

Only The Paranoid Survive Notes

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Preface

80s, Japanese manufacturers brought about a strategic inflection point so great that Intel stopped producing memory chips and got into micro processors.

Then, micro processors brought an inflection point to other companies, particularly mainframe manufacturers.

“It doesn’t matter where you live, long distances used to be a most that both insulated and isolated people from workers on the other side of the world but every day technology narrows that most inch by inch.”

“Every person is on the verge of becoming both a coworker and a competitor to every one of us.”

“In technology, whatever can be done will be done.”
Is that true?

“The sad news is no one owes you a career. Your career is literally your business. You own it as a sole proprietor. You have one employee, yourself.”

“It is your responsibility to protect this personal business of yours from harm and to position it to benefit from changes in the environment. No one can do that for you.”

Andy Grove might be literally me and apply the Kurzweil strategy.

Chapter 1: Something Changed

In 1994 Intel was the largest producer of computer chips in the world. \$10B, lol

Pioneered memory too! 30% CAGR

Intel employees found an FPU (float) bug from forums. They discovered it months earlier themselves. Rounding error in division once per nine billion.

Picked up by trade papers, then CNN, then worldwide newspapers.

They wrote a white paper. Some customers got replacements if they did tons of FPU division.

“PC” is derived from the IBM PC.

IBM suddenly stopped shopping pentiums.

New policy: replace any pentiums that users want. Million of sales at this point. Set up a big costumer oriented org for this, calls and easy replacements.

This was December, they started manu of corrected chips in summer.

\$475M write off. 6 months of R&D or 5 years of pentium marketing.

“Whatever problems we had in the past we used to handle with computer manufacturers, engineer to engineer in conference rooms with blackboards based on data analysis. But now all of a sudden 25,000 computer users were calling us every day saying ‘give me a new part. Period.’”

He still thought of them like a startup with long hours when needed. Outside view of Intel didn't agree.

Intel inside started the idea for customers that their PC is the chip inside, not the PC itself.

Intel inside was now counter reproductive.

“At some point along the way, like a kid who suddenly looks down to his father, our sizes reversed.”

The rules changed and they didn't know it and didn't know the new rules.

“If you work in one of these industries and you are in middle management, you may very well sense the shifting winds on your face before the company as a whole, and sometimes before senior management.”

CEOs:

“That guy is always the last to know.”

Chapter 2: A “10X” Change

Most analysis of competition position of businesses are static. They show forces at an instant of time. This is not useful while a major change is taking place.

Traditional competitive analysis doesn't help when one of the forces grows 10x.

This is a world I haven't seen much, I only think about the 10x. Maybe this has to do to precipitated insights from Grove.

Porters five forces determining competitive well-being of a business:

1. Power, vigor, competence of competitors (similar to your product?)
2. Power, vigor, competence of suppliers (many or few?)
3. Power of customers (many? Demanding?)
4. Power of potential competitors
5. Possibility that your product/service can be substituted

That last one is most interesting.

Another force: complementary products and companies.

10x is an order of magnitude is the way it's being used here.

Eventually after a 10x change a new equilibrium is reached. Find that new equilibrium and aim for it is my approach.

"Only the beginning and the end are clear, the transition in between is gradual and puzzling."

Mathematically, an inflection point is a change in sign of the second derivative. Convex to concave. Strategic picture changes.

Balance of forces shifts from old structure to new.

"Misalignments between corporate statements and operational actions hints at more than the normal chaos that you have learned to live with."

"Last of all, a new set of corporate statements is generated, often by a new set of senior managers."

Venturing into the valley of death.

"Your ongoing business forms a protective bubble in which you can experiment with the new ways of doing things."

Can't use data in the moment to navigate out of a strategic inflection point through the valley of death.

Chapter 3: The Morphing of the Computer Industry

Personal computers built on a single microprocessor is non trivial.

Computing industry used to be vertically aligned. Semiconductor chip to computer to factory to OS to applications. Full package sold by internal sales people.

Vertical proprietary blocks competed against each other.

The microprocessor became the basic building block, economics of mass production ensue.

DOS was modified into windows for ease of use. Competed against a IBMs OS2 and macOS and Unix.

Vertical to horizontal paradigm shift some time in the 80s. Can't pin out exact time, gradual.

Compac was the fastest Fortune 500 to reached \$1B rev. A practitioner of the horizontal computing paradigm.

In 1981, IBM chose Intel to provide the microprocessor for the IBM PC. This let Intel grow to be the biggest.

