The Reddix Group

Management and Technical Approach

Domain-Specific Capability in a Health-Related Mission

HEALTHCARE SERVICES

Integrating a New Terminology System at HHS

Subcontractor CollabNet is helping to integrate a new medical terminology system at the Department of Health and Human Services (HHS).

To ease health care providers' transition to electronic health records, Kaiser Permanente agreed to donate its CMT medical terminology system to HHS. The system, an XML data standard, is being integrated into HHS IT systems using CollabNet's TeamForge software development platform.

HHS' new medical terminology system is continuously updated using TeamForge, which runs securely in the CollabNet cloud. Every night, changes are rolled up and a new version of the system is available.

Providing an Online Support System for CMS

Subcontractor RightNow helps HHS' Centers for Medicare and Medicaid Services (CMS) answer questions for program beneficiaries, healthcare providers, and CMS staff.

RightNow's CX software suite enables CMS to automatically answer the vast majority of questions posed by visitors to its Web site, even under heavy traffic. For example, visitors to Medicare.gov get questions answered through the CX suite an average of 670,000 times every month, for a self-service rate of over 99 percent.

This software suite also includes an incident management system that allows all CMS employees to address issues ranging from IT problems to patient suggestions.

Improving Search Capability at AHRQ

Subcontractor Perfect Search recently supplied a search appliance to the Agency for Healthcare Research and Quality that enables the agency to access more of its data.

After installing a Google search appliance, AHRQ found that it couldn't search much of the unstructured data contained in its databases. To access this data, it installed a supplementary Perfect Search appliance. Now AHRQ employees are able to access both structured and unstructured data through a single search interface.

Because the Perfect Search appliance is built using non-proprietary commodity hardware, AHRQ was able to solve its search problem easily and inexpensively.

Supporting a CMS EHR Research Project

Subcontractor The Grant Group facilitated the involvement of medical practices in a CMS research study involving electronic health records (EHRs).

The study called for these practices to employ EHRs, and use them to submit data on several clinical measures to CMS. To prepare the practices to participate, The Grant Group provided educational and technical support, including a Web-based tutorial for each practice.

The study is ongoing, with The Grant Group continuing to help the practices' IT staffs expand and refine their use of EHRs.

Developing a Medical Research Database

Subcontractor Prometheus Research is developing database software to help researchers collaborate on understanding the causes of autism.

Working with the Simons Foundation Autism Research Initiative (SFARI), it is developing SFARI Base, an informatics platform that provides the scientific community access to DNA specimens from 2000 families.

Prometheus' flagship product for the biomedical research market, RexDB, formed the basis for SFARI Base. It allows real-time access and configuration of databases via the web, making data a shared resource that researchers can access as needed.

Hosting a Web-based Research Tool

Subcontractor Acquia offers hosting and support for OpenScholar, a tool that allows university researchers to easily create research Web sites.

Developed by The Institute for Quantitative Social Science at Harvard University, OpenScholar is a Drupal-based platform used to deploy faculty micro-sites and project collaboration spaces. Acquia, a world leader in Drupal integration, provides researchers with a "one-stop shop" to get these sites up and running quickly and easily.

Through the social networking functionality built into OpenScholar, researchers are able to share information easily, follow research published at other universities, and reduce the "silo" effect that thwarts progress on a broader scale.

Serving on an HHS Policy Committee

Joyce Hunter, CEO of subcontractor Vulcan Technologies, serves on the Policy Committee of the National Collaborative for Health Information Technology for the Underserved.

A key participant on this committee, Ms. Hunter works to ensure that underserved populations are not left behind as new health information technologies are developed and employed. The committee's particular concerns are improving the quality of care, increasing access to care, and reducing the cost of care among the underserved.

The Collaborative of which the Policy Committee is a part includes the HHS Office of Minority Health and the Office of the National Coordinator for Health Information Technology's (ONC) eHealth Initiative.

Setting Software Standards for the NHIN

Brian Behlendorf, a CollabNet Director, is a Collaboration Advisor in the ONC's Federal Health Architecture program. He helped develop standards and governance for the CONNECT project.

In allowing Federal agencies to link their existing health information systems together, the CONNECT project plays a central role in the development of the National Health Information Network (NHIN).

Developing HHS' Risk Management Framework

Reddix Group founder Joseph Reddix served on the Tiger Team tasked to develop a new risk management framework at HHS' Substance Abuse and Mental Health Service Administration (SAMHSA). The framework he helped develop, the Enterprise Performance Life Cycle (EPLC), is now in use agency-wide at HHS.

On the Tiger Team, he coordinated production of the EPLC Annual Operation Analysis Practice Guide, Checklist and Template. The EPLC has since produced tangible improvements in HHS mission performance.

Resources

INTERNAL RESOURCES

Strategy to Recruit, Train and Retain a High-Quality Workforce

An innovative structure means more resources.
Our group's non-hierarchical networked structure
(see Page 13) erases distinctions between internal and
external resources. Subcontractors that may have
been peripheral in a traditional contract team are
integral to operations within The Reddix Group.

Subcontractors have in-house staffing resources.
In our group, subcontractors aren't relegated to a
supporting role. They function as prime contractors in their own right, with in-house
resources they use to recruit, train and retain employees. For example, subcontractor
TigerLogic operates its own staffing department. CollabNet runs an extensive training
operation that it uses to bring new hires up to speed on its products.

Good environments draw talented people.
The enlightened work arrangements of our subcontractors allow them to draw from a
nationwide talent pool. For example, many CollabNet employees work remotely from
locations around the country. This allows the company to employ talented,
knowledgeable people wherever they happen to live.

Employing the Latest Business Systems

Our project management platform is cloud-based.
For coordinating work among its constituent firms, our group employs the TeamForge
platform developed by CollabNet. This cloud-based platform accommodates constant
input from managers, end users, and the customer.

