THE ROLE OF CULTURE IN ORGANIZATIONAL CHANGE

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Abstract

Today more companies are developing strategies that require providing total solutions to their customers rather than just delivering products. Many such companies have a strong culture that derives from years of successfully delivering differentiated products. The move toward a more "solutions oriented" business is difficult. The strategic initiative is a critical first step but often belies the cultural transition that must take place concurrently. Some organizational change theorists present culture as one of many variables in the change equation. Others take a more holistic approach where organization and culture are integrated and must change together. In this thesis, we assert that companies focused on the latter approach can be quite successful at organizational change. We look at one such change initiative launched by Schlumberger, Ltd.

This thesis studies the successful transition of Schlumberger from a product-based company composed of independent product groups into an "oilfield solutions provider". Through interviews with employees at all levels of the organization, we reconstruct the events that began over five years ago. The cultural transition continues to this day. The study identifies the initial corporate strategy and corresponding transition plan. We include case studies of other large firms attempting similar change for comparison. Further discussion focuses on the reaction of the middle management and others involved in line operations to capture their perception of the vision and their skepticism. In addition to the strategic perspective, the initiative is analyzed from within the political environment (both individuals and organizations) as well as from the cultural perspective.

Finally, we pay particular attention to the management tactics in planning and executing the change initiative. The study analyzes these management practices to understand what worked and the lessons learned.

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Chapter 1

INTRODUCTION AND OVERVIEW

Corporate change is the subject of much analysis both in the popular press and in academic research. In theory, corporate strategy often starts with an analysis of the competitive landscape in which a firm presently operates or is considering operating (Porter, 1980). Additionally, companies are advised they should take stock of their resources and competencies (Hamel, 1994). Many frameworks can be used to facilitate the strategy development process (Hax, 1996). Conventional wisdom now holds that strategic change must entail changes to the organization's structural design. Structure should follow strategy; not the reverse.

What is missing in much of the strategy discussion is the "how" of the change. Companies are not organization charts and job descriptions but rather employees that walk in the door each morning to participate in strategic directives of the corporation to the best of their abilities. Peter Senge refers to this as an "enacted" system (Senge, 1990). Employees upon entering the building each morning pick up where they left off and continue to re-enact the system (pattern of behavior and social norms) that existed the day before and will likely exist the next day. This set of behavioral patterns and the social norms that support them are often called corporate culture (Schein, 1985). To the extent that the corporation is successful over time, this culture becomes ingrained. This culture can and does play an important role in determining the success of corporate change initiatives. Many good initiatives are thwarted because they are rejected by the underlying culture. Corporate managers sometimes attribute the failure to soft issues like culture but
more often chalk it up to poor execution or inappropriate timing. To some extent all accounts may hold truth. Successful execution of organizational change must fully integrate these elements of corporate culture, leveraging some elements, accounting for others. Without such appreciation of culture change strategists are likely to see their efforts thwarted by the ingrained values and habits of the firm.

The primary objective of this thesis is to take a close look at a strategic change that Schlumberger made in 1998. Schlumberger is an oilfield services firm started in France in 1927, but now headquartered in New York. In order to compliment its core business of testing rock and soil formations for the presence of oil (known as Wireline logging), Schlumberger purchased and grew a series of related businesses. In 1998 Schlumberger transformed these businesses from a loose confederation of oilfield services companies to a single integrated organization called Oilfield Services (OFS) that provided both products and solutions to its customers. The phrase “Silos to OFS” will be used to refer to this overall strategic shift.

Following IBM’s heralded transition from hardware “products” to an e-business “services” company; many companies are today asking the question: “How do we become a services company?” One key obstacle that hinders many companies is the strong presence of a product-based strategy and culture that has been reinforced over many years. Schlumberger provides an appropriate example to look at such changes of both strategy and culture.

Schlumberger is a low profile company that has been highly successful in the oilfield services sector for over 75 years. This proud, profitable Franco-American engineering company had built a technology-focused, product-centric culture that by 1998 was no longer providing the results
necessary to compete in an increasingly integrated business environment. A change was planned and executed. In the end, outsiders as well as most at Schlumberger consider this change a resounding success. What makes the Schlumberger case particularly interesting is that it did not use a dark period of poor performance as a catalyzing force. Rather the change was initiated during a particularly calm, successful period. Additionally, on the surface at least, the change seemed quite counter to its long-standing tradition of allowing autonomous and profitable businesses to act in their own self interest.

Using data from a series of interviews conducted about 5 years after the start of the initiative, we reconstruct the series of activities that drove the change. We pay particular attention to the corporate culture at the time of the change and how it changed. We analyze the techniques that were used to drive the change initiative, trying to understand how these influenced the culture. From this case, we draw some “lessons learned” that put into perspective how corporate management can better drive change.

In Chapter 2 we look at understanding corporate culture and its relationship to change. The first step is to define and give examples of corporate culture. Several frameworks are introduced that codify and analyze culture. Then we pull out of the literature some common techniques and tactics used in successful change initiatives. This allows us to better assess the tactics used by Schlumberger in their change efforts.

Chapter 3 provides two short case studies of large companies that have attempted broad organizational change in the last decade. The IBM and Proctor & Gamble cases provide a broad backdrop against which we can better evaluate the Schlumberger case. Assessing the Schlumberger
results in light of the mixed results that characterized comparable companies allows us to draw out the particulars at Schlumberger. In order to better understand the culture of Schlumberger and that of its industry, we have included a short introduction to the oil industry in chapter 4. Chapter 5 documents the culture of Schlumberger. Since culture is very much a function of the history of a firm, the chapter is organized chronologically with sections on each of the key leaders of the firm. In Chapter 6 we will discuss our interview process and the methods we used to conduct the field research at Schlumberger.

In Chapter 7 we will look at the story of Schlumberger’s change. Chapter 8 draws out the particulars of the Schlumberger case, both in terms of its unique cultural aspects and, more importantly, in terms of tactics. Chapter 9 contains a summary of lessons learned that Schlumberger and other organizations should be able to make use of in future organizational and cultural change efforts. We conclude Chapter 9 with some personal and final thoughts on the process as we saw it operate at Schlumberger (and elsewhere).
Chapter 2

ORGANIZATIONAL CULTURE AND CHANGE THEORIES

In the matter of change, there is rarely a clear beginning – nor, for that matter, a discernable middle or end. Few people, it seems, ever agree on what ‘really happened’ or if indeed anything happened at all. Even fewer, perhaps are able to say with any certainty what change is, or precisely what has changed. This is especially true in matters of cultural change (Bate, 1994).

Organizational change is a highly complex business, difficult to understand, and because of its non-linear nature almost impossible to deal with systematically, or to write about convincingly (Bate 1994). As author Clifford Geertz (1973, 29) says of change: “one never seems to get to the bottom of things. And, worse than that, the deeper it goes the less complete it is.” In a similar fashion, Kennedy (1985, 325) writes: ‘we don’t even seem to have a reasonable way, (i.e., a conceptual framework) for thinking about cultural change.’

Change Theories

Get used to thinking that there is nothing Nature loves so well as to change existing forms and make new ones like them.

(Marcus Aurelius, Meditations)

A theory of (and strategy for) cultural change needs to grow from a thorough understanding of the processes that produce and maintain cultural order and the processes that transform it. In this section, we
present two fundamentally different ways people have come to look at culture and the ways it changes.

Many organization writers and probably majority of organization practitioners have opted for a 'materialistic variable' approach rather than 'anthropological' or "holistic" view of culture. The former involves conceiving of culture as an object, a 'thing' or part of a bigger 'thing'. Culture is designated as a 'companion' of organization, no different in status than any other of its 'components'. Even McKinsey's well known 7-S framework places culture (mentioned as shared values) into a 'happy atom' alongside structure, strategy, skills, staff, style and system as mentioned famously by Peters and Waterman (1982).

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This model assumes that effectiveness of the culture of the organization (note: both are being objectified by use of the definite article) depend on two factors:
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1. How ‘strong’ the culture is: The idea of culture being like a heart or pair of lungs – the stronger the better. Writers like Deal and Kennedy (1982: 15), have even claimed that good culture can actually be measured. Others, within the same materialistic-variable perspective, have a view that “Culture can be a brake of change. Strong cultures seem to be like powerful inertial systems. Changing direction demands a lot of energy” (Thomas, 1985: 24)

2. How well culture is aligned with other organs of the ‘body’ (e.g. the so called strategy-culture fit).

With this variable model, one finds comments like “Strategy, and structure, and culture are part of the same package and require simultaneous attention” (Dalmau and Dick, 1991: 4). Another writer claims: “The concepts of strategy, culture, and communication are hardly foreign to managers today. However, many of the organizations that I have evaluated over the past five years are ineffective at aligning these three components to achieve their goals” (Schienmann, 1989). As is obvious, ‘changing culture’ from this perspective is seen as a modular, design-and-build activity, not dissimilar in conception from replacing a faulty component in a motorcycle or trading an old car with a new one. There is no process as such, merely the physical task of ‘unbolting’ the old component and ‘bolting’ on a new one. The language used by people following such a framework sounds like ‘overhauling’, ‘renewing’, or ‘renovating’ the corporate culture, thus turning cultural change into a push-button affair.

The anthropologists’ conception of culture is quite different. They remind us that we do not think of societies as having cultures in an object sense. Societies are cultures. So why should we think of organizations as being any different? They are, after all, only society ‘writ small’ as
described by Silverman (1970). The point being that culture is not something organization has but something organization is (Smircich, 1983). It is a metaphor for, not a component of, the total work organization. This anthropological view is shared by many if not most of the academic writers today. In their view, culture is:

- Synonymous with organization meaning systems.
- A particular way of viewing and thinking about organization; a paradigm for interpreting organizational life processes. In short, it is a perspective.

Consistent with this approach, Edgar Schein (1983) writes: “Organization culture is the pattern of basic assumptions which a given group has invented discovered or developed in learning to cope with its problems of external adaptation and internal integration.” Schein’s framework has become the standard benchmark for defining organization culture. It postulates three levels of culture:

- **Deepest level: ‘basic assumptions’**
- **Middle level: values’**
- **Surface level: ‘artifacts and creations’**

Schein leaves us with no way of discriminating between a culture and an organization. And Paul Bate (1994: 14) is right in summarizing that:

"If organizations are indeed cultures, no conceptual distinction should be made between a ‘strategy for cultural change’ and a ‘strategy for organizational change’: cultural change is organizational change. As Morgan (1986: 138) puts it, ‘since organization ultimately resides in the heads of the people involved, effective organization change implies cultural change. Anyone engaged in cultural change should see themselves as involved in organizational change. Strategies aimed exclusively at changing the culture of an organization are based on the false notion of culture as a ‘thing’ and should be avoided on account of the fact that they are, in effect, strategies for something that does not actually exist – mythical strategy for a mythical entity.

In strategic terms we need to think about organizations as being cultures rather than having cultures. The important point, therefore, is not what we
study, but the different way we look at the organization: the task for the cultural strategist is not to think about culture but to think culturally.”

If we accept that culture and strategy are substitutable for one another, we need next to consider what implications this will have for the way we view cultural change. Broadly speaking, there are two propositions of relevance here. They are, however, two sides of the same coin.

- Strategy formulation of any kind is a cultural activity (the development of strategy is cultural development).
- Cultural change is strategic change. The idea of setting up a separate program for changing culture is nonsense. Cultural change is already occurring within formal and informal strategic processes.

Cultural change may therefore be simply defined as the movement from one strategy to another one over time. Here, care must be exercised in defining the strategy NOT as the ‘strategy as announced’. By Minstzberg’s (1990) account, ‘strategy in use” is the actual rather than desired strategy; the real rather than the espoused; the current rather than the ideal strategy.

Cultural change can therefore be conceived as ‘change IN’ and ‘change OF’ the strategy in use – a displacement of one set of ‘operational myths’ by another.

There are two types of strategic change. As noted, they are “change IN” and “change OF” strategy:

- **Mutation**: This is change IN strategy where the shape of strategy changes but not its underlying properties. In other words, there is
strategic continuity with the strategy following an unbroken trajectory through time.

- **Transformation**: This is a change of strategy measured by a frame-switch from one type of strategy in exchange for another; the evolutionary chain is broken and there is discontinuity and variance of form. Examples of transformation include: (1) From production oriented to customer oriented, (2) From volume driven to quality driven, (3) From hard selling to soft selling and (4) From top down approach to Participative approach.

**Why change culture?**

The point that needs to be grasped is that Structure, Organization and Strategy are all implicit in the culture concept. When we change culture; we are, in affect, changing strategy, structure and organization. So the question ‘why change culture’ can be answered as:

- ➔ To change structure
- ➔ To change strategy
- ➔ To change organization

Cultural change programs not only require the services of organization ‘development’ people to attend to the process of change, they also need organization ‘strategists’ and organization ‘designers’ to help plan. Process must be formulated and reformulated. It requires the concerted activity of people, who in the past, may have operated quite independently from one another but must now come together and manage the change process collectively. It needs people who, like artists, are able to appreciate form, function and process simultaneously, arranging, synthesizing and harmonizing these organizational attributes in a pleasing and effective way. Thinking culturally, obliges us to
abandon the ‘either-or’ thinking that has bedeviled many previous approaches to change. Holistic ‘both-and’ thinking is necessary and capable of embracing soft and hard, structure and process, order and change.

As Thomas Quick (1989) remarks about his own experiences as a manager and a consultant:

> “I came to understand that either-or, which characterizes many managerial decisions, is a trap because you have only two boxes in which the whole world must fit in. Sometimes, it occurred to me, reality was best defined by both-and. I further discovered that the more options I had, the more possibilities I discovered and the more successful I was in deciding and solving. And more fun managing was.”

This approach is extremely useful. First, it serves as a warning that change is never going to be ‘one or the other’: evolutionary or revolutionary, continuous or discontinuous, planned or unplanned, top-down or bottom-up, transitional or transformational, conflictual or cooperative. These popular dualisms demonstrate how pervasive ‘either-or’ thinking has become in the organizational change literature. Instead it involves combination or sequences of some or all of these different concepts. This being the major source of complexity while orchestrating organization change.

In the following chapter we will look at two cases of organizational change. The two change initiatives demonstrate the two competing views of culture just described. Despite his McKinsey roots, Louis Gerstner, the key change strategist in the IBM case, embraced the holistic (both-and) approach to cultural change. As we demonstrate, Gerstner displays a clear belief that organizational change and cultural change are one and the same. The case of P&G demonstrates a more materialistic variable approach. By following the actions of Durk Jager, the comparable change strategist at P&G, we came to the conclusion that a more either-or approach was at work. The culture was just one element of the
change equation that was addressed and it was addressed in isolation of strategy and organizational structure. The two approaches form the backdrop by which we can evaluate Euan Baird’s approach at Schlumberger.
Chapter 3

CASE STUDIES OF ORGANIZATIONAL CHANGE

Cultural transformation is a difficult task, particularly for large corporations with a long history. It is often the very successes of the past that make change so difficult. It often takes flirting with bankruptcy before a clear case for change can be made in a firm. Yet, when the end of the corporation is in sight, it may be too late to make deep changes in time to avoid collapse. Cultural change in any environment is remarkable. In this chapter we look at two companies that attempted a deep structural or cultural transformation.

The transformation of IBM under Lou Gerstner is perhaps the most notable corporate change story in recent business history. However, it is also clear that the potential end of the company was in sight for many insiders and outsiders. This gave the board of directors license to hire a new CEO from outside the company. Such a move sends a strong signal to the corporation that wholesale change is in order. In Gerstner's autobiographical account, he makes it quite clear that waiting so long to make the change brought the company perilously close to bankruptcy. While helpful as a motivational tool, this strategy is, to say the least, high risk.

The P&G case represents a somewhat less successful situation initiated during a healthier environment. It forces us to pose the question, "Is it more difficult to execute organizational change during a successful period?" Yet this is precisely the time one would like to make the change. Thus, Proctor & Gamble's initially unsuccessful move to a matrix organization serves as a nice reference point when thinking about
Schlumberger. P&G is a relevant case both because of the companies' similar attributes (size, age/history, and market leadership), but also because some Schlumberger employees had, through the popular business press, become aware of P&G's attempts to change when they were making their changes.

IBM

(This case study was compiled primarily using materials coming from IBM's Archives (www.ibm.com), autobiographies from CEOs Thomas J. Watson, Jr. (1990) and Louis V. Gerstner (2002), and "IBM Corporation Turnaround" HBS Case # 9-600-098)

IBM began in 1911 as the Computing-Tabulating-Recording Company (C-T-R) and sold machines for commercial and industrial use. Thomas J. Watson, Sr. joined the firm as general manager in 1914 from the National Cash Register (NCR) Company. For the next 42 years he built and shaped this company into one of the most dominant companies in American business. The name was changed in 1924 to International Business Machines (IBM). The company had many products for office, school, and factory use such as the printing tabulator, the first electric key punch, and the first public address system. In 1928, IBM redesigned and patented a new punch card that became so successful it became synonymous with IBM's name. Watson, Sr. moved IBM away from scales, clocks and other simple machines and centered the business on tabulators and accounting.