Higher scale, more people wanted Intel, moat.

IBM (and their managers) won many times in the vertical paradigm. Executives were promoted on ability to perform in the vertical paradigm.

Compac passed IBM as the largest maker of IBM-compatible PCs.

Michael Dell at the University of Texas sold computers assembled in his dorm to friends. He built a company on these customised computers.

Buying computers through the mail would be seen as unnatural.

Novel head Ray Narda. Early 80s. Built hardware and developed network software for that hardware. He says the path was easy, no money for suppliers so shutdown hardware and focus on software, then move software to standard PCs.

They became a first mover in networking in the new horizontal paradigm.

“When a strategic inflection point sweeps through an industry, the more successful a participant was in the old industry structure, the more threatened it is by change and the more reluctant it is to adapt to it.”

“Whereas the cost to enter a given industry in the face of well entrenched participants can be very high, when the structure breaks the cost to enter may become trivially small.”

This gave rise to Compaq, Dell, Novel. Emerged from nothing by accepting the horizontal paradigm.

Horizontal paradigm is built on scale of production and marketing:

1.

“Don't differentiate without a difference. Don't introduce improvements whose only purpose is to give you an advantage over your competitor without giving your customer a substantial advantage.” (A better PC (in the R&D sense) is incompatible with compatibility)

2.

Opportunity is when technology or fundamental changes appear.

“The first mover, and only the first mover, the company that acts while the others dither, has a true opportunity to gain time over its competitors.”

“Time advantage, in this business, is the surest way to gain market share.”

3.

“Price for what the market will bear, price for volume, then work like the devil on your costs so that you can make money at that price.”

This is how you get economies of scale.

“By contrast, cost based pricing will often lead you into a niche position which in a mass production based industry is not very lucrative.”

Pretty general rules for horizontal industries, and most industries are horizontal.

Higher competition requires retreat into what you're best at.

“By virtue of the functional specialisation that prevails, horizontal industries tend to be more cost effective than vertical equivalents.”

“It's harder to be best in class in several fields than just one.”

Chapter 4: They're Everywhere

Container shipping was a 10x factor for every port.

Walmart uses just in time logistics, trucks constantly going from store to hub.

Apple is the last vertical computer company, and not even too vertical anymore.

Jobs wanted to recreate the Apple success at NEXT, sleek GUI and lots of software too.

Mass produced GUI came out (Windows) and the NEXT model was futile.

Jobs thought the Mac was their competitor, not the PC.

Windows was available on hundreds of computers from competitor hardware firms. Inflection point underwent during NEXT development.

Managers suggested in 1991 building PCs and abandoning the NEXT computer.

“In short, jobs thought PCs were a mess. The thing is, he was right. But what Jobs missed at the time was that the very messiness of the PC industry that he despised was the result of its power. Many companies competing to provide value to ever larger numbers of customers.”

Jobs later accepted the inevitability of the inelegant PC. He shut down all hardware dev and automated production and laid off 50%.

“Steve Jobs is arguably the founding genius of the personal computing industry. The person who at age 20 saw what in the next decade would become a one hundred billion dollar worldwide industry.”

Future 10x:

Digital entertainment (movies)

Digital information (newspapers)

Remote banking

Interconnected Medicine (with computers)

EVs are an example of a technological possibility that doesn't have a major impact. And commercial nuclear power generation.

Movies with sounds too.

Charlie Chaplin: "I give the talkies six months more."

In one decade: standardisation of ship design, refrigerated ships, containers.

This reversed an increasing trend in costs?!?!

Singapore and Seattle emerged as major shipping hubs. Appreciate that all ports had different management.

New York port is declining, no room for modern equipment.

With decreasing cost per MIPS through PCs, companies like HP took advantage.

IBM blamed global economic forces.

Steve Chen, designer of CRAY supercomputers founded a company that was one of the last holdouts of the legacy approach. He eventually changed.

In 1921, Ford had 50% market share in the US.

Post WW1, style and leisure became more important. Alfred Sloan at GM saw "a car for every purse and purpose."

By 1930 GM took the lead in share and profit and stayed up until 1990.

"The center of gravity of Intels customer base shifted over time from computer manufacturers to the computer users."

Supercomputer industry targeted government spending, defence, big research.

Then, technology moved to microprocessors and Cold War ended.

The \$1B industry was in trouble.

Cray Computer Corporation ran out of funds.

