



The HR Side of Northrop Grumman's Acquisition Process

By Eileen Hogan, Ph.D.

PROJECT TEAM

Author: Eileen Hogan, Ph.D.

SHRM project contributor: Nancy A. Woolever, SPHR

External contributor: Michele Toth

Copy editing: Katya Scanlan, copy editor

Design: Blair Wright, senior graphic designer

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SHRM Academic Initiatives

1800 Duke Street, Alexandria, VA 22314, USA Phone: +1-800-283-7476 Fax: +1-703-535-6432

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Teaching Notes

This case deals with the process that Northrop Grumman Corporation (NGC) uses to integrate the human resource aspects of its acquisitions. The process has evolved over the past 17 years, when NGC started acquiring firms to support its corporate strategy. The case discusses the steps NGC goes through in integrating various HR systems, as well as the team approach that NGC uses.

In addition to dealing with the integration of HR systems, the case reveals NGC's corporate culture and how it attempts to integrate its new acquisitions, both big and small, into its operations. Much of NGC's culture can be seen through how its own members talk about its operations.

USES OF THE CASE

This case could be used in an upper-level undergraduate course, a graduate course or an executive MBA course in strategic HR, HR compensation and benefits or management of mergers and acquisitions.

LEARNING OBJECTIVES

By the end of the case discussion, students should be able to:

- 1. Describe the complexity of acquisition evaluation and integration.
- 2. Discuss choices that an organization makes in how it manages the acquisition process in terms of teams, speed and post-acquisition integration.
- 3. Explain how organizational cultures affect acquisitions.
- 4. Examine how an organization's strategy can be supported by HR practices.
- 5. Discuss mergers and acquisitions as a possible piece of an organization's strategy.

POSSIBLE DISCUSSION QUESTIONS

- 1. What is the most important lesson(s) that NGC thinks it has learned about evaluating and integrating acquisitions well?
 - Students may have a variety of answers to this question, such as:
 - The importance of strategic fit (p. 13).
 - Not pursuing hostile targets (pp. 13-14).
 - The due diligence process (p. 13 +).
 - > Use of teams (pp. 14-15).
 - > Team leadership (p. 15).
 - > Steps in the process (p. 16).
 - > Managing data and communication virtually (p. 16).
 - > Development and use of checklists (p. 17).
 - > Retention of key individuals (pp. 19-20).
 - > Length of retention agreements (p. 20).
 - > Flexibility of structure (pp. 22-23).
 - > Implementation planning and execution (p. 25-27).
 - However, the two most important are arguably:
 - Culture fit (pp. 28-31).
 - Involvement of HR in due diligence process (pp. 15-16, 23-24).
- 2. How successful is NGC, really, at managing MAs? How do you measure success?
 - Financial performance is shown in Table 2.
 - Students may have a variety of other suggestions for appropriate measures, such as success in integrating people and managing cultural issues of acquisitions.
- 3. Describe the NGC culture. Is it changing? Is that a good thing or a bad thing?
 - On pages 28-29, this topic is discussed from the employee standpoint.
 - Generally, larger organizations become more bureaucratic, policy- and procedure-driven and conservative.
- 4. Would you care to work in a culture like NGC's? Why? How does NGC's culture compare with the company you presently work for?
- 5. For the most part, small acquisitions that NGC makes are brought in and culturally integrated into NGC. Is this wise? Should NGC keep acquisitions more independent?

- This is discussed on pages 23 and 30.
- Students should be able to argue the pros and cons of complete integration versus allowing independence.
- 6. How sensitive is NGC to cultural issues in acquisitions? Should it be more or less tolerant of cultural variations?
 - NGC appears to have learned from the Grumman experience (p. 29).
- 7. What is your view about the speed at which NGC integrates acquisitions?
- 8. How well is NGC prepared for the future in its industry?
 - Since the case is focused mainly on past actions and not on the future, the case does not contain much information on this topic.
 - However, students could do research outside the case itself on current events in the industry to explore this question.
- 9. NGC has moved to the use of a "virtual data room," which means that MA team members no longer have to meet physically. Explain the pros and cons of this innovation. Should NGC continue in this vein?
- 10. What changes would you suggest NGC make to its acquisition process?
- 11. Can NGC's process be applied to other organizations?

SUGGESTIONS FOR TEACHING THE CASE

HR Aspects

Since this case is mostly descriptive and not focused on a managerial decision, the focus of the case is to evaluate NGC's practices and discuss whether they are effective. The case is written from the perspective of NGC people who clearly think their process is highly effective, but students should be encouraged to pull apart NGC's practices and critically evaluate whether the conclusions they have reached hold water.

One useful way to begin the discussion is to ask participants to respond to Maria Norman's need to come up with a list of "lessons learned" in NGC's management of acquisitions. Then, participants should be induced to evaluate these lessons.

One way to facilitate this type of discussion is to break the class into groups that will then debate both sides of the issues. The list of possible topics includes:

- Acquisitions as a part of NGC's strategy.
- Involvement of HR in the MA evaluation process.
- The use of virtual data rooms versus personal contact.
- The use of cross-functional teams to evaluate and integrate acquisitions.

- The use of extensive checklists to routinize the evaluation and integration processes.
- Speed of integration.
- Degree of independence allowed to acquisitions.
- Philosophy of retention agreements.
- Philosophy of standardizing benefits of acquisitions to the NGC model.

Cultural Aspects

The case also gives a fairly rich description of NGC's culture, much of it in statements of NGC's members.

To lead the discussion in this direction, a class could be asked to generate a list of attributes of the NGC culture, as well as its underlying values. Then, discussion of the industry in which NGC operates could contribute a list of desirable characteristics of a successful firm. Finally, strategic match could be assessed.

NGC claims it picks the "best of the best" when acquiring companies. At least for its large acquisitions, this appears to be true, as an inspection of the background of its present executives reveals a variety of corporate origins. However, this may have led to some shifting of the corporate culture to a more bureaucratic, more risk-averse culture. Again, a debate could be structured, either by designating groups or allowing the class to divide itself, around the issue of whether this cultural change is appropriate to NGC's strategy and environment.

SUGGESTED READINGS

Schmidt, Jeffrey A. (2002). *Making mergers work: The strategic importance of people*. Towers, Perrin, Foster, & Crosby, Inc.

How the companies stack up. (2008, May 5). Fortune.

Freccia, D. (2006). *Post-merger integration at Northrop Grumman Information Technology*. Darden Business Publishing, University of Virginia (UVA-BP-0472).

Overview

Maria Norman, Corporate Director of Benefits Strategy and Design, contemplated the checklist on her desk. Her company, Northrop Grumman Corporation (NGC), was considering making an offer to purchase a small firm that specialized in computer security. Norman had been assigned to lead the mergers and acquisitions (MA) team that would evaluate this potential acquisition. In addition, her tasks were to review the target company's benefits systems to estimate potential liabilities, as well as to plan for and assist in implementing changes in this area.

Although NGC pursues MAs for financial reasons, the company has come to recognize that a major factor in obtaining the value of a target company rests on solving the human resources (HR) challenge. To that end, it has developed an MA evaluation and integration process that takes human factors into account. The MA team bears much responsibility for making sure the cultures of the two firms can be meshed in a way that minimizes disruptions and the flight of intellectual capital (the people) from the target.

In a few hours, Norman was scheduled to meet with a case writer to discuss the process by which NGC tries to ensure the success of an acquisition and the role of HR in carrying it out. She picked up the list of team members (see sidebar for a list of individuals who are part of this case study) and the three pages of items for HR to evaluate and considered what she would say.

HISTORY

Northrop Grumman Corporation has always had strong ties to the Defense Department. John K. "Jack" Northrop founded Northrop Aircraft Inc. in 1939 in Hawthorne, Calif. By the next year, the new company already had its first military contract to build the N-3PB (for "patrol bomber") for the Norwegian Air Force. From that beginning, Northrop became known for its military aircraft, developing numerous cutting-edge airplanes for different missions over the decades, culminating in the B2 "stealth" bomber.

