

Project Design Using Design Thinking

Solution Architecture

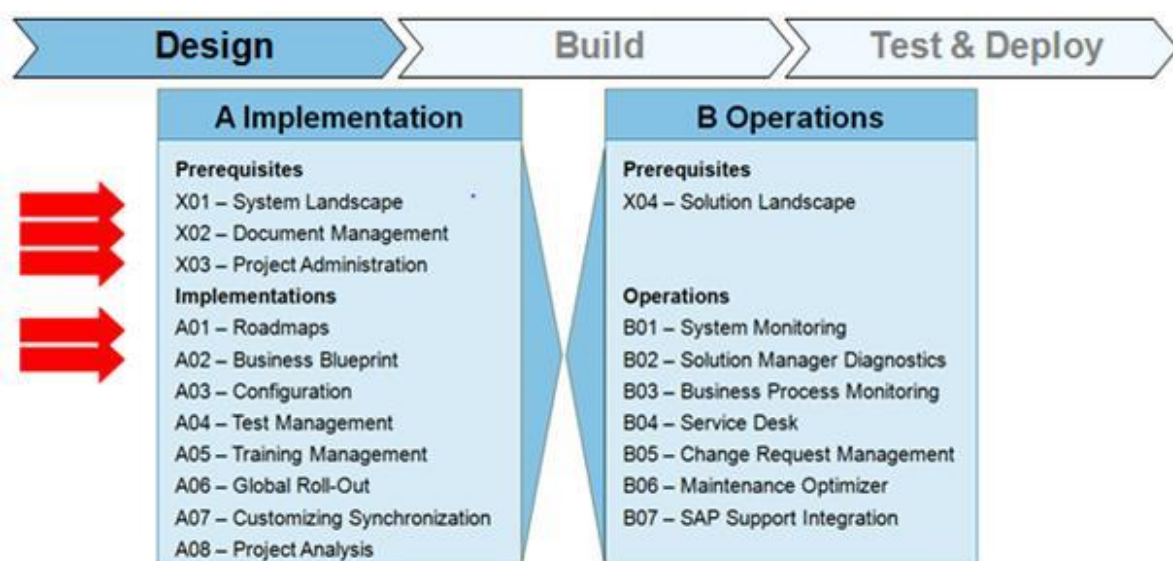
Date	19 September 2022
Team ID	PNT2022TMID43271
Project Name	AI Based Discourse for Banking Industry
Maximum Marks	2 Marks

Introduction

The past decade, digital trends like cloud computing and service-oriented applications have led to new market opportunities across all industries. However, these changes also come with unique challenges and add complexity to the digital landscape of an organization.

And when new solutions aren't perfectly tailored to an enterprise, they yield unsatisfying results and create unwanted problems. Thus, the successful launch of digital projects requires a set of guidelines that align business interests with new IT solutions.

And this is where solution architecture (SA) comes into play. It is an architectural description of a specific solution based on predefined processes and best practices. As the initial step for creating new enterprise solutions, it ensures that every solution meets the business requirements and fits into the enterprise architecture as a whole. From a bird-eye view, solution architects can be seen as the link between enterprise architects and technical architects as they're trying to find the right IT answer to a specific business riddle.



Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

Find the best tech solution to solve existing business problems.

Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.

Define features, development phases, and solution requirements.

- Provide specifications according to which the solution is defined, managed, and delivered.

Example - Solution Architecture Diagram:

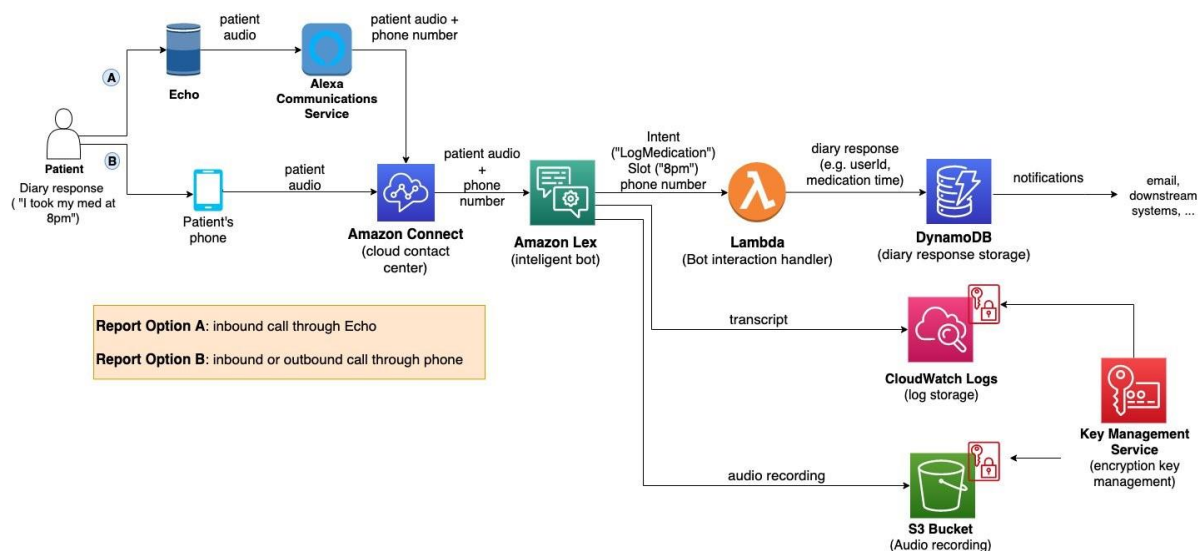


Figure 1: Architecture and data flow of the voice patient diary sample application

The role of a solution architect

It's now clear that a solution architect's main job is to find the best possible answers to technical problems. The process itself is defined by solution architecture best practices. This means that established industry patterns and standards should be used when creating conceptual models. The detailed

solutions are then shared with developing teams, often in the form of a solution architecture **diagram** or a **written document**.

However, solution architects don't just hand out instructions and then leave the scene. They work closely with technical architects and manage all the tasks that are needed for the project to succeed. This involves overseeing time schedules, monitoring technological risks, and ensuring that each activity aligns with the business requirements described in the solution. Therefore, the role of a solution architect can be compared to a technical project manager who keeps track of the project throughout all. Ideally, a solution architect should have technical skills and past architecture experience.

Conclusion

In every new IT project, solution architecture is a vital link between the IT strategy of a business and the successful implementation of technical solutions. By looking at a specific problem, solution architects conceptualize the best possible solution while taking all functional and non-functional requirements into account.

They formulate clear guidelines that help manage technical teams and outline the development stages of a project from start to finish.

But it's not only the close collaboration with development teams that defines the role of solution architects. Since they're translating strategic visions into real-life solutions, they need to have strong relationships with enterprise architects who define the overall IT direction of an enter

Project Design Phase-I Proposed Solution Template

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Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Needs Assessment	Initial Proposal				
	Client Accepts Proposal				
	Graphic Design Phase				
		Client Accepts Graphic Design			
		Invisible Gold Implements Features			
		Client Produces Content			
			Testing		
				Client Approval	
					Go Live