

AGILE PREMIER CONSULTING SERVICES



01 Overview

ABOUT AGILE PREMIER

Agile Premier is an IT consulting and staffing company which is privately owned by Wegman Capital. Since 2012, our team has been instrumental in helping small-tomedium sized businesses as well as Fortune 1000 companies create staffing solutions related to IT strategy, software development, network and systems engineering, ERP/CRM, IT security, data management, and more. We offer numerous specialized services including agile development consulting, direct-hire IT recruitment, and temporary IT staffing.

ABOUT AGILE PREMIER CONSULTING SERVICES (APCS)

Agile Premier Consulting Services (APCS) is a team of senior-level software professionals who focus on rapidly developing solutions on modern development frameworks while leveraging the power of the agile development methodology. The team consists of agile experts who have prior experience working together and assume a role in the project that adheres to their particular specialization such as business analysis, development, data, architecture, project management, UI/UX, and/or QA.

Our project management and solution architect resources will co-manage the project from the requirements gathering stage to user acceptance and will ensure milestones are being met on-time so you can allocate your time to other critical projects. We will provide a pre-assembled team of experts who will handle all duties required to develop a software solution including requirements gathering, architecture design, development, and quality assurance. The APCS team will develop in 2-week intervals of time to ensure that the most desired features are developed first and to allow our team to react quickly to changing priorities of our client.

APCS is an excellent option for IT leaders who want to save numerous weeks of time which would normally be spent identifying, recruiting, interviewing, and managing software development professionals.

METHODOLOGY

APCS uses an agile approach to software development that is driven by continuous improvement. Agile focuses on the rapid delivery of those software features that will deliver the greatest business value and customer satisfaction, while providing the ability to adapt to changing needs and requirements.

Agile breaks the development process into iterations, or sprints, which typically last two weeks and involve collaboration among self-organizing, cross-functional, self-managing teams. At the end of each sprint, a working product is delivered and client feedback provides guidance and direction for the next iteration. Close collaboration and open communication are the backbone of agile, helping to minimize risk and deliver the products our clients want and need.

POPULAR PROJECTS

- New Concept Software Development
- Legacy Application Modernization
- "Off-Shore Gone Wrong" Software Rewrites
- Web Service/ API Solutions and more

VALUE

On average, APCS is 25%-33% less expensive than most comparable services. We accomplish this by hiring dynamic resources that can contribute in various aspects of the solution (not just one), minimizing our consultant's down-time, and by billing select resources on a fractional basis. There will be extremely important participants in the software development process who will not be needed full-time during certain stages of a project. Because of this, we don't feel our clients should be billed as if they were. Although a software architect, BA/QA professional, data analyst, and project manager will all be very much involved in the successful development of your solution, the lion's share of your investment with us will go towards actual development costs. A much smaller fraction will go towards these more periodically used resources such as project management and software architecture professionals. This model provides you with access and the expertise of a full-team of elite software professionals without having to commit to paying all of them full-time rate.

OUR SERVICES

Hackathon

(Prototype/Mockup Development)

3-Day development session with approximately 3.5 resources (3 developers and fractional use of architect, QA, and BA resources). The purpose of this is to rapidly produce an application prototype or mock-up and test an idea before committing to a large budget. If the client is satisfied with concept created during the Hackathon, the development team will then transition to developing in 2 week Sprints.

Agile Sprint Team

Team of software development professionals work in synergy to rapidly provide a functioning prototype and ultimately a useraccepted solution. In 2 week increments or "sprints", the team will continuously provide slices of the most desired functionality first and react to new requirements and desired features as the project progresses. Sprints will continue until all production features are developed. The rate includes the duties performed by software engineering professionals as well as the fractional use of software architecture, business analysis, and QA professionals.

Individual Software Consultant

Access to architecture, data, or development subject matter experts who are billed by the day.

