THE TURNAROUND!

Part 1 – The Task

December 8, 2009

The call came at 3pm on a Saturday afternoon. I was preparing one of my families favorite summer meals; baby backs, charcoal grilled slowly over indirect heat with a lot of wet hickory to smoke them until pink and tender. It is a good thing that it is always warm in Shanghai, even in December.

The secret to ribs is, like so many things, a combination of deeply understanding your materials, processes, enabling technologies (rubs, sauces, and charcoal) and combining this scholarship of the subject with the patience and technique to perform a culinary miracle.

Ribs, done correctly, are about a 6 to 7 hour process, and I was about 5 hours in. So a distraction at this point was unwelcome and potentially disastrous to the final product.

Since I am a product guy, this made the call a significant irritation, but it was from my German headquarters so I lit a couple of joss sticks and hoped for the best as I tried to juggle concentration on the call with the challenge of successfully completing Alabama style ribs in Shanghai, China.

“Don, this is Bob”

“Hi Chief, what’s up”

“You need to get on a plane tomorrow”

“OK, where am I going?”

“Back to the States”

“For how long?”

“Until you’re done.”

“What’s up?”

“Well, you might have noticed that while you have been enjoying yourself, cavorting in an economy that continues to grow like mad, the rest of the world has fallen off of a cliff.”

“That’s why I like China, boss, you would have to be an idiot to not be able to make money here.”

“Well the vacation is over Donny.”

“What exactly is the problem?”

“Suk blew it”

I smiled at this little double entendre which I knew was done unconsciously because Bob's English wasn't good enough to appreciate the play on words he had just made.

"Suk" referred to Benjamin (Benny) Suk, the man with the unfortunate name who had replaced me all those many years ago as the CEO of our North American division. Benny was a German Sales type who had oodles of style and charisma. He was the life of the party and had managed to charm the hell out of the entire upper management. He had rounded out his education with one of those "weekend warrior", executive MBA's and had talked his way onto the fast track. Hell, he even had had me convinced that he was the man to replace me although I was always troubled by his lack of any real engineering or operational experience.

So I had gone off to develop our Asian division and Benny had remained in the USA to preside over the further development of our American beachhead. Seemingly, things had gone well at first but then financial performance started to decline. Things were starting to get critical when the real trouble emerged.

American bankers had gotten out of the banking business and into the investment business. Then they had gotten greedy. Criminal behavior followed greed and "hey presto", the entire rotten kettle of toxic fish now had the world's economies on the brink of collapse. The bottom had fallen out of the stock markets, investment banks had collapsed, the idiot Government officials who had charted the entire hellish course and who, almost to a man, came out of the same investment banks that now threatened to ruin the world, were running around pointing fingers and trying to salvage some order out of their own screw up.

The knock-on of this to the Manufacturing sector had been predictably devastating and the bottom had fallen out of the market. There were rumors that GM might go bankrupt and nobody was moving cars anymore. In one year we had gone from top of the world to bottom of the barrel.

Everyone was implementing "efficiencies" as quickly as possible to try and stop the bleeding, but apparently what Benny was doing did not meet the expectations of either Bob Stein or the Board of Directors.

"So what's with Benny?"

"Benny's out, you're back in"

"How bad is it?"

"Product Quality is in the tank, we are expediting shipments using planes and helicopters, to the tune of over a million dollars US a month. Sorts, reworks, and third party containments are costing us another 800 grand per month, the customer hates us, we have no new orders, the engineering department is gone, and we are about to be de-sourced."

"I will need one thing."

“What?”

“Harry.”

“You can’t have him.”

“Then I won’t do it.”

“Then, you’re fired.”

“That’s fine with me, better to have an end with terror than terror without end.”

“OK then, you can have him.”

“Then we have a deal and we will go fix it.”

“Be quick about it.”

“Yes Papa, I will be on a plane back to the US tomorrow.”

“Are you going to call Harry, or am I?”

“You call him, he will be annoyed.”

Harry was Harry O’Boyle and Harry was scary. He was British ex-military and mean as hell. Harry would never discuss his military record or his rank but I had him pegged as a Sergeant Major/Master Sergeant level type. I once ran into a hard looking type in a bar in Cape Town who, upon learning that I worked for DSI, asked me if I knew a guy called Harry O’Boyle. I replied that I indeed knew the estimable Mr. O’Boyle and enquired how he knew him. “We were on a diving course together, when we were in the military.”

The only thing I knew for certain was that Harry had been in the Army, so what the hell was an Army guy doing on a diving course and what the hell does “diving course” in the military mean. I decided it would be better not to ask and shortly thereafter my fellow reveler slipped out and away and I never saw him again.

Harry was one of the most gifted amateur psychologists one could ever hope to meet and he was one of the best Operations guys I ever met in my life. We were a fantastic team. Although we were quite capable of doing each other’s jobs, we both had natural tendencies for the opposite ends of the business spectrum. He was Mr. Inside and I was Mr. Outside. His hero was Goldratt and mine was Jobs. Harry was analysis and I was synthesis, and we were now supposed to turn an ailing automotive division around. I told my family, we feasted on ribs, slaw and beans and I ordered my ticket. I was looking forward to working with Harry again.