Much of the business machinery that IBM made was leased or rented to its customers. While this limited initial sales, it created a steady stream of revenues in the future that made IBM one of the most stable and profitable firms for decades to come. This was one of the reasons that IBM was able to grow even during the Great Depression of the 1930s. During this time, T.J. Watson, Sr. introduced a number of benefits to care for his employees. These included group life insurance, survivor's
benefits, and paid vacation. Watson's determination to keep employees busy on new products during this time paid off in 1936 when the Social Security Act was signed into law. IBM was rewarded with a contract to supply equipment to the Social Security Administration, solidifying IBM's position as a key supplier of office equipment to the U.S. government. Watson also used this time to invest in research and development facilities as well as employee training centers in the upper Hudson Valley area of New York.

During World War II, IBM's facilities were made available to the defense department for use in making supplies for the war. A nominal profit margin of 1% was set but Watson donated that profit to the widows and orphans of IBM employees lost in the war. With this he continued to reinforce the patriarchal IBM culture where employees turn to the company, not just for employment, but for security and a way of life.

Another cultural aspect at IBM was "professionalism." Managers and salesmen were expected to wear dark suits and white shirts, work hard, and adhere to high ethical standards. This IBM culture played a vital role in post-World War II business expansion where consistency, reliability, and a clean-cut appearance became defining attributes of American professionalism.

Watson's son, Thomas J. Watson, Jr., assumed the title of President in 1952 and became CEO shortly before Thomas, Sr.'s death in 1956. He took over the company and quickly ushered IBM into the computer age with its System/360 mainframe computer. IBM also created the programming language of FORTRAN used by developers throughout the world to customize these mainframe computers for their use.
IBM remained unchallenged in mainframes throughout the 1960s and the mid 1970s. Despite the rise of mini-computer makers like Digital Equipment Corporation (DEC), IBM believed the value of computing was in large machines with custom applications that IBM often wrote for its customers. Between leasing arrangements and millions of lines of custom software, IBM literally had its customers locked into its products. IBM poured the resulting revenue into world-class technology for its customers as well as benefits for its employees. Both set the standard in the world of business.

Watson, Jr. continued to reinforce the values of IBM. But more importantly perhaps, uninterrupted decades of success strongly reinforced the culture. The IBM cultural values helped set standards and norms throughout the country and, to some extent, throughout the world. In the 1960’s and 1970’s IBM culture and products dominated the computer industry. By the 1980’s, however, both the products and the culture were beginning to show signs of age. An anti-trust investigation by the U.S. Justice Department had taken its toll on IBM corporate morale. IBM began the transitioning its customers from monthly lease payments to large upfront purchases of equipment. The early phase of this transition brought a boost in revenue (as new sales were added to existing leasing revenue) but it also masked underlying structural problems.

By the end of the decade most leasing contracts had expired. The one time transition revenue boom was gone, and mainframe prices were under assault from cheaper alternatives from companies in the U.S. and Japan. Additionally, IBM had squandered its dominant position in Personal Computers (PCs) and was now a market follower in PCs. Sales and margins of mainframes had eroded. Decades of success had isolated IBM managers from the changing needs of their customers. IBM could
no longer afford the generous benefits and lifetime employment guarantees that had become entitlements for its employees.

In 1991, IBM recorded a loss of nearly $3B. CEO John Akers moved to cut costs through layoffs and restructuring but found IBM's size and its strong reliance on the long successful business strategy of the past constituted a formidable obstacle to change. At the end of 1992, the board of directors began to look for a new CEO who could lead change. Many high profile business leaders had declined to be considered, but the board tapped Louis V. Gerstner who had been Chairman and CEO of RJR Nabisco. Gerstner worked for McKinsey out of business school before leaving for American Express. He rose quickly through the ranks to become CEO of the credit card business where he was one of IBM's largest customers.

The first year of Gerstner's tenure was focused on cost cutting and cash conservation by selling off assets and carrying out layoffs. Additionally, the firm lowered its prices in its mainframe business to stimulate sales.

In essence, the story of IBM's turn-around is about culture. Gerstner (2002) comments:

> I came to see, in my time at IBM, that culture isn't just one aspect of the game – it is the game. In the end, an organization is nothing more than the collective capacity of its people to create value. Vision, strategy, marketing, financial management – any management system, in fact – can set you on the right path and carry you for a while. But no enterprise – whether business, government, education, health care, or any area of human endeavor – will succeed over the long haul if those elements aren't part of it's DNA. (p.182)

In trying to reshape the culture to better allow for organizational change, Gerstner gives this advice:

> You can't simply give a couple of speeches or write a credo for the company and declare that the new culture has taken hold. You can't mandate it, can't engineer it.
What you can do is create the conditions for transformation. You can provide incentives. You can define the marketplace realities and goals. But then you have to trust. In fact, in the end, management doesn’t change culture. Management invites the workforce itself to change the culture. (p. XXX)

An early example of this philosophy concerns IBM’s renewed interest in customer relationships. Once the cornerstone of the company, customer relationships had deteriorated over the years as IBM’s market successes and premier technology isolated employees from customers. Six weeks after joining the company, Gerstner was asked to speak briefly at an IBM conference for the CIO’s of most Fortune 500 companies. Rather than accepting a limited invitation to speak, he declared that he would attend the entire conference, having all his meals with customers. He also added that any fellow executives that planned to attend should stay for the entire conference as well. In his speech, Gerstner committed many of his executives to resolving various customer problems that week. The message was sent to all senior IBM executives that customer relations are their job.

Later he went on to make customer relations part of the way performance of senior executives was measured. This message was further reinforced by “Operation Bear Hug”, wherein Gerstner required each of the fifty members of his senior management team to visit at least five key customers within three months and submit to him a two page summary for each visit. The initiative’s momentum picked up when staff members realized that he read and gave feedback on each of the reports.

This renewed interest in customers allowed IBM to better follow industry trends. As the Internet was beginning to blossom in the mid 1990’s, IBM was quick to realize that transactions were the heart of making money on the internet. Web pages and browsers were not the money makers. Hence, IBM focused future growth around a “service and solution”
business model. To communicate this new approach, Gerstner consolidated all advertising and branding activities into one strategic thrust. With its much heralded “Solutions for a Small Planet”, the advertising firm, Ogilvy & Mather, designed a centralized marketing campaign to announce and position the new Big Blue. This message was directed as much to employees as it was customers. The new model leveraged the internet and was first described as “network-centric computing” but later refined by Ogilvy to “e-Business.”

As a part of this strategy to be a solutions integrator rather a mainframe sales and production company, IBM also embarked on a long term effort to become a “middle-ware” software company. Through acquisitions of Lotus, Tivoli, and others, IBM slowly became the dominant force in software offerings focused on business productivity. By the end of the decade, IBM once again become one the most profitable companies in the United States and had regained its position as the premier IT Company.

In transforming IBM from a hardware company on the verge of collapse to a premier solutions company in the information technology industry, Gerstner did as much (if not more) to renew IBM’s existing core values and culture as to change them. He worked with, not against, tradition and habit. For example, the much publicized departure from the dark suits and the white shirts is explained by Gerstner in the following way:

And, for the record, ‘dropping the IBM dress code’ was the biggest culture-change move we never made. We simply said IBMers should dress appropriately for the task at hand. We trusted their judgment—on a lot more than clothing. (IBM, 2001)

Additionally, IBM went back to it’s strengths in technology, embraced its size as a competitive advantage, and drove for open standards in business computing (a key aspect of the success of the IBM-PC). Gerstner retired from IBM in 2002, turning the reigns over to Sam
Palmisano, an IBM career employee. In doing so, he once again demonstrated that organizational change is not about ignoring culture or about wholesale cultural change. It is about changing only parts of the culture and organization while embracing the rest.

P&G

[This case study was compiled primarily materials coming from Advertising Age’s “The House that Ivory Built” (1988), various analyst reports, and the P&G corporate history at www.pg.com]

In 1837, two men named James Gamble and William Proctor signed a partnership agreement that began The Proctor & Gamble Company (P&G). The company is now the largest home and health care products company in the world. Gamble, a soap maker, and Proctor, a candle maker, had both married into the same family. Their father-in-law, Alexander Norris of Cincinnati, convinced them that they could benefit from combining their efforts. With local competition significant, the two struggled through the rest of the first half of the 19th century but were able to make a tidy profit each year.

By the time the railroads linked Cincinnati to the East in 1848, P&G was poised for rapid expansion. It had already been importing raw materials from New Orleans and had developed a reputation for quality and integrity beyond Cincinnati. Its “moon-and-stars” symbol that it stamped on crates of products represented a seal of quality to its customers. As the Civil War approached, the partners sent two of their sons to New Orleans to secure a large shipment of rosin. When war did break out, P&G became the only soap manufacturer with the means to supply the entire Union army.

During the late 1800's, the U.S. saw rapid industrial development and geographic expansion. It was during this period that many of the basic
hallmarks of the P&G culture were born. Research & development, branding, advertising, and product marketing were all established and greatly refined as business practices during this time as demonstrated by the case of their first hit product, Ivory soap. One of the six sons of the founders to join the family business, James Norris Gamble began R&D after he purchased a formula for white soap. He continued to refine the product through research and experimentation until he settled on a mild but effective soap that was cut into bars. In a fortunate turn of events, a workman left a soap mixing machine on too long creating a lighter than normal soap that floated in water. While product development benefited from a stroke of luck, the capitalization of this product feature was not left to chance. James' cousin, Harley Thomas Proctor, knew he had a hit product on his hand when customers came back asking specifically for the "floating soap". Harley gave it the name of Ivory which he promptly trademarked (Advertising Age, 1988).

Harley submitted the product to independent chemical analysis to find that it had a purity of 99 44/100 %. With these features, Harley went to the company's partners asking for an unheard of advertising budget of $11,000 to begin a national advertising campaign. Despite of the company's reluctance, Harley was allowed to begin the campaign by putting advertisements in national magazines such as Good Housekeeping and Ladies Home Journal. He went on to develop increasingly sophisticated multi-color advertisements including illustrations of babies and mothers commissioned from many well known illustrators of the day. The first ever full color print advertisement was of the "Ivory Lady" which appeared in Cosmopolitan magazine in 1896.

Also during this time, William Cooper began the practice of giving employees a stake in the company. Despite being the grandson of one of the founders he had made it a point to learn the business from the
ground up. He would prepare his own kettles of soap and would take lunch on the factory floor with all the other workers. In 1885, convinced that the work was too grueling, he convinced his father and uncle to give the factory workers Saturday afternoons off. This set a precedent for the industry but led to workers at their largest plant, Ivorydale, to ask for additional concessions. William Cooper further proposed a profit sharing plan to boost productivity but it failed to have a significant impact. It was not until P&G incorporation as a company in 1890 and the subsequent offering of stock to employees that the productivity improvements were seen. In 1903, he allowed employees to purchase company stock out of withholdings from their paycheck. The company added to this contribution up to 12% of annual salary to that purchase of stock. These profit-sharing and employee stock purchase programs became so popular that, by 1915, over 60% of eligible employees participated.

The early 1900's brought increased sophistication in R&D as well as the management and marketing of dozens of brands including the first all-vegetable shortening, Crisco. Many orders from stores would come in on a seasonal basis creating large swings in production demands. In an effort to offset stability and better protect the job security of factory employees, William Cooper set about direct selling to retailers and distributors. He had hired 450 salesmen by 1920. The direct sales effort led to additional business that reduced seasonal fluctuations. One up and coming sales manager, Richard Redwood Deupree, convinced William Cooper Proctor that responsibility should be increased and decisions delegated to employees wherever possible. This fully established a different relationship between P&G and its employees than existed at the time elsewhere.
Dupree succeeded Proctor in 1930 to become the first non-family member to run the company. The following year Neil McElroy, the company's Promotion Department Manager, fretted over the prospects of Camay soap, feeling that it was being held back by Ivory. In a now-famous memo, McElroy outlined the role of a brand manager (with a staff to assist them) who would be appointed for each brand, thus guarding against a potential conflict of interest among brands. After having studied Unilever up close, McElroy reasoned brands needed to compete freely in the marketplace even if it meant competing against other brands from the same firm. McElroy succeeded Deupree years later, starting a long trend of choosing CEOs from the promotion and advertising departments.

During WWII, the shortage of many raw materials forced P&G to experiment with new chemicals for soaps. In 1947, the detergent Tide, known as the "washing miracle" hit the market with its use of one of these new chemicals, sodium tripolyphosphate (STPP). There was concern that Tide would cut into the sales of existing brands but McElroy argued that if P&G didn't bring a product like Tide to the market, others would. By 1949, Tide was the #1 detergent, particularly buoyed by the strong growth in washing machines in post WWII America. This was followed up by Cheer, a concerted effort to capture the #2 position for P&G as well.

P&G had pioneered the use of radio programs as a form of advertising before the war. In post war America, the television was taking off. P&G sponsored much of the programming in the early days of television in order advertise Tide and other products. Today's daytime "Soap Operas" were originally developed by P&G as weekly daytime serials that advertised soap and other home products targeting the American housewife.
In the 1950's, after years of research into using fluoride in toothpaste to fight cavities, a young ad executive, John Smale began to submit the results of testing on Crest toothpaste to the American Dental Association's (ADA) Council on Dental Therapeutics. In 1960, an article in the Journal of American Dental Association said that Crest had been shown to be effective in fighting cavities. With this, P&G put their advertising engine to work. Within two years, Crest became the leading toothpaste. A similar story of research, testing, validation, and then advertising led to the creation of the disposable diaper industry. P&G took Pampers from 0% to 98% market penetration in households with babies in less than two years.

In 1957, McElroy was tapped by U.S. President Eisenhower to become Secretary of Defense. The P&G board went back to the advertising department for its next president, Howard J. Morgens. P&G had become the premier proving grounds for corporate management. In years to come, P&G executives would go on to run many companies including PepsiCo, General Foods, Marketing Corp of America, Ogilvy Group, Cadbury Schweppes, and Drexel Burnham Lambert. P&G scoured the country each year for college graduates, MBA program graduates, and military veterans. Leveraging university relationships and through advanced use of IT, P&G could target any number of potential hires anywhere in the country.

Once in the company, recruits were asked to develop goals and were assigned mentors. But little tolerance for failure was allowed. Over the years a strict meritocracy developed where young employees were given much responsibility but were expected to perform to high standards. The brand managers had the premier positions. If an employee did well
on a small brand he or she could expect to move to a bigger brand. But competition was fierce and tolerance for failure low to non-existent.

Proctor & Gamble adhered to a 'Up or Out' policy. To better focus managers on running the business, strict procedures were developed around communication (rigorous use of formatted memos) and execution of roles. Young employees realized early on whether or not they could adapt to the highly regimented 'P&G Way'. Those that could adapt were rewarded with a promising future in marketing and corporate management. Those that couldn't adapt generally put in a few years and left the company.

In 1957, after high profile acquisitions of Clorox bleach and Folgers coffee, the Federal Trade Commission (FTC) filed suit against P&G requiring them to divest Clorox. The FTC feared that with P&G's marketing and advertising prowess, P&G could dominate and monopolize any market for home products if allowed to buy competing brands. P&G argued that it was being penalized for being a sophisticated advertiser. It was, however, forced to sell off Clorox.

With P&G holding the many of the top brands in the U.S. home products market and prevented from purchasing competing brands, they turned to overseas markets for growth. Results of initial forays were mixed as foreign consumers often had different preferences compared to Americans. Undeterred, P&G built large R&D centers and marketing departments in Japan and Europe. Efforts made to leverage R&D globally resulted in products like Liquid Tide in 1984. Under the leadership of John Smale in the 1980s and Edwin Artzt in the early 1990's, P&G made significant progress in Asia and Western Europe with many locally developed products. Similar efforts were organized in Eastern Europe, in China and in the rest of Asia.
When John Pepper took the reigns of company in 1995, P&G operated in more than 100 countries and had sales of more than $30B. More than half of the sales came from outside the U.S. The combination of brand managers (most of them located in Cincinnati) and 100+ country managers with P/L responsibility had given rise to complex matrix of power. P&G's continued to test market every product in many regions, thus adding almost two years to most product introductions. P&G's success had become more dependent on advertising and global conquest than new product innovation. Durk I. Jager, an aggressive executive who helped build the firm's operations in Japan was promoted to Chief Operating Officer. Operations formerly split between U.S. and International were aligned into four regions (North America, Latin America, Asia, and Europe/Middle East/Africa) all reported to Jager.

