



smart people • smart solutions
Strategic Consulting Guide

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Strategic Consulting Overview

Smart People

Maintaining a consistent system and delivering new initiatives on time and on budget may seem like a daunting task. Yet understanding what is required and delivering a successful solution goes hand in hand with properly setting achievable client expectations. Attainable goals enable productive results.

Logical Advantage repeatedly delivers custom developed projects and strategies with an unbeatable track record. Throughout our history, all of our projects have been delivered on time, within budget, and have fulfilled the requirements of our clients. This success is the result of strict adherence to our process, our development framework, and coding standards.

As a result of our success, Logical Advantage has been engaged by many clients to help their development organizations structure internal processes, methodologies, and development frameworks and standards.

Smart Solutions

All projects follow a process or methodology. Though there are a wide variety of software development methodologies available, all successful software companies follow one consistently. Based upon the requirements and complexity of the project along with the skill levels of the team, need-specific methodologies are determined and applied.

Logical Advantage architects, developers, business analysts, project managers, and quality assurance associates evaluate and modify methodologies to affordably and accurately meet the needs of our clients' projects. Our unique system has become known as **The Delivery Assurance ProcessSM**. Our custom built software is built upon **The Logical Advantage Application Framework (LAAF)SM** which ensures that all solutions are consistent, scalable, supportable, and perform to the expectations of the business.

Logical Advantage's **Strategic Consulting Services** performs an initial assessment enabling our consultants to focus on problematic areas, while at the same time allowing our clients to see the core issues that hinder their IT success. Instead of partial exploration, our thorough assessments provide the answers to many questions, including:

- Is the application architected and coded correctly to ensure scalability, supportability, and security concerns?
- Does the organization have a development framework and standards, and are they being followed?
- Are business needs fully understood and documented correctly?
- Are projects estimated accurately?
- Are standards in place to ensure consistency and quality?
- Are project updates and changes communicated to the business client properly?

The following **Strategic Consulting Services** are offered by Logical Advantage:

- Enterprise Architecture
- Architectural Consultation
- Business Analysis Consultation
- Quality Assurance Consultation
- Program Management Practice Consultation

Logical Advantage works with clients to select a specific problem area to address. Typically one application or one functional area (Design, Development, Project Management, Quality Assurance, or Estimation and Scoping) is selected. An assessment is usually performed over a one to two week period, and is delivered with a roadmap for the implementation of the recommendations that will be made. Once the roadmap is identified, Logical Advantage will assist clients with the implementation.

The following sections outline our **Strategic Consulting Services** in more detail.

Enterprise Architecture

The Framework

Establishing an architecture upon which applications are designed and developed provides an application development framework that meets the needs of the organization and is utilized for all applications built for our clients. Since it is the foundation of all development within the client's development organization, our framework is frequently licensed by our clients.

The Logical Advantage rich framework includes a code generator, a library of reusable components, a logging/error handling framework, and development tools to help us be more efficient. These items are collectively known as **The Logical Advantage Application Framework (LAAF)SM**. In addition, our LAAF framework includes a set of tools to automate processes in order to remove human error and streamline the development effort.

Code Generation

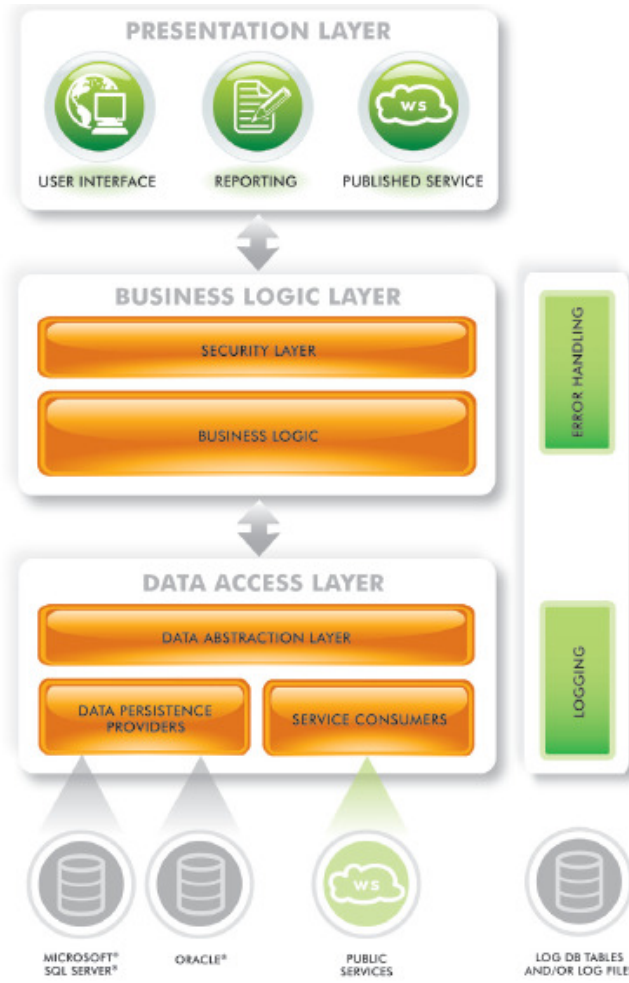
Our unique code generation tool, one of our framework's key competitive advantages, promotes quality, consistency, productivity, and abstraction. Generated code is of the highest quality because it is built using a set of templates. When improvements are found, the templates are modified, and the improvements are propagated across the entirety of the code.