"The person who was the star of a previous era is often the last one to adapt to change."

Airlines used to give travel agents a 10% commission. They sold 85% of all tickets.

Second sourcing was the practice of giving a competitor the ability to produce a product similar to yours. More customer acceptance, free money for competitor, more suppliers for customer.

When this is most useful is usually before the competitor is in mass production.

In the 80s Intel stopped this practice. They demanded compensation for their tech.

Eventually, their competitors developed their own chips.

All chips became more similar (greater Intel market share) so software could be more standardised.

Early 1900s, patent medicines were mixed of narcotics and alcohol. This brought regulations and required labelling of ingredients.

Not all paradigm shifts are the kind that I was thinking of, like medicine regulation.

AT&T designed and manufactured their own equipment (handsets and switching systems) and provided all connections (local and long distance).

1968, FCC ruled that they could not require use of their own equipment at the customers location.

Opened business to foreign manufacturers (Japan). Inflection point.

Mobility (slow) suddenly had competition from NorTel, NEC, Fujitsu.

Handsets became commodities.

MCI antitrust suit against AT&T demanding breakup of bell system and separation of long distance and short.

Charles Brown, chairman, after years of litigation decided one morning to voluntarily go along with the breakup.

Privatisation is another paradigm shift for many state owned businesses. Worldwide trend of this.

AT&T's managers core competency was working with regulators. They had no experience of competition or courting customers.

Chapter 5: "Why Not Do It Ourselves?"

Is it going to be opportunity cost of engineers compared to benefit of vertically integrating or the benefits of horizontal integration.

12 o'clock high movie.

"Every startup has some sort of a core does, ours was simple. Semiconductor technology has grown capable of being able to put an ever larger number of transistors on a single silicon chip. **We saw this as having some promising implications.**" lol

Silicon chip cost is roughly uncorrelated with number of transistors.

Higher speed and lower cost.

Transistors closer perform faster? Really getting down to that level?

Their first idea was building memory chips. More and more memory as transistors got smaller.

First product: 64 bit memory. Lmao

Around this time a major computer company called for proposals for memory chips. Intel was slightly late and muscled into the competition.

They were the first to produce a working memory chip, and won.

Then. 256 bit memory. Lmao!

“These products were marvels of 1969 technology and it seemed that every engineer of every organizing in every computer maker as well as every semiconductor maker bought one of each to marvel over.”

However, no production orders. Continued to burn cash and develop the next one.

“As a result of the pressure we felt, we often spent as much time bickering with each other as working on the problems.”

The third product, 1024 bits, was a hit. Manufacturing now became a massive issue.

So Intel was an R&D lab? I don't have quite the right word for this or understanding of what an R&D lab is.

“The incredibly tough task of development segwayed into the nightmare of producing a device that was held together by the silicon equivalent of bailing wire and chewing gum.”

This was the 1103 chip

They had 100% market share of chip memory until the 70s. They're all now long gone.

Each generation one company got it right, not always Intel.

Early 80s, Japanese memory producers emerge. They were first on the late 70s to fill a product shortage when Intel decreased manufacturing during a recession.

They parallelised 16, 64, 256 k bit memory development. Tons of people.

“There were even rumours that in secret projects people were working on a million bit memory.”

Intel founded in Santa Clara.

Japanese memory quality as reported by HP was well beyond US manufacturers and what Intel thought was possible. First reaction was denial.

“Only when we confirmed for ourselves that the claims were roughly right did we start to go to work on the quality of our product, but we were clearly behind.”

Japanese firms had “nearly infinite access to low cost capital.”

Found an internal memory about their “10% rule”, find AMD and Intel sockets and quote 10% below their price. If they requote, go another 10%.

What happened here? Why were Japanese manufacturers so competitive??

Intel tried “value added designs” and differentiation to earn premium.

“There was a saying at Intel at that time: “if we do well we may get 2x.” In other words, twice the price of Japanese memories. But what good does it do if x gets smaller and smaller?”

Around 1970 Intel invented the microprocessor. It was smaller and slower growing than memory.

In 1981, an Intel microprocessor in an IBM PC got tons of demand from IBM and competitors.

In 1984, demand slowed and they couldn’t ramp down capacity fast enough. They were still on the memory differentiation strategy.

Some wanted to build a massive factory dedicated to memory and nothing else to take on the Japanese. Hell yea but no modern Intel and would you have won?

“Meanwhile, as the debates raged, we just went on losing more and more money.”