Margins for products sold internationally were regularly half those of those sold in the U.S. These relatively low margins were viewed as a problem as an increasing amount of the company's revenue was to come from overseas. But other problems were apparent as well in the late 1990s. The market for consumer goods had changed dramatically by 1998 and P&G was struggling to keep up. Many P&G products had lost the top spot in their respective markets including Crest, Pampers, and Ivory. Consumers, faced with a plethora of quality products, were becoming increasingly sophisticated in their purchasing. Many would test various products such as laundry detergent only to find that the differences between them were not so noticeable. Additionally, the rise of dominant retailers like Wal-Mart, Costco, and Carrefour was creating a wedge between P&G and its customers. Independent private label products at many stores were creating price pressure and a fight for premium shelf space in stores. Marketing had ceased to be just understanding fragrance preferences and finding key features to
accentuate in advertising. Customer shopping patterns and store preferences also needed to be understood. These patterns differed widely amongst companies but also amongst customer types (wholesales store shoppers vs. neighborhood store shoppers). As one analyst put it:

"In a global marketplace where consumers tell manufacturers where, when, how, and what price they want to pay for product, a fundamental understanding of the consumer, including shopping habits, decision tree trade-offs, etc., likely will determine success. ... A firm understanding of the consumer will happen in the home, not in the store." (Deutsche Banc Alex. Brown March 20, 2000)

To combat these trends and revitalize growth, Jager, as C.O.O. led a reorganization of the company 1998. Know as “Organization 2005”, P&G sought to divide the company into six product based organizations called Global Business Units (GBU):

- Baby care / feminine care
- Beauty care
- Fabric / laundry
- Food and beverage
- Healthcare / new ventures
- Tissue / towel

The six GBUs complimented by eight geographically-based regions where the Marketing Development Organizations (MDO) could operate:

- North America
- Western Europe
- Eastern and Central Europe
- Middle East; Africa
- Japan / Korea
- Greater Asia
- Asian (plus Australia / New Zealand)
- Latin America
The focus of the GBU’s was on product development, global brand management, and local customization. A renewed focus was placed on innovation for these markets. The MDOs were responsible locally for sales, consumer research, and marketing activities. Inside each region, multiple MDOs might address differences in distribution such as mass merchants, supermarkets, club stores, etc. While simplifying the P/L structure from 120 countries to six GBU’s, marketing became more confusing than in the past. Global brand management was split between MDOs and GBU’s. P&G’s obsessive focus on advertising was expected to give way to more focus on direct marketing and sponsoring events. In the end, one matrix organization was traded for another. (Spethman, 1999)

P&G recognized that such an organization might create redundancy and streamlined operations to preserve profits. Accompanying the reorganization, were plant closures and a 15,000 person workforce reduction to cut costs. Most skeptics believed the cost reductions could be achieved, but questioned whether or not the new organization would actually generate growth, particularly in light of the P&G culture.

Coincident with announcing the reorganization in 1998, the P&G board promoted Jager, known for his phrase, “If it ain’t broke, break it,” to Chairman and CEO. This was to be taken by analysts and employees as a sign that P&G was serious about change. Jager made significant alterations in management compensation. Previously, managers’ pay varied little more than +/-10% according to performance. In the “New P&G,” managers could receive up to 2.5 times their salary in bonuses for good performance and loose up to 30% of their base salary for underperforming. Conservative guidance to Wall Street was replaced with “stretch forecasts” in order to motivate those in the company to perform. These changes were intended to ratchet P&G’s meritocracy up a notch or two. Careers, more than salaries, were on the line. Ironically,
it was Jaeger’s career that was first to take a hit. (UBS Warburg, July 28, 2000).

The reorganization officially took effect in July 1999. Within six months, signs of problems were evident. Downsizing in Europe hit the local marketing organizations hard, making product introductions more difficult, not less. In March 2000, an earnings shortfall was announced but the company blamed unforeseen increased commodity prices for the misstep. A concern among investors was that Jager was chasing growth at any cost and providing overly optimistic forecasts. The company began flirting with an acquisition of drug maker Warner-Lambert, causing some analysts to question Jager's growth strategy.

In two months, the stock fell to less than half of its all time high. Figure 3-1 shows the stock price during this time. The following quarter (ending June 2000) made it clear that a trend towards increasing costs and lower margins was emerging. Investors were convinced that P&G was chasing unprofitable growth. In June 2000, the board replaced Jager with A. G. Lafley, an insider who was formerly the president of the Global Business Unit for Beauty Care. John Pepper returned as Chairman. Top-line sales growth remained strong but net earnings were down for FY 2000.
Lafley tried to calm investors by stressing a return to "marketing global brands" as well as returning to conservative growth forecasts. The new mantra for the company was "balance." Lafley identified the top ten global brands (each represented more than a $1B in annual revenue). And money was poured into advertising these brands. Effort was also turned to building more big brands. In the annual report released in July 2000, Lafley identified his key priority: "First we are going to focus sharply on building our biggest strongest global brands, the core of our business. We need to be sure we are consistently growing market share on these brands." (Proctor & Gamble 2000 Annual Report)

As for toning down P&G’s forecasts, Lafley emphasized that stretch forecasting was a thing of the past at P&G. He was quoted by an AP reporter as saying: “We’re running a marathon versus our competition, not a sprint.” Lafley’s comments, according to this report, were greeted
enthusiastically by analysts, who applauded his realistic assessment of the company’s profit picture and potential. (Geller, 2000).

In the months that followed, Lafley did not entirely abandon the new organization but he did usher in a “back-to-the-basics” approach. The Wall Street Journal (August 31, 2000) reported that 25% of the Brand Managers left P&G in the first year of Organization 2005. Yet, most business observers believed the new organization was the right move but that Jager moved too quickly forward change; a move that did not respect the culture of the organization. UBS Warburg (July 28, 2000) said, “Should Organization 2005 ultimately succeed in making this elephant more nimble we believe the potential for upside to our long-term growth rate forecast and price target could be significant.”

Lafley has continued to make organizational adjustments. He has created a new position to oversee all MDOs and allocate resources in the areas. But, in the end, a focus on brand marketing was missing in the new organization. As earnings numbers rebounded in 2001 and 2002, Lafley reflected:

“Branding is more important than ever – and big, leading brands are more valuable than ever. In a sea of choices where confusion reigns, consumers value the reliable promise of their favorite brands. This plays to our strength: branding is in P&G’s DNA.” (Proctor & Gamble 2002 Annual Report)

**Summary of Case Studies**

The two cases demonstrate the fine balancing act that must be performed when attempting broad organizational change in a large corporation. Change attempted by an outsider during a crisis period (as in the case of IBM) brings legitimacy but brings with it its own risks of failure. A CEO can use the company’s position on the brink of disaster as a catalyzing force for employees but leaves little margin for error.
Gerstner focused on changing only the parts of the IBM organization and culture that were broken. While the initial vision for change and catalyzing force (save the company) was not original, it was compelling. As IBM exited crisis mode and began rebuilding its brand and market position this catalyzing force took the form of its “Solutions for a Small Planet” and “e-Business” campaigns. These proved compelling for employees as well as customers.

The problems P&G faced, such as declining market share and lack of innovative new products, were less apparent and failed to offer that same catalyzing force. Thus, Jager moved aggressively to battle the internal resistance by tearing up the organization and building it anew. This “man on a mission” approach to motivation was reminiscent of the tactics that earned GE’s Jack Welch the name “Neutron Jack.” Jager’s tactics failed to account for the rich culture of R&D and brand management that P&G built over 160 years. In the end, Jager found out that he, too, had little margin for error. The vision of changing what was not broken, reducing costs, and closing plants failed to be compelling enough for employees to depart from their ways of the past. In the end, costs rose and operating profits suffered. Without the threat of collapse to justify the near term impact on results, Jager was under pressure from investors to keep profitability intact despite his initiatives.

The Schlumberger change initiative that we now have to consider was carried out during a relatively healthy period by managers that had grown up in the company. The context resembled more the P&G scenario than IBM. In fact most companies desire to make organizational change in a setting resembling P&G’s with an outcome more like IBM’s. In comparing the two cases, we can draw out some issues that we feel must be addressed for this to happen. Four key points are listed below:
• Create a compelling vision and a catalyzing force for change.
• Embrace the corporate culture, modifying only where necessary.
• Manage expectations carefully.
• Keep the focus on near term operations.

Understanding the culture of Schlumberger will be easier for the reader if we first describe the industry in which the company operates. Thus we will spend the next two chapters looking at the oil industry in which Schlumberger operates as well as the corporate culture of Schlumberger as it developed throughout its history as a pioneer in the industry.
Chapter 4

THE OIL INDUSTRY: AN OVERVIEW

Understanding the culture of Schlumberger will be easier for a reader if we first describe the industry in which the company operates. Schlumberger pioneered a new way of “looking down” a recently drilled hole of an oil well and gathering information. The gathering of “downhole” information is known as “wireline logging” and was introduced by Conrad and Marcel Schlumberger back in 1926. They developed the technology to ‘read’ the properties of downhole rocks and fluids in an oil or gas formation. Because the particulars of the industry are not as well known as, say, consumer products, we present an industry sketch as a way of suggesting how a culture like the one in Schlumberger originated.

Hydrocarbon (oil and gas) Formation

There are three essentials in the creation of a crude oil field. First, there must be "source rocks" whose geologic history allows the formation of crude oil. This usually is fine-grained shale, rich in organic matter. Second, oil must migrate from the source rocks to a "reservoir rock," usually a sandstone or limestone that's thick and porous enough to hold a sizable accumulation of oil. A reservoir rock that's only a few feet thick may be commercially producible if it's at a relatively shallow depth and near other fields. However, to warrant the cost of producing in more challenging regions (the Arctic North Slope, for example) the reservoir may have to be several hundred feet thick. Third, there must be ‘entrapment’. The earth is constantly creating irregular geologic structures through both sudden and gradual movements - earthquakes, volcanic eruptions and erosion caused by wind and water. Uplifted rock, for example, can result in dome-like structures or arched folds called
anticlines. These often serve as receptacles for hydrocarbons. The probability of discovering oil is greatest when such structures are formed near a source rock. In addition, an overlying, impermeable rock must be present to seal the migrating oil in the structure.

Subsurface temperature, which increases with depth, is a critical factor in the creation of oil. Petroleum hydrocarbons rarely are formed at temperatures less than 150 degrees Fahrenheit and generally are carbonized and destroyed at temperatures greater than 500 degrees. Most hydrocarbons are found at "moderate" temperatures ranging from 225 to 350 degrees.

Crude oil is a surprisingly abundant commodity. The world has produced some 650 billion barrels of oil, but another trillion barrels of proved reserves have yet to be produced. An additional 10 trillion barrels of oil resources await development, assuming the price of oil someday justifies production. These resources include bitumen, shale oil and oil in existing fields that might be produced through enhanced recovery methods.

Natural petroleum is a complex mixture of hundreds of different hydrocarbons, but its bulk composition is remarkably constant, about 85 percent carbons and 15 percent hydrogen. It may include small amounts of organic compounds containing oxygen, sulfur, and nitrogen. Its content of other elements is exceedingly small.

There are four age-depth classifications: young shallow, old shallow, old shallow and old deep. These classifications are also shown on the tertiary diagram. Young shallow crude is often sour, has a high aromatic content, a high viscosity and high sulfur content. Old shallow crude is less viscous in comparison, has a lower boiling point range and shorter paraffin chains. However, a hydrogen source is needed to cap the shorter
chains and so aromatics grow in size. As they grow beyond a certain size they precipitate out into a solid phase known as asphaltenes and the overall aromatic content decreases. Old shallow oils are less viscous than young crude and are increasingly paraffinic in nature. Old deep crude has the longest time to undergo cracking and have the lowest boiling point range and the lowest viscosity of the crude. Sulfur containing compounds will also has cracked forming hydrogen sulfide, which can often escape the crude, and hence the old deep crude is the sweetest. These oils are also the most desirable because of their potential for high gasoline yields. The standard crude by which others are rated is Pennsylvania crude; good Pennsylvania crude contains very low sulfur, high content of alkanes and a low viscosity.

It is the particular crude oil's geologic history that is most important in determining its characteristics. Some crude from Louisiana and Nigeria are similar because both were formed in similar marine deposits. In parts of the Far East, crude oil generally is waxy, black or brown, and low in sulfur. It is similar to crude found in central Africa because both were formed from non-marine sources. In the Middle East, crude oil is black but less waxy and higher in sulfur. Crude oil from Western Australia can be a light, honey-colored liquid, while that from the North Sea typically is a waxy, greenish-black liquid. Many kinds of crude are found in the United States because there is great variety in the geologic history of its different regions.

In approximately 30 million years during the middle of the Cretaceous Period, at the end of the dinosaur age, more than 50 percent of the world's known petroleum reserves were formed. Almost three-fourths of this mid-Cretaceous petroleum accumulated in a relatively small region around the Persian Gulf. Much of the remainder accumulated in another limited region of the Americas between the Gulf of Mexico and Venezuela.
Evidently the low-latitude Tethys seaway collected large amounts of organic matter along its margins, which today is found as petroleum in the Gulf Coast of the United States and Mexico, the Maracaibo Basin in Venezuela, the Sirte (or Surt) Basin in Libya, and the Persian Gulf region. The remaining petroleum supply is much older. According to fossils, the single cell organisms that are the main component of petroleum date from the Cambrian era, circa 544 to 505 million years ago.

**Hydrocarbon Oil replaces Whales Oil**

Before the discovery of fossil fuels, whale oil was burned for high-quality lubricant, machine oil, lamp oil or candles, melted down from whale blubber. From the 16th to the 19th century, the oil was important for soap making and as a fuel for lamps. In the 20th century, whale oil has often been converted into margarine and cooking fats. The paint and varnish and the printing-ink industries formerly used whale oil. Treated with sulfur, it provided extreme-pressure lubricants. Textile sizing and compositions could be made from the hardened oil. Fatty acids for soaps and fatty alcohols for cosmetics and detergents were derived by immersing the fats in alkalis. Production of whale oil usually took place on large factory ships. The minced blubber and whalebone were cooked under steam pressure. Whale-liver oil was usually extracted by a solvent after digestion with alkali. Whale blubber yielded 50 to 80 percent oil by weight, whalebones 10 to 70 percent, and whale meat 2 to 8 percent.

**Current Oil producing Regions**

Oil has been found in the middle of the ocean: North Sea and the Gulf of Mexico. It has been found on the coasts of Brazil, Indonesia, Angola, Nigeria, Alaska, and Venezuela. It is also found in vast quantities in the desert areas of the Middle East: Saudi Arabia, Iraq, Iran, and Kuwait.
Table 5-1 shows the oil production and consumption rates for regions of the world.

<table>
<thead>
<tr>
<th>Region/Country</th>
<th>Oil Production</th>
<th>Crude Oil Imports</th>
<th>Apparent Consumption (including bunkers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>15,494</td>
<td>9,488</td>
<td>22,715</td>
</tr>
<tr>
<td>Central &amp; South America</td>
<td>6,974</td>
<td>1,869</td>
<td>4,899</td>
</tr>
<tr>
<td>Western Europe</td>
<td>6,999</td>
<td>12,063</td>
<td>14,885</td>
</tr>
<tr>
<td>Eastern Europe &amp; Former U.S.S.R</td>
<td>7,468</td>
<td>1,626</td>
<td>4,968</td>
</tr>
<tr>
<td>Middle East</td>
<td>22,454</td>
<td>538</td>
<td>4,399</td>
</tr>
<tr>
<td>Africa</td>
<td>7,823</td>
<td>635</td>
<td>2,463</td>
</tr>
<tr>
<td>Far East &amp; Oceania</td>
<td>7,922</td>
<td>11,582</td>
<td>19,512</td>
</tr>
</tbody>
</table>

**Schlumberger in the Oil Industry**

Technological innovations in oil and gas exploration and production have changed the industry over the past 30 years. For example, it now takes 22,000 fewer wells annually to develop the same amount of oil and gas reserves as it did in 1985. A straightforward relationship exists between the location and amount of oil (and gas) in a given field and its economic viability on the open market. It is not uncommon for a field with high potential to be drilled and the oil extracted only to find it economically unviable in a given set of market conditions (the costs of extraction are not offset by the price in the market). The technological advances in drilling, fracturing, and recovery have worked to reduce the cost of extraction and thus increasing the viability of many fields. The more accurate the information available about the formations downhole, the more cost effectively oil exploration and recovery can be done. It is this accurate information (wireline logging) and the technology that aids in
developing the reservoir that is at the core of Schlumberger’s competitive position in the oil business.

Electrical measurements (Schlumberger pioneered such measurements in 1927) are made to gain information about a well before it is completely drilled. This saves time and money and prevents drilling where no hydrocarbons will be found. To observe conditions downhole, measurements are taken that can be used to build models and guide decisions. Such decisions are reliable and accurate and provide a flexible, economical way to evaluate reservoir potential while minimizing capital exposure and risk. After drilling, Oil/Gas wells are then cased to create a lining, a barrier between the walls of the well and the flowing hydrocarbons. Like drilling mud, it also prevents the well from collapsing and keeps water from entering the hydrocarbon flow.

Casings are then perforated by shooting holes into the well and the flow of oil from slower moving parts of the completion is enhanced. Oil can be quite viscous or thick; with larger holes, it can flow easier.

At times, the rock formation does not produce satisfactorily as the rock is not porous enough. Hydraulic fracturing of the rock then becomes essential. It optimizes fracture length and height after perforating holes were shot. Fracturing should leave no residue in the proppant pack to impair well productivity. It can be combined with other treatments, such as mineral formation inhibitors. Fracturing can also successfully complete marginal zones or reenter a well, re-stimulating zones bypassed during the original completion of a well.