02 Technical Skills

	Tools & Technology	Jonathan B. Solutions Architect	Jonathan S. Solutions Architect / Full-Stack Developer	Tim G. Backend Developer / Data Management	Jon D. Frontend Developer (UI/UX)	Ashton K. DevOps Manager / Backend Developer	Sudha S. Business and Data Analyst / QA	Scott F. Project Mgr. / Business & Data Analyst / QA
Databases & Frameworks	AngularJS / React		7		7			
	Microsoft Azure Cloud Services	7	7					
	Microsoft.NET	7	7	7		7		
	MongoDB		7	7	7	7		
	Node.js / Express / Socket.io	7	7		7	7		
	SQL Server	7	7	7		7	7	
	Web API / Web Services (REST, SOAP)	7	7	7	7	7		
Languages	C#	7	7	7	7	7	7	
	C++	7		7				
	Java	7	7		7	7	7	7
	JavaScript	7	7		7	7	7	7
Tools	Git / Subversion	7	7	7	7	7	7	7
	Gulp / Grunt / Babel / Sass / LESS				7			
	Redis				7	7		
	TeamCity / Octopus Deploy	7	7			7		
Analytics	Data Mining / Data Shaping / Feature Engineering	7		7			7	7
	Microsoft Azure Machine Learning	7					7	
	Modeling (Anomaly, Clustering, Decision Trees, Linear Regression, Logistic Regression, Random Forest, Recommender Engine, Support Vector Machines)	7					*	₹
	Optimization Techniques	7					7	7
	R / Shiny / SparklyR	7					7	7
QA	Design Thinking / Empathy Maps / Usability Testing	7	7	7	7			
	Scrum / Sprint Retrospectives and Demos	7	7	7	7	7	7	7
	Test-Driven Development (NCrunch, NSubstitute, NUnit, Simple Injector)	7	7	7	7	7		

03 Our Work



THE AGILE PREMIER DIFFERENCE

- Direct Access The assigned project manager is responsible for managing all aspects of the development process and for communicating with you about the project's progress.
- Small Teams In our experience, a small team (3-5) of veterans delivers faster and better results than larger teams of less experienced developers.
- Software Features Our team works closely with clients to analyze and understand their business needs, which are translated into software features developed through iterative sprints.
- Quality Assurance We design testing and acceptance criteria before we begin coding the product, so quality assurance is integrated with the project from the very beginning.
- Ongoing Involvement Our products are "built for change" and we are available to provide long-term product enhancements. Unlike traditional consulting firms, our team can also provide training and documentation that allow you to support, maintain and enhance the products we develop to the degree a client desires – so that you don't have to be dependent on us.

DATA SERVICES HUB

PROBLEM

The client – a large state agency – recognized the need for an in-state data services hub that would pull together new and existing data sources to automate and streamline the processes used to determine eligibility for public benefit programs. The primary goal was to reduce the labor- intensive, manual application and verification processes used to determine applicant eligibility, which accounted for a significant portion of overall program administration costs.

A review of similar, "best-in-class" processes had found that automated data services, such as those used by American Express, could provide real-time information related to identity, residency, household composition, property, credit history, and other important details that could substantially reduce the time and effort required by staff to verify information and determine eligibility. This same information could also be used to help detect and deter fraud, waste, and abuse.

SOLUTION

Our team designed, implemented, and maintained a data services hub that was used to determine eligibility for all human services programs, improved case-processing efficiencies and ensured greater overall program integrity. The data service hub was developed over an 18- year period and is recognized as one of the most comprehensive systems of its type in the entire United States.

The data services hub was developed as stand- alone system that integrated fully and seamlessly with the client's separate online and mobile application systems to provide staff with quick and easy access to a consolidated view of data for each client across multiple data sources, as well as a searchable repository of historical requests and responses.

In addition, our team created a daily extract process that normalized, standardized, and aggregated program data from highly-complex and disparate sources for use in a wide range of activities, including case monitoring, ID authentication, and predictive analytics.