We use videoconferencing to enable close collaboration.
People in our group conduct face-to-face meetings when necessary, but most meetings
are done through group video calls. Conducting face-to-face conversations over the
Internet allows close collaboration among people throughout the U.S.

Project dashboards enable customers to monitor progress.
We employ software from TigerLogic to create Web-based "dashboards" for the
projects we undertake. The dashboards provide real-time access to project information,
allowing our customers to monitor them every step of the way.

Managing Programs with Proven Leaders

Joseph Reddix, Program Manager
Joseph Reddix, PMP, is the founder of The Reddix Group. A PMI-certified program manager with over 30 years of experience, he has managed and audited programs at the $2 billion+ level, including several technology programs at HHS.

Barbara Roberts, Program Manager
Barbara Roberts, Vice President of Program Management, has over 30 years' experience managing technology programs, including creating the strategic technology plan for a trillion dollar enterprise.

Administering Contracts with Experienced Staff

Clinton Scott, Contract Administrator
Clinton Scott, Jr., Senior Advisor for Governmental Affairs, is a PMI-certified program manager and the team's Contract Administrator. In his 30+ years of Federal service, he handled Federal Acquisition Regulation system matters for HHS and the U.S. Army.

Ensuring Security with Qualified Personnel

Our member firms employ a total of 25 people with Federal security clearances:

	TOP SECRET	SECRET
CollabNet	2	2
RightNow		17
ExactData		1
Acquia	2	1
Total	**4**	**21**

EXTERNAL RESOURCES

Building and Managing Our Group

We bring together the best in the business.
The 18 companies that comprise our group are market leaders that provide best-of-breed products and services. For example, RightNow provides the only commercial software approved to run within the Defense Information Systems Agency (DISA) secure cloud network. Acquia is the world leader in Drupal integration.

Our subcontractors were selected also because their capabilities are complementary. For example, Perfect Search provides high-speed search technology for mobile devices, while Prometheus Research provides software that allows applications to easily "talk" with relational databases over the Internet. Together, these technologies can be used to create data-rich applications for mobile devices.

All the firms in our group are focused on our mission.
Each subcontractor helps our group fulfill its mission of creating useful software applications for the National Health Information Network:

- CollabNet created a secure, collaborative software development platform used by DISA. Its platform can be used to develop applications for the NHIN as well.

- Acquia is the world's premier systems integrator for the Drupal content management system. It can play a central role in developing Web sites that serve NHIN users.

- RightNow provides commercial software that runs within the Department of Defense secure cloud network. It can help make NHIN applications similarly secure.

- Perfect Search enables very high-speed searches across multiple systems. It can help NHIN users quickly find information anywhere in the network.

- Tiger Logic offers a development and operating environment for cloud-based mobile applications. It can be used to create mobile apps that run throughout the NHIN.

- Prometheus Research created software that translates HTTP into SQL. Now used in biomedical research, it can help "web-enable" applications to run in the NHIN.

- ExactData generates large sets of test data used to make sure software applications work correctly. It's HIPAA-compliant—an important criterion for NHIN apps.

- Tred Avon Labs helps computers understand human language. This can enable people to find information on the NHIN that might otherwise be hidden.

- DKI Consulting develops open source systems architecture. To function nationwide, the NHIN must be built using open source and standards.

Other subcontractors specialize in the program management aspects of health-related application development:

- Vulcan Enterprises consults with medical practices and institutions on the adoption of health information technology.

- A.L. Jones Optimum Consulting helps organizations resolve problems in capital planning and enterprise architecture.

- The Grant Group advises and guides organizations in the implementation of electronic health records.

- Edge Research conducts research into the perceptions and attitudes of customers and staff, in order to make programs successful.

Subcontractors are managed in a modern way.
In our group, subcontractors are managed very differently than in a traditional contract team. Instead of being commanded and controlled in a top-down hierarchy, the prime and subcontractors collaborate in a fluid network.