December 9, 2009

The nice thing about flying from west to east is that you get to live one day twice. You can leave Shanghai on Sunday morning and land in Atlanta on Sunday Morning. I landed

and had to wait for Harry's plane to land from Europe. Once I had Harry in tow, we rented a car and headed to the hotel.

Harry and I had a pretty rich history together. We had identified each other as kindred spirits during the first board meetings we attended at DSI. We had developed enough experience in building companies or fixing troubled ones that we had actually developed a system. We knew that workflow equaled cash flow and that nothing was more important than cash. People who worked for us got used to a constant bombardment of questions or statements such as "Every movement, by every person, employed by this company, under the roof of any company property represents a cost to the company. We have to minimize those movements." Or, "Toyota production system is not an efficiency tool, it is an economic philosophy." Or Harry's favorite, right from the mouth of Eliyahu Goldratt "This idea you are proposing, will it increase throughput, will it decrease inventory, will it decrease operating expense?"

We fancied ourselves as teachers.

We knew however, that now we were to be parachuted in to fix problems.

Like most things in life, our system was not completely original, as a matter of fact; it was directly adapted, well stolen really, from the warfighting doctrine of the United States Marine Corps. Simply put, it worked like this.

Most companies, and particularly most troubled companies, have simple disconnects which they are not aware of, or cannot do anything about, or do not have employees that are able to come to grips with the job to be done. The result was that most of the organizations we had dealt with, including the successful ones, had disconnected at the level at which company policy was developed (if policy was being developed at all), at the operational level, where policy and direction were implemented, and the tactical level on the shop floor every day. Harry and I visualized it like this

Dysfunctional Company

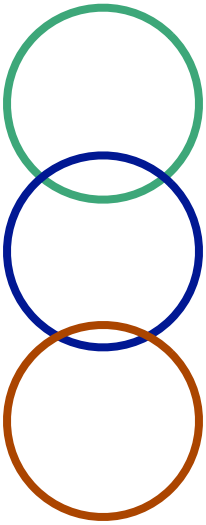
Our job was to stabilize and move the company from this dysfunctional state to a level where there would be at some interactions between the functions and levels of any organization we were sent in to repair. This would make forward progress for the entire organization at least possible. A minimally functional company, one that could at least function in an acceptable manner, would have at least some overlap between the Strategic, Operational and, Tactical decision making levels. This would assure that at least there were some interactions and communication between management and the shop floor.

Minimally Functioning Company

Strategic/Policy Level

Operational Level

Tactical Level



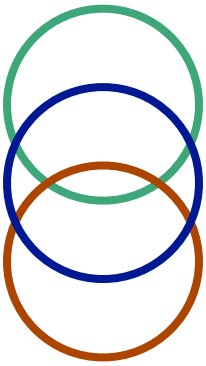
Finally, if we had a longer-term assignment, if the mission was more than just find, fix, fast, if it was find, fix, optimize, we could do the following.

Optimally Functioning Company

Strategic/Policy Level

Operational Level

Tactical Level



At this level, when management was enlightened and mentally prepared to push the three levels together, you really had something. The shop floor and its realities would never be far removed from the considerations and planning of top management. Such an organization had distinct advantages in terms of speed of decision-making, reaction to environmental changes, and unit cohesion as all the players tended to be on the same page. When we had an assignment like this, the fun really started, and this was precisely the situation we were being parachuted into. We were looking forward to getting started.

Day 1 Triage, December 2009

After our initial discussions, Harry and I decided to split up. Harry headed for the "biggest loser" plant in Mexico while I headed for the corporate offices in Detroit. DSI was a German company that made mechanisms to be used in the German transplant automotive companies. When I had left the CEO spot of the North American division three years prior to this, we had just nailed down our first major domestic contract and had a fully functioning little company in place. We were turning over about $200 million in sales; had good solid EBITDA and we were growing. However our CEO, Robert "Bob" Stein had already indicated that the place was now a complete mess and that "Engineering was gone". So I had to find out what was going on at the headquarters while Harry took the pulse of our operations in both Mexico and Alabama.

We called this part "triage". This was where we looked at the patient to determine the extent of the injuries and to decide which holes required plugging first. You have to get the patient stabilized and make an assessment of the order in which the repairs must be made or the patient may well die on the table on you. This was to be avoided at all costs of course so time was critical.

We arrived in our respective operating theaters about the same time and had arranged for a conference call at the end of the business day.

In the Detroit office there was a palpable pall of depression. The twenty-five man engineering team had been reduced to five people, while the previous five-man finance team had been increased to fifteen people. Anytime you are in the design and manufacturing business and your finance headcount exceeds your engineering headcount, there is a problem. There were several new Vice Presidents who, it emerged, had been hired for their political connections rather than their technical abilities, and the Quality and Program Management staffs had been cut to one each. DSI America had truly become a finance driven organization. The problem here, of course, is that Finance is an assessment and compliance function and it is an expense center. Finance guys cannot fix machines, design parts, make products, or deal with angry customers. They make decisions that often look good on paper but end up costing much more than they save in the long run. They should not run manufacturing companies.

Now having said all of this, the new finance guy, although he didn't know screws from owl scats, was competent and realized the predicament the company was in and proved willing to help. He would prove very adept at keeping the corporate finance mob calm while Harry and I went to work keeping the barbarians from the gates and ended up being far more a part of the solution than he was part of the problem. I continued to take stock of my situation.