CHALLENGES

- Incorporating data from multiple state, Federal and third-party vendor sources
- Communicating and sharing data among state agencies, departments, and outside vendors
- Complying with growing array of state and federal regulations
- Adhering to stringent privacy and security requirements
- Providing complete audit functionality

- Cost-effective integration of disparate systems with improved quality and reduced effort
- Decreased administrative burdens for system users
- Speedier eligibility determination
- Improved detection and deterrence of fraud, waste, and abuse
- Greater quality assurance
- Speed and uptime
- Disaster recovery
- Predictive analytics

DATA LAKE

PROBLEM

The client needed to make better use of its data to streamline case processing, make quicker decisions and improve program integrity; however, the client was challenged by massive volumes of data from disparate sources, many trapped in siloed legacy systems, all in different formats.

SOLUTION

Given the volume and complexity of data and the high cost of developing an enterprise data warehouse, our team developed an efficient, cost-effective alternative by designing and building a data lake. Using an Oracle extract process, we daily transformed and stored more than 10 GB of structured and semi-structured data drawn from over 25,000 fields in 1,575 tables into 1,790 fields in 61 tables in the data lake that could then be used as needed for a variety of activities, including reporting, monitoring, and asynchronous predictive analytics.

The advantage of a data lake is that it allowed incoming data to remain as close as possible to its original, native format, and then provided "just in time" transformation and shaping of data based on the unique data requirements for each project and/or activity. The data lake, and its terabytes of data, lowered costs and increased capabilities by reducing the impact on source systems and making data available much more quickly.

CHALLENGES

- Storing and making available disparate and highly-complex data from multiple sources and legacy systems when needed
- Transforming and normalizing stored data to meet the differing data requirements of new and ongoing projects and activities
- Incorporating changing requirements and new data sources
- Complying with growing array of state and federal regulations
- Adhering to stringent privacy and security requirements
- Providing complete audit functionality

- Quick and highly cost-effective solution
- Capture and storage of key data from many different sources in original, native format
- · "Just in time" transformation and normalization of data to meet specific project requirements
- Access to and better use of existing data
- Improved monitoring, reporting and analysis
- Improves staff productivity and accuracy
- Increased detection and deterrence of fraud, waste, and abuse

ASSET VERIFICATION SYSTEM

PROBLEM

The client wanted a seamless, real-time integration of an electronic Asset Verification System (AVS) into its existing data services hub to discover the undisclosed assets of individuals applying for and/or receiving Medicaid benefits, while also ensuring compliance with Section 1940 of the Social Security Act.

SOLUTION

Our team developed an innovative asset verification system solution that used electronic networks to provide the most comprehensive real-time solution in the United States. The solution can identify assets over eligibility thresholds and/or likely asset transfers during the prior 60-month "lookback" period.

Our real-time banking system integration with Bank of America, JPMorgan Chase, Wells Fargo, Capital One, and other national financial institutions, provided a comprehensive search of Texas assets and accounts, and highlighted potential asset transfers during a 60-month historical period that indicated increased risk or potential fraud.

CHALLENGES

- Developing a real-time method of asset verification
- Creating a seamless interface with existing web and mobile application systems
- Ongoing compliance with growing array of state and federal regulations
- Adhering to stringent privacy and security requirements
- Providing full audit functionality

- Real-time verification of financial assets
- Search capability across multiple sources
- Speedier eligibility determination
- Increased worker productivity and accuracy
- Improved program integrity

THE WORK NUMBER **WEB SERVICE**

PROBLEM

The client needed real-time access to The Work Number to verify earnings for benefit eligibility determination and recertification.

SOLUTION

Our team developed and implemented the first and largest state-level implementation of an integrated web service providing the client with real-time access to The Work Number's employment and wage verification system - the largest nationwide employer database available today with over 60 million active employee payroll records and over 4,200 public and private sector employers contributing payroll data each pay period. Thus, the client could obtain actionable data significantly more current than Federal W-2, quarterly state wage data or other sources. In addition to reducing fraud, this process dramatically reduced the time to determine eligibility by making pay stub data available to case workers at the time of initial screening.

