Intel Corp Leadership Study Essay, Research Paper

1. Andy Grove and his role in Intel?s Success

When I think of Intel, I think of Andrew Grove. That may be due to my age, and the fact that I was too young in 1968 to know that Gordon Moore and Robert Noyce, pioneers in the semiconductor industry, had left Fairchild Semiconductor to form Intel Corporation. But I believe that my association of Grove with Intel is due more to the tremendous influence that he has had on the company as the official and unofficial overseer of Intel?s internal operations from the beginning.

Even though he did not join Intel?s executive committee until 1976, and did not become CEO until 1987, it is clear that he has been the leader at Intel since the beginning. He has constantly pushed the collective company envelope with ?big, hairy, audacious? goals to produce better and faster chips that ultimately have been some of the primary drivers of the computer industry.

Intel?s first goal was to replace magnetic-core computer memories with semiconductor memories. Their objective and early vision, initially shaped by Gordon Moore, was to dominate any market in which they participated. They would set out to accomplish this internally by ?buying options?, which allowed them to systematically explore various alternatives. This approach gave them flexibility but also created internal competition, which played a strong role in shaping the culture of Intel. I believe that Moore, who felt that the semiconductor business ?lived on the brink of disaster?, also was a very strong influence on Grove. Grove seemed to carry on ?Moore?s Law? ? that approximately every three years a new generation of chips must be developed with four times the capacity of their predecessors.

The company?s first SRAM chip, the 1101, came out in 1969, but Intel was constantly driven to change the industry. Moore, Noyce and Grove were never satisfied long. They initiated a drive within the company to produce a DRAM chip with four times the capacity of the SRAM. The resulting 1K chip, introduced in 1971, was the 1103, which was universally preferred to magnetic core technology and became the industry standard. After two other big developments in 1971, ?Operation Crush ? an all-out combat plan? was initiated to make the next generation 8086 chip the industry standard. This was followed by development of the 432 project. The 8086 and 432 are examples of ?buying options? ? Intel?s strategy whereby one product is developed with an evolutionary strategy while another is developed with a revolutionary strategy. Noyce remarked that through these R&D projects, often times Intel ?may not have found what they were looking for, but found something else equally important?.

Andy Grove could be described as a ?detail-oriented pragmatist?, as oppossed to Gordon Moore, who was a ?technology driven futurist?. Grove was a demanding, hard worker who worried about how to accomplish what Moore dreamed up. This has been a critical element in Intel?s success. Grove noted that it led to the development of the ?Two-in-a-Box? management philosophy. This consisted of two individuals with complimentary skillsets, much like Grove and Moore, sharing the same management position in order to stabilize a transition, start-up or reorganization. It was also used to groom successors or to get more value out of a position. Some people in the organization viewed this as inefficient, but Intel continued to succeed.

According to another executive, Grove possesses ?aggressive brilliance?. He?s very articulate, yet with a powerful, confrontational style. I believe Grove?s penchant for ?constructive confrontation? led Intel employees to think of themselves as the ?Marine Corps? of the industry. He helped develop an organization with ?bright, opinionated, macho, rude, even arrogant and impatient, and very informal? employees. This negative type of personality meant that Intel people often didn?t care how they got results, but it probably gave them the toughness to weather the 1980?s recession and the semiconductor price wars of 1986-87 that caused U.S. manufactures to lose billions.

Intel survived, not unscathed, probably in large part due to Grove. Despite his tough style, he focused on individuals and took a lot of pride in putting people where they were needed. This would be extremely important as he tore the company down and put it back together a number of times, as was done in 1986, when Intel exited both the DRAM and SRAM businesses. The open culture he helped create enabled him to move people up, down and sideways during reorganizations and allowed him to implement his ?125%? and ?90%? solutions to get more out of his people in tough times. Grove believed that in their business ?there are the quick and there are the dead?. He helped the company accept as the norm constant relearning, as the company changed its focus. This would be the case as he moved the company into microprocessors, as they were faced with protecting Intel?s intellectual property, and as they had to make the CISC vs. RISC choice in the late 1980?s. He would push for more rapid product introduction and force computer makers to keep up with the pace set by Intel. He pushed for dvelopement of The Intel Inside slogan. The process at Intel seems to closely follow the exhibit The Process of Renewing and Transforming Organizations (Kotter) that we studied as part of the Charlotte Beers case.