The Reddix Group offers several advantages over a traditional contract team:
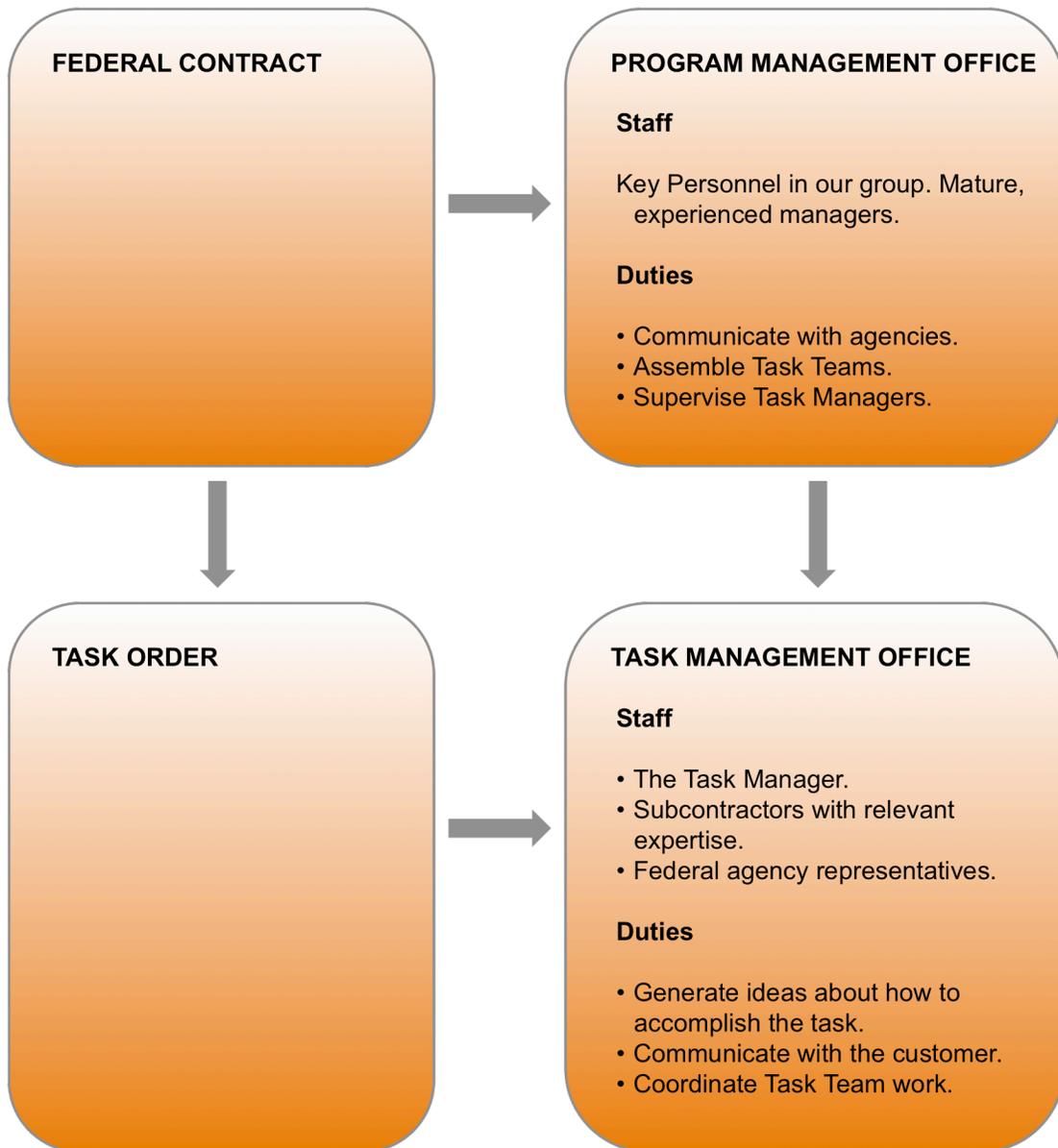
TRADITIONAL CONTRACT TEAM	THE REDDIX GROUP
Exclusive Locks in subcontractors with exclusive deals. Uses their qualifications to get work.	**Inclusive** Signs up subcontractors in open arrangements. Leverages their capabilities to do work.
Backward-looking Keeps out firms whose technology might displace old, proprietary systems.	**Forward-looking** Brings on firms whose technology helps create new, open systems.
Opaque Keeps customers at arm's length. Assures them, "You'll get what you want."	**Transparent** Shows customers how things look. Asks them throughout a project, "Is this what you want?"
Profit-oriented Uses the Prime's position to grab high-paying work and maximize profits.	**Performance-oriented** Assembles the best possible "task team" to complete assigned task orders.

Task-Level operations allow subcontractors to shine.
When a task order is issued, subcontractors with relevant expertise are assembled into a Task Team—the best possible team for that particular task. Any subcontractor can lead a Task Team doing work that involves its area of expertise.

Each Task Team is managed through a Task Management Office. It's run by a Task Manager, who is supervised by a Reddix Group Program Manager.

The Task Management Office also includes a representative from the Federal agency being served.

FEDERAL CONTRACT

PROGRAM MANAGEMENT OFFICE

Staff

Key Personnel in our group. Mature, experienced managers.

Duties

- Communicate with agencies.
- Assemble Task Teams.
- Supervise Task Managers.

TASK ORDER

TASK MANAGEMENT OFFICE

Staff

- The Task Manager.
- Subcontractors with relevant expertise.
- Federal agency representatives.

Duties

- Generate ideas about how to accomplish the task.
- Communicate with the customer.
- Coordinate Task Team work.

Responding to Workload Surges

Market leaders can cover increased workloads.
As market leaders, our subcontractors have substantial resources to draw upon in responding to workload surges. Seven of them have in-house staffing departments or operations. They also have widespread networks within their industries from which they can draw qualified, experienced employees and consultants as needed.

Our subcontractors' modern work arrangements also contribute to their ability to scale up quickly to meet increased customer demand. CollabNet, for example, has many of its employees work remotely, which allows it to bring new employees online quickly.

In our group, disasters are anticipated and minimized.
Emergency/disaster situations are less likely in The Reddix Group than in a traditional contract team, because core capabilities are distributed among many subcontractors. This eliminates a single point of failure, reducing project risk.

Providing OCONUS Support

Several subcontractors have a strong international presence. This enables our group to deliver support in 17 countries outside the United States:
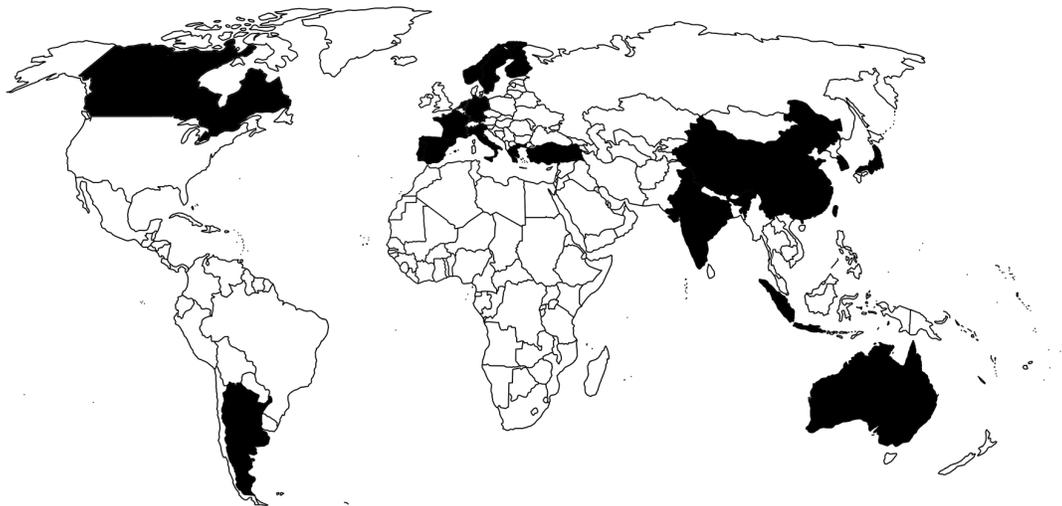
- CollabNet has offices in Shanghai, Tokyo, and Seoul.
- 33 companies worldwide are enrolled in Acquia's Parner Program.
- RightNow has offices in Munich, London, Utrecht, Sydney, and Tokyo.
- Perfect Search operates an office in Taipei, Taiwan.