CHALLENGES

- Creating a web service that interfaces seamlessly with the client's existing web and mobile application systems
- Complying with Federal and state regulations
- Adhering to stringent privacy and security requirements
- Providing complete audit functionality

- Real-time access to the largest nationwide employer database
- Faster eligibility determination
- Increased staff productivity and accuracy
- Improved program integrity

LEGACY SYSTEM WEB SERVICE INTERFACE

PROBLEM

Following income and household composition, the proper identification of child support payments was the third highest cause of error in eligibility determination and recertification. Consequently, the client wanted to incorporate raw child support payment data from the agency responsible for administering directly into its data services hub.

SOLUTION

Our team provided a pragmatic and highly cost- effective solution that supported immediate business needs without waiting for the administering agency to complete an upgrade to its legacy system, scheduled for December 2018. Understanding how to work with both legacy and modern technology across the enterprise, our team designed, developed, and implemented a Java web service interface that integrated with a 20-year old legacy ADABAS database system through an EntireX gateway. This interface, now hosted by the administering agency, has made child support cases, obligations, and payment information available in real-time for use in benefit eligibility determination.

CHALLENGES

- Obtaining real-time data from a 20-year old legacy ADABAS database management system
- Utilizing EntireX to create a bridge with Java web services
- Complying with complicated state and Federal regulations
- Adhering to stringent privacy and security requirements
- Ensuring complete audit functionality

- Immediate, cost-effective solution
- Speedier eligibility determination
- Increased productivity and accuracy

MULTIPLEXER API

PROBLEM

The client was having difficulty handling high volumes of simultaneous requests for data from their data services hub. In addition, the client's staff used manual processes to transfer data from the data services hub into a separate case management system, which was highly timeconsuming and error prone.

SOLUTION

Our team created a Multiplexer API (MUX) to provide web service access to the data services hub. Rather than processing requests in serial fashion, the MUX enabled simultaneous submission and parallel processing of requests against numerous data sources. Designed to interface through back-end system communications with the client's online and mobile application systems, the MUX also delivered structured data as key data elements that could be transferred directly into case records, eliminating manual steps, such as retyping or copying/pasting, and the resulting errors.

CHALLENGES

- Ensuring average response times did not exceed eight seconds
- Returning data in a format automatically transferrable to case records
- Interfacing seamlessly with client's existing web and mobile application systems
- Complying with growing array of state and federal regulations
- Meeting stringent privacy and security requirements
- Providing complete audit functionality

- Immediate access to real-time data
- Automation of manual processes
- Increased accuracy of case records
- Faster processing of applications

ADMINISTRATIVE PORTAL AND DASHBOARD

PROBLEM

The client needed a browser-based portal for use by their senior executives and systems staff to provide self-service access to real-time monitoring and reporting on the availability and performance metrics of their data services hub, which was expected to be available 24 hours per day, 7 days a week.

SOLUTION

Our team designed and developed an administrative portal and dashboard that enabled reporting, tracking and monitoring of day-to-day service operations, as well as the management and resolution of ongoing issues and development and contract activities. Key metrics tracked included: current and historical system availability, response time summary, transaction volume and response time, periodic monitoring schedules and volume, and incident and outage summaries. A dashboard was developed that provided a consolidated view of key performance indicators and metrics. Both the administrative portal and the dashboard were designed to be continuously iterated upon as business needs grow and change.

CHALLENGES

- Developing a real-time web application that interfaces seamlessly with other enterprise web and mobile application systems
- Providing a scalable, adaptable framework for growth and change within a consistent information architecture
- Integrating and synthesizing data from a variety of sources, at multiple levels of granularity and size
- Ensuring ongoing compliance with growing array of state and federal regulations
- Adhering to stringent privacy and security requirements
- Providing full audit functionality

- Real-time monitoring and measurement of system performance
- Instant overview of data from multiple sources
- Customizable dashboard and reporting to meet changing business needs
- Enhanced collaboration and communication