The company made its first notable acquisition in 1952, when it purchased the Radioplane Co., a maker of target drones. In 1959, the company changed its name to Northrop Corporation, reflecting its growth and expansion into defense fields besides aircraft.

For more than 50 years, the company concentrated on growing its own business. But the fall of the Berlin Wall in 1989, followed less than two years later by the dissolution of the USSR, changed the fundamentals of the defense industry as spending on Cold War programs was cut and the Pentagon went through a period of shrinking budgets. This increased pressure on defense companies to consolidate or diversify.

List of Interviewees in Case

(In Order of Appearance)

Maria Norman, Corporate Director, Benefits Strategy and Design

Karin Flanagan, Corporate Vice President, MA

Ray Fulcher, Corporate Director of MA Integration

Bart Barré, Senior Counsel

Debbie Catsavas, Vice President, Compensation, Benefits and International

Jeff Schmidt, Corporate Director, Compensation

Jon Korin, Sector Director, Strategic Development, IS Sector In order for Northrop to maintain its position and business momentum, the company opted for the latter strategy. "Northrop created the whole mergers and acquisitions department back in late 1992," says Karin Flanagan, Corporate VP of Mergers and Acquisitions in NGC's Treasury Department. "We saw the industry consolidating, and we had to decide where to take the company—should we shrink? Be acquired? Acquire? We had tough decisions to make, and we knew M&A would be a big part of what happened in the industry going forward. NGC saw the industry consolidation as an opportunity to become a Tier One [top tier] contractor, and we went for it."

Northrop's initial acquisition in the face of changes in the defense industry was Grumman Corporation, in 1994. Grumman itself was a successful provider of military aircraft. Founded in 1930, Grumman had a long history of innovative design, including the first Navy fighter plane with retractable landing gear (the XFF-1, in 1931), the A-6 Intruder, the world's only all-weather attack bomber (in 1969), and the Apollo Lunar Module, used in the first landing on the Moon.

While Northrop was the acquirer, the company changed its name to Northrop Grumman to reflect the new organization. The name change implied a marriage between equals, which was not the case. Northrop executives only paid lip service to the idea that integrating two cultures would be the biggest challenge. "The Grumman people, I heard later, stopped the clocks on their walls," Flanagan says. "Many Grumman people were disheartened during the integration process. It was the first integration we ever did, and we did a horrible job."

Looking back on the acquisition, Northrop executives say the Grumman acquisition was handled terribly, and it took years for the new, combined entity to overcome resentments. But the lessons learned during this most difficult acquisition laid the groundwork for refining the process in future purchases.

Throughout the 1990s, Northrop Grumman continued to make high-value—and high-visibility—acquisitions. In 1996, NGC acquired Westinghouse Electric, known for its radio and radar technologies within the defense industry. In 1997, it purchased Logicon, a California company that pioneered the application of computer technology to defense programs. In 1999, NGC acquired Teledyne Ryan Aeronautical, the defense industry leader in unmanned aircraft used for reconnaissance, surveillance and target systems.

In 2001, Northrop branched out into ships with its acquisition of Litton Industries and its Ingalls Shipbuilding division; the Litton acquisition also added leadership in inertial navigation systems, laser radar and information technology. "We can be swift and nimble when we need to be, and that is very important," says Ray Fulcher, Corporate Director of Mergers and Acquisitions Integration. The Litton purchase was an example of that, he says. "It's interesting that we had [about 150] senior executives from those two companies in a hotel with executive presentations going on, and we're wondering how we are going to pull this off, that someone is going to notice. Nobody did. When it hit the wire, it was like, 'You guys bought what?'"

That same year, Northrop Grumman acquired Newport News Shipbuilding, creating its Shipbuilding Sector.

The last major acquisition came in 2002, with the purchase of TRW for its military and civil space systems and satellite payloads, as well as integration of complex, mission-enabling systems and services. Northrop sold off TRW's automotive parts division, keeping NGC focused on government contracts and staying away from commercial markets. Flanagan explains, "One thing we haven't done 'by design' is jump into the commercial marketplace and think we could compete. If you've done any historical research on defense companies and their forays into the commercial marketplace, you will find it unblemished by success."

Since the acquisition of TRW, Northrop has purchased numerous small companies (Figure 1, on page 8), pursuing specific niche technologies—and individuals with creative talents—to make Northrop Grumman capable of undertaking any defense contract for any branch of the Armed Services, "from undersea to outer space to cyber space." Northrop's inclusion of "cyber space" as a field of expertise reflects another significant change in the defense industry: the permeating of computer systems (information technology, or IT) throughout defense applications—weapons systems, aircraft, ground vehicles, security systems and so on.

The spread of IT as a core component in many government contracts also has led Northrop to expand beyond its traditional defense business. For instance, when the company acquired Litton in 2001, included in the deal was TASC, a high-end technology developer owned by Litton with extensive business operations within the intelligence community (NSA, CIA, DIA, etc.). Through such targeted acquisitions, Northrop now holds major contracts at NASA, the State Department, the IRS, the Homeland Security Department and classified contracts for the intelligence community.

THE COMPETITION

In the 1990s and into the 21st century, the defense industry went through significant consolidation. One distinguishing characteristic was size: Companies either needed to be very, very large, covering many technology disciplines, in order to pursue government contracts worth potentially billions of dollars, or very small, focusing on specific niche technologies. Mid-sized companies, with annual revenues between \$100 million and \$1 billion, generally found themselves too small to compete with the major players in the industry and too big to match small companies' flexibility and specialization.

As a result, Northrop's acquisition strategy was responding to changes at the Defense Department, but it also was a defensive reaction to purchases made by its top competitors. For instance, one of the few companies to rival Northrop Grumman in size and scope of work is Lockheed Martin Corporation. In 1995, the Lockheed Corporation acquired Martin Marietta, a move also billed as "a merger of equals." Similarly, the Boeing Company, another major competitor, purchased McDonnell

Figure 1. Northrop Grumman MA&D History



Douglas in 1997. These acquisitions were comparable to Northrop's purchase of Grumman in terms of immediate impact, size of the enterprises and complexity. Just as Northrop Grumman set out to purchase key technologies and intellectual capital by gobbling up smaller firms, Lockheed and Boeing did the same.

These three companies—NGC, Lockheed and Boeing—represent the top tier of government contractors. A relative handful—perhaps two dozen other firms—comprises the second tier: not quite as large as the Big Three, not quite the same breadth and depth of capabilities, but determined competitors in their own right. Their names, too, are familiar to the public—General Dynamics, Raytheon, SAIC, Computer Sciences Corp. and Harris Corp., to name a few. And they, too, went on acquisition sprees.

In some cases, Northrop competed against these other firms to acquire businesses; for instance, General Dynamics originally aimed to acquire Newport News Shipbuilding. Concerns at the Defense Department about lack of competition for submarine manufacturing left the door open for Northrop to step in and acquire the ship manufacturer.

The Newport News Shipbuilding acquisition illustrates one way the defense market reflects its unique government customers. "Most of the time, our roadblocks are things like, 'Wait a minute, there are going to be some sort of governmental regulations where we bring these folks on, then it is going to affect some other piece of Northrop Grumman business,' because the government doesn't let you do everything," says Bart Barré, Senior Counsel in the Corporate Legal Department.

CORPORATE STRUCTURE

With 120,000 employees worldwide, Northrop has a sprawling organization, with scientific, engineering, design and service disciplines that don't always fit neatly into an organizational chart. At the top level, NGC is organized into five Operating Sectors—Aerospace Systems, Electronic Systems, Information Systems, Shipbuilding and Technical Services—supported by the Corporate departments: Business Management, General Counsel, HR & Administration, Technology, Government Relations, and Communications.