Program Management

ORGANIZATIONAL STRUCTURE

Reducing Risk Throughout a Project

We employ the EPLC Framework.
We understand how the HHS Enterprise
Performance Life Cycle (EPLC) fits into
the agency's Performance Improvement
Lifecycle. That's because our group's
founder served on the team that developed
the EPLC framework.
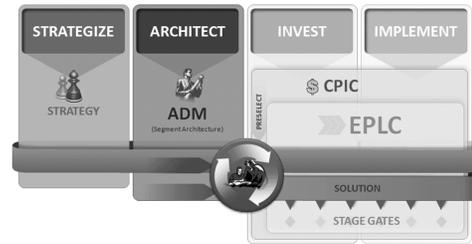
We employ the EPLC framework in all the
projects we undertake. We're familiar with what must be done in all its stages, from
Initiation to Disposition, as well as how the gates between these stages work. We're
experienced in handling the framework's other elements as well: stakeholders,
deliverables, exit criteria, and project reviews.

We supplement the EPLC with NIST security.
Cloud environments make it increasingly important that applications be developed with
security built in. That's why we integrate information security activities with the EPLC.

We handle security as an Enterprise Architecture function, employing NIST Special
Publication 800-37, *Guide for Applying the Risk Management Framework to Federal Information
Systems,* and following the steps it prescribes:

1. Categorize the system: how secure does it need to be?
2. Select security controls for the system based on its category.
3. Implement the controls and describe how they're employed.
4. Assess the security controls to determine if they're working.
5. Authorize the system to operate based on that assessment.
6. Monitor the security controls to maintain their effectiveness.

We employ these NIST security processes in developing the EA Framework, collecting
security-related data in the EA Repository.

We provide DoD-level security.
One of our subcontractors, RightNow, is the first and only private-sector company
whose software is approved to operate in the secure Department of Defense (DoD)
cloud network.

With a dedicated security and information assurance team, RightNow can certify applications to operate in the DoD cloud. It can also host these applications in its Tier 4 datacenters.

This gives our group DoD-level security at the development, application, and implementation level.

Employing an Effective Team Structure

We understand the importance of this vehicle.
As we understand it, the CIO-SP3 contract vehicle will be used to help build the NHIN, an "Internet of health care" that brings electronic health records into widespread use. As we see it, this effort is vital to our nation's economic strength and national security. It can greatly reduce health care costs and spawn a large new export industry:

• By making health monitoring, treatment, purchasing and research more efficient, the NHIN will significantly reduce health care costs that the Secretary of Defense says are "eating the Defense Department alive."

• A technology boom drove job growth in the 1990s, and health care is one of our economy's few current growth sectors. An NHIN-driven boom in health care technology will spur U.S. job growth.

• The NHIN will create a new worldwide market for health care IT with high barriers to entry. American companies will dominate this market and help create a more favorable balance of trade.

We think we know how the NHIN will work.
We consider the construction of the NHIN to be the "moon shot" of our generation. Like the Apollo missions, this project is highly technical, has never been done before, and absolutely must succeed. In our estimation, it will play out this way:

1. Through a multi-agency effort involving the Department of Veterans Affairs (VA), HHS, and DoD, the Federal government builds the NHIN to be the "Internet of health care." It connects all Federal health care facilities.

2. The NHIN is eventually opened for use in the private sector. Because it's based upon open source, standards and systems like the original Internet, it grows exponentially and becomes the nation's health care backbone.

3. To serve remote areas and keep individuals' health records secure, the NHIN is delivered via satellite array. This geospatial system allows the NHIN to operate globally and serve a worldwide market.

We recognize the problem NITAAC is faced with.
A project of this scale and complexity can't be completed using old contracting methods. The pay-a-single-contractor-to-build-a-single-system model won't work: the landscape of Federal contracting is littered with failed IT projects that were contracted this way.

We see the CIO-SP3 contract vehicle as a great stride towards solving this problem. With half its funds set aside for small business, it puts teams of small companies in position to do a great deal of work.

However, most small business contractors find it difficult to acquire the expertise required for NHIN-type work. As subcontractors to large firms, small companies are typically assigned tasks that don't require a high level of coordination or involve the latest technology.

Our group was created to solve this problem.
In January 2010, The Reddix Group began building our network of companies to do Federal IT work.

- Whereas traditional contract teams are structured like military units in command-and-control hierarchies, our group is organized like a software startup in a collaborative network.

- The Team Lead functions as the hub of this network, facilitating communications, coordinating member firms, and handling program management. It does no technical work for the customer—that's left to subcontractors.

