encourage the formal and structural quality of the model and will be capable of estimating the millions of euros saved and the degrees of agility gained, by applying architecture rules. The vigilance exercised by the business architect will lead to this type of benefit.

Such rewards rely on a prerequisite: that the architect and the modeler speak the same language and use the same notation. This is a consequence of the continuity principle between the global vision and the detailed representation.

The level of concern

Business architecture differentiates itself from other architecture categories by the level of concern that it considers. Among the seven aspects that make up the Enterprise System, business architecture is concerned with the intentional, semantic, pragmatic

and geographic aspects. It also intervenes in the logical aspect, although it is not responsible for it. It does however verify the adequacy of this aspect with the requirements and strategy. At a minimum, it makes sure that the state of the proposed technical system will not handicap the planned transformations.

The relationship with enterprise architecture

Before specifying the relationship that business architecture has with enterprise architecture, we must first clarify the latter. If we keep to the terms, we understand enterprise architecture as being the discipline that deals with the enterprise in all these aspects⁷. In this view, business architecture is, therefore, a subset of enterprise

architecture, and the business architect is answerable to the enterprise architect. There is no choice but to accept that this is a theoretical view. In practice, the overwhelming majority of people who have the title of enterprise architect work within the IT department; this job title is no more that a new name for "IT architect".

⁷ This is the definition given in the *Enterprise Transformation Manifesto* (see in the bibliography).



In these conditions, the relationship between the business architect and the enterprise architect develops around the logical aspect, defined as a link between the aspects and competences connected to business, on the one hand, and the technical aspects and competences (notably IT), on the other.

Consequently, the role of integrator of the aspects and supervisor of the transformation chain, which goes from strategy to deployment, falls to the business architect. This remark is of crucial importance for the organization of the transformation. There are so many wasted opportunities due to the confusion that reigns!

Organization of the function

Still in the perspective of the transformation, the critical point for the management is the coordination of the areas of expertise and the stimulation of the imagination. It is with this idea in mind that we deal with the competences of the business architect and

the organization of the function.

To answer this concern, the ideal organization consists, for the management, in acquiring a "transformation department" in which one would find all the key profiles who think about and drive the transformation. One would find, of course, business architects, working alongside strategists and organizers. Should the transformation have a large technical or IT content⁸, representatives from the corresponding functions would also be part of this transformation department. A more radical solution: the transformation department absorbs the functions involved. This option, at least, avoids having the transformation department behave as a consultative body, giver of advice but without the necessary means of action.

Such a transformation department will act more effectively if it reports to the executive management and is seen as the management's task force for implementing the change that has been decided.

Competences

Regarding the competences, it is important to avoid the error of having a single profile: transformation requires different skills. The whole art of the person driving the transformation will consist in maintaining a balance between the specialties and creating synergy. This is particularly obvious between "business" competences and technical competences. Within the domain of business architecture, the competences to assemble are many and we cannot always find them within a single profile; they cover: business knowledge, sensibility to organization and management theories, business watch for those trends that modify the business (for example in the marketing domain), performance analysis, organization and process design, modeling techniques, understanding the "business" stakes and strategic directions, the capability of reformulating general directions into concrete actions... Once again, the architect is not asked to do all this and to do down into great detail; he/she is asked to come up with the comprehensive plan and to guide the integration of the elements into this overall plan.

In order to see things more clearly, we can organize the skills into two main categories, corresponding to welldefined psychological profiles:

- on the one hand, content skills (form and content, modeling and business);
- on the other hand, people skills (listening and communication, taking expectations into account and dissemination of the decisions).

If one of these categories were to be missing, then the transformation would be doomed to fail. Yet, the natural path of organizations leads to favoring a single profile, often that of leader, and so oriented exclusively towards relationships. This trend considerably weakens the transformational power of architecture and sometimes condemns the architecture function to enter into a political game for which it is ill prepared and where it loses its very essence.

Praxeme Institute http://www.praxeme.org Ref. SLB37en-PxBusArch.docx v. 1.2

⁸ The textbook case is the adaptation of the enterprise to the digital economy (cf. reference SLB-41).



The relationship with management

The term "architecture" came to us as a metaphor. We use it to say that the enterprise must consciously build itself, as a coherent whole, efficient and harmonious. As for any construction, its size, its message and even its style are decided by the sponsor

before being designed and detailed by the architect. Without a prince, no architect! Often, by choosing the architect, the sponsor chooses the style and states the ambition.