In January of 2009, NGC streamlined its structure, reducing the number of Operating Sectors from seven to five: Information Systems, Technical Services, Aerospace Systems, Electronic Systems and Shipbuilding. According to NGC, this was done to "strengthen alignment with its customers, improve the company's program performance and growth potential, and enhance its cost competitiveness."

The Information Systems Sector is composed of the former IT and Mission Systems Sectors. This Sector is an approximately \$10 billion leading global provider of advanced solutions for defense, intelligence, civil agency and commercial customers. Formerly, the IT Sector (almost \$4.5 billion in 2007 revenues, or 14.0 percent) provided technology, systems engineering and systems integration to federal civilian, defense and intelligence agencies and to state and local agencies. Headquartered

in McLean, Va., this Sector expanded aggressively through acquisition—Logicon, purchased in 1997, was integrated into IT, as was Federal Data Corporation when it was acquired in 2000. In the government IT market, vendors and customer agencies don't talk about buying products or services, they talk about buying solutions. Northrop Grumman's "solutions" support simulation and training, information assurance, combat systems, software engineering, weather systems, military intelligence, enterprise systems, secure communications and space systems, according to NGC's web site.

The former Mission Systems Sector (more than \$5.9 billion, or 18.5 percent) was focused on meeting the needs of customers at the Defense Department and intelligence community. Its name, "Mission Systems," reflected its development of very large, complex IT systems that serve unique missions. For instance, Northrop won a contract to migrate Army communications to digital formats and create a completely networked voice, image and data system to serve battle commands, brigades and smaller groups simultaneously. This Sector had its headquarters in Reston, Va.

The Technical Services Sector (2007 revenues of almost \$2.2 billion, about 6.8 percent of the total) provides operations, maintenance and logistical services and support for the systems it sells its customers, and for systems the government has purchased from other contractors. This Sector also will take over services that previously were provided by government employees; contracting regulations require the outsourced services to be not "inherently governmental," though that term is not well-defined. Sector offices are located in Herndon, Va.

Also combining in January 2009 were Northrop Grumman's two Sectors devoted to aspects of aerospace, Integrated Systems and Space Technology, forming the new Aerospace Systems Sector. On the NGC web site, the business of this Sector is described as "a premier provider of manned and unmanned aircraft, space systems, missile systems and advanced technologies critical to our nation's security." In 2007, Integrated Systems (El Segundo, Calif.) had revenues of \$5.1 billion, or 15.8 percent. The Sector focused on locating and tracking enemy threats, delivering troops and information accurately, and projecting air power precisely. To do this, for example, the Sector developed unmanned aerial vehicles (UAVs) that can run surveillance or deliver a missile payload; new digital radar systems that provide enhanced detail and precision; or new aircraft that incorporate the networked communications capabilities needed to support troops. Teledyne Ryan, acquired by Northrop in 1999, formed the core of this Sector.

Space Technology (Redondo Beach, Calif.) was, as one would expect, centered on leading-edge systems for outside the edge of our planet—rockets, missiles, satellites, lasers—and the systems and subsystems to support them and integrate them into earth-based systems. Its 2007 revenues were more than \$3.1 billion, equaling 9.8 percent of the corporate revenue stream.

In the previous structure, the Electronics Systems Sector was the largest by revenue (\$6.9 billion in 2007, or 21.6 percent). It covers the gamut of systems with specific purposes—sensors, navigation, propulsion and electronic countermeasures—where IT plays a role but not the central purpose. When Northrop Grumman purchased Westinghouse Electric Corp. in 1996, the acquisition formed a large part of this Sector. Sector headquarters are in Linthicum, Md.

The Shipbuilding Sector is just that—two operations, Newport News and Gulf Coast, dedicated to the design and construction of maritime craft, including aircraft carriers and nuclear submarines. Northrop created this Sector through its acquisition of Newport News Shipbuilding in 2001. With 2007 revenues of \$5.8 billion (almost 18.1 percent of the total), the Sector is the second largest based on income. Sector headquarters are in Newport News, Va., and Pascagoula, Miss.

Building ships is part of Northrop's overall mission, and it is a critical piece in meeting Defense Department needs. In addition, as IT has migrated through every discipline within the military, it is easier to build ships that integrate computer networks than to retrofit. This represented an opportunity to bring new technologies to a traditional military space.

Table 1 summarizes other key acquisitions and their assignment within the Northrop family of Sectors.

Table 1. Structural Locations of NGC Acquisitions

- Inter-National Research Institute (1998)—Command and control, tracking, data fusion and mapping for the Department of Defense; now part of Information Systems Sector.
- California Microwave Systems (1999)—Airborne reconnaissance and surveillance systems, government ground-based satellite communications systems, communications gateway systems and mission planning; now part of Electronic Systems Sector.
- Data Procurement Corporation (1999)—IT services and support to the Defense Department and intelligence agencies within the U.S. government; now incorporated into Information Systems Sector.
- Navia Aviation AS (2000)—Norwegian electronics company that developed, manufactured and delivered systems for air traffic navigation and surveillance applications; now in Electronic Systems Sector.
- Comptek Research Inc. (2000)—Supplies electronic warfare and information dominance technologies for U.S. and international defense customers; today it is part of all Sectors.
- Federal Data Corp. (2000)—A leading systems integrator and supplier of information technology to the federal government; now in the Information Systems Sector.
- Sterling Software Inc. (2000)—Provider of information technology services to the federal government's defense and intelligence agencies; now in the Information Systems Sector.
- Aerojet General Corp.'s Electronics and Information Systems Group (2001)—Manufacturer of spaceborne sensors for early warning systems, weather systems and ground systems; builder of "smart" weapons technology for U.S. defense programs; part of Northrop's Electronic Systems Sector.
- Fibersense Technology Corp. (2002)—Designer and manufacturer of precision fiber optic gyroscopes, inertial measurement units and sensor components for missile, aircraft, sea and land applications; now part of Electronic Systems Sector.
- XonTech (2003)—Science and technology firm specializing in missile defense, and sensor and intelligence data analysis; now in the Information Systems Sector.
- Illgen Simulation Technologies (2003)—Specialist in software development and test, navigation and communications; part of Information Systems Sector.
- Integic Corporation (2005)—An information technology provider specializing in enterprise health and business process management solutions; now in the Information Systems Sector.

FINANCIAL PERFORMANCE

Northrop's size during this period of rapid acquisition expanded accordingly. Between 1989 and 1993, the company reported sales of \$5.1-\$5.6 billion per year. But the purchase of Grumman in 1994 was reflected in the company' financials—sales jumped to \$6.7 billion, thanks to the acquisition. By the end of fiscal 2007, Northrop Grumman's annual revenues topped \$32 billion.

Table 2. NGC's Financial Performance										
Income statement (\$000,000)	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Net Sales (\$)	7,367	7,616	7,618	13,558	17,206	26,396	29,853	30,067	30,113	32,018
Net Income (\$)	194	467	608	427	496	866	1,084	1,384	1,542	1,790

Source: Northrop Grumman Corp. annual reports; fiscal years end Dec. 31

Phases of the MA Process

Executives at NGC think of the MA process as a three-phase process: a preliminary phase, a due diligence period and implementation. The actual details of the process vary somewhat, depending on the size of the potential MA and if it is a more "corporate" MA—that is, one containing multiple ventures that have potential synergies with different NGC Sectors, or one that is very specific to one of NGC's Sectors.

PHASE 1: PRELIMINARY

In the first stage, someone at NGC identifies a potential acquisition target. NGC executives throughout the company are always looking for potentially available firms that have technology or capabilities that fit with NGC strategies but that NGC lacks. The smaller target companies are often identified by someone in a particular Sector. Typically, a Sector spots a target and "bubbles it up" to the Corporate MA function. Generally, this happens when a firm lets it be known that it might be open to being purchased. Corporate MA will get documentation—the offer memo, if one exists, or some other form of descriptive information about the company, as well as the firm's financials. Corporate MA then brings together a group of experts, the MA team, to complete an initial review of the target.