- Subcontractors within the network function as equals, each firm taking the lead on tasks that involve its area of expertise.
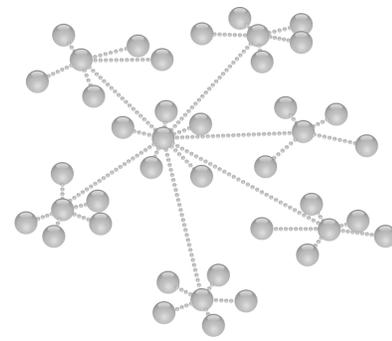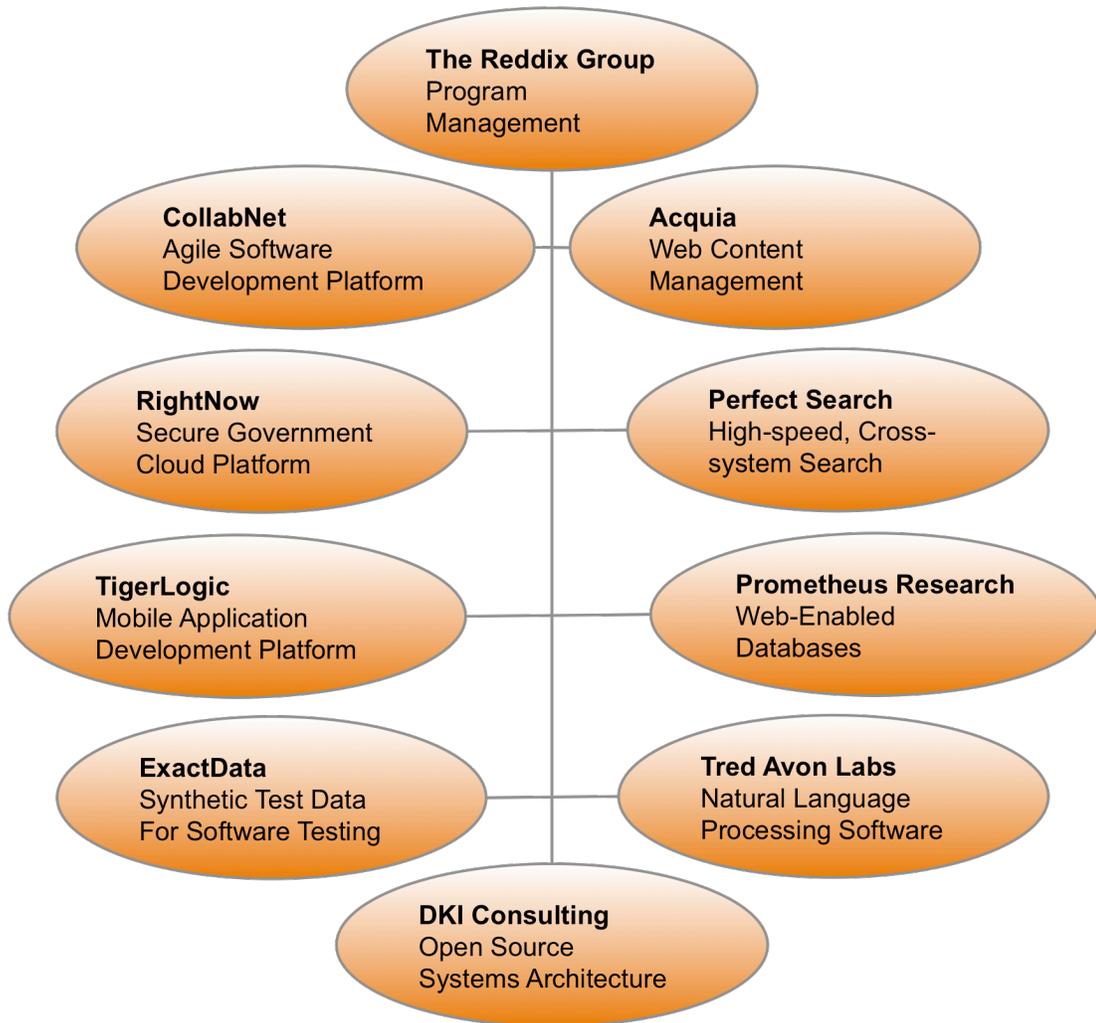
This arrangement enables small companies to work together to complete big projects. It provides subcontractors with the freedom and responsibility to do their best work.

It also attracts market leaders—firms that are the "best in the business" and uniquely valuable. Market-leading companies that might chafe at being subordinate to a traditional prime contractor like functioning as "primes" in their own right as part of our group.

Is our group the future of contracting?
The Reddix Group may even be the future of Federal contracting, with similar groups working together to take on the nation's biggest IT challenges. These networks of companies (one might focus on security, another on interoperability, another on application development) might connect with each other to form a powerful, flexible "Internet of contracting."

Structure of The Reddix Group

The Reddix Group
Program
Management

CollabNet
Agile Software
Development Platform

Acquia
Web Content
Management

RightNow
Secure Government
Cloud Platform

Perfect Search
High-speed, Cross-
system Search

TigerLogic
Mobile Application
Development Platform

Prometheus Research
Web-Enabled
Databases

ExactData
Synthetic Test Data
For Software Testing

Tred Avon Labs
Natural Language
Processing Software

DKI Consulting
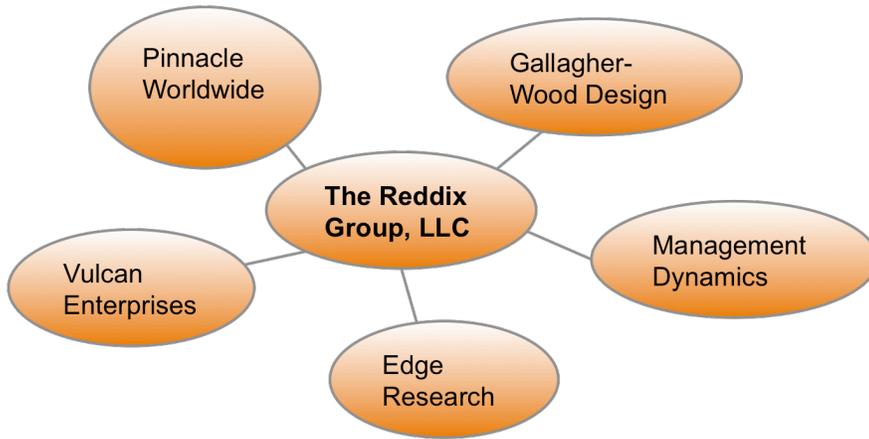Open Source
Systems Architecture