They were wandering in the valley of death.

He asked Gordon Moore what a new CEO would do. He would get out of memories.

Religious Dogmas at Intel:

Memories were the technology leader where experimental technologies were used then transfer to microprocessors.

Full product line dogma too. Salesmen required this for impressing customers?

Their customers weren’t too concerned with Intel getting out of memory. Half expected as they were small and they already made plans with other suppliers.

“People with no emotional stake in a decision can see what needs to be done sooner.”

How do you solve the Intel memory problem? It's not the same as the Elon algorithm of going after the end state.

Even the team at the flagship Oregon memory production weren't too surprised by Intel getting out of memory.

They shut down a ton of old memory assembly and testing plants in odd locations.

Japanese manufacturers were a force 10x larger than Intel. Their old thinking couldn't help them. Uncomfortable situation.

"I learned that the word point in strategic inflection point is somewhat of a misnomer. It's not a point, it's a long, torturous, struggle."

1984, industry slow down. 1985, Gordon Moore conversation. mid 1986, they finally implemented the exit from memory. 1987 return to profitability.

I wonder what the cap table looked like?

The 386 then became their most successful microprocessor.

They redefined themselves as a micro computer company from memory. Starting in public statements, literature, and ads. Then, hearts and minds of a management and employees.

By 1992, they became the largest semiconductor company in the world.

While management debated memory vs microprocessors, men and women lower in the organization got them ready for the pivot.

"Over time, more and more of our production resources were directed to the emerging microprocessor business. Not as a result of any specific strategic direction by senior management, but as a result of daily decisions by middle managers."

"The production managers and finance people who sat around the table at endless production allocation meetings. Bit by bit, they allocated more of our silicon wafer production capacities to those lines that were more profitable, like microprocessors."

"By taking production capacity away from the money losing memory business simply by doing their daily work these middle managers were adjusting Intel's strategic posture."

When they finally decided to exit memory, only one of eight wafer facilities were producing for memory.

"People in the trenches are usually in touch with impending changes early."

Chapter 6: "Signal" or "Noise"?

IBM told Intel and others that the Japanese were building wafer manufacturing facilities using x rays instead of visible light.

Intel guys thought it was risky and that visible light could get better as well. Intel thought it was noise, IBM signal.

Intel was right.

CISC = Complex instruction set computing
“Arcane term”

Intel and 386 was CISC. Some competitors RISC.

The 486 was the same architecture as the 386 but faster and more advanced.

Intel wanted back compatibility for software, hence same architecture.

Some at Intel thought RISC was a 10x change.

They put a lot of effort into a RISC chip. It was faster and better but incompatible.

To get under the management radar for compatibility the engineers said it could be an auxiliary chip that would work with the 486.

Out of this the 1860 (860?) microprocessor emerged. Introduced at the same time, let the marketplace decide.

Difficult to support both at the same time, just one architecture is difficult for a company. Some salesman concerns like which do I push.

CEO of Compac encouraged CISC at Intel. He thought it had enough power to last the decade.

Microsoft (made majority of software for Intel chips) encouraged an 860 PC.

“Most strategic inflection points instead of coming in with an bang, approach with cat feet.”
Blogable quote

How to see if you're in a strategic inflection point:

1.
Is your key competitor about to change? Find key competitor with single silver bullet test.
2.
Is your key complimenter about to change? Either less useful or replaced.
3.
Is everyone around you losing it? Or are you?

Remember the selection process for managers before a paradigm shift.

Cassandra was the priestess who foretold the fall of Troy.

Cassandros are usually in middle management.

Watch for changes in tone from people in the field. Also, a lot of the time you have a better higher level perspective.

Cassandra's will seek you out to see you their concern. Literally me.

"When spring comes, snow melts first at the periphery because that's where it's most exposed."

Learning what's going on at the periphery of your business is different from learning what's going on in your business!!!!!! This is the Elon strategy of talking to the line worker. Instead of the general manager.

"Of course, you can't spend all of your time listening to random inputs, but you should be open to them."

Some people give you gems of information and some noise, adjust receptivity accordingly.

"Sometimes a Cassandra brights not tidings of a disaster but a new way of looking at things."

Autonomous agents within Intel reallocated wafer production capacity. No authority to get out of memories, but authority to fine tune the production allocation process through little steps.

Peter Drucker Entrepreneur Definition:

"Someone who moves resources from areas of lower productivity and yield to areas of higher productivity and yield."