The primary goal of the team at this stage is to evaluate and assess strategic fit. Team members take any information they have been provided, along with public information they obtain from government sources (e.g., Department of Labor filings), Internet searches and the target's own web site, review it and bring their comments back to the team. NGC tries "to figure out what is going on with this company that is out there in the public and what it is all about, at least what it is selling... We go after what is out there. I want to get my arms around who this is and what it is," says Barré.

If there appears to be a strategic fit, the NGC team decides to go forward. They will place a tentative value on the target and contact the prospect with a letter of interest. At this point, they enter into a confidentiality agreement with the target company.

PHASE 2: THE ELEMENTS OF DUE DILIGENCE

If the target reciprocates the interest, a decision is made to conduct due diligence (DD, in industry slang). Generally, NGC does not pursue hostile targets: "When the value in the business is primarily the value of its people, a hostile approach can often work against you," Flanagan says.

Due diligence is the process of coming to understand all of the issues at the target that affect the target's value—to understand the concerns and, more importantly, the

people that may be acquired, assess how the prospect is going to integrate into NGC, discover any legal risks or liability that would affect the offer price, and plan how to retain the key people that represent the real value of the acquisition. The prospect provides extensive data about all elements of its operation, and NGC functional teams, including HR, dig through everything. Bart Barré describes the process:

What we really do is dump things into a couple of different buckets. One is if you come across something that would be material to the deal, if you come across something that would significantly move the dollar number needle one way or the other. Is there some huge risk? Is there some huge litigation matter? Some huge problem with the retirement plan? ... [We have to] ascertain this very quickly, because a lot of these big ticket items, those material things, may determine whether we want to move ahead with the deal or not. These are going to be few and far between in the HR world, but there are plenty of them in the other parts of the MA team. If something is found, you really need to be able to quantify it so you can put your arms around it, so that you know how much they really want to pay for this company. Even if something isn't a deal killer, they need to be careful to factor the cost into the equation.

Another bucket is things where we need to find out more information, or that we need to have on our radar screen to fix during the integration process. The third bucket is more of a bucket with the true synergies that we have identified as to how this company really fits with NGC.

Another bucket still is, "How do we identify who is critical to keep this thing going?" Do we need to have the target commit that certain employees are going to be in their roles at acquisition time? Do we need to make sure there are retention agreements in place? Do we need to make sure that there are employment negotiations ready to go on the NGC side? [...] In some acquisitions, we are buying a product or a technology, and in other acquisitions, we are buying primarily people. More often, there are key people we need to make sure stay, but just for a certain amount of time. So you look at what type of attrition do they have, how is this type of acquisition going to affect people who leave and stay?

NGC's Due Diligence (DD) Teams

A DD team is generally composed of individuals from one or more Sectors, Corporate MA, Corporate HR, Legal, Contracts, Finance, Operations, Business Development, IT, Security, Tax, Import/Export, Real Estate, Treasury, Technology, Risk Management, and Environmental Safety and Health. The team also contains people from the target who represent these areas of expertise.

Leadership of the MA Team

More than anything else, who leads the MA team depends on whether the business of the target is relevant to more than one sector. Says Debbie Catsavas, Corporate Vice President of Compensation, Benefits and International in the Corporate HR Department: "Typically, what happens is they'll notify me of a project. I'll get more details as to what's the size, the scope, where we see it fitting in the organization, then depending on the size—generally the bigger it is, the more there are 'corporate' issues—we'll have someone from Corporate lead it. If it's going into a Sector, we'll have someone from the Sector lead it. Depending on the acquisition, we may or may not take a really active role."

While generally a team is led by one person, large acquisitions may require two leaders. TRW was such a large acquisition—so large it became two whole new Sectors—that two leaders were appointed, according to Flanagan. To lead a large DD team, a person must be highly qualified. Historically, Northrop Grumman required an engineering degree, because of the need to understand the technology, training in program management to learn how to manage large teams of people, and an MBA to understand the business aspects of the purchase.

If Corporate is going to take on a support role, Corporate staff may still be quite involved. For example, Maria Norman or Jeff Schmidt, Director of Compensation, both from Corporate HR, might manage the review of the data room. The data room contains all the relevant records and documents supplied by the target firm for NGC's review. Norman and Schmidt may also run some of the briefings, the meetings where the DD team discusses what they have learned. There typically will be a Sector meeting as well to identify Sector-specific issues that should be covered in due diligence.

HR in Due Diligence

While in years past this was not true, now HR gets involved right at the beginning, when a decision is made that NGC is actually going to carry out due diligence, or sometimes even in the preliminary phase. Now Corporate MA will not go forward without someone from the HR side.

"It's a very good relationship between us and the MA function, because they've done it long enough to know acquisitions are a success or failure based on more than just the value, the numbers. We get involved early, we're involved in all the management debriefs...we are involved in pretty much every step along the way," Catsavas explains.

"It wasn't always that way. In the past, MA was always driven by Finance, to the point where they would buy a company and then toss it over to us, 'Here you go, it fits strategically with our business.' When I first got here, smaller transactions were especially like this. HR is now much more involved in the front end," Schmidt adds.

For most acquisitions, usually there are two people from Corporate (Norman to address benefits, Schmidt on compensation) and one or two people from the HR staff of the Sector. If this is a big acquisition, there are more.

The Due Diligence Process

The DD process typically starts with a kick-off meeting of all members of the team present, either physically or virtually. The meeting is pretty basic; it takes about an hour. Corporate goes over what they know about the business; sometimes at the beginning it is not much.

During the DD period, each member of the team accesses information about the target. These are housed in a data room (sometimes completely virtual, but previously in a physical location, often off-site, such as a hotel). "Nowadays all due diligence is done online. There is a virtual data room they set up, it used to be that you would have to go somewhere and be stuck in a room full of boxes of documents. Now you get to sit and look at the documents online," Maria Norman says. "Jeff [Schmidt] literally did an on-site DD for the first time in I don't know how long, and we were all commenting about how fun it was because of the community of everybody sitting in a room talking and joking and sharing stuff and going out afterward and having a drink—it was actually kind of fun, and we were talking about how we should do this more often."

As for the complexity of the process, the size of the acquisition doesn't really matter. Larger companies have larger plans to be reviewed, but you have to go through the same process, and smaller doesn't necessarily equate to easier. Smaller acquisitions are generally more challenging from the cultural perspective. When a single person or small group of people have run a privately held company for many years, the priority issue becomes how NGC can buy them without killing their energy in the process, Catsavas says.

The leader of the MA team structures the DD process, assigning experts to review their own pieces within the structure of the team. NGC has developed a number of extensive checklists that guide both this process and the later integration of an acquisition. Each area has spreadsheets that describe the business area, task, person at NGC responsible for the task, person at the target responsible for the task, planned start and finish dates, actual start and finish dates, and task status. Checklists are very detailed (Figure 2). For example, the HR checklist contains more than 140 tasks divided into areas such as benefits, communication, compensation, EEO, employee health and safety, ethics, policies, human resource information systems, new-employee orientation, staffing, and administration. These checklists are used consistently by NGC during the due diligence phase to ensure that all the bases have been covered in an organized, efficient manner. As team members review these documents provided by the target, something may trigger the need to seek additional information. As the expert asks for additional material from the prospect, NGC puts additional items on the checklist, Bart Barré says.