I got lucky with Toby. Toby was Toby Unterdach (we will just refer to him as Toby from now on), and was the prototype shop manager. Toby was a German kid I had brought to

the US when I had taken the initial assignment to create the new American division. Fifteen years in Germany had taught me a couple of things, and one of them was to get yourself a German prototype guy if at all possible. The reason for this is simple.

Germany still has a complete and fully functioning apprenticeship program. This means that people there are still trained to do technical jobs and not just focused on a college prep program. Graduates of German apprenticeship programs know materials, shop math, tooling, and the techniques for making things. They can tell you what metal alloy you are grinding by the color of the sparks it throws off. They are highly skilled and fiercely proud. They make really high quality products. They are my kind of people.

When I opened the prototype shop I insisted that the homeroom send me a German to run it. Since the Germans are only too aware that their training programs are far superior to the wreckage that we have left in the United States, they were only too happy to comply. Toby had proved useful to the prior administration by soliciting and winning outside work for his shop that kept him on the plus side of the expense/revenue equation and so he had been able to avoid the orgy of bloodletting that had decimated the other non-financial departments. Toby only had five guys left but they were the best five he had and included a welding expert who taught at a community college, a toolmaker who knew more about product design than most engineers, and a millwright who was certifiable but who could make complicated metal parts grow out of his hand. In addition to these prodigies, we had a CNC measurement genius who was a biker as well as that most valuable of all associates, an expert scrounger. I would need them all.

Engineering was a debacle. What was left was the manager, competent but no leader, and one of our most talented guys, an Indian with an unpronounceable name whom we called Poptart, a grim German named Roger who was burned out and who we called Eeyore because of his attitude, a married Romanian couple who were both PhD's and the lady from Document Control who made sure that all of the correct boxes were checked. All had survived, not because they were good, which they were, but rather because they were cheap.

When the SHTF in mid-2008 and everyone started laying off people and pulling into their snail shells to let the rubbish roll over them and wait for better times, we started to do the same thing. Unfortunately this type of surgery, which calls for a scalpel and a talented surgeon, is often performed, and had been at DSI America, with a chainsaw by a hospital orderly. While I have nothing against chain saws or hospital orderlies, they are not designed or trained to perform the kind of delicate surgery required to separate essential from non-essential tissue during a life and death operation.

Many of our best associates were scattered to the four winds. We had lost much and there was no direction, no course plotted, and the sails were hanging from the halyards bereft of air, but we had enough to start with.

My evening talk with Harry confirmed that he was looking at pretty much the same thing.

“I had the first on-site management meeting with senior plant staff, and after the usual introductions and the pleasantries, I asked the simple question that I usually do and which is generally very effective in determining the level of the management’s engagement in the overall business. I asked, “Tell me team, how do you know that you have had a good day?” The room was at first completely silent. After a few minutes, and with a couple of prompts from me, a 63 year old expatriate tool maker piped up and said “that’s an easy one – we’ve got to make 6000 seats today.” “Really”, I asked,” what was the product mix that the customer required? You know, the power vs. manual percentage, what models require what volumes, what are the delivery locations we have to ship to, what is the finished goods stock position; how many days on hand do we have?” Again the room fell silent!

Again the brave toolmaker, who clearly cared and was not afraid to tell it how he saw it said, “the previous boss who you replaced said our target was easy, just make 6000 fucking seats a day or you’re all fucking fired!”

“That is quite charming Harry” I said, “what an enlightened management style.”

Harry continued, “I then asked my usual sequence of questions to get a feel of our current awareness of financial status at the plant management team level. “Ok, so who knows if we are making any money?” No answer, apart from the controller who said “kind of”. “What about revenue? What levels of sales dollars are we shipping per month and per day? What is our current scrap rate percentage?”

So you kinda get the impression the team has no clue and that’s how the previous plant manager wanted it. My first desire was nothing short of wanting to track this fellow down and drive my truck over the guy’s head. Clearly this team wanted to succeed, as do most, but they were not empowered to make any decisions whatsoever, and when you then discover that they did not have any data to make a business decision on, well, everything started to become clear.”

Harry then added the results of his first review of the shop floor.

“There is a mountain of re-work, no spare parts, no scheduled maintenance, no plant scheduling, and no direction. Processes are going down because the fixtures are falling apart and we are flying out parts with airplanes. We then have to sort those same parts at the customer’s warehouse. Other than that everything is ducky.”

“Harry, we should probably send you the guys from the prototype shop to help get things stabilized. There is no new business up here anyway, plus I will send you our last Program Manager and Quality Engineer. I’ll send Scrounge too, in case you need stuff to materialize out of thin air. Meanwhile I will go see the customers, tell them what we are doing and tell them we will need a little patience on their parts and that we will not be sending daily reports although they can come down and watch what we are doing if they so desire.”

“You’re sure about that last bit?”

“Can’t get ‘em to buy in unless they are part of the solution.”

“OK sounds like a plan.”

“I will call again tomorrow and I will be there on Thursday, deal?”

“Like they say in Australia, no worries, mate.”

While I assembled the Detroit team and made the arrangements the next day, Harry continued to make new and interesting discoveries in the plant. I told him I was sending down out troops and that I would be coming after I visited the customers to calm them down and he launched forth with his latest findings.

“Day Two was bloody wonderful Donny me boy.

