An al-Qaeda Agent Handler receives instructions to carry out a suicide bombing at a local market at a specified time. The future martyr is a member of the Agent Handler’s Operational Cell “A”. The Agent Handler selects and activates an Improvised Explosive Device (IED) maker operational cell “B” and a surveillance team from operational cell “C”.

During the cell’s surveillance of the attack location, local citizens recognize unusual activity and law enforcement intercepts and detains the surveillance team. The Agent Handler pulls a new surveillance team from Sleeper Cell “A” and changes guidance for surveillance tactics to better avoid detection. Two days before the attack, military operations take out the IED-maker; the Agent Handler selects a new IED-maker from Operational Cell “B”.

Two days later, the attack is carried out successfully, killing four people and injuring dozens; several nearby businesses sustain damage. The market is deserted for days and local businesses do not recover financially for 2 months following the attack.

al-Qaeda is a focused, effective, and agile enterprise that cannot be defeated using conventional means

More than six years post-September 11, images of the attacks still remain vivid for most Americans: the shocking footage of planes destroying our national landmarks and killing thousands of innocent people in a systematic process. The heroic response from our first response community. And then the recognition that this was the work of a terrorist group that was not a popularized or well-known threat. Up until then, many thought al-Qaeda to be a stereotypical group of religious zealots living primitively and occasionally causing minor problems far from our shores. But what we have slowly come to realize is that al-Qaeda is a focused, innovative, effective, and agile organization that can not be quickly or easily defeated using our convention approaches.

The cost of the September 11 attacks to America? Nearly 3000 people killed instantaneously, several billions of dollars in infrastructure damage, and hundreds of billions of dollars of collateral effects to an already waning financial market. The cost to al-Qaeda? Nineteen minimally-equipped and moderately-trained terrorists, for a cost of less than $500,000. The planning for the operation was conducted covertly in only two years.

Al-Qaeda’s two primary founding fathers, Abdullah Yusuf Azzam and Osama bin Laden, established an agile enterprise that is able to organize, train, plan, and carry out operations under an intense amount of pressure and scrutiny, often in poor working conditions, with limited resources, training, and often, direction. Recruits come from all walks of life; operatives come from different countries, speak different languages, yet are still expected to work seamlessly and effectively together.

The al-Qaeda decentralized cellular model is an important starting point for the discovery of what makes al-Qaeda so agile. Operatives are assigned to cells of varying sizes depending on their experience, know-how, and availability. They typically are given little information and are directed to live normal lives; they only sporadically perform operational tasks. A cell will be facilitated by an Agent Handler—a “commando” of considerable experience, training, and trust—who receives basic instructions from the al-Qaeda central command, evaluates intelligence from his theater of operations, conducts planning, obtains resources, and then carries out operation.

The commandos are spread out in various theaters of operations. Cells are known to be established in North America, Latin America, Europe, the Middle East, Africa, Asia, and Australia. Some cells fall under the al-Qaeda Central Command while some are only loosely affiliated groups aligned under other terrorist organizations. However, al-Qaeda can fund these “sister” organizations to conduct operations in the event their own operatives are unable to carry them out.

Another hallmark of the al-Qaeda enterprise is the training provided to their operatives. Many of them receive rigorous training, to include espionage, concealment, communication, counterfeiting, transportation, and weapons training. This training is offered to prospective operatives for al-Qaeda and its sister organizations alike. Thus, all potential operatives receive the same basic education, and this gives al-Qaeda the opportunity to reinforce its ideology, which
helps maintain retention, sustains morale, and reinforces individual focus to complete difficult and potentially life-ending tasks.

Having a large, diverse, geographically spread out pool of potential “employees” allows the agent handlers to quickly assemble units to carry out operations as directed by the command structure. Keeping each individual member generally ignorant of what others are doing also helps mitigate the potential exposure of the overall operational plans in the event an individual cell member is caught, while still allowing that cell member the autonomy to carry out individual tasks to the best of his/her abilities. In the event the local al-Qaeda labor pool is lacking in a specialized expertise necessary to conduct a particular operation, the agent handlers can leverage external cells, sleeper cells, sister organizations or request that the command structure quickly provide the proper personnel.

None of the al-Qaeda operation requires a large bureaucracy; instead operational units exist more as a decentralized network. Their ideology reinforces a Spartan lifestyle for their operatives. Thus, commandos are not hindered by the requirement to sustain large resource requirements, and innovative means of operations are considered to obtain spectacular results from limited means. For example, it is estimated that the full al-Qaeda costs to plan and execute the 9-11 attacks cost them anywhere from $250,000 to $500,000. In the U.S. government, that amount might buy the services of two contractors for one year. This highly innovative use of available resources provides the requisite variety necessary to carry out operations while still enabling parsimony within the organization, meaning that their resources are generally flexible.

This level of ingenuity with resources also contributes to al-Qaeda’s ability as an organization to change tactics and techniques quickly in response to external factors or to take advantage of environmental changes. For example, al-Qaeda operatives who learn of planned attacks through connections with other Islamic terrorist organizations are able to “piggy back” on them. Because they have more flexible resources, al-Qaeda can provide appropriate additional capabilities to other organizations when needed for a planned attack. Likewise, because most of their tactics involve plentiful and inexpensive multipurpose components, if law enforcement or military actions change so that one technique is no longer feasible (e.g. mitigation techniques have been created) or that the likelihood of the attack being detected is increased (e.g. new chemical detectors are utilized), then operatives can quickly and easily adjust their strategy to counter these obstacles.