This is chasing your leverage I didn't realize that my university blog post was actually about entrepreneurs!

"Are these random actions on the part of middle management or are they strategy being formed and executed? To be sure they don't seem strategic at first glance, but I think they are."

EMERGENT STRATEGY!

"A danger in assessing the significance of changes lies in what I call 'the trap of the first version.'"

In 1984, first Macintosh had no hard disk (while all PCs did) and was slow. Grove thought the GUI was a nuisance because of this.

This blinded him to GUIs.

1991, Apple started talking about module computers called personal digital assistants. Many at Intel saw this as a 10x force against mainframes. They invented so that they'd participate in any PDA wave. Then, Apples Newton wasn't very successful, first version, but not much came later.

Lisa was the first computer with a GUI and the predecessor of the Mac.

First version of Windows was seen as inferior too. "Dos with a pretty face."

"You can't judge the significance of strategic inflection points by the quality of the first version."

Intel didn't have a grand Muskian strategy. They were a memory manufacturer. Feels like Zaber too.

All of his serious examples so far of 10x changes have come about!

Debate is the most important tool to identifying 10x changes.

"The more complex the issues are the more levels of management should be involved because people from different levels of management bring completely different points of view and expertise to the table as well as different genetic makeups."

Don't be afraid to consult experts as a manager.

"Take your time until the news you hear starts to repeat what you've already heard and until the conviction builds up in your own gut."

Wait until news repeats, no novelty. Hmm

"If you are in middle management, don't be a wimp."

If not in management:

"What you may miss in perspective and breadth, you make up in the depth of your hands on experience."

"Inaction might lead to a bad result for your business, and that should frighten you more than anything else."

"Data are about the past and strategic inflection points are about the future."

"The most important rule of managers is to create an environment in which people are passionately dedicated to winning in the marketplace."

Fear is useful here.

“How do we cultivate fear of losing in our employees? We can only do that if we feel it ourselves.”

“The fear of repeating 1985 and 1986 has been an important ingredient in our success.”

“Fear that might keep you from voicing your real thoughts is poison.”

“Once an environment of fear takes over, it will lead to paralysis throughout the organization and cut off the flow of bad news from the periphery.”

Knowledge power (sales or engineering) vs management power. Both required during a paradigm shift.

Where anyone can raise issues:

“Dramatic or symbolic moves do nothing, it requires living this culture. Promoting constant collaborative exchanges between the holders of knowledge power and the holders of organizations power to create the best solutions in the interest of both.”

Chapter 7: Let Chaos Reign

In yourself.

“Objective analysis will take second seat to personal and emotional reactions almost every time.”

Stages of grief during a strategic inflection point:

1. Denial
2. Escape or Diversion
3. Acceptance and pertinent action

“When companies are facing major changes in their core business they seek to plunge into what seem to be totally unrelated acquisitions and merges.”

A lot do this is the need of senior management to occupy themselves with something they can justify spending their time on instead coping with the impending force.

This is an extremely good little section to know what not to do during a strategic inflection point as a leader and describes what I've heard before. If ever in an impending doom situation remember this!

If he takes on an acquisition, it can and must take an arbitrarily high amount of his attention.

Major Japanese consumer electronics companies acquired movies studios. Maybe this is the same phenomenon.

“Lesser leaders are not capable of making it to the acceptance and action phases and are thus removed.”

“Then they are replaced by individuals who are not necessarily more capable, but do not have the emotional investment in the previous strategy.”

“This is a key point:

The replacement of corporate heads is far more motivated by the need to bring in someone not invested in the past than to get someone who is a better manager or a better leader in other ways.”

“The inertia of success is extremely dangerous and it can reinforce denial.”

When environment changes make old skills less useful, we cling to the past.

That an important insight to generalize. I try to cling to the future.

Strategic dissidence:

Not admiring the gravity of the situation?

Divergence between action and statement. Strategic dissonance.

Good term!

At Intel this was low level managers reallocating memory wafer capacity while senior management was saying something completely different.

Follow up questions during talking to company guys can result in cases where your well worn answer no longer applies and strategic dissidence is clear to view.

“Strategic dissidence is so much an automatic reaction to a strategic inflection point that probing for it is perhaps the best test of one.”

“When people in the company start asking questions like ‘but how can we say X when we do...’ more than anything else this is a tip off that a strategic inflection point may very well be in the making.”

“Only stepping out of the old ruts will bring the insight.”

“The operating phrase should be ‘let chaos reign.’”