This honeymoon period was the shortest in history! Upon my arrival at the plant at approximately 7am, I was immediately confronted by Lill, a panic stricken logistics manager who, I rather suspect, was in her current position for reasons other than managerial talent. She promptly informed me of fresh horrors. "Mr. O’Boyle, I flew seat structures to two locations late yesterday and we are going to have to fly parts again today – the production manager is just not making the right stuff" so my first question was ok, calm down and tell me who authorized the air freight, the reply was, “well, you did”. I must be suffering from too many late nights with Professor Walker’s amber nectar, because no matter how hard I tried, I simply could not recall ever approving this, I then asked her to tell me how many parts she had flown and what had it cost us “oh”, she replied, “I got a good deal, it was only 71 thousand dollars" I looked her in the eye sternly, and very clearly made my point, "do not fly anything again without my signature on an approval requisition or an e-mail from me if I am not in the plant, is this clear!" "Yes Mr. O’Boyle” she replied...

So my next step was to call the production and logistic manager together, and proceed to ask, in my standard blunt British way, ‘what’s all this then; Daniel, why are you not making the products that Lill has asked you for?’ Daniel was one of those production managers that immediately gave you the impression that he knew what he is doing, Daniel replied, ‘well if Logistics would just order the right parts I will make whatever she wants’. Oh dear, I thought, so I asked for a list, "guys, precisely what parts are missing? You guys have to be on the same page, you know we blew $71k in air freight yesterday, Lill said ‘oh it will be 150k by close of business today, I gotta fly parts again today’. Judging from their reactions, the irritation on my face must have been clear to the both of them.

I wheeled on Lill, "So hold on here, you’re flying parts because you do not have the raw materials and it’s the production manager’s issue". ‘Yes’, she replied, ‘because he keeps scrapping stuff and not recording it’. Well, it was clear after a little digging that the

materials group and dear old Harry O'Boyle are going to have to take a walk together through the Garden-of-Understanding, and I am just the lad for the job.

Donny, boy, you know that I am not a big believer in investigating and tracking material accuracy and variances in ERP systems, in fact it is my considered opinion that such behavior is normally exhibited by lazy bastards who do not think it appropriate to haul their fat carcasses out of their comfortable office chairs and walk to the plant floor or warehouse. Donny boy there is nothing quite like an ERP system in a plant that is out of control. It's like putting a welding robot into a process where the parts are not dimensionally stable, and a disaster is bloody guaranteed to follow.

Next I approached the controller who our colleagues on the BOD had said was clearly part of the problem, but he turned out to be an interesting and smart guy who was just pulling a pay check and hating every day in the office, I asked him, 'hey Swede, so what's with inventory accuracy issues here', he replied in a very protective manner,' well do you mean raw WIP or finished goods', I said well, all of it really, but let's talk about raw for now'.

'Hmmm, well we wrote off almost a million dollars 6 months ago, but this was not just accuracy issues but included warranty and scrap too, I gulped, 'a million bucks Swede?". 'Yes', he replied, 'I think we had a bunch of stuff stolen too!'

So the picture is becoming clearer

Material accuracy issues, massive write-offs, Management not knowing and owning the issues, blame game is the sport of the day, and believe me these guys are great at it.

So then I asked for a list of the variances from the last write off, you know, to see if they fixed the issue, to see if they had identified the real root causes identified and plugged the holes! I played the old 80/20 rule and only asked for the top 20 value part number variances and I tracked to the floor to see if they were in control. I took the management team like a bunch of children on a field trip to the warehouse. We checked value item number one on the list, weight sensing electronic bolts, what they call I-bolts. The ERP system said that our inventory on hand was worth, $458k, so I pulled all inventory and instructed the management team to count them, well guess what, $131k's worth had gone missing. This resulted in multiple forms of gestures. Shoulders shrugged, heads were scratched, and various other forms of body undulations were performed, and well, yes, they were gone! When I then asked for somebody to show me the most current cycle count reports, the reply was 'what is a cycle count report?'

Two "oh dear" moments in one bloody day, this is just going to be a real fun assignment, a challenge one might say. Donald Linkwood, I am beginning to dislike you!

Day 4 Tourniquets, December 2009

Triage did not take long, but it got worse.

Any competent practitioner of operations management featuring the Toyota Production System or Goldratt's Theory of constraints knows the drill. Reduce inventory to drain the swamp and find the bottlenecks. Eliminate the first bottleneck then the second, then the third until you have everything moving using the Drum-Buffer-Rope system. Schedule the plant properly and then start looking for unnecessary keystrokes and eliminating them. To the extent possible, eliminate the buffers and head for one-piece-flow. Then redirect maintenance to stop fixing broken machines and concentrate on what needs to be done on a daily basis to keep them from going down in the first place. Think statistically. It all sounds easy, and it would be, except for people.

The shop floor situation was also pretty bad. On the first day I was there, Harry went out to a welding machine and found a part label stuck to one of the hydraulic lines on the clamping fixtures holding down the assembly. When he removed it he was showered with hydraulic fluid. He was informed that the part number label was a patch for the leaking hydraulic line. Harry insisted that a replacement line be installed, as the label "was no acceptable alternative for the watertight integrity required to guarantee that the line would supply the appropriate clamping force necessary to assure product quality". Harry was informed that no such spare parts were allowed to be held in the plant so that money could be saved.