Figure 2: Benefits Portion of NGC's HR Checklist for Acquisition Due Diligence and Implementation

Business	Task ID	Tools Describition	Person of Contact		
Area		Task Description	NGC	Target	
HR – Benefits	9.1	Determine strategy for negotiating target "stub" year (Jan-Jun 2008)			
	9.1.1	Obtain description of each benefits plan/policy offered and list of participants and employees sorted by class of employee (e.g., salaried, hourly, deferred vested, retirees, etc.)			
9.1.4	9.1.2	Determine strategy of transitioning to NG 401(k) in January 2008			
	9.1.3	Determine strategy of transitioning to NG Pension Plan in January 2008			
	9.1.4	Develop and implement communication plan on transition to NG H&@, 401(k), Pension Plan, ancillary benefits			
	9.1.5	Develop benefits program comparison chart showing differences			
	9.1.5.1	 Major provisions (eligibility, vesting, deductibles, co-insurance, maximums, etc.) 			
	9.1.5.2	■ Participant/company contributions			
	9.1.5.3	■ Funding arrangements (self-insured, insured, minipremium, etc.)			
	9.1.5.4	■ Plan administrators (in-house vs. outsource vendor)			
	9.1.6	Identify list of employees with car allowances or other "perks"			
	9.1.7	Gather and analyze benefits plan documentation (plan documents, IRS determination letters, actuarial reports, Form 5500s, Schedule B and financial statements, insurance policies, contracts, Spuds, Saris, trustee statements, filings, newsletters, etc.)			
9.1.8 9.1.8.1 9.1.9	9.1.8	Obtain Management Committee approval of benefits strategy for combined company (employees, retirees, terminated, vested, LTD, survivors, others; treatment of past service, etc.)			
	9.1.8.1	■ Define relative weighting of employee benefits vs. cash compensation			
	9.1.9	Select benefits plans/policies/programs of combined company (e.g., medical/dental, 401(k)/pension, profit sharing, etc.)			
	9.1.9.1	■ Determine short-term and long-term benefits strategy			
	9.1.9.2	 Merge plans, terminate plans, adopt new plans, freeze plans, spin-off plans 			
	9.1.10	Recommend benefits program for combined company to Management Committee			

■ Determine IRS/DOL/SEC reporting requirements		
■ Explanatory materials		
 Conduct vendor negotiations (plan provisions, costs, etc.) 		
 Identify plan termination clauses and any related penalties 		
■ Develop employee benefits communications strategy (timing, content, etc.)		
■ Select termination dates for any plans that will no longer be offered		
■ Advise vendors of plan termination dates		
■ Produce communications materials		
■ Plan descriptions		
■ Enrollment forms		
	 Explanatory materials Conduct vendor negotiations (plan provisions, costs, etc.) Identify plan termination clauses and any related penalties Develop employee benefits communications strategy (timing, content, etc.) Select termination dates for any plans that will no longer be offered Advise vendors of plan termination dates Produce communications materials Plan descriptions 	 Explanatory materials Conduct vendor negotiations (plan provisions, costs, etc.) Identify plan termination clauses and any related penalties Develop employee benefits communications strategy (timing, content, etc.) Select termination dates for any plans that will no longer be offered Advise vendors of plan termination dates Produce communications materials Plan descriptions

One of HR's major jobs is to dig through everything the prospect provides that has to do with people. These include benefits plans, pension plans, employment agreements, stock option plans, incentive plans, outstanding litigation and salaries, all included on the checklists. HR looks to identify anything that could be a deal-breaker, or at least change the price NGC is willing to offer for the target. Large items are rare but not unheard of; for example, once Maria Norman found a nonqualified pension plan in which the target had included provisions that benefits would accelerate and payables would come due immediately, potentially a \$190 million obligation. NGC did complete that deal, but with the knowledge that its cost would have to be borne, Norman recalls.

One of the things NGC has done best is to review the various business processes that the client uses. Do they have some that work better than NGC's? If so, NGC wants to take advantage of the process. The DD team makes sure the target has an active voice on the team, because they want this kind of value to be brought forward.

Duration of Due Diligence

Due diligence could take anywhere from a day to a month. It usually varies not so much by the size of the acquisition, but by other factors that are unique to the situation. Sometimes the length of the DD period is limited because the target has put itself up for sale and given NGC a specific amount of time—for example, two weeks—to make a decision. In other cases, if the target has put itself up to multiple potential buyers, the prospect may schedule the data room only from one specific date to another and then ask for bids.

Sometimes, NGC approaches a target that is not "up for sale" and will agree to allow the process to take longer. This is particularly true when the target is small and the demands of the due diligence process on the target—which often has only one

person on the DD team wearing multiple hats, such as HR, Finance and Legal—could, if attempted quickly, undermine the value of the target business. In cases like these, NGC is willing to string out the process, trying to buffer the target from the huge demands of DD so the value of business is still there after the acquisition.

In other examples, due diligence may be delayed when one expert on the DD team discovers an issue that must be explored. In that case, Maria Norman says, that particular acquisition may take a back burner for others on the team, only to become "hot" again when the problem at hand is worked out, and suddenly the deal is about to close.

Karin Flanagan points out that there are also variations between Sectors. Some operate quicker than others, reflecting the Sectors' different subcultures and approaches to garnering support for acquisitions.

Retention of Key Talent

In addition to reviewing HR information about the target, HR's job is to help identify what the critical skills are in the company and what it will cost to retain these skills long enough to achieve the synergy of the acquisition. Since NGC pursues MAs for their people, retaining key personnel is critical to getting the value out of the MA. Care must be taken that the key people's critical knowledge of the target's technology, processes and the like comes with the company into NGC.

If it looks like NGC will be moving forward, NGC starts planning for retention of this key talent toward the end of the due diligence period. Sometimes, key individuals at the target may be identified not just at the top level but several levels down—people who have been supporting the leaders, perhaps just good managers or technical people. Usually, people from the Sectors identify target managers or employees who have the critical knowledge that NGC needs to get the value; often, NGC Sector managers already know the players. "Most of the businesses we acquire, we're players in a specific space, and this company has either software we like, a customer we like, but often we're in partnerships with them, subcontracts back and forth... The top 10 people in our company know their top 10 people," Jeff Schmidt says.

Key people also may be suggested by executives or managers of the target firm. If so, NGC also evaluates the individual carefully. Informal opinions of target individuals are shared among the MA team members.

Generally, key people are in the line organization because they have the knowledge NGC wants to keep. However, NGC tries to look for good talent in all targets, as Schmidt explains:

When I first got here seven years ago, we would be provided with a list of five to 10 people that we want to retain: the president, the head of marketing, the finance person, the key technology person—it was always interesting. When I first get involved, my first question is always 'did we consult with our HR people to see if these are the correct people we want to retain?' We also always wanted to

retain the HR person at the target because if this is going to be integrated, they know the people better than we do. It is not me or the Sector's HR people who know these companies, we know their management....if you are buying a mom and pop organization, retaining that HR leader is even more important, because they will be the leader in change. They will be here through the process, they will be leading the process and helping us. So to me, I don't know philosophically, but the more different you are from NGC—and we are way over here—so the bigger the difference it is, the more critical it is to assume the same leadership of the company, like the HR leadership, to help with that transition.

It becomes Corporate HR's job to interview the key people, explore with them their interest in working for NGC and find out what it would take to make sure they stay. In a large acquisition, NGC might interview 50 people, put 30 on retention agreements; in a small one, such as a \$100 million deal, it may conduct 10 to 15 interviews. The interviews themselves are challenging, Schmidt says:

We are going to buy your company, and we really want you—we wouldn't buy you if we didn't want you. But everybody I interview is so suspicious that we are going to cut salaries and force evil things on you, it never ceases to amaze me. A lot of this is because NGC is the big company, and we are heavily structured with who we are, and we are probably going in with 20 people in due diligence. It never ceases to amaze me—the suspicions they seem to be harboring in that 'how do we know that you are not going to decrease my salary.' I can't say, 'trust me, but why would we try to buy you? I want your company, I want a positive relationship,' but they are suspicious that the company is going to do all this cost saving, laying off half the people, stealing the technology. I know that that was the way MA happened back then—people buying companies for pensions, but that's all over. They were reasons to buy companies back then, but we don't buy companies to break them up, and we don't steal technology.