Once wells are producing, “reservoir management” plays a key role. The traditional method is to have someone available onsite to ensure the maintenance of production levels and safety of a reservoir. Today, with
new technology, wells can be monitored from a distance. Sensing equipment to collect real-time data in order to continuously update production models are now available. Such equipment controls production drainage strategies.

There are four main stages of Reservoir Management. Schlumberger plays a key role in all four of them. The first is exploration. Here data is compiled on the contents of a reservoir. The second is delineation. This involves the development of plans for the reservoir including the determination of different types of wells to drill in order to build production and begin depleting the reservoir efficiently. The third is development. This is the most active phase where the amount of hydrocarbons is increased to the highest level (sometimes using pumping). At this stage, separation facilities are built and injections given to balance the flow of hydrocarbons. The fourth stage is “Late Life”. During this stage, stimulation occurs such that the maximum amount of hydrocarbons can be withdrawn (by fracturing, acidizing, etc.) and abandonment takes place wherein wells are plugged and cleanup of the site occurs.

Schlumberger is involved in all of reservoir management operations worldwide. The company’s portfolio of services starts with seismic data collection and runs to the final development of the reservoir as well as the “late life” events of the reservoir.

**Roles and responsibilities of Schlumberger in the industry**

Most oil activity is away from the cities, in the deserts or in the ocean (off shore drilling). These activities are conducted in self-contained units which are capable of the operations as well as housing all the personnel. A high priority is placed on safety. Operations are expensive – a typical
drilling operation costs $30,000 per day and can go up to $300,000 per day. Any time lost on operations (e.g., because of tool malfunction or delay by the ill-trained personnel) can quickly translate into hundreds of thousands of lost dollars. Oil operators are quick to claim losses back from the service providers like Schlumberger. Loss of data or acquisition of incorrect data, not detected at the wellsite, is almost impossible to acquire once casing has been placed in a well. Any re-acquisition of data requires extra hours or days and, thus, increases the overall costs.

Servicing numerous oil companies which have joint ventures and competitive stances in different leases, oilfield service providers like Schlumberger have responsibility for the confidentiality of data. Mishandling of data could result in an immediate loss or gain of millions of dollars by different parties. A strict code of professionalism is thus imperative. Schlumberger insures that all employees maintain confidentiality while providing top notch service.

Particularly in its Wireline business segment, Schlumberger has traditionally entrusted responsibility to relatively young field engineers (typically 23-25 years). A new hire at Schlumberger spends the first six to nine months in training. This training is intended to instruct the engineers in the technology but, equally important, to impart strong professional and technical values. Schlumberger invests heavily in each field engineer and takes pride in leading the industry in training quality.

The engineer at the wellsite is the sole responsible representative of Schlumberger. Millions of dollars worth of equipment are at stake. Rigorous selection of personnel and extensive training mark the Schlumberger engineers. As the engineer progresses in his/her career, ever changing challenges and independence of decision-making are motivating factors. Schlumberger management feels this allows their
employees to mature at rates much faster than their counterparts in competing companies. As Schlumberger promotes field engineers into management, their early field experience is a defining characteristic of the Schlumberger culture. Many Schlumberger managers today attribute much of their professional character to the early days (and nights) spent at the wellsite.
Chapter 5

CULTURE AT SCHLUMBERGER

Culture at Schlumberger can be read by its values, and, as we will demonstrate, these values have a long history behind them. The “core values” at Schlumberger are given in table 5-1 and are referred to in the company as a commitment to “People, Technology, and Profits.”

<table>
<thead>
<tr>
<th>Table 5-1: Schlumberger Values</th>
</tr>
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<tbody>
<tr>
<td>o Our people, their motivation and dedication to customer service worldwide, in a clean and safe environment, are our main asset.</td>
</tr>
<tr>
<td>o Our commitment to technology and quality is the basis for our competitive advantage.</td>
</tr>
<tr>
<td>o Our determination to produce superior profits is the cornerstone for our future independence of action and growth.</td>
</tr>
</tbody>
</table>

Such values, however true, are highly condensed and abstract. To understand the “real culture,” we must detail where such values came from and what they mean to the people in the organization as they go about their everyday work. Schlumberger’s culture evolved over the years like many other companies. However, if one looks closely, the core characteristics of the culture were sown by Paul Schlumberger (the father of Marcel and Conrad). This occurred when Paul added a covenant in an agreement he made with his sons that they were to ensure the “interests of scientific research take precedence over financial ones”. This covenant is reproduced in Table 5-2.
Table 5-2 Schlumberger Covenant (source: Schlumberger, Ltd.)

"I undertake to supply my sons Conrad and Marcel with the necessary funds for research on the use of electrical measurements for the exploration of the sub-surface... For their part my sons agree not to dilute their efforts by working in other areas... In this undertaking the interests of scientific research take precedence over financial ones... Marcel will bring to Conrad his remarkable ability as an engineer and his common sense. Conrad on the other hand will be the man of science. I will support them."

Paul Schlumberger

Such a covenant, Paul hoped, would guarantee that Schlumberger would remain a highly technical company. It did. To ensure an edge in technology, recruiting and training of engineers is kept to high standards. Rigorous training of all professional employees begins in the first few months. Then, working under close supervision, continues to be a 'way of work' for Schlumberger wireline engineers for years to come. Training is so rigorous that, at times, it has been compared to military boot camps. Customer service is the name of the game and, to ensure there is no complacency in the system, a rigorous rotation plan is kept in place all the time. This rotation, it is believed, keeps people on their toes in meeting or even surpassing standards.

Empowerment and decentralization ensures that the headquarters staff remains at a low level and all decisions are taken at the lower levels. As one engineer put it "if you are responsible for millions of dollars worth of equipment and are accountable for millions of dollars worth customer property in the form of oil wells, you ought to be totally responsible at engineer's level". This produces a strong level of accountability on each employee's part.
With this amount of responsibility came a certain level of pride that touched the boundaries of arrogance at times. In 1981, CEO Jean Riboud, very proudly remarked this company as:

“(1) We are exceptional crucible of many nations, of many cultures, of many visions; (2) We are a totally decentralized organization...; (3) We are a service company, at the services of our customers, having a faster response than anyone else; (4) We believe in profit process as a challenge, as a game, as a sport; (5) We believe in a certain arrogance; the certainty that we are going to win because we are the best – arrogance only tolerable because it is coupled with great sense of intellectual humility, the fear of being wrong, the fear of not working hard enough.” (Auletta, 1984)

From as early as 1956, with acquisitions of companies like Forex and Dowel, Schlumberger had diversified its portfolio to serve oil field customers but experimented with even wider scale diversification by acquiring companies like Fairchild, an electronics and semiconductor company. On the acquisition of Fairchild, a firm quite different than Schlumberger, Jean Riboud remarked:

“Why does a company have to grow and in which direction? I am not saying I am right, but I feel two things – two dangers. One danger is of becoming conglomerate and trying to do everything. The other danger is of just staying a wireline company. I don’t think we could have maintained the profit margin we had and the motivation of our people if we’d done that. The real problem in any organization is to have new challenges, new motivation.” (Auletta, 1984)

Schlumberger has a history of long CEO tenures. Marcel took the helm of the company for 9 years (1956 to 1965) followed by Jean Riboud who served 20 years (1965-1985). Euan Baird ran the company from 1986 till 2002. Long tenured CEO’s lead to an emphasis on long term planning and on consistent corporate values. These CEOs all came from within the company.

The Personnel staff is viewed as a key strategic resource, instrumental in the company’s success. The long tradition of senior managers taking time to recruit the best people was begun by Marcel. Jean Riboud, himself was recruited and mentored by Marcel. Benno Schmidt remarked:
"Riboud spends more time on people and people problems, in contrast to business and business problems, than any other chief executive I've ever seen... Most people who run a company are much more interested in business, new products, research – all that." (Auletta, 1984)

We now go back to the beginnings of the company to look at the reigns of each of these long tenured CEO's.

**Conrad and Marcel Schlumberger (1912-1953)**

Conrad and Marcel Schlumberger were born in 1878 and 1884 respectively in the town of Guebwiller, in Alsace. They were two of the six children from Marguerite de Witt and Paul Schlumberger. Paul was a visionary with a rocklike faith in science and in projects like the Suez Canal, in which he was an early investor. A great grandfather, Francois Guizot, was prime minister of France from 1840-1848. The father, Paul Schlumberger, was the first angel investor in the formation of the family owned company. In his early vision for the company, Paul emphasized the development of R&D activity over short term profits.

**The making of SLB culture**

"Our people must have an independent mind - to think for oneself, to analyze by oneself, not to follow fashions, not to think like everyone else, not to seek honor or decorations, not to become part of the establishments."

(Marcel Schlumberger)

Detail is provided in Table 5-3 on the important events in the history of Schlumberger. As such, it demonstrates how the culture at Schlumberger evolved over time. Schlumberger enhanced its growth through acquisitions of complementary oilfield service companies and allowed them autonomy in their operations. This independence in running their businesses allowed acquired groups to retain their own cultures despite the fact that they became part of another organization.
The names changed of course (e.g., from Dowel to Dowel Schlumberger, Anadrill became Anadrill Schlumberger) but these companies retained their original culture. The Wireline organization, being the parent, tried to influence these cultures. But it was not fully successful.

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>1912</td>
<td>Conrad conceives the idea for electrical measurements</td>
</tr>
<tr>
<td>1919</td>
<td>Marcel joins his brother, first work in Normandy</td>
</tr>
<tr>
<td>1921</td>
<td>Office opens in Paris, rue Saint-Dominique</td>
</tr>
<tr>
<td>1923-1926</td>
<td>Geophysical surveys in Romania, Serbia, Canada, South Africa, the Congo and the United States</td>
</tr>
<tr>
<td>1927</td>
<td>First electrical downhole log in Pechelbronne, France</td>
</tr>
<tr>
<td>1929</td>
<td>Well surveys in Venezuela, India, Russia increasing Technical staff to 50 engineers</td>
</tr>
<tr>
<td>1934</td>
<td>Schlumberger Well Surveying Corporation founded in Houston</td>
</tr>
<tr>
<td></td>
<td>- Operation expanded in Germany, Argentina, Ecuador</td>
</tr>
<tr>
<td></td>
<td>- Mexico, Austria, Borneo with 122 engineers</td>
</tr>
<tr>
<td>1936</td>
<td>Death of Conrad Schlumberger</td>
</tr>
<tr>
<td>1940</td>
<td>Houston becomes temporary world headquarters</td>
</tr>
<tr>
<td>1946</td>
<td>Electromechanical Research (EMR) founded in Ridgefield</td>
</tr>
<tr>
<td>1953</td>
<td>Death of Marcel Schlumberger</td>
</tr>
<tr>
<td>1956</td>
<td>Schlumberger Limited registered in Curacao</td>
</tr>
<tr>
<td></td>
<td>Henri Doll, Chairman, Pierre Schlumberger, CEO</td>
</tr>
<tr>
<td>1956</td>
<td>Expansion from logging to Oilfield Services: Johnston Testers acquisition for well testing</td>
</tr>
<tr>
<td>1960</td>
<td>Acquisition of Dowell—a well cement pumping company</td>
</tr>
<tr>
<td>1962</td>
<td>Schlumberger Limited (SLB) listed on NYSE</td>
</tr>
<tr>
<td>1963</td>
<td>Acquisition Forex—a drilling company</td>
</tr>
<tr>
<td>1966</td>
<td>Jean Riboud, Chairman and CEO</td>
</tr>
<tr>
<td>1986</td>
<td>Euan Baird, Chairman and CEO</td>
</tr>
<tr>
<td>2003</td>
<td>Andrew Gould, Chairman and CEO</td>
</tr>
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</table>
From Family Business to Global Company under Jean Riboud (1953-1985)

In the summer of 1953, Marcel Schlumberger died of heart failure. There was no one in the firm ready to take over and feuds surfaced among Schlumberger family members. As a result, the company was divided into four fiefdoms each ruled by a family member.

Henry Doll, the engineer who had designed and executed the first experimental Wireline log at Pechelbronne and the husband of Conrad's daughter Anne managed the technical side of the business. He was a scientist first and a corporate manager second. William Gillingham (1988) estimated that when Doll retired in 1967, 40% of Schlumberger's revenue sprang from his inventions.

Pierre Schlumberger took care of the most profitable business - Schlumberger North America Wireline. Based in Houston, he was in-charge of the fast growing American oil market. Pierre was the first to argue that to grow the company, it must go public.

The third sector, Schlumberger's wireline operations in South America and the Middle east, were run by Jean de Menil. The fourth sector, European operations, was run by Marcel's son-in-law, Rene Seydoux.

For three years, the company functioned in these four segments. An amicable relationship held between them but there was no central bond. As a result of strong lobbying by Jean Riboud and other executives in 1956, Schlumberger Limited was created to draw the company together. Pierre Schlumberger was named the first president and Henry Doll the Chairman of the Board. In 1959, Pierre's wife died and he became erratic.
His involvement in the business fell back and, finally, in 1965, the family asked Riboud to replace Pierre.

For the next 21 years, Riboud ruled Schlumberger. Investment banker and Schlumberger board member, Felix Rohatyn said of Riboud (Auletta, 1984): “He is absolute, unquestioned boss in the company. His authority is as absolute as that of any chief executive I’ve seen”.

Born on November 15, 1919, Jean Riboud was a graduate of prestigious Ecole des Science Politiques and attended Sorborne to study Law and Economics. Marcel Schlumberger recruited Jean Riboud in May of 1951 who was as temperamental as Marcel himself. Riboud grew the company through a series of acquisitions and strengthened the company’s portfolio. In Riboud’s opinion, wireline was then responsible of 70% of revenue and could not continue to grow at 30% per year forever. New outlets of corporate energy must be found. Thus, Schlumberger bought Fairchild and by doing so, was prepared for the high-technology revolution soon to occur. After Schlumberger had acquired Fairchild and had run a loss during the first year, Riboud spoke about his philosophy:

“..... danger is of just staying a wireline company. I don’t think we could have maintained the profit margin we had and the motivation of our people if we’d done that. The real problem in any organization is to have new challenges, new motivation.” (Auletta, 1984)

Riboud earned a reputation for selecting the right people for the right job. To do so he was preoccupied with personnel matters. This established a tradition that continues at Schlumberger where the vice president of personnel reports directly to the CEO, not to an executive VP, as is the case in many other companies.
On September 30, 1977, at a celebration of the fiftieth anniversary of Schlumberger’s first wireline log (a record of electrical measurements that explain the texture and contents of the downhole rocks), Riboud remarked,

“I should say that the most important thing I have learnt from Marcel was to have an independent mind – to think for oneself, to analyze by oneself, not to seek honor or decorations, not to become part of the establishment.” (Auletta, 1984)

This independence of mind and strong character remain part of Schlumberger culture even now. Wireline being the oldest company displays this strength most profoundly of all the oil business segments.

In the 1970’s under Riboud, Schlumberger began to reshape the makeup of the workforce to be more global. As business was increasingly coming from remote areas of the world, Schlumberger’s top management set out to match the makeup of employees to roughly match the global diversity of its business. Over the next 25 years, this focus on international business resulted in changes in recruiting practices. By the end of 2000, Schlumberger employed engineers from most of the countries in which the company operated as shown in Figures 5-1 and 5-2.

Figure 5-1: Percentage of employees from regions of the world is balanced to match the region from which revenue is received.

![Employee Nationalities](chart1)

![Clfield Revenue](chart2)

Approximately 35,000 people from 100 nationalities working in over 100 countries
Schlumberger profits grew by about 30% each year from 1971 to 1981. Its earnings per share rose more than 30% annually even though the price of oil varied throughout. Net profit in 1982 was $1.35B on revenues of $6.28B. This profit ratio put Schlumberger among the leading companies in the world. Return on equity in 1981 was 34% against a median of fortune 500 companies of 13.8%. Board member Felix Rohatyn commented in 1981:

"By the standards of profit margins, return on investment, compound growth rate, of remaining ahead of the art technically and having an efficient management structure, over the last 20 years – until the recent drastic changes in the energy environment – Schlumberger might well have been the single best business in the world." (Auletta, 1984)

An analysis issued by Barton M Briggs, managing director of Morgan Stanley in January of 1982 reads:

"Here is this immense, superbly – almost artistically – managed company booming along with a 35% compound annual growth rate in earnings and 37% in dividends between 1975 and 1980 ..... Our analysis of earnings variability from growth trend shows Schlumberger as having the most consistent, high growth track of any company in the 1400-stock universe of our dividend discount model." (Auletta, 1984)

Riboud focused less on the daily operations of the business, focusing more on the long term planning for Schlumberger. This is fittingly reflected in his quote: “The fundamental question is where
Schlumberger's earnings will come from five years from now" (Auletta, 1984). Riboud believed that this long term perspective in Schlumberger was found in its origin. Recalling the covenant between Paul Schlumberger and his sons, Riboud based his long range plan on Schlumberger "DNA," stipulating that "the interest of scientific research takes precedence over financial ones."