At this point Harry started turning red. Red became crimson when, in response to his question as to why this (the lack of spares) was the case; the weld cell operator shrugged his shoulders and replied, "Because this is DSI." At this point a minor emotional event transpired which featured a lot of arm movement and briskly delivered admonitions that this was NOT the DSI that both Harry and I knew and loved and as of right now, it was not to be the DSI that the staff would know either.

Harry was off and running. He knew that the first step in the turnaround has nothing to do with business school tricks or formulae but is rather a good old fashioned "hearts and minds" campaign. Once people believed, once they really felt empowered, they were capable of almost anything. There is a lot of stuff written about empowerment, but is not something that neither Harry nor I had seen put into practice very often, particularly in dysfunctional organizations. That was the difference between Harry and most other "turnaround experts". Harry understood that without the factory floor behind you, you could not efficiently make that 90 degree turn without losing a lot of energy, and conservation of energy was what we were all about.

Once we had brought in our little expert team from the prototype shop, we were able to start applying the tourniquets to stop the bleeding. We followed the age-old wisdom of

Frank Morisette, who, at the beginning of War 2, had set up the Chrysler gun arsenal and who had cut the finishing time of an anti-aircraft gun from 400 hours to 15 minutes. Morisette's standard approach to all problems was: "Let's go out and look at the goddamn thing" and that is where it always starts in a turnaround, looking at the goddamned thing. We found fixtures in the welding robots that had not been maintained and were producing

30% to 40% scrap. This was the first major bottleneck and it was affecting the rest of the plant operations as we had an “A” classification plant (see Goldratt for the types of plant classifications) and we needed one of the welded subassemblies to produce each final assembly. We tightened up the welding fixtures and had complete layouts and repairs performed on each unit. We ordered a bank of spares so that we could repair the machines and begin to re-develop a preventive maintenance schedule so that the machines would not go down in the first place and would make good parts continuously.

Getting rid of this bottleneck exposed the next one. We now found that we were losing another 20 to 25 percent of our finished product due to the fact that screws were stripping threads when being assembled into the final assembly. We convened a production/quality meeting, created an Ishikawa diagram that identified possible causes methods, machines and material, developed eight main likely causes and fixed them all whether they needed to be or not. It turned out that our purchasing department had found a new supplier who was cheaper and had changed sources without telling anyone, we changed back to the original. There had originally been a device on the power screwdrivers that held the screws perpendicular to the surface of the final assembly. This had been removed in order to decrease takt time. We put it back on. All of the fixtures on work piece carriers had drifted and had not been maintained so that the parts were often not in the correct position which contributed to the absent but necessary perpendicularity required to avoid shearing the screws. We did a layout and adjustment blitz on the work piece carriers and established a preventive maintenance and calibration interval for them.

If all of this seems like a lot of specific and tedious detail it is because that is exactly what the initial stabilization process is. It is getting your best people together and working all of the most important issues hard, together with the shop floor personnel to get the bleeding stopped.

In this manner the shop floor people were taught problem solving techniques, saw how these techniques could be applied, participated, and were given a sense of empowerment and confidence to do the right things. Harry and I were there to supply our experience, but more importantly, to provide a set of principles that would allow them to make independent decisions but would force them to do so in a manner consistent with the goals for the organization. Our job was to deploy those goals and give the shop floor people a basic set of guidelines to operate within that would keep them moving in the right direction. We had to provide our people with a unifying concept of what we were there to do that would allow them to enthusiastically take action toward confronting and eliminating all obstacles that stood in the way.

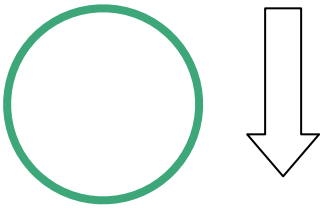
Over the next four weeks, with the help of our Detroit based team, we were able to improve throughput to the extent that we were able to all but eliminate the expedited freight that was costing us a million dollars a month and stop producing poor quality products that were costing us almost an additional million bucks per month. The tourniquets had been applied, the patient was now somewhat stabilized, and we started to get close to break even by the end of the second month.

Week 7 2010

Harry and I met that night to discuss our next moves. We decided that it would now be appropriate to split up and start applying pressure from different directions so that we could start to move towards a functional company. Since we had an aligned conception of what to do this would not be a major issue.
The reason that Harry and I could be so aligned is that we discussed our philosophies quite often and for extended lengths of time; generally becoming inebriated in the process. We spent entire evenings discussing our marketing philosophies, our manufacturing philosophies, our financial philosophies and our general business philosophies. This meant that we had spent the time to achieve a very clear understanding of each others conceptual frameworks and had shared a lot of information and techniques. We did not always agree on approach, but we knew how each other would react in a given situation.

We were able to anticipate behaviors based on circumstances and this did a lot to achieve unit cohesion between the two of us. Based on our review of history and having gone through the common traits of successful organizations, one of the things that we always recognized was that almost all of the successful organizations throughout history have exhibited strong unit cohesion. The senior management team understood each other and knew how they would react in various circumstances.