This goes to show that the relationship between the business architect and the management of the enterprise must develop at the very top of the enterprise, there where destinies are decided. Otherwise, we can no longer speak of transformation and the architecture is reduced to mere decoration.

This also shows the necessity of a regular and close relationship between the architect and the CEO. Together, they discuss and elaborate on the project, make alterations to the plan, adjust the details as the construction goes along. Decision-making happens according to a subtle process, closer to sharing and co-creating rather than following orders. This explains that, in the enterprises where the executives are not involved with enterprise architecture, this discipline vegetates and does not fulfill its potential.

The relationship with strategy

Enterprise strategy is often given as the starting point for business architecture, at least in its design effort. This should not wipe out the particular nature of architecture, a nature which opposes it to strategy in many respects.

Indeed, the strategist is especially attentive to the environment and to the positioning of the enterprise in its environment, whereas the architect looks after the substance and structure of the enterprise: his/her concern is more internal.⁹

Another point: the strategist reasons in a shorter term, indeed one which is increasingly short, with the generalization of sliding strategies which can be re-evaluated several times per year. On the contrary, the architect, aware of the effort required to transform the enterprise, takes a long-term view and adds to the necessary external adaptation, the search for internal balance. The strategist can modify the destination and the trajectory of an aircraft carrier in immediate reaction to changing conditions, but, if the equipment needs to be modified, the architect will request more time.

Finally, if the strategy inspires the enterprise architecture, it is not the only source: the architect integrates other elements into his/her reflection, notably the innovations or opportunities that can come out of any of the seven aspects of the Enterprise System: new forms of organization, new practices in such and such a function, technological possibilities, etc. It may happen that these opportunities take on such proportions as to affect the strategy¹⁰. In this case, it is the architectural thinking that inspires the strategy. This illustrates that the relationship between strategy and architecture is not a one-way street and that the enterprise would benefit from a strong link between these two disciplines, as achieved through a "transformation department".

The actions of the business architect

When all is said and done, what does the business architect have to do? This article is not sufficiently long enough to detail the actions; we will instead define the attitude of the architect, through his/her key functions, at the enterprise transformation level¹¹:

ensure the flow of ideas in the enterprise;

stitute \$\frac{1}{2}\$ +33 (0)6 77 62 31 75 \$\infty\$ dominique.vauquier@praxeme.org

⁹ This remark does not contradict the interest the architect takes in the interactions of the external systems and the issue of interoperability. The strategist identifies these external systems and evaluates the need for interactions; the architect elaborates the modalities of these interactions, both organizational and technical.

¹⁰ The most obvious case that springs to mind is that of digital technology which can go as far as modifying sales techniques or the customer relationship. As it happens, the decision chain leading to the transformation is bottom-up: it begins with the technology watch, then goes through business architecture which reformulates the technical potential in usage terms and effects on the enterprise, and results in the strategic decision, having evaluated the predicted impact on the market.

¹¹ Regarding the detailed process of business architecture, see in the conclusion on the methodology.



- elaborate the vision;
- help to realize the vision.

Ensure the flow of ideas

The business architect assumes a role of passer-on. In this complex organization that is the enterprise, made up of highly individualized cognitive universes, with various rationalities passing through them, the business architect is the one who circulates the

information, decisions and ideas relative to the enterprise construction and transformation.

This role is essential in innovation and adaptation. In particular, it contributes to reducing the divide between business and IT (or more generally, the technique). The global point of view adopted by the architect enables possible improvements to be identified and wasted efforts eliminated.

With other functions such as quality, technology watch and innovation, architecture is part of an organization that lies parallel to the hierarchical line. As much as the latter is focused on the day-to-day operations and performance, this parallel organization is concerned with long-term improvements and construction. Its mission is to observe the running of the enterprise and propose improvements. To this end, it is always on the look-out for anything that steps outside the rules, be it a malfunction or a suggestion.

Elaborate the vision

From the material gleaned by its initial action, the architecture function moves on to its constitutive activity: design. For business architecture, the design materializes through the enterprise model, in its future state. It elaborates the overall vision, in any event in

it "upstream" aspects, as detailed above (p. 5).

