Development and Implementation Methodology

http://www.tpsonline.com

TPS

Business processes today are increasingly specialized, complex and focused requiring software solutions that are tailored to specific needs while remaining cost-effective, scalable and robust.

TPS is a leading provider of switching, payment processing and online transaction processing solutions and services to financial institutions worldwide. TPS software development team is specialized and can deliver solutions that are quick, effective, feature-rich and fully integrated with existing front-end and back-end business systems.

TPS can offer products from its existing suite along with specific customizations, add-ons as well as completely tailor-made solutions to meet the unique requirements of an organization.

TPS provides a wide range of services that cover the complete software development lifecycle from analysis and design to deployment and maintenance.

TPS possesses a rich knowledge base in its business and technology domain, in-depth expertise, comprehensive quality processes and strong technical and development skills on various technology platforms.

Areas of Expertise

For more than 10 years now, TPS has been providing mission-critical solutions and services to the financial industry in the areas of remote banking and payment processing. With a suite of products and customized solutions deployed in 18 countries at 140 sites, TPS has built its expertise in the online transaction processing domain. Our solutions have been deployed in diverse and complex environments, certified with major international networks and integrated with disparate systems.

Our focus is to provide solutions on the Unix/Linux platform based on C/C++ and on the Microsoft .Net platform under C# and ASP.Net.

TPS can provide superior services in the following areas:

Highly robust, reliable and efficient OLTP systems on Unix/Linux/Windows

- Customized online transaction processing (OLTP) systems
- Systems with guaranteed message delivery and transaction posting requirements
- Solutions requiring complex inter-process communications and message transformations
- Customized interfaces with distributed and varied systems
- Customized and robust communication interfaces
- Solutions with integrated databases using indexed file systems such as C-tree

Web and thick-client applications on Windows

- Rich GUI based on efficient, robust and scalable architecture
- Flexible interfaces enabling integration with various databases
- Customized online and batch interfaces to any target application

Reconciliation and Settlement Tool (RECON)

- Customized online transaction processing (OLTP) systems
- Generic Reconciliation system to Automate reconciliation between multiple transaction sources.
- Support for multiple file formats (Flat files, VISA BASEII, MasterCard International etc).
- Customer friendly user interface of Rule Based engine for defining Business rules.
- Supports definition of multiple processes for reconciliation of ATM, PoS or Inter Bank transactions
- Efficient processing speed for reconciling large amount of data

Security Solutions

- Solutions that require secure remote access to enterprise applications and data
- Multi-function digital ID for disparate enterprise applications
- Security enhancement through smart card based user management and authentication
- Support for PKI infrastructure
- Easy integration,implementation and administration to support existing infrastructure
- Implementation of well proven techniques and algorithms like 3DES, RSA, SHA-1 etc.

We also invite you to take a look at our product suite to get a better understanding of the types of customized solutions that we can create for your requirements.

Project Management

Statistically, a majority of projects fail due to bad project management. In its 10 years of history, TPS has a flawless record of more than 200 successful projects deployed across the globe catering to the needs of different regions and systems, cultures and languages.

All this is due to the Project Management methodologies in place at TPS with professional and seasoned Project Managers. Our Project Managers are not only adept at managing all the aspects of a project, but also have in-depth technical as well as business domain knowledge about transaction processing, payment solutions, systems security, and integration with standard international applications as well as legacy disparate distributed systems.

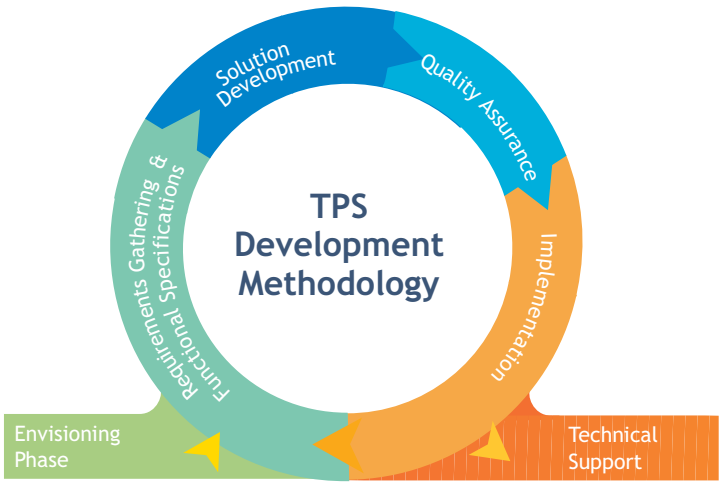
Our project managers have a core background in Computer Science with several years of hands-on software development experience. With additional training and certification from PMI coupled with extensive experience of managing complex projects with large teams, PMs at TPS have the right mix for completing projects successfully, on time and within budget.

TPS Development Methodology

Simplicity is the name of the game. TPS has tailored its Development Life Cycle based on extensive study of the Microsoft Solutions Framework (MSF) and ISO driven processes.

The methodology utilizes the best of both worlds and is simplified to suit our working environment as well as better understanding and execution by all project stakeholders.

The TPS project lifecycle includes the following critical phases:



A Glance at Phases of the TPS Development Methodology

In the **Envisioning phase**, the executive board at TPS reviews the project from various angles particularly related to domain and technical expertise. Once a decision is made to undertake the project, a project team is created with appropriate roles and responsibilities assigned.

Requirements Gathering is the most important phase of the life cycle with the success of the project and customer satisfaction depending on it. A detailed **Functional Specifications** document is prepared with constant engagement of the customer and involvement of other project stakeholders. Very often, a **user-interface prototype** is developed in this phase to gain a better understanding of end-user requirements.

The solution is then developed by the Development Team based on the functional specifications and the prototype.

The main responsibility in the **Development Phase** lies with the Technical Team Lead who works extensively with various domain experts in creating a scalable, reliable design of the solution. Also available to the technical team is a rich repository of various types of applications, modules, code samples, code libraries, etc., allowing them the benefit of previous research and development.

Although the QA team is attached with the project throughout all phases, their most visible involvement is during the end of the development phase. The QA performs rigorous testing on the solution using Test Plans and Scripts based on Functional Specifications. The application goes through several iterations in a simulated user environment before it is passed and released for implementation.

A complete set of documents including Manuals, Operations Guide, Security, and Installation Guides are also prepared during this phase.

Product Implementation is carried out by a deployment team consisting of members of the Development Team as well as from the customer support department. A detailed Implementation Plan including Pre-Requisites is shared with the customer. During implementation, systems integration testing is carried out onsite as well as various operational trainings to relevant departments.

The implementation concludes with the soft launch of the application for an interim period followed by a Go Live cycle.

Post implementation, TPS provides a comprehensive Technical Support and Maintenance service with well defined SLAs. The customer can chose from a variety of support services including solution support as well as solution enhancement.

The TPS Advantage

With ever smaller windows of opportunity, businesses today need quick delivery and implementation of solutions. Realizing this TPS has refined its approach and delivers solutions iteratively in phases with each phase providing a complete working solution. The most important and standard offerings are deployed initially and subsequent phases deliver value added features. This enables the client to rapidly roll out the solution. Each subsequent phase can then incorporate customer feedback and user experience to make the solution more robust, reliable and satisfactory.