Strategic/Policy Level



Operational Level

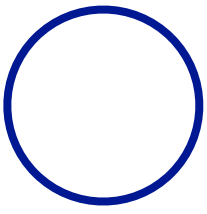
TOC

TPM

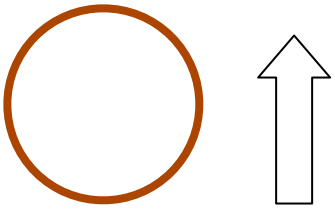
Kaizen

Hoshin Kanri

7 “weapons”



Tactical Level



So I would go to Detroit and start to push the Strategic/Policy level down towards the Operational level and Harry would stay in Mexico and start to push the Tactical level up

towards the Operational level.

The reasons for this approach was that the Operational level had been researched thoroughly, and many tools existed that were time honored and useful. We had, ourselves, used many of these tools during the past six weeks. Harry, for example always made every manager and supervisor read “The Goal” by Eliyahu Goldratt. This introduced the management to the Theory of Constraints and the need to understand your product and to understand your plant and to schedule it properly. Most importantly it taught people to think statistically.

In addition to “The Goal”, we introduced the standard tools of the Operations professional. Under the blanket that is provided by the Toyota Production System we introduced Kaizen, Hoshin Kanri, Lean Manufacturing and Kanban Pull, Ishikawa’s “seven weapons” for quality etc.

These tools had been available for many years and they have been applied at various enterprises with differing levels of success. What Harry and I understood was that the closer you were able to push the three levels together, the better your results would be.

What we also understood was that the outer circles did not have the kind of well-defined toolbox that the Operational level had. This is where we had innovations to bring to the party. These were proven innovations that we had already seen work. So we split up, moved to the outside circles, and started to push.

At the Tactical level, Harry would work to install his “control room”. This, as the name implies, was part of our integrated “Command and Control” system. Together we would work in all three levels to provide direction to the organization as to what had to be done in a clear and unambiguous manner, while interacting and responding with the entire system to make sure that we could adapt our actions and directions to the inputs or circumstances as they came to us. As a smart man once said “it is a bad plan that cannot be changed”.

The control room was designed to provide a forum to assess the effects of our Operational endeavors. The job of the control room was to give us the opportunity to monitor and assess the system in a real time in a clear and unambiguous way. Not designed to interfere with the system, but to ascertain the progress of what was being done.

The control room shows where our efforts are working or not working and thus shows where effort needs to be applied, although not necessarily how those efforts should be applied.

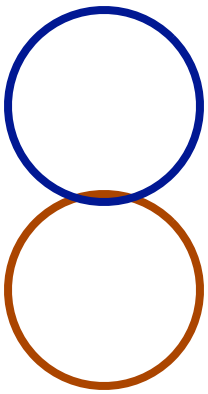
The Control room would knit together the results of our operational efforts and weave them into a fabric that we could study carefully. It pushed the Tactical levels towards the Operational level and established linkages between the levels so that the result of what we were doing at the Operational level would be implemented, tracked, and reported on in a daily fashion. By reviewing progress on a daily basis we could monitor our policy deployment in real time.

Operational Level

- TOC
- TPM
- Kaizen
- Hoshin Kanri
- 7 “weapons”

Tactical Level

- Control Room



While Harry worked his magic at the plant, I would take the Strategic/Policy level.

This meant that I would be in charge of the corporate navigation system.

The Operational and Tactical levels are very good at producing and enhancing corporate “fitness”. That is to say these systems exercise the corporate organism and remove unwanted fat. They are designed to eliminate unnecessary keystrokes from processes and procedures and to make use of what you need and plan to use exactly what you need. Most importantly these systems and particularly the Toyota Production System are designed to increase the velocity of movement of material through the plant to get it to the pay point in the fastest and most effective manner possible.

In this way it may be said that the Toyota Production System is designed to increase the efficiency and speed of the corporate organisms’ circulatory system, to optimize muscle tone and create the maximum amount of output with the minimum amount of inputs.

The main problem with most companies today is that most management teams are too preoccupied with the Operational Level and are far too influenced by the financial departments.

What often results is a very fit organism that is extremely stupid and will blunder into the first uncharted object it encounters. Or it may poison its own food by eliminating

company elements that some finance type determines are surplus to requirements. “Wouldn’t it be cheaper if we had a third party build all of our prototypes? Think of all the money we would save.” Yes you idiot, it would save you money, but you sacrifice knowledge, speed and an immediate look at the product you are developing. You will lose agility.

Part and parcel of the United States Marine Corps warfighting doctrine was heavily influenced by the philosophies of a United States Air Force Colonel named John Boyd.

Boyd’s strategic concept was based on a number of key elements. One of the most important was the understanding that the systems or environments in which we find ourselves are dynamic and non-linear. They cannot be understood completely by those of us operating within them, ever.

What we are forced to do then, is to create a sensor array and navigational system, which will allow us to adapt quickly to environmental changes, reevaluate our actions and make the necessary course corrections to avoid a disaster. At the same time we are also trying to find opportunities to take advantages of, so that we may move along the hard surface of our market segment and to find those transient gaps into which we can slip into and take advantage of before our competitors do. The game is about being able to **observe** the position we are in, **orienting** ourselves to our position and conditions and then to **decide** on the best course at the time and then to **act**. We want to wheel our very fit corporate organism about quickly and with great agility while minimizing any loss of momentum or energy.