Because it uses templates, generated code has consistent naming conventions and architecture. This technique increases productivity by allowing developers to spend more time on the design and the unique aspects of the code making it easier to navigate between applications and projects. Since our framework handles most of the administrative portions of the project, it enables us to focus on the important business logic of the application.

Flexibility

In an enterprise environment, where there is the opportunity to provide information or reusable functionality to other applications, a services approach is used. The utilization of services provides flexibility, scalability, and reusability of functionality in a technology agnostic fashion.

Using the layered, modular approach in the architecture allows the development tasks to be performed by multiple developers with limited dependency. The layered model allows the development process to scale across developers to help reduce time to market, while providing flexibility in the deployment of the applications. The hosting of the layers can also be spread across multiple servers to provide scalability as the use of an application grows.



Architectural Consultation

Architectural Consultations are more narrowly focused than Enterprise Architecture engagements. Typically a client is maintaining an application that is not scaling or performing properly. The client receives the expertise of a seasoned, senior architect to evaluate the application and develop a roadmap to provide stability and performance.

A technical assessment is usually the starting point for this type of consultation. With each assessment, the deliverable will include all findings and recommendations.

Below are examples of the types of technical assessments that Logical Advantage provides:

- **Source Control / Build Automation**

- Review management of a spectrum of code base versions.
- Review the technical steps in the build process, which includes compiling the source and packaging up the deployment.
- Review version tracking of the build. Some form of version identification should be included in the deployment package.
- Review the use of diverse deployment environments (QA, UAT, and Production). Recommendations are suggested of the build process from one environment to another during the development process.

- **Architecture Review**

This task is performed through a series of interviews with the client staff, as well as a detailed code and infrastructure review, which focuses on the following areas:

- Code Review – understand code structure, scalability, stability, and general coding practice standards
 - Database Structure – review of current database structure
 - Services – record all service layers
 - Topology – document system topology
 - Workflows – map workflows within the application
- **Patterns and Practices** – review the client's coding standards, chosen data access layer framework, logging and error handling, common libraries, custom control information, explanation of core application elements (base classes, frameworks, etc.), and how-to information for common development tasks
 - **Disaster Recovery Documentation** – document current disaster recovery strategy

- **Document Areas of Improvement** - record and recommend any areas that should be improved, not only in the current state, but also in the future
- **Migration Plan** - assist the client with a migration plan or road map

Business Analysis Consultation

The success of Logical Advantage begins with our Business Analysis process. This consulting engagement focuses on the client's analysis process, methodology and templates for documenting these requirements and functional specifications.

Understanding the needs of our client's business users and their systems is imperative to successful structuring and layout of the application. Logical Advantage uses the Business Analysis Consultation to capture and document the business user's requirements, setting the expectations which will be fulfilled by our system. This process gives our consultants a glimpse into the needs of our client's vertical business and subject matter in order to estimate cost and timing for the project.

The Logical Advantage Business Analyst frequently works in a mentoring engagement with the client. The result is not only the mentoring of the client's employee, but a deliverable for the selected project.

Initially, the Business Analyst will meet with subject matter experts to collect and document the following Business Requirements:

- **General Requirements**
 - Definition of the overall purpose of the application, including target audience, types of users, and consistent behaviors across the application
 - Identification of other systems which will require integration, peak usage times, data capacity planning, and special needs or equipment (handheld device, mobile device, etc.)
- **Security / User Requirements**
 - Evaluation of authentication mechanism for use in the application (integration with client's Active Directory or application credentials)
 - Clarification of user permissions and administrator-level access
- **Functional Requirements**
 - Analysis and documentation of the types of activities required of the application
 - Identification of any internal or external reporting requirements
- **Workflows / Processes**
 - Description of the tasks associated with required workflows
 - Documentation regarding alerts, batch processes, imports/exports, and integrations with third party applications
- **Future Requirements** – all identified requirements are documented, even those not in scope for the current release; these future requirements are available for reference as the application progresses and additional releases are scheduled

Once the Business Requirements are approved by the client, the Business Analyst creates the Functional Specifications. This document takes the Business Requirements and turns them into the blueprint from which development occurs. The Functional Specifications define how the Business Requirements will be met through the application.