Several dangers lie in wait for the practice of architecture:

- to underestimate this global design action, as its attitude and its horizon run counter to the prevalent ongoing activity;
- to limit the deliverable and the target description to a superficial presentation and a theoretical drawing¹²;
- to disregard the boldest scenarios, because of worries about receptiveness and consensus in the enterprise;
- on the contrary, to go too far in the transformation without doing what is required to bring about a real conviction and involve, at least, the most active part of the hierarchy.

Help to realize the vision

owner;

Once the vision has been agreed upon, there are two possibilities:

either the architect remains in charge and takes on the role of contracting

• or the architect retains only a consultative role in accompanying the transformation.

The first scenario remains true to the architecture metaphor: architects leave their design office with the approved plans and instructions for the different trades under their arm; put on their boots and go to the building site to monitor the work, perhaps test and rectify the boldest ideas.

However, this is not what is commonly observed with business architecture. In fact, we have to reckon with a major imbalance linked to the dominance of the project mode. The largest part of enterprise investments is managed through projects, programs or initiatives. The resources are placed under the aegis of the directors. In comparison, architecture has no means, other than its authority, at best. In classic architecture, the name of the architect is associated with the building itself. Who will associate the business architecture function with the transformed enterprise?¹³ This is where the metaphor reaches its limit¹⁴.

¹² Architecture is not the drawing, even less the "slideware". The building will only stay standing if the rules of the art have been respected. The presentation can be a communication tool; it is not the description of the architecture. The reputation and the value of the discipline are in the process of being ruined by these superficial practices – as has been the case with Enterprise Architecture over these last years.

¹³ The same can be said of enterprise architecture.



In any case, for a real architecture function to exist and for it to bring its full value to the enterprise, the architect has to behave as guardian and promoter of the vision. This means fighting against the short-termism, staying on course, broadening the horizon. A lot of effort and investment is wasted by being too dispersed and inattentive: the architect's role consists precisely in fighting against these natural tendencies of the social organism. This action rests on the coherence of the vision and the constancy of the will.

Business architecture has a major role to play among the transformation disciplines. It dialogs with strategic design and all specialties capable of bringing new ingredients to the enterprise model. It ensures that ideas flow in the enterprise and reformulates them in a precise manner and positions them in the common framework. Its founding act is to develop the target, the desired future state of the enterprise. Nevertheless, this work is fruitless if it is not supported each time by the CEO of the enterprise. No sponsor, no architect!

The architect's time is spent between thinking deeply (design of the target) and accompanying (project intervention). The reality of the architecture depends on the balance found between these two moments.

Conclusion: the resources of the open method

Summary: the value of business architecture

The enterprise is a complex object: it is made up of a multitude of interacting elements, humans, collective entities, physical objects, motivations, knowledge, etc. In order to be able to transform such an object, an accurate and precise perception is required. The discipline of business architecture takes on this task, at least for a part of the elements.

Thanks to its analysis and representation techniques:

- it helps to clarify and to organize the intentions, values and goals that form the engines of the enterprise actors;
- it expresses the business knowledge so that it can be handled and revisited for innovation;
- it seeks the optimal structures for the enterprise to operate better (through the organization, the division into processes and the structuring of knowledge);
- it dialogs with the technical functions to equip the activity with the best tooling possible.

Its constant concern is to ensure the coherence of the transformation. An enterprise without an architecture function deprives itself of the global vision and puts itself at the mercy of drifting towards isolation in its entities. The architecture function is more than financed by the economies it provides by banishing redundancy. In addition, it acts as a facilitator for innovation.

Recommendation

To update this transformation potential, the architect should nevertheless avoid certain pitfalls. The first one is the living contradiction that architecture represents in the enterprise culture today. Because architecture gathers all the characteristics that have been removed from the "normal" way the enterprise is run and from its dominant ideology: intellectualist, abstract, holistic, viewing the enterprise in the long term, it is everything the decision-maker hates! It is especially because this way of thinking is marginal, albeit vital, that it must find its place, for the common good. Architects must resist the prevailing pressure to stick to their ideal, no matter what the cost.

