Quality Humans, Inc.

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Work Samples

The following pages give a handful of examples of QHI work performed for various large clients from 2003 to 2006.

Some projects were performed by QHI staffers working from QHI facilities around the USA, while other projects were performed by QHI staffers working at client sites.

Some of our on-site staff were later hired as full-time employees of the client under a contract-to-hire agreement.

Project Example 1

Title: Cornell University			
Contract Number P.O. Number:		**Contract Type:**	Time and Materials
Contract Value:		**Award Date:** 04/2004	**Completion Date:** 09/2004
Points of Contact:			**Title:**
Address: Ithaca, NY			**Contact Info:**

Project Description:

We developed an end-to-end solution that fully integrated a segment of Cornell's mainframe/MVS application with Microsoft VB.Net. This was part of Cornell's plan to smoothly transition from mainframe systems to more distributed systems over the next 7 years.

Our solution was much more than simply providing a terminal window into the mainframe. With our solution, Cornell can write new .Net applications that interact with their legacy systems.

Legacy investments remain in place and remain productive, but new development takes place on Microsoft .Net systems. Other technologies and platforms can be used, including C#, Perl, Java, and Unix/Linux systems.

Our work included finding out just how deeply Cornell wanted to integrate new development with legacy data storage, then researching current frameworks that allow what they wanted. None existed exactly as needed, but some were close, and we chose software that allowed reasonably deep interfacing to old systems from new code, using "middleware" that accesses old screens and can input and output data, just as a user would – but under control of new software written in new languages, as listed above.

The first step was to implement the basic "pipe" between old and new systems, and to implement it bi-directionally (that is, able to read and write mainframe programs from new Visual Basic programs). A large amount of testing was performed to verify basic operation, after which we developed five small, new software applications to carry out specific functions, such as weekly A/P check runs, payroll check runs, and reconciliation operations.

Toward the end of the project, there were budgetary changes at Cornell, which resulted in some of the work being postponed until a future date. We wrapped up the tasks at hand and made sure Cornell personnel were prepared to use the systems by themselves.

Project Example 2

Title: National City Bank			
Contract Number P.O. Number:		**Contract Type:**	Time and Materials
Contract Value:		**Award Date:** 06/01/2004	**Completion Date:** 10/01/2004
Points of Contact:			**Title:**
Worksite Address: Strongsville, OH			**Contact Info:**

Project Description:

"ARGO" software is among the most respected for handling branch automation, teller services, lending & underwriting operations, and many other areas of bank management. "ChangeMan" is one of the premier Software Change Management systems for large organizations.

QHI consultants have direct, on-site experience integrating these two packages for seamless operation of ARGO for bank operations, plus ChangeMan for Software Change Management (managing software changes across the whole enterprise, including ARGO).

The software integration was implemented by hooking into predefined entry and exit points provided by ChangeMan DS.

The ARGO product uses a custom software development environment that represents source code in a custom database. Data is stored in binary format that uses just a few files to represent, in this case, slightly over 50,000 individually editable elements. The ChangeMan DS product works better with text files for each individually editable element, so the integration worked by interfacing with vendor-supplied tools to provide text dumps of the binary data from ARGO for storage in ChangeMan DS.

The conversion process from binary to text and text to binary was seamless and assisted with a custom tool to manage the interaction between the two systems.

We implemented the same ARGO + ChangeMan combination earlier at TCF Bank, a smaller, regional bank in Minnesota. National City Bank was very pleased with the results demonstrated at TCF Bank, so we were called upon to implement the large ARGO installation/integration at National City Bank in Ohio (described above).

Our experience covers the implementation and integration of ARGO with other enterprise systems, particularly ChangeMan.

Project Example 3

Title: U.S. Postal Service			
Contract Number P.O. Number:		**Contract Type:**	Time and Materials
Contract Value:		**Award Date:** 04/2004	**Completion Date:** 09/2004
Points of Contact:			**Title:**
Address: Eagan, MN			**Contact Info:**

Project Description:

Workflow ("work process") definition and automation at three USPS data centers, using various software and hardware systems, but centered around Serena TeamTrack server-based software. In general, this work entailed requirements gathering, organizational analysis, implementation of workflows in TeamTrack, general system design and server setup, and management reporting.

The project spanned three USPS data centers ("IBSSC"s):

- Wilkes-Barre, PA
- Eagan, MN
- San Mateo, CA

We worked with USPS personnel to pilot the use of TeamTrack process automation software. The goal was to meet the USPS' overall goal to standardize and automate various workflow processes between people, departments, and centers.

This included interviewing various employees and managers within each center to scope and define the processes that would be automated. We created a working prototype for review that included custom reporting capabilities and custom email notifications. Process and design review and customization took place, including migration of records from older systems into the new automated systems.