In our group, every company within it is connected directly to every other one in a collaborative network.
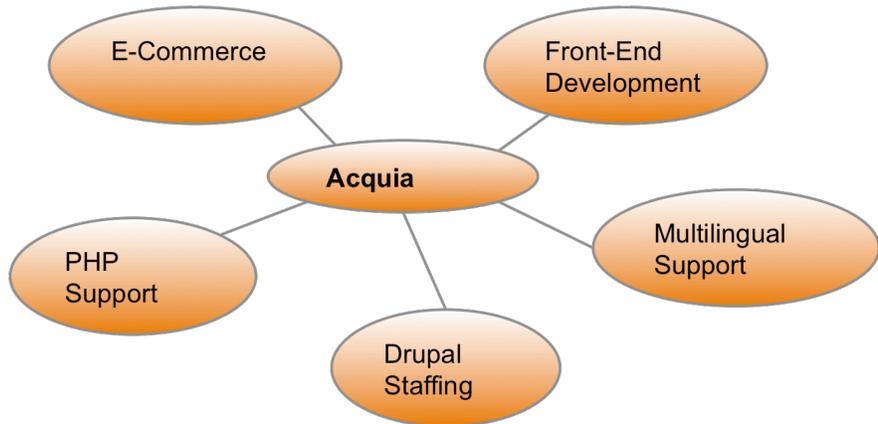
Each firm can communicate and work with any and every other firm.

Each can lead a Task Team to complete task orders that involve its area of expertise.

Networks Within Our Network

The Reddix Group handles program management. Several subcontractors help it fulfill its program management duties by supplementing its capabilities.

In the same way, each market-leading subcontractor has its own constellation of partner companies that supplement and complement its capabilities.

MANAGEMENT AND QUALITY CONTROL STRATEGIES

Measuring Performance

Our metrics are based upon broad-based measures.
Moving beyond traditional finance-based metrics that focus on an organization's inner workings, we develop performance metrics that measure our performance against customer requirements and Federal, State and Local implementations.

We believe metrics should support a range of agency stakeholders, from citizens to regulators to program management staff.

Our metrics reflect agency strategy.
We develop metrics by:

1. Talking with an agency to define its critical success factors.
2. Developing measures using the EPLC framework.
3. Establishing agency targets that results are scored against.

We then employ them to assess the health of projects according to six criteria:
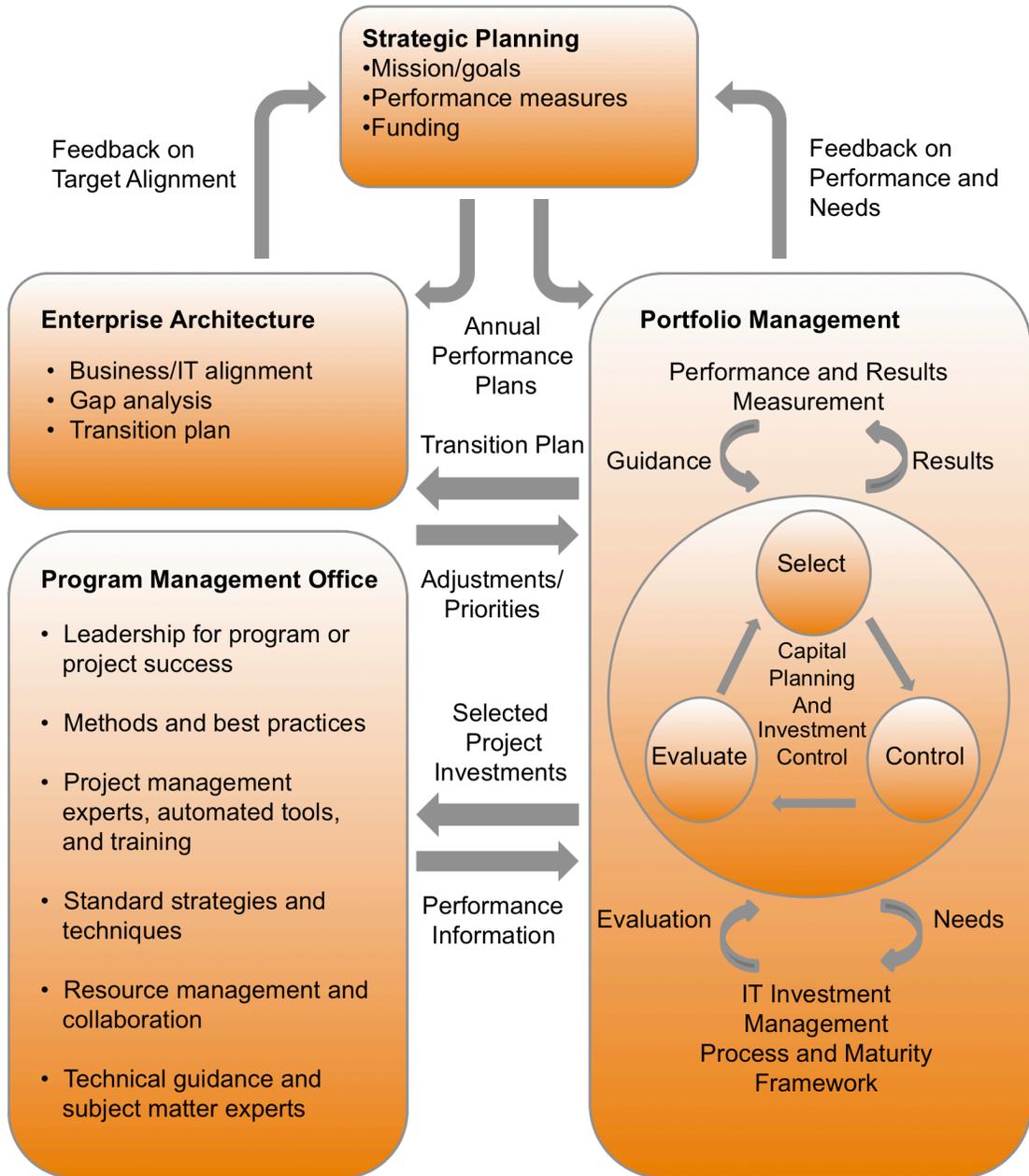
- Time
- Cost
- Resources
- Scope
- Quality
- Actions

Operating from a Strategic Perspective

Our holistic approach to managing CIO-SP3 is based upon HHS' fundamental goals. It's this strategic perspective that informs the way we conduct program management.

