

# Architecture Review Board for Cancer Research Organization

## ORGANIZATION

XTIVIA's client is the first and largest cancer research organization dedicated to accelerating the conquest of cancer. It fosters cancer research, disseminates new research findings among scientists and members, promotes science education and training, and advances the understanding of cancer prevention, diagnosis, and treatment worldwide.

## CHALLENGE

Our client partnered with XTIVIA to assess its current processes and standards to establish the correct size Architecture Review Board (ARB). Our client realized that there were immediate challenges that needed to be addressed, such as:

- **Decentralized Process:** resulting in non-uniform application guidelines
- **Operational Risk:** too many manual touch points with limited governance and controls
- **Inconsistency:** variation in underlying assumptions and interpretation of organizations' guidelines

## TECHNICAL SOLUTION

XTIVIA partnered with the cancer research organization, to establish an **Architecture Review Board (ARB)**, which included:

1. Defining & Establishing the ARB Operating Model; establish ARB, define charter, define membership roles and responsibilities
2. Creating an ARB Process Flow, communication, and prioritization cadence
3. Defining & Implementing Application Development Guidelines
4. Defining & Institutionalized ARB questionnaire
5. Defining the organization's Technology Stack, products /services
6. Defining Buy vs. Build vs. Subscribe Framework & Scorecard
7. Implementing the Financial, Agility, Control, and Technical (FACT) Framework in their organization
8. Defining & Institutionalizing a Technology Framework
  - Environments
  - Development & Migration Strategy
  - Processes
  - Standards
  - Support Request Process
  - QA & Production Deployment Process
  - Technical Review Process
  - Products/Services Approval Process
  - AACR Tool Request & Self-Assessment Process
  - AACR Contractor Guideline
  - Vendor Management Checklist
  - IT Simplification Framework
  - Cost Benefit Analysis Framework
  - Project Estimation Calculation
9. Transition the Architecture Review Board Execution

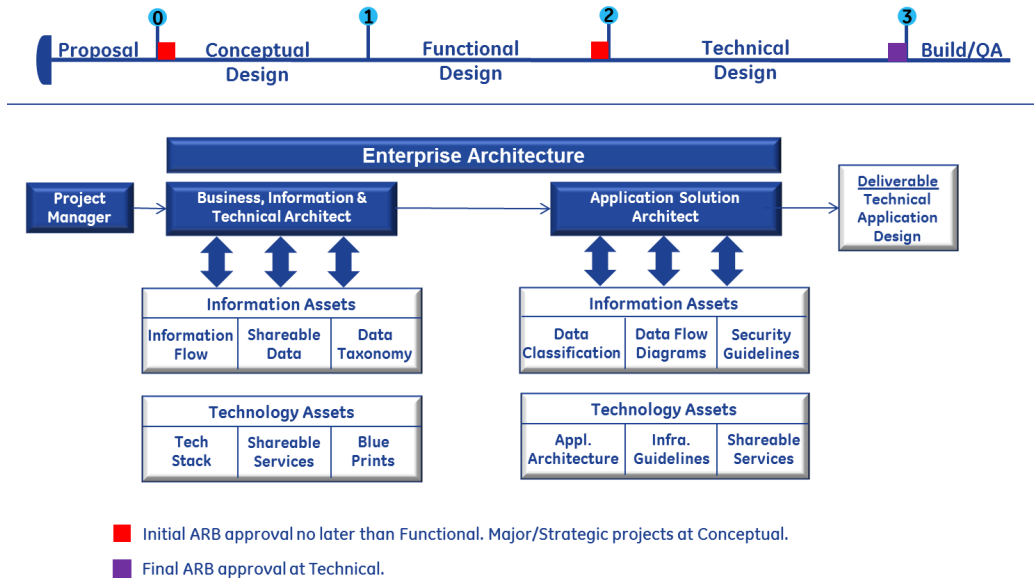
### Architecture Review Board Operating Model

The cancer research organization has a weekly ARB cadence on Tuesdays at 3:00 PM and Thursdays at 10:30 AM, reviewing projects at various phases.

During the conceptual phase, the project's general direction is presented to the ARB, and the board provides recommendations, including identifying specific board members to work with the project as it progresses through its life cycle. In addition, the cancer research organization implemented mandatory ARB reviews for all projects at the end of the technical design phase to vet the technical design before commencing build activities.



Projects with limited scope and impact qualify for expedited, offline approval without the need for formal review by the entire ARB. This is at the discretion of the chair of the ARB.



### Architecture Review Board Overview:

#### Mission:

Provide **technical leadership** and consulting across the organization for project direction. **Set technology standards; drive adherence to tech stack** and industry trends; determine the direction of emerging technologies and identify opportunities for early adoption.

#### Objective:

- Provide process improvement and innovation in the development and integration of software applications.
- Standardize methodology and processes
- Drive application designs that allow for expandability, flexibility, and support of future business requirements

#### Board Members:

IT cross-functional board with representation from the following IT areas:

- Application Architecture & Development
- Data Governance
- IT Operation
- Application Support
- Security
- Business Engineering

#### ARB Review Focus Areas:

1. Problem Statement
2. High-Level Data Flow
3. SLA's
4. Technical Complexity -> Touchpoints/dependencies
  - Does the project impact multiple applications?
  - Does the Project add new System/Application Interfaces?
  - Highlight the changes
5. Data Entity / Data Relationship
6. Wing-to-wing process (To-Be and As-Is)
7. Core Data - Define reusable data
8. Define application roles, security, and access needs
9. Are you using the existing AACR tech stack, or are new technologies/processes being introduced?
  - Consult with ARB for guidance in new product/solution selection



- Please answer the following questions if it is a third-party application:
  - Describe the server and database vendor's specifications
  - Does this application support distributed architecture?
  - Does the vendor provide any security guidelines?
  - Does this project involve the use of declining technologies that are scheduled for retirement?
- 10. Does the project involve retiring any applications?
  - Please provide the impact analysis and updated context diagrams for all impacted applications
- 11. Does the project include any scope items related to regulatory compliance?
- 12. Will the application use existing infrastructure, or is the new infrastructure required? High Availability /Disaster Recovery requirements

## BUSINESS RESULT

The architecture review board was designed to bring together subject matter expertise to guide and consult with projects and programs. A few key benefits of having an architecture review board:

- Provides transparency of decision making: facilitates discussions regarding design, development, and implementation of chosen IT solutions.
- Drive the use of IT standards / Frameworks and support processes
- Evaluate, recommend, and implement new development standards, procedures, and tools
- Provide mentoring and assistance to team members in phases of applications development
- Align new development to strategic vision; enforcing the use of tech stack tools for all application development
- Highlights architecture risk by enforcing the architecture principles and best practices during reviews.

## KEYWORDS

Architecture Review Board, ARB, Architecture Governance

## ABOUT XTIVIA

XTIVIA is a proven technology integration and innovation company known for delivering leading-edge technology solutions to our client's specific requirements, regardless of project complexity. We bring next-level business operations to reality through Application Development, Business Intelligence, Data Warehousing, Database Support & Management, Enterprise Information Management, Digital Experience Solutions, and Enterprise Resource Planning. Our success stems from a demonstrated ability to deliver deep expertise via professional services, empowering clients to successfully, competitively, and profitably leverage their chosen technology. XTIVIA has offices in Colorado, New York, New Jersey, Missouri, Texas, Virginia, and India. [www.xtivia.com](http://www.xtivia.com)