When we combine a fit organism with a first rate corporate mind, one which is acutely aware of the environment and the appropriate responses required to improve our position within that environment, the probabilities for survival and growth can be optimized vis-à-vis our competitors. If we can turn a decision loop, the observe-orient-decide-act cycle faster than our opponents, we can gain an advantage. Our goal was to be able to outthink and outmaneuver our competitors and to use our organism to dominate our market segment while delivering world-class financial performance.

To do this we had to review the market situation, decide on appropriate products, materials and engineering direction, re-engage the customer and get some kind of process approach established to improve our position in the market. If we could push our three rings together, we could speed up decision-making and link more closely the shop floor to the corporate strategy. Thankfully, we had tools for this too.

I was going to be faced with restructuring the entire SG&A and Engineering part of the business without raising costs, getting the customer base back on our side and creating that sensor array needed to respond to the market and orient the company so that we would work on the right products with the right manufacturing processes. We needed to turn DSI back into a Market driven company.

Many people, particularly in the automotive supply sector, still think of Marketing as attending shows, putting out advertising, getting stickers on racing cars, and deciding what promotional give-away items are the best combination of cool and cheap. Nothing could be further from the truth.

Marketing is the ability to do two things. First, you have to identify trends in the market and to start developing products now, that the customer, based on trends, will need in three to five years. The idea is to be standing next to the customer when he says ‘what we really need is,” and to be able to turn to him with a functional model and to say “this, right?” The second aspect of Marketing is to be able to develop products or even adapt the market environment responding effectively to an opportunity that is presented.

For this I default to that greatest of Marketing gurus, Steve Jobs. The I-pod took Apple from a cute little niche computer maker to a new global product powerhouse. How did they do it? Well, Jobs and his team adaptively reused existing technology. The MP3 player had been in existence since 2001 while the I-Pod debuted in 2004. So why was Jobs able to scorch the competition and emerge with one of the most successful products seen since Thomas Edison stalked the planet?

The real innovation was not the product itself. First of all, the I-pod was simply an adaptive reuse of existing tech. It was, in principle, just a Walkman, a thumb drive and a record collection. Admittedly it looked much slicker than the Nomad Jukebox, which had already been out for several years, but the I-pod, other than the packaging, was nothing new.

Jobs however saw past the product itself, which was admittedly critical, and understood how this product fit into the market environment. Jobs saw a gap; one that wouldn’t be there for long, but it was a gap that had been unfolding due to circumstances within the environment. Napster and Shawn and Sean had been effectively enabling theft from artists and record companies for several years and it was hurting. Had Jobs gone to the record companies twenty years prior to 2003, the then confident and profitable recording industry would have told him to take his I-tunes store idea and go pound sand. But now the record companies were very concerned and had to stop the bleeding. So when Jobs showed up with a new business model that would replace a major portion of the income lost to piracy, they agreed. The real innovation, the I-tunes store, was launched, and the rest, as they say, is history.

Jobs had done it, not just with slick product, but with situational awareness that allowed him to adapt his company and the customer base to the unfolding circumstances and to provide a solution that made everybody successful except for his competitors.

What Jobs exemplified was no less than what Boyd considered to be the essence of winning. Instead of an I-pod, Boyd’s example was a snowmobile. Boyd said that a snowmobile was nothing other than an adaptive recombination of existing subsystems from other pre-existing products, recombined to come up with a new innovative product.

Boyd believed that an organization must be designed and managed to develop and proliferate this kind of ability to find fast new solutions through new or adaptive recombination. Boyd thought that it is the ability to look at the world in this way that defines a winner. And he made a bold conclusive statement about it:

> "A winner is someone (individual or group) who can build snowmobiles, and employ them in an appropriate fashion, when facing uncertainty and unpredictable change"

Ladies and gentlemen, I give you Steve Jobs and Apple; definitely winners.

So now it had become my responsibility to reinvent DSI to bring it back to the level it had been in when I had left. My tools would include: Market research, and financial analysis of the global automotive OEM's. I would also do the research to establish the latest product and engineering trends, macroeconomic research and research into the latest manufacturing technologies.

These tools would cover the "observation" part of the cycle and would put me in a position to "orient" the organization and the team. We could then decide what to do and proceed, while remaining flexible should the situation, and particularly the environmental factors, change.

After observing, we would use some additional tools, such as X,Y,Z analysis and a targeted business list to orient ourselves and then to develop a Marketing and Sales plan to represent our decisions. The only thing left to do would be to implement through action.

Strategic/Policy Level

Market research

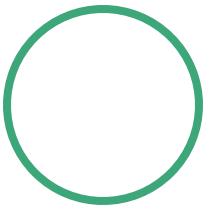
Engineering analysis

Manufacturing trends

X, Y, Z analysis

Targeted Business list

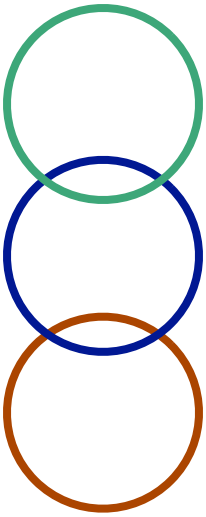
Marketing and sales plan



With this done, and with Harry working on the Tactical end, we could start to push the circles together and start cross-linking the systems so that the company's strategy and the shop floor could eventually become entangled.