- **General Coding Standards** – uniform set of User Interface standards to be used across the application, as well as the navigational structure
- **Screen Design** – screen mockups, which include the corresponding fields and controls, business rules, validations and actions
- **Requirements Validation** – indexed functional specification to allow traceability and ensure all requirements are satisfied
- **Documentation and Templates** – version control documentation for both the short term and the life of the project. Templates created for import/export, workflows, etc. are included as part of the specifications.

Quality Assurance Consultation

Quality Assurance within build methodologies and the deployment process are essential and can be difficult to achieve.

For this type of consultative engagement Logical Advantage tailors a modified methodology specific to the client's build requirements streamlining the process of build scheduling and performance, while providing Quality Assurance in both the implementation testing and deployment of the final version of the release.

This consultation may include combinations of the following elements:

- **Test Cases and Test Scripts**
 - Test Case creation based upon Functional Specifications
 - Positive and negative testing
 - SQL queries used to ensure accuracy of data transactions
- **Developer Testing Expectations**
 - Establishing standards of testing for developers prior to functionality being turned over to Quality Assurance (QA)
 - Methodology to ensure developers are performing proper QA
- **Quality Assurance Process**
 - Issue tracking process and workflows
 - Test Case execution methodology
 - Release Notes documentation and standards
 - UAT processes and methodologies

Program Management Practice Consultation

Logical Advantage assists organizations with the review of project or program management functions. This type of project management methodology is dependent upon the needs of the organization.

Logical Advantage works with clients to determine which methodology or blend of methodologies works best for their organization. The consultation includes a selection of the following offerings:

- **Process Estimation**
 - Evaluate tasks to ensure realistic allotment of hours
 - Assess contributing factors such as complexity of each task and the experience level of staff
 - Appraise budget versus actual hours for similar tasks
- **Project Planning / Resource Planning**
 - Determine Release Roadmap (Business Needs Roadmap)
 - Establish the best methodology to apply to the project
 - Discuss the project team's capacity for accepting change
 - Understand the dynamics of the project team
 - Examine the maturity of the application
 - Evaluate team size against milestones and project goals
 - Weigh the milestones and goals against timeline and budget
 - Recognize potential risks and determine mitigation strategies
 - Group tasks into milestones for progress tracking
 - Identify opportunities for parallel development tracks
 - Prioritize tasks for a phased approach
 - Format meetings by applying techniques which keep focus and energy
- **Budget Management and Planning**
 - Institute processes for time tracking at the task level
 - Complete historical trending analysis
 - Evaluate a task by task analysis of budget versus actual throughout the project
- **Organizational Structure**
 - Pinpoint key stakeholders, target audiences, and subject matter experts
 - Identify decision makers so that decisions are made at the proper level and in a timely manner
 - Establish roles and responsibilities unique to the project team

- Create a support structure for development and post-production
- **Change Management Processes and Procedures** – establish processes for changes already in development and/or systems already in production
- **Business User's Expectations**
 - Establish a Communications Plan (meetings, reports and frequency) to create transparency in the project progress
 - Evaluate and select tools for knowledge sharing (Portals, SharePoint, Shared Network Drive)
- **Project Follow-up**
 - Assess project goals, approach and methodology
 - Create team and client feedback sessions
 - Communicate feedback to all team members

Getting Started

Initially, Logical Advantage will meet with clients to perform a high level assessment which will determine the area of focus for the consultation. The client's senior leadership meets with our consultants to review areas of concern and suggest a workable solution. Included in the deliverables is a detailed estimate to perform more specific and comprehensive assessments or simply the cost to implement the suggested road map.

The cost of engagement with us is dependent on the type of service performed, as well as the scope of the work. Logical Advantage will consult with clients to determine which service is appropriate and the scope of the project. Finding out which assessments are needed will then determine the cost of the engagement.

A standard assessment typically requires between 40 to 80 hours to complete. With all assessments, Logical Advantage's number one goal is to provide real, usable value in the deliverable. Smart People. Smart Solutions.

About Logical Advantage

Founded in 2003, Logical Advantage provides IT consulting services because we believe you should do only one thing – and do it better than anyone else. No matter your challenges, we can design, build and deploy custom-built solutions that will drive your business. We specialize in mastering the most complex business hurdles and developing enterprise-class solutions backed by custom software and data integration. We deliver solutions that deliver results.

For more information, please visit our website at www.logicaladvantage.com.

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