“The dilemma is that you can’t suddenly start experimenting when you realize you’re in trouble unless you’ve been experimenting all along.”

Tesla, SpaceX, the Musk companies

For several years Intel spent more developing and marketing microprocessors than they got back in revenue.

Experimenting for a decade is what allowed them to survive the paradigm shift.

Late 80s was 1860 RISC vs 486 CISC.

It is easiest to make changes while your business is still strong obviously.

Compac was losing revenue for 6 months as the PC business turned into a lower margin commodity business. \$70M loss and layoffs before course correction.

“Benign business bubble” from inside which you operate.

The implication of the horizontal model is that, “the player with the largest share of a horizontal layer is the one who wins.”

As this sunk in at Intel they focused more on compatibility with other horizontal layers.

“Mental maps are awfully forgiving of ambiguity. You must force yourself to commit your thoughts to paper.”

Make an industry scale org chart, like to illustrate vertical vs horizontal.

A good map can give you better confidence that your actions are right and steer you towards good actions.

Chapter 8: Rein in Chaos

There's no mental map during an inflection point, trust between individuals in a business is lost.

In 1986 Intel created the slogan “Intel, the microcomputer company” so that everyone knew what they did.

Companies lose direction during strategic inflection points and there's internal arguing about where to go.

“You're trying to define what the company will be, yet that can only be done if you also undertake to define what the company will not be.”

This is done in the later stages of an inflection.

The danger of oversimplification pales in comparison to including every manager in the description of the refocused business.

Oversimplification > overfitting / over inclusion

Lotus was a supplier of personal computer software and spreadsheets.

They developed Lotus Notes and refocused on this, group computing.

Their strength in notes prompted IBM to purchase them for \$3.5B.

“I can't help but wonder why leaders are so often hesitant to lead. I guess it takes a lot of conviction and trusting your gut to get ahead of your peers, your staff, and your employees while they are still squabbling about which path to take and steady an unhesitating, unequivocal course whose rightness or wrongness will not be known for years.”

“Not surprisingly, the transformation implicit in surviving a strategic inflection point involves changing members of management one way or another.”

Gordon Moore was chairman

In the switch to microprocessor during a meeting, Moore pointed out that half of executives in five years would need to be software people. They were all in the room as he said this.

About half of managers adapted, a few others left.

“If you're describing a purpose that deep down you know you can't achieve, you are dooming your chances of climbing out of the valley of death.”

Wafer allocation is just as important as labour allocation.

Intel recently reassigned a senior manager from microprocessor to a new line of communication chips. Many could replace his old role but no one else could do the new role.

Allocate labour for highest net productivity. Even if this means lower productivity in one department.

Grove met with heads of software companies (called and set appointments) to get more well versed in it.

“As I sat talking with these people, I took copious notes. Some of which I understood, and some of which I didn’t.”

He took what he didn’t understand to knowledgeable internal people.

“Basically, I went back to school. I was aided by the fact that Intel is a school company where it’s perfectly respectable for a senior person with 20 years of experience to take some time, buckle down, and learn a whole new set of skills.”

Don’t give in to the automatic deference people give you as a manager. That becomes a wall from learning new things.

Grove reallocated time spent at work to learning. It’s all about resource allocation!!!! Imagine me in the limit my god.

“Redeploying resources sounds like such an innocuous term.”

You’re putting more energy in one place and taking away from elsewhere.

“If you’re in a leadership position, how you spend your time has enormous symbolic value. It will communicate what’s important or what isn’t far more powerfully than all the speeches you can give.”

“Strategic plans are statements of what we intend to do. Strategic actions are steps we have already taken or are taking which suggest our longer term intent.”

“Strategic plans sound like a political speech, strategic actions are concrete steps.”

“Strategic plans are abstract and are usually couched in language that has no concrete meaning except to the company’s management.”

Steve Balmer on Acquired talking about Microsoft tenets for employees evokes this. He understood all phrases innately, while an intent sees a joke.

Strategic actions take place in the present and affect people’s lives, strategic plans are in the future.

The timing of transfer of resources between teams during a strategic inflection point has to be done like a relay race and carefully well timed.

If switching too early, you lose on gain from the previous paradigm. Too late, you lose momentum for the next paradigm.

You need to invest in the old business to have momentum for the next business.

“Your tendency will almost always be to wait too long, yet the consequences of being too early are less onerous than the consequences of being too late.”