If a person is identified as critical to the value of the acquisition, a retention agreement is essential. To determine a retention strategy, NGC looks at several factors, according to Debbie Catsavas:

We look at their current compensation level, the criticality of their position, how long we want to keep them on the hook...we've acquired companies where people are going to be millionaires, so how much more money will it take to retain them? Then we'll typically hold back a little bit, pay it out over time.

Flanagan says there are all kinds of ways to retain a particular individual: cash payments, special stock grants or phantom stock are among the examples. For the most part, people really don't want to lose their jobs. Money is really not what keeps people in their jobs—it's the satisfaction—but the money gets them over the hesitation hump.

Flanagan says that NGC has learned to keep retention agreements relatively short (2-3 years typically). Often, a small company is led by one or two strong leaders or

charismatic people, an entrepreneur who is unlikely to enjoy or be willing to stay long in a large-corporation environment. The challenge, Flanagan says, is how does NGC capture and transfer their knowledge before they are ready to leave?

The reality is we know that when you buy a small company led by a charismatic person, that person is unlikely to stay for more than a year or two. They're leaders, often entrepreneurial in nature, and they don't want to be tucked into a larger company four or five layers down. These people weren't in a big corporation before for a reason. To get the desired value out of the acquisition, we have to transfer this leader's knowledge before he or she decides to leave. We don't want to keep them if they're unhappy. We've tried five-year retention agreements in the past, but you really can't keep them excited and motivated about their work if they're unhappy in a large corporate environment. If a leader's heart is not in it, a long retention period isn't going to be productive. For the morale of the rest of the people who have been acquired, it's actually better to let them leave. We haven't always done this as well as we could have. I don't think any company has consistently done this well, to be honest. Perhaps a better approach would be to keep them for six months to a year in their current position, but proactively transition them to an advisory capacity over that period of time. From the day we become interested in an acquisition, we should be planning how to bring someone else in to replace them in order to protect the long-term value of the acquisition to the company. Unfortunately, the leaders of these small companies don't appreciate someone shadowing them. So this has to be done with some amount of cultural sensitivity.

Sometimes, what HR thinks should go into a retention agreement may not fly well with others on the DD team, Catsavas observes.

We're involved and we're talking to them, but we can't make the assessment whether they're critical—we don't know the business. This can cause tension between us and Corporate MA because their job is to close the deal. They're more focused on, 'I want to close the deal so I'll give away everything.' They'll come in high, or have in the past, and we'll sit down and say, 'let's talk about this in more rational terms.' There are times when we've said, 'that's just ridiculous, we can't do something like that.' MA will come to us for guidance on almost anything having to do with compensation; all in all, I think HR is an extremely valued partner.

HR Reasons for Walking Away From an MA

When they talk about HR reasons why some MAs have not been culminated, NGC executives talk about three issues: finances, lack of synergy and issues of cultural fit.

Hopefully, financial reasons surface during due diligence. Examples of HR-related financial issues include retention agreements, obligations to employees and pension plans. Part of pricing out an acquisition is calculating how much it will cost to retain

key talent in the firm, which Jeff Schmidt says can run anywhere from \$500,000 to multimillions of dollars. If the cost of retention agreements is too high, it can endanger a deal, or at least change the offering price.

Some target firms may involve foreign operations that create complexities in calculating financial obligations. For example, in one due diligence, the target operated in a foreign country in which two years' notice of severance to employees must be given. If an employer wants to lay off employees, it incurs the liability of two years' wages to each employee. NGC would have had to take on this obligation, had it acquired this firm.

Other cases may involve the obligations of pension plans identified through company reports to the IRS, or stock options. Schmidt offers one example:

The owner of a privately held company had this giveaway mentality with stock options. So there was a lot of uncertainty about who even owned the company, just a little bizarre. It wasn't a new company that had 10 people—it had about 80–100 people, the same people who had been there for a while. But it did create some accounting issues; we were concerned about backdating stock options and such. It was kind of a lightning rod; we actually had the external auditors come in and review it.

Sometimes due diligence reveals a lack of true synergy between a potential acquisition and NGC. Given that NGC makes acquisitions to acquire the key skills of people, NGC was dismayed to discover one situation where the reality of the potential acquisition was much different than it appeared on the surface, Schmidt recalls.

We were looking at a company, relatively small, about 200–250 people, and we noticed that it had recently put into place 27 employment or contractor agreements. Of the 27, give or take one or two, 15 had been put in place just in the last four months. So when we're looking to buy a company, we're looking to buy the infrastructure and the people—there's a value in having it already together. Here's a company put together for the purpose of selling. The more we kind of looked at it, that was one of the big issues I raised. I don't know if that is what killed the deal [...] We're not buying what they want us to think we're buying.

Culture mismatch is generally not a reason that a specific MA is not finalized. NGC expects to integrate most small firms it acquires into its own culture, at some point; the key is keeping the critical talent long enough to transition the entity into NGC effectively. If there is a danger of enough key people leaving the target at the time of the acquisition to defeat the value proposition, the primary response is to negotiate retention agreements long enough to bring their critical knowledge into NGC.

Between Agreement and Finalization

NGC believes that a strong implementation plan needs to be completed before a final decision is made. An integration plan includes where and how the target will be integrated into the structure (e.g., which Sector(s) it will be located in, where in Sector(s), what actions NGC will take to assure integration), in what time frame (NGC prefers quicker), and to what degree the target will operate quasi-independently.

For many acquisitions, the initiative for purchasing the target has arisen from within a particular Sector, and that Sector's management determines where the acquisition will fit, as well as how independently it will operate. Larger acquisitions are more complex. In the case of Litton, NGC left part of it alone, fully integrated part of it and sold a group off. In the case of TRW, NGC bought four divisions, sold off one division before acquisition, sold off another division that was a public company and then left two operating systems pretty much alone. Says Jeff Schmidt, "That kind of gets into the intention of what we're going to do with the company in the first two years. How are we going to manage the company? Operate the company?"

In fact, there are examples where some businesses are brought in and not integrated much at all. One example is Scaled Composites, one of the world's pre-eminent aircraft design and prototyping facilities, a company originally founded by Burt Rutan. Headquartered in Mojave, Calif., Scaled Composites was brought into NGC in 2007, after years of partial ownership. Key to many multibillion dollar programs in which NGC is investing, Scaled Composites is allowed to operate relatively independently, being protected from the bureaucratic processes that other NGC units operate under. Why? Because Burt Rutan was not about to agree to allow his company to be bought up by a 30-billion-dollar company that would "tell him how to fill out a time card."

Once the deal has been negotiated and agreed to, it is announced to the public and, of course, to the employees of the target. The last phase of DD may be antitrust review; under the terms of Hart-Scott-Rodino, the 1976 law that revised antitrust boundaries, by virtue of NGC's size, any acquisition in excess of \$63.1 million has to be reviewed to make sure it doesn't hurt competition. This process, a review by the Justice Department, generally takes 30 to 45 days, Karin Flanagan says.

For small MAs where no antitrust review is required, the period between announcement and finalization may be only a week. During this period, NGC still doesn't own the target and can't legally tell anyone at the target what to do. But it can do intensive planning for the implementation. NGC calls this time period the 'preprocess.'>>>

NGC's implementation plans center on how to tell people why the company bought them and what will happen to them. In the preprocess, NGC tries to give the target an idea of how the company does things, in a very organized, to-the-point way. NGC will describe in detail the process that will occur. More people from the target will join the implementation teams.

In the area of HR, implementation plans involve preplanning on several fronts: resolving target employee anxiety, benefits, pensions, compensation and titles. Maria Norman describes the process:

Questions come up where people want to communicate with us, and what you hope happens—and what we try to do from our end—is to try to settle the waters, saying, 'calm down, this is what is going on, nothing is going to happen tomorrow.' And you really have to rely on the target business to communicate—you cannot communicate for them... We do start directing communications about what is going to happen, such as 'You are all going to keep your benefits for two years,' or 'You are going to come onto our systems immediately,' and 'Nobody is going to lose their jobs today.'... But tell employees that nothing is going to happen on day one, that we are going to keep you posted, and here is the timeline.'