Continuing the strong leadership of Marcel, Riboud enhanced the 'culture' of Schlumberger with this glorious way of managing the company. Acquisitions continued but the individual cultures of the newer companies got heavily influenced by Wireline culture in these years.

**From Boom to Crisis (1971-1986)**

With a long term perspective in mind, Riboud worked to leverage the profitability of present business while building a diversified set of businesses that aligned with Schlumberger's commitment to technology and research. Table 5-4 shows the continuous growth of revenue to be in line with the oil industry from 70's to early 80's. Jean Riboud had built a successful company under this strategy. But it was not long before oil prices fell to their record lows in mid 1980's. The oil business was drastically injured and this had a direct impact on Schlumberger. In 1981, the rig count in the US was 4500 compared to 800 in 1986. Some critics say the company did not cut back on employees as fast as the business had demanded (*Financial Times*, Oct 1986). At any rate, the company financials showed poor profitability. The Schlumberger family's net worth dropped from $5 billion in 1980 to about $2 billion in 1986.
Thus, the same strategy of diversification and expansion that was once the strength of the company became the weakness. Rather than offsetting the slump in its core business, Schlumberger’s two major acquisitions, Fairchild (for $425 million) in 1979 and the offshore drilling giant SEDCO (for $1 billion) in 1984, proved equally problematic. The impact of these acquisitions did not appear positive on the company’s bottom line. Schlumberger ended up spending another $1.2 billion on Fairchild to make it profitable and hence “sellable”.

In 1985, Jean Riboud was in the terminal stages of lung cancer. As noted, he had forged Schlumberger into a most profitable multinational. He had done so in an iron fisted fashion over a 20 year period. As chairman, in 1985, he tapped his closest lieutenant, Michel Vaillaud to take his place. Despite his reputation as a leader and his intellectual status as the top graduate of Paris’ prestigious Ecole Polytechnique, Vaillaud could not meet the expectations of the Schlumberger family or the Schlumberger organization. One company insider remarked in 1986:

“Schlumberger was used to an authoritarian like Riboud. Vaillaud tried to please the family, he tried to please the management and he tried to please the board. He was everything but his own man” (Financial Times, Oct., 1986).
Another observer, John Rossant of Business Week in Paris wrote “a strong leader may be just what Schlumberger needs”. And so the board acted. At a meeting in New York on Oct 1, 1986, the 54 year old Vaillard stepped down as chairman and CEO and was replaced by 49 year old Euan Baird, formerly executive vice president.

**Euan Baird’s First 10 Years and Beyond (1986-1996)**

The Schlumberger family had been grooming fellow family member and Schlumberger executive Jerome Seydoux for the job of CEO for many years. He had been Schlumberger’s president and chairman of its huge metering division. Vaillard had not lasted long and it was important for the newly arriving Baird to perform. Seydoux would be a strong candidate for CEO if Euan and Roland Genin would falter. (Note: Roland Genin, the chairman of the board’s executive committee, had backed Baird with full force).

Euan Baird came to the job in 1986. He immediately set about restoring the company to its old form. From 1987 to 1992, he took a number of actions that refocused the company on its core strength in oilfield services. Among them:

- Divestitures of business lines that did not fit core competencies
- Acquisitions to reinforce the preferred business direction
- Restructuring of organization
- Refocusing of R&D effort to become the “low-cost innovators”

Over the next five years, 1993-1998, Baird continued his commanding approach. During this period, he accomplished the following:
o Concentrated Schlumberger resources in expanding world-class product lines.

o Improved margins through low-cost innovation.

o Developed new products and services that reinforced technological leadership.

o Continued development of an international culture.

Baird kept most of the traditions of the company. Internally, the values of 'People, Technology and Profits' remained in place as the cornerstone of this organization. Externally, Schlumberger remained a low-profile company in the eyes of public. Robert Corzine (1996) of Financial Times remarked that Schlumberger was "As accessible to the outside world as a discreet Swiss bank."

Emphasis on technology remained strong but with a twist. In the same Corzine article, Baird went on record as saying: "Within Schlumberger there is still a clear conviction that investing in technology is vital to the future". However, Baird shifted the focus of R&D spending toward more business-oriented development. He did not want 'technologically arrogant', esoteric research of little practical use.

By the late-1990s Schlumberger was still pursuing a strategy of dominance in the oilfield services and, from that strength, investing in related high technology sectors. Increasingly, the complimenting businesses were ones of project management and information technology rather than electronics. This leveraged Schlumberger's core competence in data and information management that were becoming more critical to its oil business each year.

As in the past, it was the oil-related acquisitions that proved most successful. Figure 5-3 shows the history of the company’s acquisitions.
Schlumberger had successfully expanded its portfolio of services to oilfield customers. However, with each of these businesses came a strong culture centered on individual product lines.

The 'Silos to OFS' story that follows is today seen within Schlumberger as a watershed event that changed the company from a strong, product-centric culture, to an integrated reservoir company called OFS – Oilfield Services. We first describe the methodology that surrounded the field research.
Chapter 6

METHODOLOGY

Interviews with 21 employees of Schlumberger were conducted in January, 2003. The authors conducted the interviews on site in Houston, TX. The stated purpose of the interviews given to respondents was to learn about the ‘Silos to OFS’ change process and to learn more generally about the Schlumberger culture, past and present. The method followed Schein’s (1985: Chapter 5) guide to researching organizational culture.

Schein suggests that using an insider/outsider combination is the best way to understand culture. One of the authors was an employee of Schlumberger and experienced the organizational change being studied. He played a key role by providing an intimate understanding of the organization and its actions. His experiences provided context and clarity to the information provided by those interviewed. Information about events and change tactics were primarily taken from the interviewees, not the employee/author. The other author, an outsider, provided a critical and more or less “objective” outsider’s point of view when trying to document the Schlumberger culture.

While all interviews followed a format, the interviewees were free to tell the story of the ‘Silos to OFS’ as they saw fit. Most interviews began with a few basic questions such as, “Where were you working in 1998?” or “When did you first hear about OFS?” These questions were followed up by an open-ended invitation to recount the story of change as the participants remembered it. We wanted to develop a list of management tactics and this was of particular interest during the interviews. We
asked about such tactics if they did not naturally come up. The questions fell into three broad categories.

Tactics used in changing the organization:
- What role did Forum 2005 play in affecting change?
- How did the employees first respond to the OFS restructuring?
- How were people “converted”?
- How the Forum 2005 participants were selected?
- How many of the Forum 2005 recommendations were actually implemented?

Timing and execution of the change:
- How long did it take to convince most people of the necessity of change?
- Were the “casualties” more or less than expected?
- What was the length of time allowed for people to change?

Lessons Learned:
- Why do you think Schlumberger was successful making this change?
- What lessons were applied in other parts of Schlumberger?
- Were results measured in any objective way (survey)?

An effort was made to reach all levels of the organization from executive committee members to operators out on an oil rig site. Four broad levels of the organization were targeted:
- Executives (Corporate VP and Segment Presidents) – 6 Persons
- Senior Managers (Geo-Market Managers, OFS positions) – 9 Persons
• Middle/Lower Managers (District managers, Sales) – 3 Persons
• Operations (field engineers, and operators) – 3 People

The majority of the interviews were conducted in Schlumberger’s Sugarland & San Felipe facilities near Houston, TX. Further follow up interviews were conducted by phone and in person in Boston as opportunity permitted. One trip was made to visit a field location and Wellsite operation in Lavaca County, Texas. This allowed us to interview a field engineer and operator in the work setting. A further effort was made to encompass all geographic areas to understand how local cultures and regions shaped the organizational change effort. Fortunately, due to Schlumberger’s management rotation policy, the Houston facility in 2003 gave us access to managers who were in all areas in the world in 1998. Most interviews were conducted of employees now working in the U.S. In 2003, approximately a third of the interviewees were in the U.S. in 1998 at the time of the ‘Silos to OFS’ change. For example, while all worked in Houston in 2003, the interviewees that were GeoMarket managers (a key interview target group) in 1998 were then working in Europe, Middle East, and Latin America as well as the U.S. Thus a reasonable geographical cross section was achieved by interviews despite the fact that our interviews were conducted in the U.S.

During the interviews, notes were taken by one of us in a notebook. These notes were then typed into a computer file for later reference. During breaks between interviews and at the end of each day, the two of us sat down to review the points made by each person. We would discuss similarities and differences between each of the stories, often referring back to our written notes.
After the first half-dozen interviews, a fairly diverse set of perspectives emerged. Meeting for an hour or two after each day’s interviews we developed a series of hypotheses that might allow us to reconcile the differing views we were hearing. These included differences in manager’s personalities and differences in perspectives that might arise from being at different levels of the organization or might arise from being at different locations in the firm. We then sought to add additional interviews that would allow us to loosely test these hypotheses.

After about 15 interviews (some of which had been added to test the hypotheses), we were able to document a fairly consistent series of events from 1996 through 2002. Variations in perspectives did exist and are captured in Chapter 8 when documenting the particular tactics used in change. Further interviews were conducted to provide additional details and a broader perspective on the organizational change. Wherever possible information on dates and events were corroborated with Schlumberger internal documents when offered by interviewees. These included presentations, announcement emails and video tapes. Interview data was supplemented by research into Schlumberger’s history and recent activities using public sources. These sources included books by Ken Auletta (1984) and Geoffrey Bowker (1994), Schlumberger annual reports, newspaper articles, and analyst reports.

The resulting account of events from 1996 to 2002 is told in the next chapter in narrative form in order to provide a dramatic snapshot of what transpired over these years. The analysis of our material is provided in Chapter 8. We believed it best to separate the story from the analysis.

We did find a difference in perspective on the activities that correlated strongly with the interviewee’s level in the organization. For example, the complexity of a dual reporting structure in a matrix organization was
seen as an Operations Manager as “chaos that I am getting used to” and characterized by a Senior Manager as “necessary tension that will ease over time.” These differences along with the change tactics employed by Schlumberger are discussed further in Chapter 8.
Chapter 7

'Silos to OFS'

THE STORY OF CHANGE AT SCHLUMBERGER

In this chapter we demonstrate how Schlumberger managers followed what we called in Chapter 2, the 'anthropologists' approach. The change process was, in the end, a 'both-and' model. The description below is given in chronological order beginning with the evolution of a change mandate.

1996 and the Need for Change

By 1996, Schlumberger had assembled an array of oilfield services businesses that gave them a rather complete portfolio of technology to offer its customers. Yet, despite the recent addition of new businesses such as Camco and Western Geco, real revenue growth had reached a plateau. Schlumberger's core Wireline business remained dominant with approximately 60% share of a somewhat maturing market. Its Dowell (Well Services) division had similar growth prospects. As one A. G. Edwards's analyst report (March 4, 1998) put it: "In each of these (Dowell) services Schlumberger is position as either No. 1 or No. 2 in worldwide market share. Future growth should stem from increasing market demand, price increases and new product introductions."

Efforts to raise market share in the smaller divisions could not be realized. While some early profitable exchanges between businesses existed in regions like Denver, Colorado or Aberdeen, U.K., deep divisions between the businesses precluded Schlumberger from broadly leveraging success in one product area into a competitive advantage in another. In
fact, Schlumberger's various oilfield businesses often communicated to one another via the customer. Many felt that collaboration was easier between a Schlumberger company and a competitor than between two Schlumberger businesses. The businesses knew little about each other's activities and were unable to coordinate, let alone leverage activities. Part of the reason for this lack of interchange across businesses reflects the nature of Schlumberger's oil services and their traditional independent, stand-alone character. This historical independence was reinforced by a decentralized management style both at the corporate level (Schlumberger, Ltd.) and inside the different businesses. Wireline field engineers, for example, were expected to know the profitability of the business they brought in each month. Such an empowerment of profit management at the lowest level drove single-minded attention to the goals of one's own business but little regard for those of other business segments.

Most potential new wells anywhere in the world require a fairly consistent string of services to be provided. A well was first drilled (Anadrill), a log of geological data taken (Wireline), well services such as cementing provided after casing the well (Dowell), holes perforated in the casing for oil/gas to flow (Wireline) and, occasionally, a well may need to be stimulated before oil begins to flow (Dowell). A well may also be tested prior to casing or after completing (Testing). While there are some variations to this sequence, much commonality exists. Additionally, management of the oil reservoir over its lifetime is often provided by service companies to oil producers.

Given this consistency in required services, coupled with the fact that many customers are global, potential synergy exists to provide end-to-end solutions. However, the activities have historically remained independent with each oil producer (customer) having its preferred
drilling company, its preferred wireline logging company, and its preferred well services company. With any one particular company, these services might all be provided by Schlumberger. But more often than not other services companies were involved in one or more steps. Even in cases where multiple services were in fact provided by Schlumberger, Wireline field engineers and operators in blue coveralls would depart just as a Dowell Schlumberger team in orange overalls would arrive onsite. To the foreman managing the well (known in oilfield jargon as the “company man”), those two groups appeared different, as if Schlumberger and Halliburton were providing the needed services. Little had been done to exploit potential synergies.

Thus the rationale for change was apparent to many in the company. All knew that Schlumberger was far from realizing its potential. In an April 1996 interview with Euan Baird, the Financial Times echoed this sentiment and described the corporate strategy in the following way:

It has also spent the past 10 years putting into place the ‘right seismic, software and other technical bricks’ to make such a production revolution happen. ‘Over the next 10 years we have to integrate them,’ says Mr. Baird.

But he says technology on its own will not be enough to achieve the company’s ambitious goals. It has to be the right cultural package.’

The background to this was huge cost cutting actions by the oil companies and the realization by those in the industry that quantum efficiency improvements had to be made.

Schlumberger realized that the gaps between traditional product line silos held many opportunities for efficiency improvements. But work on filling those gaps was not accomplished because people would shy away in fear of wasting time negotiating with adjacent product lines. Even if this was not an issue, the R&D funding to develop some "gap-products or processes" was difficult to access.
In 1996, Schlumberger’s Oilfield Services (Schlumberger Annual Report, 1997) had seven businesses. This “old” Schlumberger organization included:

**WIRELINE & TESTING**

Formation evaluation, well testing and production services for oil and gas wells: borehole measurements of petrophysical, geological and seismic properties; cement and corrosion evaluation; perforating; modular production systems; permanent monitoring and control systems; production logging; and light remedial and abandonment services.

**DOWELL**

Engineering and pumping services for cementing, drilling fluids, fracturing, acidizing, sand control, water control and coiled tubing applications.

**GECO-PRAKLA**

Seismic data acquisition, processing and interpretation services for marine, land and transition zone; seismic reservoir monitoring and characterization services; fully integrated project management including survey evaluation and design services; acquisition, processing and sales of non-exclusive surveys.

**SEDCO FOREX**

Contract drilling services, offshore and on land, with dynamically positioned drillships, semi submersibles, jackup rigs, drilling tenders, swamp barges and land rigs; 83 rigs, comprising 50 offshore (4 offshore charters and 6 management contracts) and 33 land rigs.
**ANADRILL**

Real-time drilling services: directional drilling, measurements-while-drilling and logging-while-drilling.

**GEOQUEST**

Exploration and production solutions for optimizing the value of oil and gas reservoirs: integrated software systems, data management solutions and processing and interpretive services.

**INTEGRATED PROJECT MANAGEMENT**

Project management and well engineering services: selection of optimum oilfield technology; implementation of safety and quality management systems; coordination and management of operations for well construction, production and field development projects.

Many attempts had been made by Schlumberger management in the past to utilize employee involvement in solving the problem of growth and the future structure of the company. Most of these attempts failed to yield unique ideas. Depending on the location of the employee and the business he/she was in, the problems of growth and future were seen in a unique way. Typically, blame for poor performance was seen to lie outside one’s own group. Wireline folks might cite poor profitability by Dowell groups. Dowell groups might cite the company’s lack of presence in drilling activities. The historically autocratic culture inhibited ideas deep down in the organization from making their way to senior management. Yet, there was apparently a pervasive belief that change was needed and that groups needed to work together much more closely than in the past.
Forum 2005

In 1996, Schlumberger set out to find a way to reshape the company such that the future would be one of growth and excitement. Baird asked each of the businesses heads to submit a list of young employees that had “high potential” for future management positions. From this he and a few trusted advisors selected a diverse group of “thirty-something” engineers and managers to serve on a task force named “Forum 2005.” Baird explained this activity in the 1997 annual report as:

To identify what changes were needed, we initiated in July 1996 a process of self-examination with what we called Forum 2005. In this forum we challenged a group of 36 young, diverse Schlumberger people to imagine what the world would be like in the year 2005, and describe the sort of company that they wanted Schlumberger to become.