Another pitfall is attributable the architects themselves: from the moment they sacrifice the rigor of their practice to the demagogy of communication or haste, from the moment they choose the easy option by giving up the rules of

¹⁴ By repercussion, this limit on responsibility again reflects on the very content of the discipline. What remains of the architecture metaphor once the creator-transformer responsibility has been removed, is the design of the whole. However, in part because the business architect has neither the responsibility nor the recognition, he/she finds the legitimacy contested. From there, comes the compromise and finally the renouncement. As proof, how the time is spent: in practice, the architect spends more time tagging along behind the projects than in front of the drawing board.



the art, their deliverables will have no more value, their inspiration peters out and they lose their raison d'être. Consequently, they must remain very particular about the content and rigorous regarding the form.

Some help

To help them with their task, the Praxeme enterprise methodology offers business architects:

- 1. firstly, a framework that gathers together the types of elements to consider and which rigorously specifies the content and the quality of the deliverables required in the transformation;
- 2. secondly, guides that state the modeling techniques for the aspects of the Enterprise System that they are responsible for¹⁵;
- 3. finally, to facilitate their interaction with the technical, logistics and IT functions, business architects can refer their interlocutors to guides of "upstream" aspects, so that every actor fits into a global and coherent approach, each according to his/her own specialty¹⁶.

Concerning the process for the architecture activity, the method stresses the distinction between the project mode and the transformation activities process. This distinction has a strong impact on the organization.

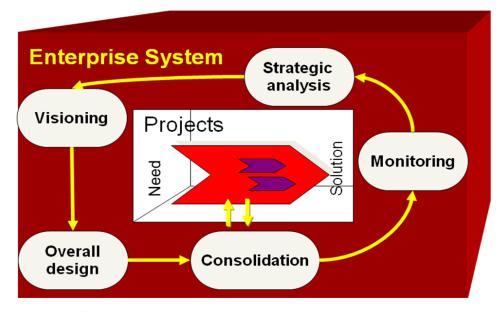


Figure SLB-37_4. The global dynamics (block diagram)

For the decision-makers, differentiating between a true architectural design and a simple drawing is not easy. To guide them, the method provides architecture rules¹⁷.

An appeal The Praxeme method results from the initiative for an open method. It has been developed with the support of the enterprises participating in this initiative and who have accepted to pool their investments on questions of method. The foundation is established and solid, proven by

¹⁵ As a reminder, the aspects that business architecture is responsible for are the intentional (strategy, goals, indicators...), semantic (knowledge), pragmatic (organization and activity) and geographic (localization of the activities) aspects.

¹⁶ In particular, the method explains how to derive the technical and logical models from the "business" models (if they are well formed). In this way, it valorizes the investment granted on the models: they serve not only to describe and redesign the business but also to build the tooling and align it with the actual perception of the business.

¹⁷ The majority of these rules apply whatever aspect is being considered. There are also requirements specific to each aspect; for example, we do not treat knowledge and physical means in the same way.



experience, but much remains to be done to thoroughly describe the activities involved in enterprise transformation, from strategy to deployment.

We therefore invite any enterprise or organization with needs as regards methodology, particularly in the domain of business architecture, to join this initiative.



Appendices

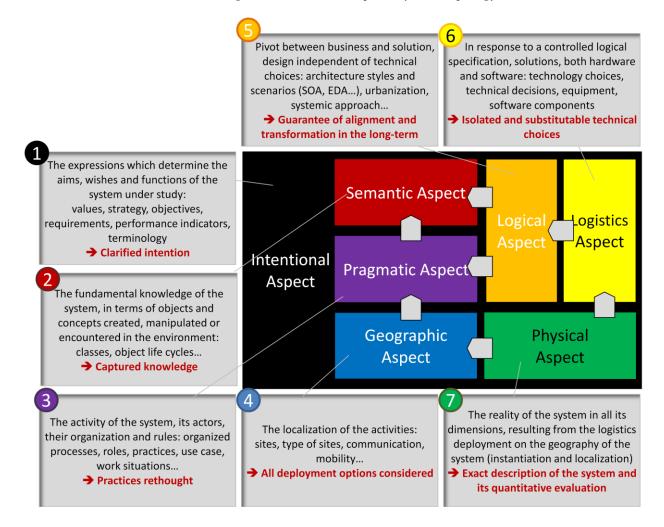
A reference framework that says everything about the enterprise and articulates the areas of expertise

Introduction The reference framework is an essential tool for organizing the mass of information and decisions to deal with when we approach the description of the enterprise. It would be impossible to do without it in the case of transformation.