From a *benefits* perspective, nothing changes on day one because new agreements must be reached and formalized with various vendors and contractors. Nonetheless, Norman says, benefits are almost always the number one question on employees' minds.

A common issue in small acquisitions is differences in basic health care benefits. Often in small companies benefits are very generous. However, employees of these entrepreneurial firms are often younger and healthier than average, so their health costs are relatively cheap. At NGC, however, the average age is 46, which affects the cost of health insurance for employees. NGC does an excellent job of negotiating and keeping costs low, but benefits for acquisition employees are likely to be less than they are used to and perhaps more expensive.

Target employees tend to perceive this as a take-away. On the other hand, NGC might be able to offset this with something that the incoming employees lack, such as a pension plan or additional vacation, and NGC encourages the new employees to look at this more broadly as an improved package. Jeff Schmidt points out, "The mom and pop shops usually pay 100% of the medical...When you're buying a high-tech company with younger employees, the pension is not a big selling point. There are tradeoffs, so you start the communication process, saying, 'We're adding a pension, so you'll have to give...'"

In the past, differences in *pension plans* were a big problem in the integration process. Defined benefits plans were much more common and were very different from NGC's defined contribution plan. Sometimes, NGC has encountered particularly difficult issues with a long-term effect. In the case of the acquisition of Litton, which had a defined benefits plan, Debbie Catsavas recalls that NGC faced a "...very unique pension plan that we knew was going to cause us problems, we knew there was going to be a liability that was going to be very challenging. We didn't miss it—we knew it." Today, more of the acquisitions have defined contribution plans, so this has become a less thorny issue.

Generally, the only time *compensation and titles* are an issue is when owners and other senior leaders of the target may be receiving higher compensation than their equivalent positions within the NGC structure. When employees of a target are going to be retained by NGC, job titles may also be an issue. Someone who is a senior leader for a small company, making \$300,000 plus a bonus, the equivalent of the salary of a senior VP at NGC, would not even be a vice president at NGC. Instead, this person's job duties may only rate being a director, at a lower salary. These people tend to leave, since they recognize they are selling their company in order to get out. If they stay, they get integrated into the business and have to deal with the pay.

Salaries lower down on the roster usually are not way out of sync, Schmidt explains:

We usually get employee rosters; sometimes the target is more or less forthcoming on these. NGC wants to know about the target's compensation department, how is it structured? If the target has a competent comp department—if it does compensation analysis, benchmarking, has some internal control structures—NGC will often accept its standards. With some of the smaller ones, NGC may only get the employee rosters containing only titles and salaries and has to determine, assuming the titles are accurate, are the prevailing wages reasonable? Sometimes there are overtime issues in addition to possible pay disparity issues. Generally, however, compensation is fairly easy to benchmark, and for most employees at the target, compensation will remain about the same.

Overtitling can also be a significant problem. "We bought a little company, maybe 40 or 50 people," Schmidt recalls. "They had five VPs, not one making more than \$90,000. In NGC, you're not even a director—our managers make more than you. The downside is that you lose your VP title. What's the upside? Look at the resources and the availability."

PHASE 3: IMPLEMENTATION

Once the acquisition has been announced and the anti-trust review has been completed, NGC actually begins integrating the acquisition. The first year is a huge challenge. The first 90 days of integration are called "stand-up," during which NGC tries to implement all the urgent things, thereby minimizing later distraction to the entity. The balance of the first year is for items that aren't urgent but have to be done, just take longer (e.g., badging, which requires security clearances), and complex systems (such as benefits and financial systems) to become fully integrated.

Day One

The stand-up period begins with Day One meetings. Day One is intended to make the acquired entity feel like it is part of NGC. Generally, the Sectors in which an acquisition is to be placed manage these events.

For a large acquisition such as TRW, Day One activities might be an entire day event; for a smaller acquisition, the meeting will be somewhat shorter. All employees are invited to a special session, which may take place either physically or virtually, depending on the type, location and size of the acquisition. Top executives attend: the CEO and the President of NGC, if it is large, or the Sector President and/or Business Unit VP, if small. They are supported by HR people from the Sector and perhaps also from Corporate. The event includes a question-and-answer period, during which executives talk about NGC and the NGC culture and their own background.

This latter point is very important because "we used to call ourselves a company of immigrants...we come from all over, people from all the companies we acquired. That's what we call ourselves. People coming in should realize we're all acquired. There are very few original people who were with Northrop," Catsavas says.

Who Runs the Implementation?

If it's a really large acquisition, in the billions of dollars, Corporate runs the implementation, as in the cases of TRW and Litton. When the target is a small company, the Sector handles the activities, with Corporate support.

As with many other situations at NGC, the Sectors vary in their approaches to implementation—in speed, tolerance for differences and attention to cultural integration. Karin Flanagan says, "In the past, the smaller acquisitions have sometimes gotten ignored by the Sector if bigger Sector challenges arise. Then Corporate does come forward to the Sector and says, 'Hey, guys, you're going to lose the value here.' So there's a team from Corporate that does coach the Sectors from time to time, but either the Sector's going to integrate it properly or it's not. It is difficult for Corporate to manage this process for the Sector. Keeping the people motivated is something the Sector has to take responsibility for."

Speed of Integration

Sectors vary in their sense of urgency for getting integration accomplished. IT integrates quickly; others take up to two years. Flanagan believes NGC should complete implementation as quickly as possible. "I think the learning for all of us is, faster is better—fast with attention to detail rather than just fast. An aggressive and focused integration process minimizes the uncertainty felt by the employee base and allows people to get refocused on their jobs more quickly," Jeff Schmidt says, "Frankly, if you are going to change them, change them relatively quickly...don't do it so quickly that you don't know what you are doing, but don't delay." Delay in integrating may create false hope in the acquisition that they won't have to change.

Further, allowing different systems to operate in parallel within NGC causes its own problems. Says Schmidt, "We used to have this thing where we always negotiated [with the target about the integration of things like benefits.] But we have learned to regret that because, first of all, as you integrate that business in, sometimes you need to move people around, and their benefits might change because they are going somewhere else in NGC."

When the acquisition is larger, it may take longer to get everything—the benefits, the systems, the financials—integrated, but even the acquisition of TRW, perhaps NGC's largest one, took eight months to a year.

Culture

The basic integration process hooks everything up and gets everyone on the same page, but cultural integration takes a lot longer. Based on its past experience, NGC recognizes that its own culture may provide a shock for people who come from the acquired companies. NGC has a strongly collaborative culture that values integrity and ethics. It is analytical, technical, and process- and data-driven. It is conservative but not risk-averse. People work lots of hours and respect authority. The company is known as centralized and bureaucratic. People possess an engineering mentality, with a high value placed on ethics because of some past history at NGC. There is a clear message that if something that seems like it could be illegal or contrary to regualtion or a contractual commitment, speak up *fast*. Challenging upward is encouraged, but the challenge should be accompanied by an idea for a solution to the problem being challenged.

We are a very policy-driven company. There are more policies here than where I ever worked before. When you get to the size of the infrastructure we have, it is a different entity—instead of writing a memo you write a policy. And you have to follow all of them. We at NGC operate in a different way due to our size. A lot of companies we buy, you are lucky if they have an employee handbook. Here, there are all these policies in a handbook. You may get a bonus at the end of the year, that is their policy. Here we have a 38-page policy guidebook for bonuses, but it covers all the rights and contingencies.

- Jeff Schmidt

The majority of our folks are driven by the mission. That's part of being a defense and federal government contractor—it is more important to be part of something bigger than you. Patriotism and a sense of national pride drive so much of our culture. You've got an incredibly talented workforce working incredibly long hours because of belief in the mission and not because of the dollars. This is true throughout the industry, but particularly at NGC.