“Advance the pace of your actions and increase their magnitude, you’ll find you’re more likely to be close to right.”

“The biggest danger facing an early mover company is that it may have a hard time distinguishing a signal from a noise and start to respond to an inflection point that isn’t one.”

Mark Twain:

“Put all of your eggs in one basket and watch that basket.”

“Hedging is expensive and dilutes commitment.”

“Most companies don’t die because they are wrong, most die because they don’t commit themselves.”

Meandering leads to demoralized managers and this leads to paralyzed employees. A strong clear direction from a leader is required, not even a good direction.

“When a company is meandering, it’s management staff is demoralized. When the management staff is demoralized, nothing works. Everybody feels paralyzed. This is exactly when you need a strong leader setting direction. It may not be the best direction, just a strong, clear one.”

How could you expect to rally employees if their leader can't articulate the shape of the other side of the valley.

The time for Cassandra’s and chaos is over when you need marching orders for a specific path out of the valley.

“Statements in external forums are always given more credibility inside the company than what you say directly to your employees.”

“Overcorrect your actions, recognizing that the symbolic nature of your actions will amplify their impact within the organization.”

“Most executives schedules are shaped by the inertia of prior actions.”

Don’t hedge!!!!

Better to let employees find holes in your strategic thinking than the market.

Email:

“By spending minutes in front of his computer, a manager can leave his mark on the thoughts dozens, hundreds, or even thousands of people in his organization.”

But, if your message is clear you'll get question emails back. Answer them, 2-3 lines.

“This is a high leverage activity. Your message will reach not just the individual to whom you are sending it but it is likely to be sent onto other employees of the network.”

Grove spends 2 hours reading and responding to messages.

“What used to be referred to as ‘managing by walking around’ has larger been supplanted by letting the fingers do the walking on your computer keyboard.”

Two way interaction with employees is important. Not just a video tape.

“You can't change a company without changing its management.”

Managers are sometimes demoted at Intel to get a better feel for the new paradigm, this done often enough that it's accepted at Intel. Learning skills more important to the new direction than rising back up.

HP shifted from PCs based on an internal microprocessor to an Intel microprocessor.

Wang Laboratories calculators to word processors.

Dr Wang was a sole figure in the company and was ill in 1989 and couldn't guide the company through the PC revolution. Bankrupt.

Everyone on the periphery can only impact the periphery. Wafer allocators don't do marketing. This is why management is required.

“If senior management is a product of the legacy of the company, its thinking is molded by the old rules. If they are from the outside, chances are they really don't understand the evolving subtleties of the new direction. They must rely on middle management.”

Before the mid 80s Intel planning was bottom up, Middle managers giving presentations in detail to senior managers.

This worked to make bigger memories.

It's best when bottom up is equal in proportion to top down.

Debate: chaos reigns

Determined March: rein in chaos

This was before Jobs got NEXT acquired by Apple!!

"When 10x forces are upon us, the choice is taking on these changes or accepting an inevitable decline, which is no choice at all."

Chapter 9: The Internet: Signal or Noise? Threat or Promise?

Netscape went public during writing, he saw the initial huge jump in price as irrational.

Yes but what is the internet? lol. Exchange data around the world!!

ARPAnet between research computers was to provide a backup to phone lines coming down due to a nuke.

"The more computers are connected to each other, the more useful it is to be connected."

Standardized track gauges were required for rail to support cross country container shipping.

"As each corporation strengthens its own network, it contributes to the strength of the overall network. As in any good coop, people acting in their own self interest act in the interests of the whole."

PCs supporting multimedia is non trivial. Colour and sound and video.

Tim Burners Lee at CERN invented hyperlinks, search? Well accessing other computers for data, servers. This and an interface is the WWW.

Four factors supported this: interconnected networks, many computers on LAN networks that could go global with a standard protocol, multimedia, Tim Burners Lee search."

"Just as a mixture of chemicals consisting of just the right ingredients can undergo spontaneous combustion, this confluence brought about an explosion in public interest in the internet."

Data packets use existing infrastructure way more efficiently than phone calls. So, it can be cheaper.

Internet is an opportunity for telcos to use their infra.

He suggests online downloads instead of literally the cereal box model. Like Walmart to a small grocery store, 10x force.

The big media companies like Warner or Viacom created experimental divisions many focused on the WWW.

Worldwide ad spending was \$350B.

You have to steal eyeballs to put on the worldwide web.

Lots of experiments in 3d rendering. Man this was 28? Years ago.