The thirty-six individuals selected represented each of Schlumberger’s businesses, both oil-related and non-oil-related, and were from all over the world (approximately 12 from each of the three key regions of Americas, Europe & Africa, and the Middle East & Asia). They were asked to start with a “clean slate” and paint a picture of the industry ten years out. Then they were to place Schlumberger in that picture. A deadline date in May of the following year was identified. They would present their recommendations to the Chairman (Baird) and others executives in Austin, TX. Special requests were sent to the managers of the 36 to allow these employees to spend up to as much as 50% of their time on Forum 2005 work. There were no resource limitations as the members could travel as they deemed appropriate. Some were able to get relief from their tasks; others just saw the Forum “as their night job.” The participants quickly self organized into subgroups by both tasks and geography to better handle expertise and logistics. Baird made it clear that the team was to focus on the vision for the future and not to “spend one minute on how to get there.”
The vagueness of the task and the fact that few participants knew each other before being appointed to the task force led to some early conflicts. Classic group dynamics would predict as much. Initial meetings were said to be characterized by confusion, frustration, and some conflict. But as team members became more comfortable with one another, they began to debate the future with what those we interviewed said were "passion and excitement". The team was assigned a mentor in the form of Volker Reichert, a retired senior executive from Schlumberger. Reichert assisted the group in attaining necessary resources and contacting outside companies. He worked to provide a clear picture of Schlumberger's business conditions and served as a sounding board for ideas. In one situation, group members were interested in how large companies manage R&D portfolios. Through Reichert they were introduced to Pfizer and were provided access to their research labs to study how Pfizer managed its R&D.

Much of the initial effort was focused on technology. Team members tried to image the oil business a decade out, with permanent connectivity anywhere on the globe. As the technology sub-group was taking shape, a smaller group broke off to look at the organizational issues that faced Schlumberger. As they spoke with field engineers and customers, a picture emerged of Schlumberger as seen by the outside world. It was an unflattering picture. Customers, it seems, saw a proud company enamored with its own technology and disdainful of customers.

As the time drew close to the Austin meeting, what the group would present to senior management was unclear. A good deal had been discovered but much of the information was qualitative and difficult to sharply articulate. At first glance, the three groups from the different regions had come to different conclusions. But, after further, analysis it was clear that three teams had focused on different time horizons.
Consistent themes could be drawn from all their work. Reichert arranged for an outside company to help the entire team prepare for the presentation to Baird and the rest of the company. Rather than opt for traditionally uninspiring PowerPoint presentations, the thirty-six participants developed a set of skits to be acted out on stage. The skits would illustrate the problems of Schlumberger was currently facing as well as a vision of what could be done about them.

Employing a healthy dose of sarcasm, the Forum 2005 members started with a parody of a fictitious customer trying to contact Schlumberger and being handed off between the various groups. The message was clear, while Schlumberger had great technology; it was often compromised by the way Schlumberger organized its tasks and the way it dealt with customers. This was followed by a skit of the future wherein a new Schlumberger worked seamlessly to deliver all technology to a wellsite of tomorrow. This was enabled by unmatched IT technology providing real-time updates of needed information. This was the change team’s vision of “One Schlumberger” providing solutions locally to customers in all product segments.

The presentations were a resounding success. They struck a nerve with upper management. As painted by Forum 2005, Schlumberger’s future was dependent on providing a unified set of solutions to local customers without losing the technological advantage of each of the present business segments. Additionally, the team described the need to create a more employee-friendly workplace that offered more flexible benefits, that took into account dual-career families, and that offered more flexibility in new assignments.


**Action 2000**

Once Forum 2005 had finalized its work, their presentation was sent to key Operation Managers in the field who were to think about how they might achieve the future objectives that this forum focused on. In the next step of the change process, Baird assembled 150 of the company's top managers in Paris for four days in November, 1997. This meeting, called Action 2000 brought these managers together who would be necessary to execute the change. As this was a much higher level of management, none were participants of the Forum 2005 task force.

This group was given a multiple goal mandate: look at the action plan developed by Forum 2005, absorb it, discuss it and clarify any ambiguities that may exist. Action 2000 was to set objectives in 1997 for Schlumberger managers to follow over the next few years such that the company could achieve a certain target by the year 2000. This group was given a charge by Baird that was complimentary to the one given to the Forum 2005 members. They were not to debate the merits of the vision or whether it should be carried out but, rather, to develop a plan that allowed the company to execute the vision.

Action 2000 came up with a clear structure of the organization. The names of the individual product lines were changed as well as the way they interacted with the system. Product lines were renamed Segments and their individual offices at all areas levels were merged into Oilfield Services offices. World was split into 29 Geographical Markets known as GeoMarkets. These GeoMarkets were to have complete independence of decision-making in terms of their business planning in their geographical area. This gave full latitude to the local managers to act according to their local customer needs and changing circumstances. The GeoMarkets

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were headed by General Managers. Technical support was given to the original product lines now called Segments. Management of the segment operations remained with the segment but these operational managers would report directly to GeoMarket Managers instead of ‘segment’ superiors. Segment superiors became functional support managers and sources of expertise rather than acting as direct line managers. Technical experts assigned to different segments were now more visible to one another throughout the GeoMarket domain. And these ‘segment superiors’ were to work, now, on solutions to customer problems instead of managing and providing commodity services.

Customer contacts also changed. There was now a ‘focal point’ to discuss general issues of sales and marketing of all products. The GeoMarket Managers were now responsible for ALL products and services with a presence in their area. This person deputized sales and marketing staff to interact with customers, then report back to decide within the GeoMarket what services would be best put together for the customer.

Marketing and Sales, previously organized by individual product lines, were merged. This was worrisome because a sales engineer might become ‘a jack of all trades’. Emphasis was also given to creating a stronger OFS Marketing structure charged with coordinating the sales force. Engineers remained in their individual segments.

Finally, technology centers were required to work more closely with one another. They were also to come up with ‘solutions’ to customers instead of ‘products’ for individual segments. Schlumberger Wireline had designed, for example, a web-based technical support structure (named “In-Touch”) which became the standard setup for all online technical support to segments. Figures 7-1 through 7-4 show the structure of this organization. An example of one GeoMarket structure is also provided.
Figure 7-1 Role of Segments in the GeoMarket structure

Dual and Complementary Focus

Product Groups and Segments
- Schlumberger Oil & Gas
- Schlumberger Cambridge
- Reservoir & Development
- Schlumberger Doll
- Information Solutions
- Network Solutions

Areas and GeoMarkets
- Areas: ASA, ECA, MEA
- GeoMarkets: NSA, CAN, ECA, MEA
- Geographical service provider and customer support
- Network of Excellence Training (NOET)
- Schlumberger Reserve & Development
- Data Management
- Data & Consulting Services
- Engineering & Production Software
- Efficient Initiatives
- Indigets.com
- Network of Excellence Training (NOET)

Figure 7-2 Geographical areas and 28 GeoMarkets

Areas and GeoMarkets
- ASA: USA, Mexico, Southeast Asia, Middle East, Australia
- ECA: Europe, Middle East, Africa, Canada, South America
- MEA: Middle East, Africa, Asia, Australia
- NSA: North Sea, Asia, China, India, Australia
- America: Canada, USA, Brazil, Mexico, Argentina, Latin America
- Africa: Egypt, Sudan, Nigeria, Tanzania, Mozambique, South Africa
- Asia: China, India, Pakistan, Bangladesh, Vietnam, Indonesia
- Europe: UK, France, Germany, Italy, Spain, Russia
- Middle East: Saudi Arabia, United Arab Emirates, Kuwait, Qatar, Oman, Pakistan
- South Africa: South Africa, Mozambique, Tanzania, Nigeria
- Australia: Australia, New Zealand, Papua New Guinea
- Canada: Canada, Mexico, Caribbean
- China: China, Hong Kong, Taiwan
- India: India, Pakistan, Bangladesh
- Indonesia: Indonesia, Malaysia, Brunei
- Iran: Iran, Azerbaijan, Turkmenistan
- Japan: Japan, Korea, Taiwan, Okinawa
- Malaysia: Malaysia, Singapore, Brunei
- Mexico: Mexico, Central America
- Nigeria: Nigeria, Benin, Chad
- Pakistan: Pakistan, Afghanistan, India
- Peru: Peru, Bolivia, Ecuador
- South Africa: South Africa, Botswana, Namibia
- Sudan: Sudan, South Sudan
- United Arab Emirates: United Arab Emirates, Bahrain, Qatar
- United Kingdom: United Kingdom, Ireland
- Vietnam: Vietnam, Laos, Cambodia

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The Roll Out

As stated earlier, unlike most organizations that have undertaken organizational/cultural change in times of financial strain, the new organization was rolled out in Schlumberger when the company was doing extremely well. The annual report in 1997 stated:

"The continuing increase in demand for oil and gas set the scene for another outstanding year for Schlumberger. Net income of $1.3 billion and basic earnings per share of $2.62 were 52% and 51%, respectively, above 1996 levels. Operating revenue grew by 19%, to $10.65 billion. The strength of the Schlumberger share price during the year resulted in a two-for-one stock split in June......Oilfield Services had an excellent year. Driven by expanding exploration and production investments, revenue increased 25% and pretax operating income increased 58%. The robust growth was fairly evenly spread geographically and across all services......As we enter our fourth year of strong growth, it is instructive to look at where we are in the business cycles."

After informing all senior and middle level managers what the new organization design was intended to accomplish, the new structure was put into place by Euan Baird. Groups were setup, jobs defined, individuals assigned to these jobs and a detailed email was sent to all employees on the 18th of Dec, 1997 by the Chief Executive Euan Baird.

Chief Executive Euan Baird, Executive VP Andrew Gould and his staff explained the structure to those in the organization. First, high level managers (whose jobs were not changed) sat together with the newly appointed GeoMarket Managers and explained to them, in detail, how the organization will work and GeoMarket Manager's role in the success of this organization. Together with the new GeoMarket Managers, senior management undertook an extensive ‘road show’ to explain the new organization to the rest of management and staff as well as company engineers and operation staff. For the next six months, road show teams made hundreds of presentations in main offices and operating bases.
The organization was first changed at the management and support level (product centers and business segments) without disturbing the operations. Once dust settled from this change, the operation organization was changed.

GeoMarket Managers went to see their customers and explained to them how the new structure was supposed to work and how it would allow Schlumberger to provide better service quality and client satisfaction. Customers were told they now had only one contact person when it came to their service needs.

The mass campaign ‘selling’ the new organization continued for several years. It became a theme of all managers meetings, all managerial visits to customers and was the central topic for all yearly objective setting exercises for managers as well as engineers.

Euan Baird defined the GeoMarket structure on 27th of May 1999, while delivering a Keynote presentation at the Annual Conference of the European Industrial Research Management Association in Lisbon. He said:

“A GeoMarket Group I define in terms of geology, economics and logistics. Norway/Denmark is a GeoMarket group, as are China, the US Gulf Coast and Alaska. Each (GeoMarket Manager) has his own multidisciplinary Schlumberger Organization, which addresses directly the specific problems of the clients of that market. The GeoMarket structure has, more than ever, made the client the focus of all our efforts and our performance is measured in terms of their success before our own. Our global IT network allows the GeoMarket groups to provide marketing direction to the product centers by getting them directly involved in local problems through virtual teams. The network also makes it easy for the GeoMarket groups to exchange market information, experience and best practices.”

Euan Baird later remarked in the Schlumberger Annual Report in 2000:
"Thanks to our focus on the reservoir, the creation of the GeoMarket organization, and a wide array of new technologies resulting from our R&D spending, Schlumberger flourished in this environment with Oilfield Services revenues increasing by 20% and pretax operating income improving by 73% compared with 1999. A number of new initiatives were started during the year to extend our lead in the Oilfield Services reservoir optimization market...In addition, we are winning a growing number of new joint value enhancement projects due to the ability of the GeoMarket organizations to offer tailored reservoir optimization solutions."

It is interesting to note that OFS (Oilfield Services) was formally born in the beginning of 1996 during the first SLB Oilfield management meeting in Mexico City (Pre-Forum 2005). This meeting established the need for more team work and introduced IPM as a business unit. The OFS structure still remained as product line silos and had yet to adapt the new structure.

**The Organization Settles**

Like any cultural change, the process took time and troubles were not absent. The pendulum of change swung to one side when the segments were required to let go of their power and team up with other segments. This initial phase was seen as resulting from the strong influence of GeoMarket managers had on Segments in day-to-day operations. Soon, it was apparent that the technical competence of the segments was challenged by the heavy influence of the OFS structure. Some people thought the focus had changed from a 'fully technical' structure to 'Jack of all trades and master of none' structure. Were OFS sales people becoming generic sales personnel in certain GeoMarkets? Were they losing their expertise? Some customers were also worried what Schlumberger was becoming.

Within a year, it was felt by senior managers that there is a need to move back from the extreme market focus of the new structure when segments appeared to be losing their grip on their core competencies. Expertise
was apparently slipping. So senior management began to allow segments stronger decision rights than originally planned. Some managers interviewed felt the role of GeoMarket managers was purposely strong initially to send a message to the rest of the organization. But, according to some, senior managers also knew that segments would be restored power later in the change process.

As technology centers started working with one another, the technical organization became more strongly integrated. Tools and equipment that were initially designed only for one segment started to be shared. Software was developed and used across segments.

The Quality, Health, Safety and Environment department (QHSE) was one area that gained much from the change. Safety is critical at Schlumberger, a historically embedded value that employees respect. The organization emphasizes safe work habits. With the GeoMarket approach, individual segments pooled their best practices in the areas of QHSE and these pooled practices became company standards.

“One Schlumberger” was the theme of Forum 2005 and became the motto for individual segments. Schlumberger Blue became the corporate standard color instead of the individual colors of Dowel, Anaadrlill and others. All the future paint and renovation jobs of individual segments’ equipment and buildings were to be done in Blue and follow the corporate-wide image scheme. Standard templates for internal company presentations were issued. Web sites were synchronized and standardized. Computer issues and policies were centralized by OFS and all the employees were required to use the same vendors.

Some employees felt the OFS structure was taking the company in the wrong direction by abandoning its historical focus on technology and
products. Most employees who felt this way left the company by the beginning of 1999. They were replaced by others who had come to appreciate the value of the new organization.

All new bases were to be built as OFS bases instead of individual operational bases. That added to the integrated image of the company. Now, engineers started seeing other segment engineers in the bases and at well sites. Work programs for a given field and well were synchronized by these engineers while at the base rather than only at the sites as had occurred before the change.

Human resource practices were synchronized across individual segments into one OFS policy. By and large, HR policies are now almost identical for all organizational units. Web-based personal profiles, performance appraisals, and succession planning are standard across all of Schlumberger.

**Cultural change in daily work life - Workplace 21**

Other change initiatives followed the shift to the GeoMarket. “Workplace 21” was one of them. Workplace 21 (the workplace of the 21st century) was an initiative developed by Forum 2005. It was designed to better use IT and the Internet. Moreover, it was aimed at reinforcing the “people oriented culture” at Schlumberger. Explaining how “Workplace 21” would operate, Baird said:

“...To this end we (have) selected 30 employees from SLB and 15 from our clients...and have asked them to develop their vision of the workplace in the 21st Century...This will change Schlumberger. We are not asking the men and women who will manage Schlumberger in the coming years to conform to the past. We are asking them to redefine the way we want to be...”

The team of 45 members spent six months investigating possible new employment contracts, business trends, and best HR practices at the
workplace – both inside and outside Schlumberger. The study group came up with eight recommendations:

1. Create the infrastructure for employees to do their work  
2. Allow employees to choose their own workplace & style  
3. Manage employees by results, not by methods (trust)  
4. Adopt technologies that allow employees to collaborate with information and with people in a way that is simpler, faster and more exciting  
5. Adopt technologies that allow the Personnel Department to become a community of career facilitators, rather than being the first people to have to say no  
6. Pay closer attention to the quality of employees’ lives  
7. Consider the needs of employee families in the decision making process  
8. Inspire creativity by incubating new ideas & innovation

Schlumberger in 2003

Moving from 29 GeoMarket groups in 1998, to 25 in 1999, to 28 in 2000, OFS organization is now divided into 27 GeoMarket groups. Over the same time the number of areas were reduced from nine originally to three today. Figure 7-5 summarizes the activities that took place from 1996 to 2003. Appendix-A provides the details of three Areas and the division of these areas into GeoMarket groups.

Areas were historically the power houses of individual segments (Product Lines). Different product lines had different cities as their area office. Wireline, for example, had area offices in Dubai, Jakarta, Paris, Caracas and Houston serving the Middle East, the Far East, Europe, South America and North America respectively. This has been historically the
way Schlumberger had kept the offices. In the new organization, GeoMarket managers were the 'business leaders' and there was not much of a role for individual area managers of product lines to play. Product lines now have a worldwide headquarter instead of separate area offices. OFS area offices are now designed to support GeoMarkets. They are not controlling or governing units. Segments, which saw their decision making powers shrink, now have a support role in the organization. Their technology centers are now in line with the OFS spirit.

The change process occurred during a time of exceptional financial performance. But, in 1998, a sizable drop in activity in worldwide oil industry affected Schlumberger. This downturn led to a large downsizing at Schlumberger. Some argue that this might have retarded the drive towards new organization. But there is a consensus among interviewed managers that the new GeoMarket organization was in sound position to handle the downturn. It did so, they argue, effectively. Typically, a downturn in the oil industry is felt strongly and swiftly in the North American market where oil lifting costs are higher. Effects in the Middle and Far East markets follow later. The GeoMarket organization was in a position to transfer employees to less affected areas (temporarily) instead of having to lay off employees right away. The same managers also claim that the new organization helped in recruiting for the upswing in activity in 2000.