Below is our model for strategic-focused, integrated IT program governance.

The Reddix Group Program Governance Model

Strategic Planning
- Mission/goals
- Performance measures
- Funding

Feedback on
Target Alignment

Feedback on
Performance and
Needs

Enterprise Architecture
- Business/IT alignment
- Gap analysis
- Transition plan

Annual
Performance
Plans

Transition Plan

Portfolio Management

Performance and Results
Measurement

Guidance

Results

Select

Capital
Planning
And
Investment
Control

Evaluate

Control

Program Management Office
- Leadership for program or project success
- Methods and best practices
- Project management experts, automated tools, and training
- Standard strategies and techniques
- Resource management and collaboration
- Technical guidance and subject matter experts

Adjustments/
Priorities

Selected
Project
Investments

Performance
Information

Evaluation

Needs

IT Investment
Management
Process and Maturity
Framework

## The Reddix Group Enterprise Architecture Model

Below is our integrated Enterprise Architecture model. It helps us answer the questions:

- Are the investments on track and delivering expected performance results?

- Is the portfolio managed soundly?

- Is the Agency's business driving the IT?

- Is the budget process fully integrated with portfolio management, IT project management, enterprise architecture, and security?

- Is security layered into all aspects of the Agency's business solution?
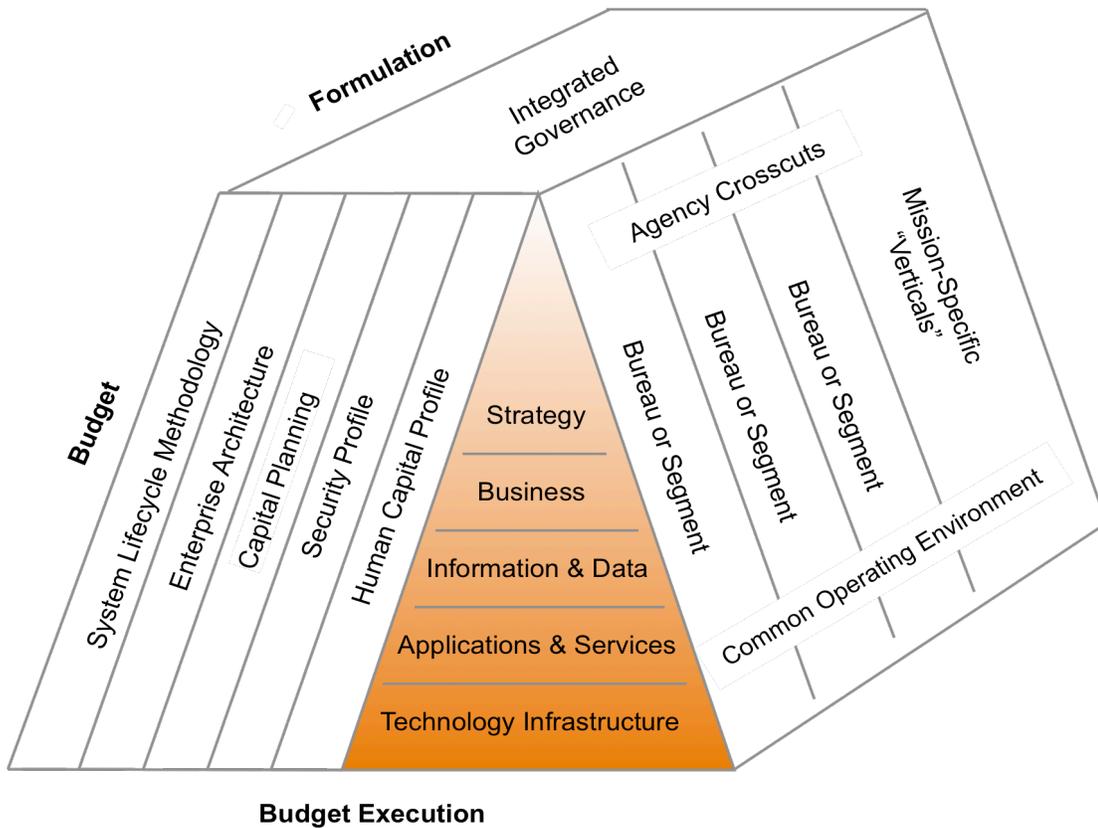
Our Enterprise Architecture Activities