The framework proposed by Praxeme integrates several traditional methodologies and is based on a detailed metamodel. It is known under the name of "Enterprise System Topology", "topology" taken in its etymological meaning as discourse of place: the schema shows *where* each element of enterprise information should be positioned, depending on the nature of this element.

The below schema provides a brief overview¹⁸.

Figure SLB-37_5. Enterprise System Topology



Praxeme Institute ☐ http://www.praxeme.org Ref. SLB37en-PxBusArch.docx v. 1.2

¹⁸ For more details and for a justification of the schema, see the Praxeme General Guide.



Bibliography

On business architecture

"Business Architecture Value Proposal", ref. PCD-02, http://www.praxeme.org/index.php?n=Modus.BusinessArchitecture

"Business Architecture Blueprint – A customer-centric and multi-accessible enterprise", to be published

"The Enterprise Transformation Manifesto", http://www.enterprisetransformationmanifesto.org

Presentation of Praxeme

Presentation leaflet, http://www.praxeme.org/index.php?n=Syllabus.SLB01

Arguments for an open method,

http://www.praxeme.org/index.php?n=Syllabus.Prospectus

"A method at your disposal", 2-page summary, ref. SLB-39, http://www.praxeme.org/index.php?n=Syllabus.SLB39

The white paper, ref. SLB-02,

http://www.praxeme.org/index.php?n=Syllabus.SLB02-WhiteBook

Architecture rules

See: http://dvau-en.praxeme.info

The guides

The general guide provides an overview of the method.

It is continued with one guide for each aspect.

The business architect will benefit from reading the guides of the intentional, semantic, pragmatic and geographic aspects. The general notions of the guide of the logical aspect will help him/her to dialog with the logical architect or the information systems urbanist.



Glossary

The definitions below are taken from the Praxeme Thesaurus, available online at www.praxeme.org.

Term	Definition			
Activity Domain	An area of activity, which is organized around a role or entity in the organization			
Architecture	Discipline that embraces an entire system and focuses on its properties as a whole			
Aspect	Part of reality, which has been isolated for the sake of study, in accordance with its inner			
rispect	logic			
Business Architecture	Transformational discipline that translates the strategy and helps to transform the			
	enterprise			
Complexity	Quality of an object when it can be understood and its behavior predicted only by			
	considering numerous inter-related elements.			
Complication	Unnecessary and artificial complexity			
Derivation	The action of obtaining something from a source or origin			
Design	To invent			
Domain	An area of knowledge or activity			
Enterprise Architecture	Discipline that analyzes the strategy and determines the main decisions for transforming			
1	the Enterprise System			
Enterprise System	The enterprise that perceives itself as a system			
Enterprise System Topology	Frame of reference that organizes the information and decisions concerning the			
	Enterprise System			
Enterprise	Any type of organized and willful entity or action			
Framework	Theoretical foundation upon which the enterprise methodology is built			
Geographic Aspect	Records the physical location of objects and actions. Notions of sites, locations, and			
	communication needs appear here			
Ideology	Set of pre-wired answers that the actors use in their day-to-day actions and decision			
	making			
IT Urbanization	Design discipline which aims to structure the information system and align it with the			
	enterprise's strategy and business			
Logical Architecture	Primary description of the IT system			
Logical Aspect	Intermediary aspect that allows for describing the system in a formal way, regardless of			
	technical choices			
Metamodel	Model of models			
Method	How to do something			
Methodology	Discourse on the method			
Model	Formal representation of a portion of reality			
Modeling	To model is to rigorously represent part of the reality, in conformance with specified			
	formal rules			
Object Domain	An area of knowledge, which is organized around one of the main objects of the			
	described reality			
Performance	Result or level of results of an activity			
Pragmatic Aspect	Regroups the different choices as to how business is done: the actors, the responsibilities,			
	the actions on objects, the processes and the work situations			
Praxeme	Enterprise methodology that covers every aspect of the enterprise			
Semantic Aspect	Describes the objects at the heart of the business. Describes the fundamental core			
	independently of how the business is done			
Separation of Concerns	Principle by which we consider various aspects of a reality separately			
System	Set of interconnected elements, perceived as a whole			
Target	Aspirational state of the future Enterprise System.			
Trajectory	Way to take the System from its current state to the targeted state			
Transformation	Collection of activities that define or change the business			
Transformation Chain	Unified concept of activities linked together for enterprise transformation			
Zachman Framework	Framework for enterprise architecture			