It is important to note, however, that in our interviews there was a clear division among managers who claim that the change process has already been completed and those who do not. The former are “true believers” in the new organization. Those more skeptical feel that change is a long process and has not sunk into the minds of Schlumberger managers as a
new ‘system.’ There is a need to keep the drive toward the organization alive for a few more years.

Many of those interviewed said that larger and older segments of Schlumberger displayed more resistance to this change process than younger and smaller segments. Others felt resistance was not size or age related. But, in general, neither view is surprising since Segments managers lost power during the change. Yet, in the final analysis, Segments managers could not resist the change successfully given their own loss of power in the new GeoMarket organization.

Despite these minor controversies, it is now a common belief within the firm that Schlumberger has successfully transformed itself from a product-line focused organization into an integrated “One Schlumberger” company able to better serve its customers. Figure 7-5 shows a timeline of the change process.
Figure 7-5 Timeline of Change Process

Managerial  Task Force  Company Wide

Various Meetings

Forum 2005 Task Force

Action 2000 Meeting

Forum 2005 Presentation

Start of New Organization

Email Announcements

1998

Initial Settling-in Period

Managerial Departures and Replacements

1999

Reduction to 25 GeoMarkets, Decrease from 4 Areas to 3

2000

Increase to 28 GeoMarkets

Minor organizational changes

2001

Andrew Gould replaces Baird as CEO

2003
Chapter 8

ASSESSING THE OUTCOME

As noted, the process of change began in 1996 with the initiation of the Forum 2005 task force. While many managerial meetings discussing the need for change preceded this activity, most managers will point to the activities of Forum 2005 as launching a series of initiatives (as defined by Action 2000) targeting organizational change. Chapter 7 focused primarily on the structural change of the organization (moving from product silos to an integrated OFS group). And, as we also noted in Chapter 7, the Forum 2005 initiatives to remake the company extended beyond the move to the new matrix-based solutions organization.

Structural changes to remake an organization create tensions that are based in the culture of the organization. Not all changes fit the culture nor can structural shifts alone move the culture with lightening speed to embrace all changes. Ultimately, success or failure to achieve the goals sought by the structural changes rest on cultural judgments. In this chapter we look to see how Schlumberger management now assesses the change and the change process that began in 1996. Furthermore, we will summarize the management tactics that drove change as mentioned in the interviews.

When asked to judge how far the change efforts have progressed to date (in 2003), interviewees gave responses that varied from 50% complete to 95% complete. Most responded around 70-80%. The majority believed that the change progressed faster and with fewer casualties (employees asked to leave because they consistently resisted change) than they had envisioned. Some noted that the organization began to take shape in
some markets within six months and had solidified in two years. Others reported that a few GeoMarkets were still not acting fully as an integrated OFS.

Since the change initiators (generally attributed to Euan Baird and Andrew Gould) never put forward specific targets for the new organization, the responses to these questions vary based on the expectations of individual employees. Most seem comfortable with this ambiguity and believe they know a well functioning GeoMarket organization when they see it.

In interviewing participants about this change process, as mentioned in chapter 6, we were particularly sensitive to the differences in results (and tactics of change) that appeared in regional or national cultures. Did change occur faster or differently in the Middle East than in Europe? Were American employees more vocal and thus more resistant to change? These questions are difficult to answer conclusively because our sample is small and thus our interviewees represent roughly two dozen unique situations. There was little overlap in situations for comparisons to be valid.

Despite variation, all indications are that the techniques, tactics, and outcomes were more dependent on the individual manager driving the change in a region than the particular aspects of that region of the world. Most of those interviewed flatly dismissed the assertion that change was location dependent. The common response can be paraphrased as follows: ‘When you are managing change in one office, your employees are employees from all over the world. If you are a GeoMarket manager in Cairo most of your direct reports are not Egyptian. Some are Middle Eastern; some are Latin Americans, some North Americans, and some Europeans or Asians. Their personalities and the type of business they
came from (Wireline, Dowell, etc.) was far more influential in how things played out than which office they were in'. The only exception to this was an acknowledgement that the customers and size of business in the region played a key role in inhibiting or facilitating change.

Below we discuss the particular tactics and techniques that were used by Schlumberger in driving change. The tactics are listed and described below. They are summarized in Table 8-1. The extent to which each of the tactics was used is given a qualitative assessment (Slight, Moderate, Significant) in the table. This "amount of use" is a judgment made by the authors based on what we were told in our interviews.

**Key Tactics that Drove Change**

From the interview data, a variety of managerial tactics were used to drive change throughout the organization. Few remembered the task of reorganization initially as an endeavor in changing the culture of Schlumberger and its separate businesses. But our respondents noted that within six months from the start of the new organization, the word "culture" was often heard. In one instance, a segment manager was replaced by the GeoMarket manager. The instruction to the incoming segment manager was, "You have one task! Change the culture of the group."

No one employee recalled or responded to all the tactics below. Some employees were convinced to give the new organization their full commitment and best efforts by the solidarity shown by management in pushing the initiative. Others were inspired by the fact that management had asked the young employees to craft a vision for the future in Forum 2005. The success of the overall reorganization was likely not tied to any one tactic but the presence and use of many. In
essence, there was something in the change for everyone. These key tactics are explained below in no particular order. Our view is that all are needed and the emphasis on one or another depends on particular situations and groups.

**Communication Approaches (information channels)**

Interviewees noted the use of two techniques to "lay the groundwork" for the coming change. A series of company-wide emails were sent starting in November 1997 and ending with the full organizational change announcement on February 1, 1998. The early emails let employees know that an important announcement was forthcoming. During this same period, videos of Forum 2005 were made available and shown to employees. Given the importance of the message delivered in the Forum 2005 and the logistic fact that most employees could not attend the Forum itself, a video of the presentation was made for Schlumberger offices world wide. Personnel had a list of all employees and tracked attendance and employee responses to the presentations delivered by the video. The video, as noted, attempted to answer the "why change" question for employees.

Following the February 1998 announcement of changes, PowerPoint presentations were made in person by Baird and other senior managers in all offices around the world. While the Forum 2005 activity was at least partly a "grassroots effort", implementation was distinctively top-down.

All those we interviewed acknowledged that the first 3 to 6 months of the change was characterized by well orchestrated communication. Many point, however, to a precipitous drop off in top management communication after this period. And, as further reorganizations and adjustments to the structure came along, confusion set in throughout
the organization for no official explanations for these additional changes were communicated. By 1999 and the downturn in business, the number of road shows and managerial presentations had dropped off considerably.

**Speedy Structural Change**

Action 2000 began the task of putting the new organizational structure in place. In less than three months, Schlumberger created the matrix organization and deployed new managers. By some estimates, more than half the company's key managers were relocated during this period. Virtually all the managers for the 29 GeoMarkets were in place by February 1, 1998.

**Focus on Near-Term Operations**

While top executives were emphasizing the importance of the newly created GeoMarket Manager positions, these same executives had a special message for the managers of the business segments. They were urged to keep business running as usual. One interviewee recalled being invited to a meeting of segment business managers hosted by Andrew Gould, and then President of Oilfield Services, where they were told it was imperative to "keep the wheels on the wagon." During the period of transition it was expected that difficulties would arise and the focus on operations could get lost. Thus, these managers on the traditional side of the business said they were made to feel as much a part of the change as the GeoMarket Managers. Many noted that a delicate balance was struck between segment business goals and OFS business goals. It was said that this balance was monitored and shifted as necessary by senior management.
Senior Management Visibility
The initial round of PowerPoint presentations made in regional offices after February 1 was often given by Euan Baird and Andrew Gould along with Area or Segment presidents. Interviewees said that the “road shows” went on for up to six months.

Town Hall Meetings
Following the presentation by senior managers, town hall meetings were held with all employees in the region. Meetings were held with employees from different segments attending. Members of the newly formed GeoMarkets met together and feedback encouraged. Employees were asked to speak their mind, vigorously if necessary. But they were also asked to not leave the meeting without being willing to give the new structure a try.

Acknowledge Objections
Senior managers were then asked to present the new organization to employees. They were also asked to put significant effort into listening to the objections of employees and trying to address them as best they could. Interviewees said that most conversations ended with a senior manager issuing a plea for employees to give the organization a try.

Use of Symbolism
In promoting a “One Schlumberger” culture for OFS, the company standardized its logo (one font for the name) and standardized the corporate color (blue). This created memorable moments such as the following incident related to us by some of those we interviewed. Dowell employees had for decades worn orange coveralls. In one town meeting, a GeoMarket Manager said to the Dowell engineers: “Take those orange coveralls and burn them. We will give you blue ones.”
In regard to language, many managers often used the analogy of a train leaving the station to describe to employees the urgency of getting "on board" the change efforts. "The train is leaving the station. You had better get on now or be left behind."

Nine months into the reorganization, when senior management began permanently removing resistant employees from the organization, the analogy was modified to: "Either get on the train or get in front of it. It is moving ahead and there is no standing at the station."

**One-on-One Meetings**
Many interviewees recalled being briefed face-to-face by their direct managers on the details of the reorganization. Some were taken through a PowerPoint presentation one-on-one. Town hall meetings generally were for operators, field engineers, and non-management personnel. Others recall getting some "management feedback" from their bosses to "get in line" with the new organization.

**Early Wins Celebrated**
Efforts to describe customer satisfaction and new customer solutions were heavily publicized as they became available. Some regions had cross-segment activities that predated the corporate-wide reorganization and thus provided examples of well functioning GeoMarkets.

**New Management Evaluation Criteria**
All managers charged with bringing the new organization on line, particularly the GeoMarket Managers, were measured on this dimension. Such evaluation had a direct link to managers' compensation. It appeared, however, to be less of a motivating factor to individuals in relation to salary than its relevance to their career advancement.
Appeal to the Merits of the Initiative
Interviewees said that the rationality behind the change effort was most pervasive. From Segment President down to Field Engineer, all interviewed cited the merits of the move to a GeoMarket organization. Many said, “GeoMarkets were an obvious improvement.” While most acknowledged the merits of the initiative, many objections remained. Therefore, the rationality behind the change, while a pervasive force, it was often not sufficient in itself to win over the opposition.

Appeal to Forum 2005 for Legitimacy
A great discrepancy existed in the interviews over the amount to which Forum 2005 provided legitimacy. This appeared to be highly dependent on the individual. For some, the merits of the initiative and the momentum behind a top down initiative were enough. Others cited the Forum as a key reason that they initially supported the reorganization.

Selling of Idea by Forum 2005 Members
This was mentioned by only a few interviewees. Yet, viewed broadly, there appeared to be several positive but unintended effects of the Forum 2005. The initiative was not publicized during the 12 months the Forum members worked on the change but it was not kept secret either. The effect that 36 people have on promoting a new vision to 5 or 10 of their peers is not clear in an organization the size of Schlumberger but it may well have been quite helpful. This is especially true if the 36 came from all postings in the organization and were from the lower ranks of management.

Selection of Personnel for Key Roles
A common personality profile was seen in the first generation of GeoMarket Managers. Those interviewed said that most were “Type-A, driver personalities.” These are the type of managers who presumably
would quickly get the word out to their organization and lead change. They were also seasoned managers who could run their own businesses. Additionally, the 36 Forum 2005 participants found themselves in influential (although less autonomous) roles after the reorganization. Most were moved up in the organization and into highly visible jobs.

Surprisingly, some of the new GeoMarket Managers were not the strongest supporters of the new organization. Of course, by being offered the new position, they became immediate stakeholders in the success of the reorganization. Those that senior managers felt could make the GeoMarket manager position work and “convert the masses” appear to be those that were chosen (rather than simply choosing the most enthusiastic supporters of the new organization).

**Management Rotation**
There was strong sentiment among interviewees that Schlumberger’s standard practice of rapidly moving managers from one region to another had significant impact on the sharing of best practices. With managers continually rotating around the company, the new organization was sufficiently understood. For example, operational managers would move from GeoMarkets with strong adherence to the OFS organization to GeoMarkets with weak adherence, thus improving the performance of the new location. But, interviewees cited that the pace of management rotation was so great (most managers staying fewer two years in a position or location) that cross-fertilization benefits were often offset by managerial instability. Many senior managers have recently cited a need to slow this rotation down.

**Measurement of Key Results**
No interviewee was able to identify a quantitative metric that was monitored throughout the change. Customer satisfaction was given as a
key rationale for the organizational change. But only anecdotal evidence existed as to improvements in this area. No financial targets for market share, cost reduction or profitability were held up for the new organization to achieve. Revenue from integrated cross-segment solutions has been used as a reference point. Today this stands at 15% in some GeoMarkets. Few managers are willing however to consider this as a proxy for effectiveness of organizational change asserting that it under-represents the new organization's increased capability to sell integrated solutions.

This lack of direct measurement is not to say that the change has not been “successful.” Schlumberger top executives believe the change has been successful and the authors concur. It is to say, however, that success has remained in qualitative, not quantitative terms.

**Use of New Language**

The use of labels “GeoMarket” and “GeoMarket Managers” had no meaning to employees at the beginning of the reorganization. Had the title been “Area Operations Manager”, many might have jumped to preconceived and traditional notions of roles and responsibilities. By using unique titles and phrases, employees had to listen to the official presentations if they wanted to learn what these new titles meant. Habituated patterns of thought were thus less likely to determine behavior.

**Using Customers to “Drive” the Initiative**

The use of this tactic was quite pervasive in some regions and minimal in others. Some managers explained and discussed the organization to both employees and customers. Both were promised more responsiveness and less bureaucracy as a result of the change. The managers would ask customers to personally call them to complain if the
organization was not living up to standards. Many cited this as a tactic to drive employee compliance. In their logic, if the customer demanded the behavior, employees would respond better than if the manager demanded it. As mentioned, this was, of course, dependent on the customer size as well as the orientation of individual managers to the change. No correlation was seen between customers in some regions being more receptive to the change than those in other regions.

**Rewarding the Converted**

While this is quite difficult to validate, many interviewees expressed their belief that the way to get promoted in the new organization was to "see the wisdom" in the new OFS organization and act in line with its dictates. As discussed above, this did not necessarily apply to the managers first installed into new positions in 1998, but rather was applied to those who made moves in the months and years that followed.

**Replacement of Change Resisters**

After six months interviewees said that employees had for the most part "internalized" the new organization and its demands. Most employees either saw the merit of the new organization or simply tolerated the effort. Some employees felt the new organization was either bad for business or bad for them and vocally resisted. No numbers are available, of course, but interviewees said that they believed it to be no more than a few percent of the total population. After about 9 months, those employees who still resisted sought opportunities outside of Schlumberger. This reduction of resisters generally took place between six and twelve months. All of those interviewed believed adequate time was given for people to get used to the organization and be successful. They felt that, if anything, the company may have waited too long to remove the vocal resisters from key positions.
It is important to differentiate these employees from ones that simply found it hard to function in the new organization but were largely supportive of the initiative. Examples were given of employees who were successful managers in a particular product segment who were asked to take on an integrating OFS manager role. Occasionally these employees found the new way of managing too difficult for them and asked to be put back into a single product function. In these cases, most requests were accommodated without issue.

**Co-location of Employees**

The general consensus was that co-location could only help further change. Some asserted that the lack of progress on the organizational change was directly linked to not consolidating field offices in a region to a single OFS base. Co-location was done in some locations but not all. Today, however, the long term strategy is build only co-located facilities as new ones are built and old ones replaced. Yet when the assertion that co-location played a central role in the change was actually tested, many managers noted that they knew of GeoMarkets where change was difficult despite co-location.
## Table 8-1: Qualitative Assessment of Key Tactics

<table>
<thead>
<tr>
<th>Tactics</th>
<th>World Wide Consistency</th>
<th>Amount of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Approaches</td>
<td>YES</td>
<td>Slight</td>
</tr>
<tr>
<td>Speedy Structural Change</td>
<td>YES</td>
<td>Moderate</td>
</tr>
<tr>
<td>Focus on Near-Term Operations</td>
<td>YES</td>
<td>Significant</td>
</tr>
<tr>
<td>Senior Management Visibility</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Town Hall Meetings</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>Acknowledge Objections</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Use of Symbolism</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>One-on-one meetings</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Early Wins Celebrated</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>New Management Evaluation Criteria</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Appeal to the Merits of the Initiative</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Appeal to Forum 2005 for Legitimacy</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>Selling of Idea by Forum 2005 Members</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>Selection of Personnel for Key Roles</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Management Rotation</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Measurement of Key Results</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>Use of New Language</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Using Customers to “Drive” the Initiative</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>Rewarding the Converted</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Replacement of Change Resisters</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Co-location of employees</td>
<td>NO</td>
<td></td>
</tr>
</tbody>
</table>
Views from Different Levels of the Organization

As described in Chapter 6, discrepancies arose early on regarding the opinions interviewees had on various subjects. It was important to determine whether the perspectives reflected different underlying facts or different interpretations based on one’s culture, level in the organization, or simply his/her own personality. We added more interviews to complement existing ones and asked detailed questions in subsequent interviews. We were, in fact, able to conclude that the ‘data’ (experiences, emails, conversations, and behavior of others) that each interviewee referred did not differ dramatically. As mentioned earlier, we posed the theory of discrepancies in perspectives that were due to the geographic location (implying a strong influence from the national or regional culture) that was vigorously disputed by most. We did find that the position in the organizational hierarchy did influence one’s perspective on the events.