Internet appliances: data storage and computation done on a server and sent over internet to the device.

This could mean less compute required for the device.

“Fundamentally, you can’t fool Mother Nature in computing either. Inexpensive microprocessors are usually slow.”

“Consumers may want lower prices but not at the risk of going back technically.”

In 1995, 60M SPCA's bought by consumers.

Two types of use he sees for this 60M:

Customers own data and applications

Sending data to others on a corporate network or telephone system

Ok what's the distinction there between corporate network and telephone systems for internet.

Third use:

“The internet fosters the emergence of a third class of use. Applications and data that are stored at some other computer some place, prepared and owned by unrelated individuals or organizations that anyone can access through this pervasive inexpensive set of connections, the connection coop.”

This explains both Google Drive and Jonathan McDowell.

Is the internet a big deal:

"I think anything that can affect industries whose total revenue base is hundreds of billions of dollars is a big deal."

He doesn't see the internet fundamentally changing Intel or suppliers or complimentors.

"There will be new players on the scene for sure, but they're just as likely to play the role of complimentors as competitors."

"All this suggests that the internet is not a strategic inflection point for Intel. But while the classic signs suggest it isn't, the totality of all the changes is so overwhelming that deep down I think it is."

Intel operates by following the direction set by three high level corporate objectives:
Microprocessor business
Communications business
Operations and execution

By making the internet a fourth high level objective they elevate the idea of focusing on it in employees minds.

The internet appliance as described before is turning the clock backward. The trend for 20-30 years was pulling information from big computers to little ones and this would reverse that. How??

He says Intel should put together a group to make the best internet appliance possible. Let them be the Cassandra's and figure out noise from signal.

Is this just a smart phone? Literally.

Chapter 10: Career Inflection Points

"Career inflection points caused by a change in the environment do not distinguish between the qualities of the people that they dislodge by their force."

1998 steps down as CEO

"I have always regarded preparing for succession as part of a managers job and have often stated that belief. Now I can do no less than what I expected others to do."

Board often discussed his successor then moved such people into roles with more responsibility.

1998 saw a trillion in mergers and acquisitions.

Back to first couple chapters, your career is your responsibility, protect it from harm and grow it, you're the CEO.

"Simply put, be a little paranoid about your career."

"Put yourself in the shoes of the CEO of a large company. You must open up your mind to outside views and stimuli. Read the newspapers, attend industry conferences, network with your colleagues in other companies."

"You may hear anecdotal descriptions of changes that may be relevant to you before they add up to a cogent trend."

Wait Intel isn't in all phones they failed at the internet appliance!

Cassandra's are likely to be concerned friends or family members that deduce change you haven't sensed yet.

When different sources all align, take it seriously. Cassandra's, newspapers, business news, internal talks, etc.

"When there's a fundamental change in the industry and you don't change your skills, you'll lose at both winning companies and losing companies."

"You're likely to have invested a lot in getting your career to where it is. More importantly, you've invested your hopes in the further upward trajectory of your career. As signs appear that the curvature is shifting downward, your whole benign will work at trying to deny that this is so."

"Often you'll be tempted to believe that because of your particular individual excellence you'll be exempt from the change. You'll think 'it may happen to others but not to me.' This is a dangerous conceit. It's equivalent to the inertia of success that dogs companies that have done well."

"Denial can come from two wholly different sources. If you've been very successful in your career, the inertia of success may keep you from recognizing danger. If you've just been hanging on, fear of change and fear of giving up whatever you have achieved may contribute to your reluctance to recognize the situation."

“Either way, denial will cost you time and cause you to miss the optimal moment for action at or near the inflection point.”

You’ll normally wish you made the change early, don’t wait until your career is in decline.

You can ask your existing employer for an entirely different assignment in preparation for a career inflection point.

“As you experiment, avoid random motion. Don’t just take blind steps in random directions whose only common characteristic is that they’re different from what you’re presently doing.”

“Arriving at the clarity of direction through a dialog with yourself and maintaining your conviction when you wake up in the middle of the night filled with doubts are both tough.”

“Yet you have no choice, inaction will leave you in a position where the action will be forced upon you.”

It’s like emigrating to a new country. And you must have unwavering commitment.

“Looking back may be tempting, but it’s terribly counterproductive. Don’t bemoan the way things were, they’ll never be that way again.”

“Whereas the old land presented limited opportunity or none at all, the new land allows you to have a future whose rewards are worth all the risks.”