

Artistic Programming for Solutions Architects

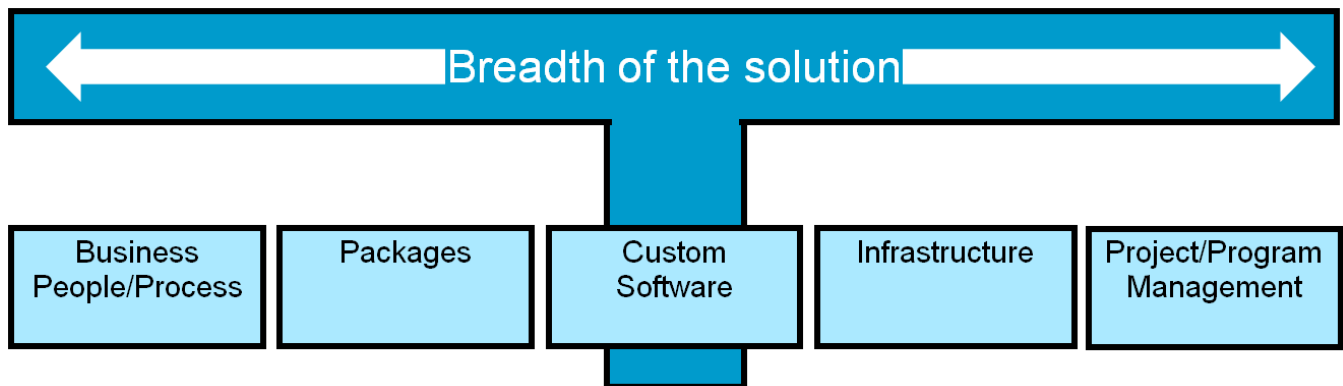
Key Responsibilities of a Solutions Architect:

- Developing an overall vision that underlies the projected solution of a system
- Create a buy-in for the vision of the solution with all the parties involved
- Transform the vision through execution to a solution

In order to accomplish this, a Solutions Architect needs to have:

- Experience with multiple software environments
- Comfort with Complex Heterogeneous System Environments
- Ability to visualize complete systems
- Ability to communicate these ideas to executives, clients, project-managers and the technical team
- Provide sufficient inputs that will guide all the stake-holders in key decision making

A Solutions Architect needs to be what Cap Gemini calls a “T-shaped” professional.



Challenges faced by a Solutions Architect:

Let us explore some of the challenges faced by an emerging Solutions Architect.

Challenge 1: How many years do I need to get the experience with multiple software environments?

Familiarity with multiple software environments and heterogeneous systems cannot be developed organically. Waiting to gain expertise through experience would be a long-drawn task and next to impossible in today's fast-paced IT career path.

What a Solutions Architect needs is the ability to:

- **Think in terms of abstractions**
- **Recognize and re-use patterns**
- **Project the learnings from one experience to other, related fields**

Challenge 2: Are there processes that I could follow to create great Solution Architectures?

The ability to create architecture is part science, but mostly an art form. An architect may follow a number of written procedures to ensure that he doesn't digress a lot from the scope of the solution and to ensure that the architecture is available in a comprehensive form to all the parties concerned.

However, procedures serve as boundaries – they can prevent you from going wrong, but they cannot help you increase your excellence for operating within the boundary. What a Solutions Architect needs is creativity in creating better architectures and elegant designs.

The key skills required by Solutions Architect are pretty individualistic in nature and in addition to “knowledge”, includes various life-skills and problem-solving abilities, like

- *Ability to analyze a problem through multiple perspectives*
- *Ability to balance multiple, often contrasting, dynamically varying goals*
- *Ability to ignite one's own and others' thinking process by asking the right-questions*
- *Ability to perceive the whole as being bigger than the sum of the individuals parts*
- *Etc*

Challenge 3: I am a technical whiz. But I can't put "monetary numbers" to my solutions.

We develop our thinking in a very compartmentalized fashion. "Thinking about technology" is considered 180 degrees in contrast to "Thinking about the business angles of an idea". However, as we grow up any career path, we need to rise above these self-created compartments and be able to see the "Big Picture" of things.

Anybody who can solve problems in a given domain is capable of solving problems in any other domain if he develops the capability to think in terms of abstractions and apply those abstractions to the other domains.

Once an individual masters the art of thinking in terms of abstractions, create generalized patterns, and apply these patterns to other situations, balancing multiple goals would be a trivial task to achieve.

Challenge 4: I am not great at convincing people. How do I create buy-ins?

The biggest challenge to creating buy-ins arises when one falls into the temptation of pushing one's best-perceived idea through other people's views.

The art of creating buy-ins is all about extracting the perspectives of all the stakeholders involved, add one's own ingredient to this (in this case, the technical angle) and making the resultant solution available for evaluation by the multiple stake-holders. It is not necessary to incorporate others' ideas in order to make one's solution appealing to all, but it is absolutely necessary to address their concerns and welcome their preferences.

Creating solutions that satisfies the "Solution Objectives" of all the stake-holders create natural buy-ins.

The best buy-ins is created when we help others think clearly about what they want.

Artistic Programming, through its emphasis on **Systematic Thinking** and **Creative Problem Solving**, trains the aspiring and current Solutions Architects gain the ability to balance the various skills required to fulfill the above responsibilities

Artistic Programming helps the Solutions Architect develop the ability to express their excellence as:

- **Applied "Techies"**
- **Creative Problem Solvers**
- **Visionaries**
- **Communication Experts (create buy-ins naturally)**
- **Business Leaders**