In general, the higher the interviewee was in the organization, the more likely they were to be satisfied with the progress of the change. But was this because they had a different perspective on what success was or were they just insulated from day to day operations and not feeling the "pain" of the new organization? While we found elements of both, we found that is was much more the former than the latter. When pushed to be self critical of the organization, most senior managers could describe areas where the new organization was not working as expected but that they were more focused on the progress to date. Senior managers were quick to remind us that "cultural change takes time." Most were well aware of the tension that still remained in their organization but saw it as something that would be sorted out over time.
One key difference of perspective centered on the move to a matrix organization and the ambiguity it created. This is perhaps partly related to the clarity of the pre-OFS organizational structure that had well defined roles and lines of authority. Lower level managers tended to look for quick action from their superiors that clarified responsibility and authority. Yet, at the next level up in the organization, there was no plan to step in. The perspective could be paraphrased as: ‘Matrix organizations are difficult to get used to but, little by little, we are maturing. Once the managers who have multiple bosses see it function well and get used to it, they will regard this way of working as normal.’

This has made us revisit our assumptions about what a successfully changed organization, or maybe more appropriately, a successfully changing organization looks like. The time horizon of those interviewed appeared to correlate strongly with the level in the organization. Functional managers might be focused on months. Senior managers would be discussing progress they expected over the next years. Top executives were often making reference to decades. Depending on the level of the organization and thus the time horizon a manager deems appropriate, one would expect people draw different conclusions from a similar set of data and experiences.
Measuring the Results

Measuring results of organizational change has always proved elusive to researchers (Pettigrew et al., 2000). As mentioned, no quantitative goals were asserted by Schlumberger top management at the outset. While many managers were sure that Schlumberger in the pre-1998 era was inefficient, no cost reduction goals were publicized. (Schlumberger management believed that the change was not about cost saving (although nice to have) but clearly about creating a new value growth generating capability without reducing the strength and focus on the old business). Unlike the P&G reorganization discussed in Chapter 3, there were no employee layoffs at Schlumberger directly associated with the change from ‘Silos to OFS’. As suggested, the primary reasons given employees by top managers for why the change was necessary were:

- The need for an integrated organization to provide solutions for customers
- The need of customers for a single point of contact in Schlumberger
- The need to be more competitive in a changing business environment

As is now common with most change initiatives, Schlumberger managers who had to “sell” the new organization to employees in 1998 and 1999 looked for early examples of success to promote. PowerSTIM was one such example. This was a product that brought together wireline, seismic, well services, and well completion capabilities and provided increased reservoir performance. PowerSTIM was heavily promoted and many expected other such examples to appear over time. However, other such solutions integrating technology from all sectors of the company have thus far proved hard to develop. Today less than a quarter of OFS
revenue comes from “true solutions” products that involve technology and services from more than one segment. While much of the revenue still comes from single segment products that could have been developed and delivered to customers under the old organization, cross-segment collaboration is nonetheless increasing.

The corporate restructuring has resulted in a “front-back” organization (Galbraith, 2000). The new OFS structure forms the front end and the business segments responsible for technology and product development form the back end. Most said that the capability to deliver a much higher percentage of solutions products than is being delivered today exists in the front-end. Unfortunately the numerous integrated products have yet to be developed in the back-end. Senior managers concede that more “true solutions” are needed. They point to a lack of cross-segment integration in the back-end of the organization. Recent adjustments to the R&D area of the organization are now underway.

No measurements were made of customer satisfaction before or after the change. However, most managers interviewed cite having had personal conversations with customers who have praised the new structure and increased responsiveness of the OFS organization. Improved customer experience seems to be real. In our interviews, for example, the responses typically spanned a wide spectrum of opinion. In only two areas was broad agreement obvious. First, GeoMarkets are considered by all to be a big improvement for customers. Second, the motivation for change was seen by all to be an attempt to insure the long term success of the firm. The lack of quantitative data at an engineering firm remains puzzling. When we inquired of interviewees regarding this issue most responded: “We don’t think much of surveys and market research here at Schlumberger.”
When evaluating the competitiveness of the firm as a result of a new organization it is important to look at results in terms of market share, profitability over time, and stock price (as a proxy for future profitability). This too is difficult to assess. No formal market share targets were set. Yet it was assumed that successful segments (Wireline and Dowell) would hold their dominant market share through the transition and smaller segments would benefit from technology sharing and cross-selling of services. Results have been demonstrated in this area. However, some segments such as Well Completions and Productivity (WCP) still struggle in the marketplace.

The issues of profitability, both past and future, have been particularly clouded by Schlumberger’s drive to increase its capabilities in Information Technology (IT). Beyond the OFS organization changes, another key part of the Forum 2005 vision for Schlumberger was real-time monitoring and control of well-sites through cutting edge IT capabilities. This led to a series of acquisitions of European IT firms ending with the roughly $5B purchase of Sema at near the height of the technology bubble in February of 2001. These companies have been organized into one division called SchlumbergerSema, which has moved aggressively to become a world-class IT solutions provider. Many senior managers have moved from OFS to SchlumbergerSema. Investor coverage in the last two years has focused on the impacts that Sema and its meager profits (relative to OFS) have on the company. In 2002, Schlumberger took a one-time $3B charge to earnings to write down much of the goodwill related to Sema. This has made any change in stock price resulting from increased OFS competitiveness impossible to extract.

In the end, Schlumberger management is firmly convinced that the move to OFS was a success despite the fact that the financial benefits have not
yet been realized. At the highest levels of the organization, most say that Schlumberger now has the organization required to move forward and will soon be a "one-stop, real-time well solutions provider." This sentiment is reflected by Andrew Gould, present Chairman and CEO, who, in a presentation to market analysts in March of 2003, remarked:

After nearly five years we need to ask ourselves if this organization has been successful and what lessons we have learned. I think we can say that in terms of improving the quality of our customer interface and our ability to sell complex projects it has been a great success. However, all matrix organizations remain a challenge. The geographical organization has to be constantly reminded that they are not there to substitute themselves for the segments and the segments have to be reminded that they often will derive more business in co-operating with other segments than in going it alone. Cost and support ratios have to be strictly controlled and monitored. [Gould, 2003]
Chapter 9

SUMMARY AND CONCLUSIONS

Schlumberger's move from independent product-focused businesses to an integrated solutions-based oilfield services group has been successful in our view. It is difficult to make a strong case that shareholders have yet realized full value from the change. Many other events such as industry downturns, investments in SchlumbergerSema, and the sharp downturn in the U.S. and world economy cloud the picture. Yet, the new infrastructure is in place and this should eventually allow Schlumberger's OFS organization to capitalize on the changes made since 1998. As with all infrastructure changes it may take many years for the benefits of the change to become apparent.

The only way to assess the created shareholder value would be to imagine the company's performance without those changes. Revenue from solutions is not the only measure. The pull through of traditional services is more important. Also the development of new services which would never have been attempted in the old constellation is important. Many of these products are only beginning to reach the market. A problem still remains as to how these solutions hence, true performance of Forum 2005 should be judged after 2005.

**Summary of Schlumberger Case**

The company's rich history of young, confident, even brash engineers had led to fiercely independent businesses. Each of the businesses worked to maximize revenues and profits with little regard to other businesses operated by the company, businesses that were often in the same city or at the same well site. Initially the hierarchical, domineering
management structure of Schlumberger seemed a key cultural attribute that helped direct broad organizational change. But the proud, independent spirit of some of the larger businesses in the firm turned out to be major obstacles in sustaining change.

Schlumberger used a combination of bottom-up and top-down techniques to implement cultural/structural change. It was apparently clear to senior management that structural change without cultural change would not move the organization forward. By tapping a small group of thirty-six employees (Forum 2005) to craft a vision for the company's future; Schlumberger executives were given a plan for change. But, more importantly, they were given legitimacy to direct a rigorous top-down organizational change without violating the spirit of involvement and independence that had historically been pervasive in Schlumberger. With the participatory, bottom-up vision in hand, top executives used the Action 2000 meeting to exert top-down leverage over the top 150 senior managers. This was essential in implementing the change.

The initial communication efforts were impressive. All 80,000 employees were blitzed with emails and asked to watch a video of the Forum 2005 presentation. The answer to the question of "Why change?" was provided before the question was asked. Hundreds of key managers were mobilized and relocated within three months. PowerPoint presentations from the CEO, town hall meetings in every office, and one-on-one meetings were used to get the word out to every employee world wide. Within six months, results were apparent in some locations. Vocal resisters were moved aside and replaced with new managers who supported the change.
In 1999, however, a downturn in the business slowed progress. Rapid movement of managers both helped and hindered progress in getting the new matrix organization to take hold. In regions where multiple segments had a fair balance of the various businesses to integrate or had global customers who saw the value the new organization, the change quickly took hold. Managers rotated out of those regions brought their “best practices” to regions that were slow to change.

Most consider the effort a success but also caution that the change remains incomplete. To some managers, too many employees still hold to their prior product line identities. They argue also that still too few solution products exist to sell to customers. And, finally, they note that too little focus was put on measuring the progress of organizational change. At the same time, they also regard the GeoMarket structure as a resounding success, widespread in practice and meeting the goals change-leaders envisioned. In the end, senior management is pleased that Schlumberger today encourages cross-segment collaboration and can deliver integrated solutions.

Ironically, the impetus for this change process was to improve customer satisfaction. However, Schlumberger did not seek quantitative feedback from the customers about this change process and whether or not the change was what customers had envisioned for Schlumberger.

**Key Lessons from the Schlumberger Case**

We have some observations that we believe summarize the lessons learned in this organizational change. In the absence of any catalyzing event (crisis or poor financial situation), Schlumberger leveraged the following items as validations for change:
1. Merits of the initiative
2. Forum 2005 task force as a proxy for the voice of the employees
3. Appeal to the future

The change strategists leveraged the high mobility of the Schlumberger management staff. Despite the availability of technology, Schlumberger managers found personal interaction more effective (i.e. persuasive) in the long run. Email and PowerPoint presentations were used to communicate details, while one-on-one conversations and town-hall meetings were used to truly “get employees on board”. New managers in place at the start of the new organization demonstrated commitment or seriousness on the part of senior management. Managerial rotation kept remote GeoMarkets from resisting change but managers questioned whether the rapid pace of rotation reduced the likelihood that any one manager achieved his/her full potential in a position.

Coordinated communication was strong in the first six months but continued only sporadically afterwards. This coincided with some continued modifications to the organizational structure such as changes to the number of GeoMarkets and Areas. These changes gave upper management the flexibility it needed to make adjustments as they learned. Unfortunately, this also created organizational anxiety since it was perceived at lower levels in the organization as confusing and possibly displaying a lack of control.

Strong personality dependencies were said to be important for the change. Most said the choice of the first round of key managers was crucial. After change took root in a particular region with the new GeoMarket structure functioning well for a period of time (at least one year), the organization in that region became less dependant on the
personalities of the managers involved. Our sense is that for change to take hold in a particular region requires:

1. A dominant GeoMarket Manager who could drive change and was a good communicator at all levels.
2. A large customer that demanded integrated behavior from Schlumberger.
3. Visibility of GeoMarket due to strategic importance and/or revenue size.
4. Balance of multiple business segments (i.e. a critical mass of Dowell, Wireline, and other business to integrate) in a particular GeoMarket.

Co-location of facilities was helpful where applied but few participants saw this as a critical success factor. Finally, metrics to measure the progress and impact of change were missing in the Schlumberger case. It is likely that change could have progressed faster with them in place.
Summary of General Findings

On the basis of our analysis of Schlumberger, we would now argue that organizational change is best done when a corporation is in good financial health and can absorb the shocks inherent in a transformation. Schlumberger's move from a set of distinct oilfield services companies to a single organization was done at such a time. Yet, this said, instilling the motivation for change is still difficult in the good times. Change, ever and always, is not easy. This said, we do believe some generalizations about change are possible. These are listed below:

- Sustained change is predicated on a mutual agreement between the change implementers and the change recipients.
- During a healthy, successful period, reaching mutual agreement requires a compelling vision of change that resonates with the organization at large (i.e. employees).
- It is important to understand the political nature (i.e. power base) of the existing organizational structure. The best change implementers in the new organization will be the power holders in the old organization. The change strategists must develop leverage with this group prior to taking change to the full organization.
- Failure to keep focus on near-term operational issues can lead to external pressure that can thwart the change initiative.
- It is as important to embrace the elements of the organization’s exiting culture that are conducive to the organizational change as it is to deal with those that inhibit the change.
- Leaders in the new organization must be change agents that can communicate and reinforce the message for months and years beyond the reorganization date.
- There are no substitutes for in-person communication.
• Clear communication and management visibility are critical initially and should be sustained at some level over the long term.
• Symbolic actions and new language can be powerful in implementation.
• All employees should be given an opportunity to change but after a reasonable period in which employees have had a fair opportunity to embrace or at least try the change; vocal resisters should be removed from the organization.
• Wherever possible it is important to leverage customers (internal and external) and market conditions to require the new behavior of the organization.

**Concluding Remarks**

The case of Schlumberger's move from 'Silos to OFS' is an interesting example of organizational change during a healthy period. The definition of success is primarily based on Schlumberger managements' self assessment of the progress versus expectations.

Our research has resulted in a comprehensive but general overview of the events and activities taken by Schlumberger's Oilfield Services business over a seven year period (early 1996 to the beginning of 2003). The interviews allowed us to explore deeply the managerial tactics used to plan for and implement organizational change. However, as with many other organizational change studies, we were unable to describe success by any objective quantitative means.

By documenting the culture and particulars of the organizational change, we have captured what happened and we have been able to make some broad assessments of what worked and what didn't work according to the participants themselves. Having "mapped the landscape" of this
change activity, so to speak, we believe it would now be possible to do a more quantitative assessment of particular aspects.

In actuality, there were at least 29 unique change activities, one in each of the initial GeoMarkets. Research into the activities of just two or three of these markets would allow for comparative analysis at a much deeper level. For example, surveys of the level of cross segment collaboration, employee satisfaction, and market success factors may very well yield to better understanding of what worked and what did not work.

If nothing else, we, the authors, have come to the conclusion that organizational change is possible under situations of either poor or good financial health of the company but such change requires tremendous managerial discipline. We were, frankly, pleasantly surprised at the extent to which experience has aligned with theory in this case. The Schlumberger case demonstrates the value of taking a holistic both-and approach to change where the organization and its culture are intimately entwined. Change strategies must encompass organizational structure, the political landscape, and the company culture as described by the "three lenses framework" (Ancona et al., 1999).

The valuable lesson is not the specific tactics that Schlumberger top managers used to direct the initiative but rather the fact that they addressed the change from strategic, political, and cultural perspectives simultaneously. Interviews with these top managers (and ones with those close to them) confirmed that the naming conventions did, in fact, reflect that they understood time horizons of each of these perspectives were different. The name "Action 2000" was chosen to convey that it would take about two years (from 1998) to put the organizational structure in place from a strategic and political perspective. The name "Forum 2005" demonstrates that Euan Baird and others understood that it would take
at least seven or eight years to change the culture. The most important lesson is that leaders of a company understand clearly that organizational change is equivalent to cultural change; and recognizing this, managers have the discipline to act accordingly.
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  • Proctor & Gamble 2001 Annual Report
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Appendix A

Oilfield GeoMarkets in 2003

(Source: Gould, 2003)

Area: North and South America (NSA)
  • Alaska
  • Canada
  • Gulf Coast
  • US Land
  • Mexico & Central America
  • Argentina, Bolivia, Brazil, & Chile
  • Peru, Columbia, & Ecuador
  • Venezuela, Trinidad, & Tobago

Area: Europe/CIS/West Africa (ECA)
  • Scandinavia
  • Continental Europe
  • Russia
  • Caspian
  • United Kingdom
  • Algeria, Morocco, & Tunisia
  • Nigeria
  • West and South Africa

Area: Middle East & Asia (MEA)
  • Australasia
  • China
  • East Asia
  • Indonesia
  • Thailand, Myanmar, & Vietnam
  • India
  • Libya
  • Iran
  • Saudi Arabia, Pakistan, Kuwait, & Bahrain
  • Egypt, Syria, Sudan, & Jordan
  • UAE, Oman, Qatar, & Yemen
Oilfield Technology Segments in 2003

- WesternGeco
- Drilling & Measurements
- Wireline
- Well Services
- Well Completions & Production
- Data & Consulting Services
- Schlumberger Information Solutions
- Integrated Project Management

Oilfield Services Businesses in 1996

- Wireline & Testing
- Dowell
- Geco-Prakla
- Sedco Forex
- Anadrill
- GeoQuest
- Integrated Project Management