We conduct several EA-related activities within an agency's operational framework. It's how we integrate Enterprise Architecture with the agency's operational and change management structures.
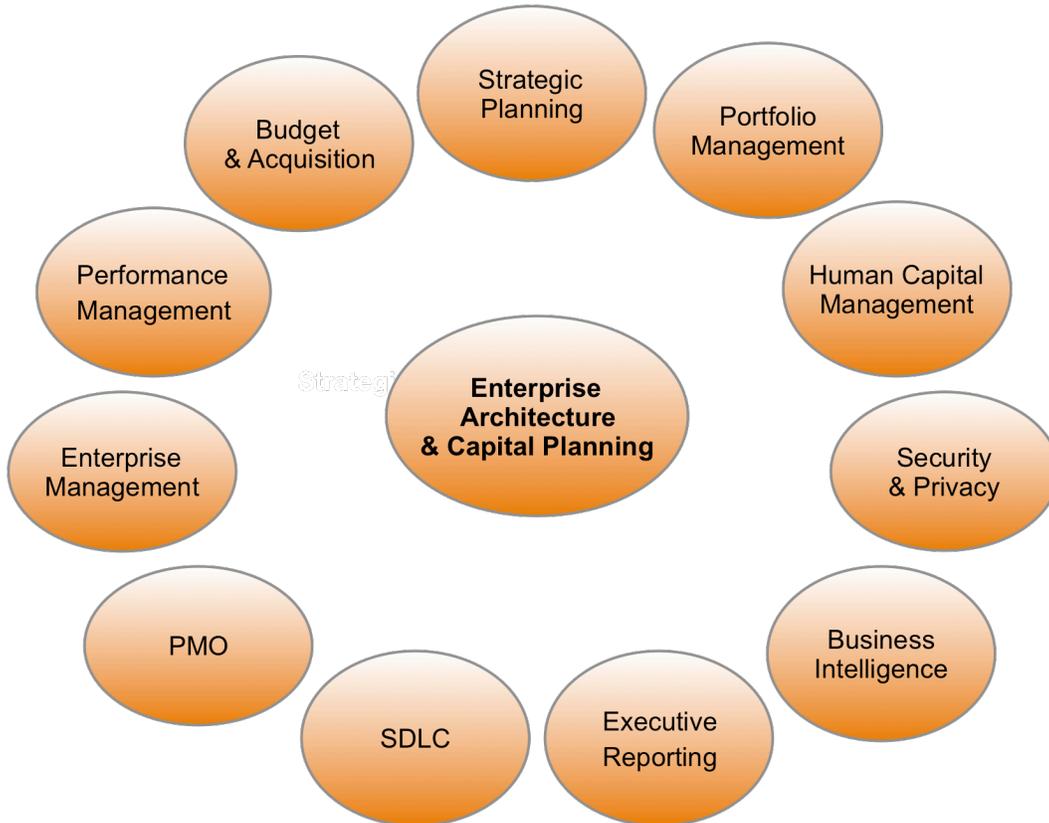
Corporate Commitment

MARKETING AND PURSUIT OF TECHNOLOGICAL INNOVATIONS

Marketing The GWAC

We plan to market it government-wide.
Our group is well suited to marketing a government-wide acquisition contract such as CIO-SP3. That's because it includes:

- Firms that provide government-wide solutions.
  Our subcontractors provide products and services that the whole Federal government can use, such as CollabNet and its planned Forge.gov software development platform, and Acquia helping to build the FedSpace social network.

- Firms with a government-wide presence.
  Our subcontractors have a strong presence in many different agencies: HHS, VA, DISA, and others. As members of our group, they have an interest in bringing their networks and customers to this GWAC.

- Unique and complementary capabilities.
  Some of our subcontractors provide unique products. Others combine their expertise to provide unique services. If Federal agencies want to procure them, they can do so through our group.

We conduct PR campaigns to raise awareness.
We plan to conduct a public relations campaign to make contracting officers throughout the government aware of CIO-SP3 and its ground-breaking nature. First we would identify journalists in the Federal contracting press, government IT publications, and private-sector media outlets who've written on similar topics. Then we'd "pitch" stories about this GWAC and The Reddix Group's role in it.

We've had success with this sort of PR campaign before. Reddix Group Vice President Chris Charuhas conducted one in 2007 to promote illustration-based textbooks created as part of a U.S. Department of Education research project. His campaign attracted over 100,000 visitors to the textbooks' Web site in its first three months online.

What does success look like?
We'll consider our marketing successful if CIO-SP3 is used by every Federal agency to procure health-related IT products and services offered by our group.

Pursuing Technological Innovation

This is an environment for innovators.
As a network of companies that's organized much like a software startup, The Reddix Group is an environment that foster's innovation.

Our group's non-hierarchical nature is attractive to market-leading technology companies such as Acquia, founded by the creator of Drupal. These subcontractors attained their leadership positions by employing people who are experts in their fields. As market leaders, they offer innovative, creative people a powerful incentive to work with them: challenging, interesting projects to work on.

The high-performing people who work in these and other member firms will be brought to bear on projects undertaken by our group.

Managing Task Order Proposals

CCPM saves time and money.
We plan to manage task order proposals using Critical
Chain Project Management (CCPM). Through level-loaded
resources, staggered start times, and rapid switching
between tasks, CCPM typically delivers 10% to 50%
savings in time and/or money.

We adhere to the government's release cycle goals.
We also plan to write task order proposals with the U.S.
CIO's release cycle goals in mind: functional deployments in approximately six months,
and deployment to end users within 18 months. Both the deliverables we propose and
their schedule will adhere to these time frames.

Administering Contracts and Task Orders

Our administration is based upon CCPM.
Our administration of task orders and contracts is based upon CCPM as well. Once a
project plan is fixed and the schedule is in place, groups responsible for completing
assigned tasks are freed from distractions or multitasking. After a task is completed, a
group "hands the baton"—transfers critical task responsibility—to the group responsible
for completing the next task in the project plan.

Transparency means "no surprises."
All participants—including our Federal customer—will be able to transparently monitor
performance using online project dashboards. Everyone involved can see potential
problems in the making and take action to avoid them.

We're guided by the Scope of Work.
By strictly adhering to the Scope of Work defined in a task order, we avoid "mission
creep" and meet contract goals.

Improving Processes

By monitoring processes, we improve them.
We monitor contract management processes, tracking the time estimated to complete
tasks vs. the time actually taken. By displaying the results, we're easily able to see which
tasks take more time relative to estimates, and which processes need to be improved.