



White Paper

The Medius Methodology of Customized Software Application Development

The design, development and deployment of customized software projects will follow Medius' proven and unique application development processes. Medius will engage with your company's team members to produce software that works, software that is on time, software that is within budget, software that can be easily maintained, and finally software that is readily reusable.

Following a phased business process approach that facilitates good communications, it provides the channels between the parties that need to communicate your project's requirements.

By combining responsive, collaborative people with a focus on demonstrable, concrete goals (software that really works), the Medius approach aims to improve the software development process, keep agile practices in balance, avoid common temptations that delay projects, and harness the power of continuous development.

Engagement Management

Medius is engaged as a potential provider from the early stages of the project consideration and internal approval by your company. Gathering initial requirements and an understanding of the project through its maturity to vendor selection is a key component of our knowledge management. The engagement management is critical to maintain a solid customer relationship, as we extract the essential project business processes.

Project Management

Unlike other firms, Medius believes in assigning the project managers from the onset of the consideration of the project and before final vendor selection occurs. This assures your company of the deepest understanding of the project utilizing the shortest timeframe possible to undertake the project.

A Business Project Manager and a Technical Project Manager are assigned to each software project and will continue as the primary project managers through the launch and future phases of the project. The project managers' main focus at the onset of each project will be to have a thorough understanding of your company's products, culture and current applications.

Project Overview Definition Process/Proposal Generation

The overall definition of the project and project general requirements continues with additional meetings and discussions with your company's team members. These meetings review, in general terms:

- The business justification for the new application
- The general technical requirements
- The general business processes to be addressed by the application

An in-depth review of any existing applications and their shortcomings is also performed in this phase. These initial meetings are general in nature and serve to communicate the overall business situation and project goals. A high level project budget estimate is determined by Medius during this phase and presented to your company.

Project Detailed Requirements and Statement of Work

Upon official award of the project, the Medius project managers will attend additional meetings with your company's team members and continued discussions to review in detailed terms:

- The functional requirements for the new application
- The detailed business processes to be addressed by the application
- Formulate the environmental, deployment, conversion, testing, documentation and support requirements

Using this information, a Statement of Work is prepared by Medius to include:

- Project planning and implementation schedule
- Project phases definitions
- User processes and roles
- Analysis and reports requirements
- Integration requirements
- Import and export formats

Both parties commit to the Statement of Work and the responsibilities of each, and agree to the project planning and implementation schedule.

Software Application Design and Mock Up

Unique to Medius' overall project strategy is the development of a "mock up" application design prior to the deployment of the engineering team. By utilizing HTML and Javascript, the application will be developed with limited functionality external to the actual environment. This proven method of development will assist both your company and Medius in assuring that all aspects of the application are addressed during this stage, and before the programming of the software begins.

Compliance with your company's Corporate Style Guide is also evaluated during this phase and a lead design engineer is assigned to the project. This approach has saved our clients valuable time, expenditures and resources by providing a visual representation of the finished application before actual programming occurs.

Changes and enhancements to the mock up application can easily be made instantly as meetings and discussions continue and as the project evolves. Once your company is confident the mock up application has taken into consideration all aspects of functionality and business processes, a sign off occurs to proceed.

Project Monitoring and Control

The project managers have the ultimate responsibility of the project monitoring and control of documented changes to the Statement of Work during all phases of the project. Project development standards are communicated to the engineering team as they are agreed upon to define and set up the development environment by the project managers.

The project managers solidify the knowledge from your company's team members into a well-organized and retrievable document library to assure this information can be retained and shared within the whole organization.

Software Development and Engineering

The foundation of delivering a successful application project and one scalable for future enhancements, as well as new projects achieving the same success, will be the assignment of a permanent workforce of a qualified engineering team.

The engineering team will consist of a lead software engineer reporting directly to the technical project manager, and additional software engineers as required for rapid deployment of the programming initiatives. Utilizing an overseas outsourced US-based engineering firm will generate the greatest economies of scale for your projects.

The lead engineer will be positioned to work during the Pacific Time zone; additional software engineers will work within their own time zone to assure around the clock development for an aggressive schedule of project launch. All engineers are professionally trained and degreed through their local universities and additional certifications and training is on-going for each team member.

Alpha Testing Sequences

The main objective of alpha testing is to show with a high level of confidence that the software application meets the acceptance criteria:

- Functionality
- Performance metrics
- Usability standards
- Features
- Capabilities

Each software engineer is expected to thoroughly beta test their coding of the software for both functionality and usability before submitting it to the lead engineer for final beta acceptance testing. The lead engineer tests the software itself, but also performs the code review to verify the validity and stability of the code written by the engineers.

During both alpha and beta testing, the project managers test the software application, but also verify documentation, operator or user interfaces, and reports. What is also indirectly tested and evaluated are the development team, the technical and project management, the application development tools, and the software development rules and guidelines. In sum, much more is tested than just the software product itself.

Beta Testing Sequences

The software has reached beta stage when it is operating with most of its functionality, and is ready for user feedback from your company. Beta tests enable the software to be tested in the client's environment, giving users the opportunity to exercise the software, find errors, and correct them before the application is launched. The project managers record, track, and address reported bugs and make all documentation changes.

Beta testing provides important input from users. Medius will engage your company to perform beta testing to evaluate:

- Software functionality
- Algorithms used or programmed
- User roles
- Problem solving or tutorials
- Subject matter technical content
- Ease of use
- User documentation

Three or more beta testers are recommended for each software project. The beta testers will need to check the technical accuracy of the software, and will use it with their own computer setups, data and workflows to make sure that the software will perform as desired in their own environments. Medius recommends listing the names of beta testers (with their permission) in the Acknowledgments section of the user documentation.

Software Launch and Monitoring

Once acceptance testing and problem resolution is completed by your company, the application will be ready for launch with real time end users. Medius will sign off on a Certificate of Conformance, certifying that the software application meets the requirements of the Statement of Work. Your company will sign off on an Acceptance of Software form, and will note any minor issues still under resolution.

The project managers, lead engineer and one software engineer are available 24/7 during the initial three day timeframe after launch to provide constant monitoring and assurance, and are ready to react to any noticed problem on a Tier 1 Support basis.

Software Application Support and Enhancements

The Tier 1 first line technical support for the software application will be the responsibility of Medius. As agreed upon, either Medius or your company, or both, will provide all sales and customer-facing support, including 800 number, fax and email support, for your customer's needs.

A technical support plan for the software application will be agreed to between your company and Medius for Tier 1 second line support. This technical support plan will define the protocol and procedures for handing off technical support problems from Medius to your company for resolution.

The customized Tier 1 Support Plans will be defined and agreed upon with your company to assure the users of constant and continued use on a global basis without interruption to their daily tasks and responsibilities. The support plan will include maintenance and enhancements on a 24/7 schedule for all aspects of the software application and access.

Problem severity will be determined by a local first line engineer and an escalation process will be agreed upon with your company. This assures you of the appropriate level of maintenance and support for the application without sacrificing user resources and client expenditures.