As an enterprise, al-Qaeda anticipates major long-term changes. For example, a major shift in tactics could be required if traditional means become impossible to use due to military or law enforcement intervention. This might involve changing from traditional attack methods using explosives to using only improvised methods, such as in 9/11. Al-Qaeda is able to adapt to changes in the operational environment. Their use of inexpensive, ubiquitous technology and enables them to operate almost anywhere in the world. This ensures that losses of “safe havens”, like Afghanistan, do not pose an inordinate threat to the organization. Al-Qaeda will also have to face changes in the leadership. Currently they change individuals in most leadership positions on a regular basis, which improves their flexibility in responding to these types of issues.

Perhaps it should come as no surprise that al-Qaeda’s current leader, Osama bin Laden, has an education background in economics and business administration, and comes from a family that owns one of the largest construction companies in the Islamic world. Both of these circumstances suggest an early exposure and predilection to agile practices. In addition, studies by Marc Sageman show that a significant portion of al-Qaeda’s operational members also have engineering backgrounds and/or business experience, which helps to engender understanding of agile principles throughout the organization.

In essence, al-Qaeda’s agility is the primary contributor to its generally accepted resilience. Without its ability to be agile in the face of threats from the military and law enforcement might of the strongest nations in the world, it would not have been able to plan, coordinate, and execute intricate and effective operations such as the 9-11 attacks, the 2000 USS Cole bombing, or the 1998 U.S. Embassy bombings in Kenya and Tanzania. The world’s superpowers continue to utilize traditional military and law enforcement means to counter this threat, but these methods are not designed to counter such newer, more agile threats. It seems that al-Qaeda will remain a constant menace.

The intent of this analysis is not to admire or laud al-Qaeda, but to characterize it, without bias, as an agile enterprise. By understanding what elements of the al-Qaeda organization create agility, it may be possible to destabilize the organization. It is the authors’ hope that by contributing to the discussion and debate, we can assist in al-Qaeda’s elimination.
Key Proactive Issues:

Creation:
- Creation of new cells for special operations (qs)
- Creation of new funding streams (tc)
- Creation of new projects (tcq)

Improvement:
- Streamlining operations based on increased knowledge of the environment and improved intelligence (tcqs)
- Refining SOPs due to discovery of new technologies that save time and money (tc)

Migration:
- Prepare for change in leadership (tqs)
- Prepare for loss of safe havens

Modification:
- Add cell members for special ops needs (qs)
- Shrink cell footprint during increased counter-terrorist operations (cs)
- Addition of new tactics (q5)

Operational/Integrity Management
Framework: Emir General, Shura Council
Components: Military Committee
Inventory: Support Cells
Configuration: Agent Handlers

System Examples

System Design Principles

Self Contained Units:
- Self-contained cells can operate independently of a central command
- Compartmentalization; components function semi-independently of each other
- Training emphasizes self-sufficiency

Plug Compatibility:
- Common ideology and training consistently reinforced
- All members and subgroups meet the fourteen mandatory qualifications
- If a cell member is caught, other members can fill the void

Facilitated Re-Use:
- Proven members can continue to be deployed indefinitely
- Strong recruitment program is a source for constant replenishment
- al-Qaeda will "fire" cell members who do not perform
- al-Qaeda will provide advanced training to cell members performing special operations

Non-Hierarchical Interaction:
- Select cell members can communicate with selected members of other cells if required
- All cell members report directly only to their agent handler (relatively flat architecture)

Deferred Commitment:
- Employment of sleeper agents and cells
- Assistance requested from affiliated organizations only when need or opportunity identified

Key Reactive Issues:

Correction:
- Eliminate cell members which under-perform or over-consume (tcq)
- Change processes which increase vulnerability (q5)

Variation:
- Changes in law enforcement operations (s)
- Elimination of safe houses to base out of (q)

Expansion:
- Adding new tactics and technologies (tqs)
- Leveraging new "sister" terrorist organizations (s)

Reconfiguration:
- Reorganize the cell composition based on evolving needs (cs)

Evolving Standards (Framework):
- al-Qaeda able to change its structure according to circumstances
- Operational techniques constantly refined
- Intelligence operations can impact the structure and tactics of an operational cell

Unit Redundancy and Diversity:
- al-Qaeda members recruit from their own nationalities, families, and friends
- Agents with special abilities are incorporated where needed
- Multiple members (per cell and across cells) with the same specialization

Elastic Capacity:
- Cells can merge or split, cooperating ideologically, financially, and technically
- Agent handlers can easily add or subtract members of the cell
- Ability to quickly escalate or deescalate operations
- Proven capacity to regenerate new cells

Distributed Control & Information:
- Agent handlers are provided objectives and control operations at the local level
- Local intelligence gathering impacts operations

Self Organizing Unit Relationships:
- Cells organize themselves to adjust to the environment in which they operate