Even though Grove believed that work time and leisure time should be separate, he did begin to soften that stance to combat burnout. He moved for a more friendly work environment and even offered sabbaticals for employees with enough service. As the 1990?s began and Andy Grove oversaw a company that was significantly molded in his personality, his vision had changed only slightly:

?We are currently a leader in semiconductors, and my hope and vision is that our technology is going to be the heart and spine of the entire computer industry.?

2. The Culture of Intel and its Creation

Intel started as a purely functional organization centered on R&D and getting done what needed to be done to crank out new and better chips. Andy Grove and Gordon Moore wanted an unconventional approach initially. They wanted to reduce barriers and promote a free flow of ideas and information throughout Intel.

A physical example of this was the cubicles of one big hall that all employees, including executives, sat in. Walls were low and executives were not clustered in one area, but spread out. Meeting rooms and parking spaces were on a first-come, first-served basis. Dress was casual. These were classic examples of role modeling by Intel executives that played a major role in shaping culture. It probably gave all employees the confidence to speak up in meetings where even high level executives were present, which they were encouraged to do.

But as early as 1976 the first divisions were established in order to focus managers? attention on emerging business segments. Functional and business lines began to cross in ?matrix-relations?. Task forces, councils and other ?cross-boundary devices? were set up along with other more informal relationships in order to bring ideas to fruition. These new ideas often originated from ?small, highly motivated, and innovative? teams and then were carried by ?product champions? through the gauntlet of Intel?s? corporate hierarchy towards approval and/or rejection. This helped create a company with a ?very sharp and well-defined sense of history and identity?.

Great examples of secondary embedded mechanisms at Intel are the stories that evolved about how these product champions transformed dreams into amazing products. As the stories were retold over and over, the developers and champions became legendary and through the years became part of company mythology.

Further evidence that the company culture was adding some more formal components ,though, could be seen in the creation of a formal Strategic Long Range Planning (SLRP) process, which Gordon Moore pushed for, and required middle managers to prepare formal strategies for their business segments.

The ?way we do things around here? was embodied in what Gordon Moore believed:

?One of our unspoken rules at Intel is that if you can?t measure something you don?t understand it?. Not surprisingly, Moore was in charge of many of the primary embedded cultural mechanisms at Intel; measurable things like profitability and other targets that helped determine employee bonuses. He was a strong believer in performance based incentives, unlike Grove who focused more on individuals.

Intel did try to remain unbureaucratic, but it was felt by one executive that in the company?s zest to do that, it was undertaking too many reorganizations. This in turn led to unnecessary attrition and erosion of their knowledge base. The human side seemed to get lost in the mechanics of drawing up a new organization chart. Those that did remain thought of themselves as a special breed: ?Intel was not a place for those looking for a stable environment?.

Part of the socialization process seemed to come from this lack of stability. The constant action led to many internal meetings, during which employees were encouraged to debate the pros and cons of issues. This led to a sort of trial by fire, but taught people to stand their ground.

A survey was conducted in 1988 on employees? understanding of Intel?s culture. The senior officers hoped to get a handle on the human relations side of things in order to try to balance the entrepreneurial spirit of the company, which often led to instability, with the people side of things. There was a faction of long-time managers who didn?t seem concerned about that though. They felt that things had worked fine so far so why change.

This survey did lead to a formalized document clarifying Intel?s values. I believe that the espoused values contained in the document very closely match the actual values of the company. Of the six categories ? risk taking, quality, discipline, customer orientation, results orientation, and a great place to work ? only the last one really reflects a major concern for people, and Intel was not first and foremost about people. What Grove was all about is contained in these values.

Intel?s culture has been partly defined by the fact that they have so often in their history been at a strategic crossroads, but have been able to transform themselves through constant strategic renewal and revitalization. This culture will continue to exist, as long as Intel pushes to stay out in front. The October 16, 2000 Chicago Tribune points out that Intel won?t have the Pentium 4 ready for a planned pre-Halloween launch, which will cost them holiday sales in the consumer channel. They better keep pushing.