We started at the **Wilkes-Barre, PA** location and spent about one month there. Gathered requirements from management and then designed several workflow implementations using TeamTrack software running on a desktop PC. Once approvals were given, we migrated the underlying data and structures to a server in Eagan, MN (but used by people in Wilkes-Barre). This entailed setting up TeamTrack and Oracle on servers in Eagan, then working through any permissions and other network issues that came up to make sure Wilkes-Barre users could access the system. Reworked the workflow designs to management's satisfaction, then moved on to developing email alert system and management reporting systems, all based in

Project Description #3 (continued):

TeamTrack and running on remote servers. Final stages for this location included documentation for and training of local management, as well as reporting to headquarters in Eagan, MN.

The same basic work was then accomplished in **Eagan, MN** and in **San Mateo, CA**. Each stay was 3-5 weeks, and in each case, we accomplished the same goals as for Wilkes-Barre. The only exceptions in both Eagan and San Mateo, were that those locations had old data still running in legacy systems, which they wanted to migrate to TeamTrack. We accomplished this by learning the old systems and then finding ways to export data, then "massage it" for compatibility, then import into TeamTrack. In some cases, we just had to re-create legacy functionality in TeamTrack by starting from scratch and using the legacy systems as a visual guide.

On-going support was provided throughout the project and after.

This contract resulted in a 3-week follow-on engagement in October, 2005.

Project Example 4

Title: U.S. Navy			
Contract Number P.O. Number:		**Contract Type:**	Time and Materials
Contract Value:		**Award Date:** 10/2004	**Completion Date:** 04/2005
Points of Contact:			**Title:**
Address: U.S. Navy Yard Washington, DC			**Contact Info:**

Project Description:

We helped a certain part of the Navy analyze an organization of approximately 800 people involved in support of sonar systems. This included not only Navy personnel, but also contractors at Lockheed Martin, General Dynamics, and several other primary military contractors.

A large part of the project (about 40%) was simply the gathering of people to figure out how they all fit together (not how they fit into an existing org chart, but to ask individuals and teams what they depend on from others, what processes they conduct themselves, and what they produce for others). For this part of the project, we employed simple SIPOC charts to gather basic data about relationships between entities.

We then used the SIPOC data to create two wall-sized, high-level network diagrams of the whole organization. This process represented another 30% of the project. The resulting diagrams included 60 swim lanes to represent all entities that support sonar systems from design to implementation to service to logistics to end-of-life. Two diagrams were created using specialized diagramming and simulation software from a company we located in Texas.

These diagrams were the main deliverable for the Captain in charge of the projects.

The next 20% of the project entailed research and reporting on where various software could be used to increase efficiency within the mapped organization. We were also tasked with helping the Captain see where bottlenecks and failure points existed within the organization, and therefore, where he could improve matters by realigning personnel and responsibilities.

Before he had the above-mentioned diagrams, the Captain said that many problems were averted because of human “heroics”, which he greatly disliked relying upon and which raised overall stress levels and error rates. He was very pleased with our work and felt that it would genuinely help him develop plans to better organize his personnel.

The final 10% was spent documenting our work and making sure that the Navy and related military contractor contacts had all relevant source files, software supplier information, and instructions on how to use and duplicate our work after our departure.

The Captain and several other main contacts were quite happy with the final results of this multi-month project.

Project Example 5

Title: Office of the Secretary of Defense			
Contract Number P.O. Number:		**Contract Type:**	Time and Materials
Contract Value:		**Award Date:** 10/2004	**Completion Date:** 08/2005
Points of Contact:			**Title:**
Address: Falls Church, VA			**Contact Info:**

Project Description:

Implement TeamTrack business process management software; help client determine best ways to map workflow and keep people up-to-date with email alerts and management reports.

This implementation utilized us in more of a management and analysis role, as well as the usual technical details of implementing TeamTrack software.

When we started this engagement, the client was using an older software system that was scheduled to be discontinued in a couple of weeks – not long to get something new in place to support personnel.

Another contracting company had been working before us and had spent several months working on it, but still had no working model defined. That's when we were called to see if we could help our client make their deadline, as well as help roll out the system to many other users and departments over a long-term engagement.

For the initial, two-week phase, we had very little time to get moving on a solid working solution. We worked very closely with the software configuration management team and some software developers to design a realistic process that would benefit all parties involved and be useful quickly.

We had five different processes to define that all integrated into one master solution, so we started with the most crucial and had a good foundation built in time for the changeover from the old system to new. This involved importing all data stored in the old system into the new system.

Once the first phase was usable, a small group of users was able to continue with their work duties and keep track of "old" issues (old data), and we were able to continue design and development of the many other workflows and processes that were needed by other people and departments.

Work continued for several months and consisted of design review meetings with management. We implemented a structured process for implementing changes to the system, which were then tested and reviewed again through an iterative process, until management and users agreed upon a solution.

Once we had most processes defined, built, and integrated into the organization, the entire Software Configuration Management team left the organization and was replaced with a whole new team. This added some new wrinkles to the project.

Project Description #5 (continued):

We continued our work to finish the system, then worked with the new team to train them on the overall system and to customize it for their ways of working. This included rewriting and creating new reports and email notifications to meet the new management's needs.

Once the new team was comfortable with the system and felt that it met their needs using standard best practices, the project was reviewed by top management and signed off as "done".