- Karin Flanagan

NGC employees are highly comfortable with operating virtually, such as through teleworking and teleconferencing. Norman describes how they work:

In general, when we started acquiring, we started letting people stay where they were, so, for example, we acquired a firm in Cleveland, and I have an employee who has been working for me for years, and she works in Cleveland. Hey, all we are doing is traveling around with vendors and suppliers...half the

time we are all meeting each other in different parts of the country. One of my managers lives in Jacksonville—we don't have anything in Jacksonville, but that is where he lives, and we say, "That's nice. More power to you." These are upper-level, established people. We have been doing it so long it doesn't even faze me anymore. We are looking to hire another manager, and he is in Atlanta. He doesn't want to relocate—he will if we make him—and that's okay, "Just understand you will have to travel a lot more, because I'm going to want you out here at times."

Northrop's first acquisition, in 1994, was of Grumman Corporation. Both firms were technically driven, and according to Maria Norman, "the toughest part of everything is the cultural integration, and everybody in the room was just discounting it—'yeah, yeah, we get it.'" An executive was sent out to the Bethpage facility, and his managerial style rubbed people raw because cultural integration was not taken into account. Overall, NGC didn't lose a lot of people from Grumman, because a couple levels down the cultures were fairly similar. But it did provide a learning opportunity for NGC. Maria Norman describes the Grumman acquisition:

Never underestimate the culture of the company. It will come back to bite you. A sub-bullet to that one is "Honor the Icon." The first acquisition we did was Grumman. Whatever we could have done wrong we did. When I come across people from Grumman, they will still complain and moan about how Northrop did them wrong—it's been 17 years. An example was, Grumman and Northrop were both old aerospace companies that were very similar sort of companies, but one was on Long Island and one was in California. If ever two companies on paper looked alike, it was these two. Grumman was Long Island—if you worked on LI, you were employed by Grumman. It owned LI—one of the things, they gave away turkeys to employees for Christmas. Not just any turkeys, these were fresh turkeys. I have been told that years and years before, they actually gave away live turkeys. They were trucked onto LI, and everyone would line up—retirees, employees, everybody would line up and get their turkey. We acquired them in April, and one of the first questions asked during our first meeting with them was, "Will we still get our turkeys?" The answer was no, you are not getting turkeys. I could call LI right now and someone will still talk about those turkeys. They have never forgotten. If we had been smarter, we would have made a recommendation to keep giving the turkeys to everybody! They would have said, ah yes, they would have kept their turkeys and would have been happy. Even if we didn't do it a long time, it would have helped to integrate them in. I think it was really a symbol of Mother Grumman—these nasty people are all coming in and taking away our turkeys...These cultural icons are really important to note and celebrate in some way, even though you aren't going to keep them, to have a memorial service for them, in some way acknowledge them. You don't just come in there and trash the business.

NGC executives believe that NGC manages cultural integration better today, with an increased sensitivity to the culture of the firm being acquired. How NGC

manages Newport News Shipbuilding is a good example. NNS has a long and proud heritage, strongly hinged to patriotism and its history of service to the United States. When NGC acquired them, it was actually in the agreement that NGC would not repaint the huge crane that stands in NNS's shipyard displaying the name Newport News Shipbuilding for three years. In fact, according to Schmidt, NGC located Sector management on the shipyard site, and policies that apply to NGC are interpreted somewhat differently when they are applied to NNS.

Cultural Issues in Large Acquisitions

Large targets are likely to have cultures that are more similar to NGC, especially if they have already been dealing with the government as a major customer. All NGC's targets are highly technical, so they are likely to be dominated by an engineering-type culture that values data, process, rationality, planning and controls. However, they may vary in other cultural regards. In the TRW acquisition, several differences in culture became obvious. The firms differed in their risk aversion, as evidenced by their propensity to do cost-plus contracts (TRW) versus fixed price (NGC). The firms also differed in their propensity to approach projects systematically; TRW, with its history in launching satellites, was much more precise and systematic.

Culture Clash: NGC and Small Acquisitions

Small targets often have very different cultures from NGC. In general, smaller firms have strongly entrepreneurial cultures and are less cost-conscious. Employees of targets may be used to traditions like holiday parties and have less concern for profits. Smaller firms also tend to be less bureaucratic; since many have not dealt directly with the type of customer that NGC mainly serves—that is, governmental agencies—they may have less appreciation for following procedures and having strong policies, checks and balances, and litigiousness. Targets may also be "too loose," too casual about business dealings, and this can fly in the face of NGC's strongly ethical stance.

Small targets are often more emotional and personal. Employees of the target are used to having a personal relationship with their leader. The work is often more motivating because employees have more autonomy.

Perhaps the biggest change is for the executives of the acquired firm. Schmidt describes a typical "wake-up" moment:

NGC is big on operating procedures, which say, anything you do under this area, this is what your authorities are, and if you want to do something different, here are the people you need to contact. The best example is the annual incentive plan or a health and welfare plan. The ex-target leader says, 'I want a new annual incentive plan,' well, you can't do it without the approval of the VP... It keeps them from running off and getting what they want. They don't seem to see that if they would be acquired, all these policies stop them if I want to do something.

NGC's Culture: In Flux?

Some long-time NGC employees think that NGC's culture has and continues to change, at least in part due to the influence of acquisitions, particularly TRW. Says Flanagan, a long-time NGC employee:

The larger the company gets, the more difficult it is to manage a challenge-up approach. Senior leadership has historically invited contrarian views and should continue to do so. Senior leaders may not agree with your perspective as a contrarian, but they certainly should understand such a view. However, once a decision is made by our senior leadership, everyone needs to put away their contrarian views and support the decision. People should feel the freedom to challenge up at the appropriate time, but support leadership in the end. Due to the increased size of the company over the last decade, it has been difficult to retain the heritage challenge-up cultures of old. But as a larger company, we need to find a way to harness the learning that comes from a challenge-up environment.

Some perceive that lately the NGC culture has been changing in the direction of the recently acquired TRW culture. Some long-time managers at NGC think that the company has become slower to react to situations requiring decisions, that the TRW propensity toward being precise and systematic has inhibited the firm's ability to react quickly.

Conclusion

After several hours reviewing documents in the virtual due diligence room for the target, Maria Norman leaned back in her chair to think about the bigger picture of MAs at NGC. In an hour, she would meet with the casewriter to discuss NGC's MA process, and wondered what she would say. What does NGC do well? Do poorly? What lessons have they learned over time?

Norman thought about a conversation she'd had with Debbie Catsavas, who had told her:

We consider it a success when the business is integrated within the NGC culture, and we as an organization are fairly tolerant of allowing differences. There's no such thing as a NGC mold, but we'd define that they're at least interested in integrating, that it's delivering the business results we expected out of the target, and the leadership is demonstrating the behaviors we expect. The success rate? That's a more subjective question...I'd say we're probably in the 80 percent range. It may be a little higher, but that's a safe guess...because I think we've done a lot of good things, and we've learned a lot. We know what works and doesn't work, so when we go after the targets, we know what to look for.

Then she recalled what Jon Korin, Sector Director of Strategic Development for the IS Sector, had told her about NGC's philosophy—to pick the "best of the best" from any source. Korin had told her about an exercise he conducts when he visits MBA classrooms to discuss NGC:

We color-code where the executives came from, and "Oh, my, that rainbow!"—this guy came from this company, this woman came from over here, and these two from over there, here is one from the outside, and they also came from a variety of legacy companies. And it is such a huge message to all of the acquired employees because they see that the layer at the top is a melting pot. And it carries down as you cascade down the structure at every level. Actions like this speak louder than words.

Maria herself, who had come to NGC from Litton, recalled that NGC's current Corporate Policy Council—the leadership team—reflected a mix of people from acquisitions, competitors and those with long careers within NGC.

With those thoughts in mind, she grabbed her laptop and started making some notes.



1800 Duke Street Alexandria, VA 22314-3499