Strategic/Policy Level

- Market research
- Engineering analysis
- Manufacturing trends
- X, Y, Z analysis
- Targeted Business list
- Marketing and sales plan



Operational Level

- TOC
- TPM
- Kaizen
- Hoshin Kanri
- 7 “weapons”

Tactical Level

- Control Room

At this point, we could really start to push for performance on all levels, and start to push our little circles together until we reached critical mass, where all of the slack was out of the system and we would be ready for the first major company redesign to further improve performance.

This was the theory, now we had to do it in practice. Thankfully, we had done it all before.

Part 2 – The Plan

Week 8 - Harry

Harry had a big, bad job. Harry had to develop the Operations roadmap and link it to the Tactical actions that would be employed on a daily basis for monitoring inside the control room. A typical Harry O'Boyle control room was, just as the name implies, a room dedicated to the control of the business.

It is a place that is key to the effective running of operations, and as such, is considered to be the nerve center of any operation in which Harry was involved.

But as we have alluded to before, the control room is used to assess. It was like the screen of your computer or television. It would reproduce the information that it was fed but the control room itself was not the secret. There was a lot of machinery behind that screen, and this is what often proved difficult for people to understand.

Harry and I had discussed the failures of tools that had been successful in other places. In the seventies Japanese productivity and quality levels caused American management to take the concept of quality circles from Japan. It didn't work. Next it was statistical process control. It didn't work. By the time design of experiments failed, Americans were beginning to lose their patience with the latest "fad" from Japan. Quality function deployment and hoshin kanri were never really taken all that seriously and never enjoyed much success, at least in the automotive venue. Statistical Process Control or SPC became a bit of a joke. At one of my previous companies, SPC was said to stand for "show program for customers".

These tools failed because what Americans, in their desperate search for the "silver bullet", failed to realize was that all of these tools were part of an organic design for command and control. They were the organs from a Japanese organism. They simply could not be taken out piecemeal and transplanted into another corporate animal. These organs from a foreign donor were often rejected in the same manner that the human body tries to reject a transplanted heart or liver.

What the Japanese generally understood was that the corporate culture was important. If management was providing the right soil and the right nutrients, the organism was capable of wonderful things.

American management often tried to import these interesting Japanese plants without preparing the ground first and would then stand amazed when the plant died or grew in a stunted and freakish manner.

What we knew was that communication was the most important element in preparing the soil for a new type of growth. So Harry would always begin by having his management team read "The Goal" and then review its lessons in group settings. This would take

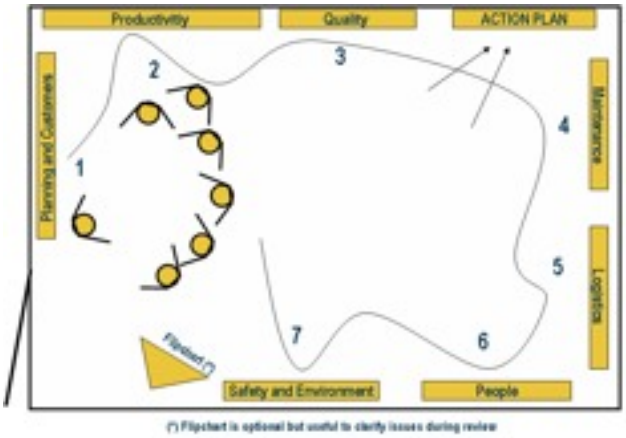
about three weeks. Harry would stress communications and Harry would be a constant presence on the shop floor. Harry got to know everybody and they got to know Harry. Then Harry would call together the first “Control Room” meeting.

Harry would announce that the control room was vital for “assigning and monitoring our key performance indicators and will play an integral part in effectively communicating what was happening with our business to the entire workforce”.

The control room would inevitably be located in a dedicated room in a central location on the shop floor or as close to the shop as possible. The control room had to be isolated from distraction as possible as focus and attention were required. Proximity to the shop floor was important as it helped to reassert in peoples minds its importance as being central to the way the business runs and is managed.

Harry’s control rooms were covered in whiteboards, templated as appropriate to the variables to be reported assessed. Meetings were held on a daily basis. Meetings were conducted standing up, meetings were paperless and the results were recorded on the whiteboards. Each mornings meeting lasted on average between 25 to 35 minutes. The reporting always followed a predetermined sequence but a different facilitator from either the management team or the shop floor personnel chaired each meeting. Reporting was encouraged to be short and sharp.

Typical Control Room Layout:



The variables that could find themselves into the control room could vary depending on the case at hand, but they would generally include

- Production Schedule by Product and sub-assembly
- Overall equipment effectiveness

- Scrap
- Absence
- Rework
- Returns
- Planned maintenance schedules
- Accidents/incidents
- Customer complaints
- Complete and on-time deliveries
- Material issues
- Status of new launch or transfer activities
- Training requirements and progress
- Financial performance
- Inventory levels
- Delivery issues/Expedited freight
- Third party quality costs – containments and sort

We could select just about anything we felt we needed to be measured and reported on. Only by doing this, could we keep the focus we need on key areas of the business and therefore drive improvements in ALL areas of performance and start linking our management systems to the real-life world of the factory floor, where the money is made or lost.

Only by measuring something can you get data driven decision making. And data and decisions are how you drive the organism towards fitness.

Once Harry had selected his Key Process Indicators and had the control established, he kicked off the daily meeting and invited the entire management team to the meeting. Harry was sure to include people from all disciplines.

- Production
- Human Resources
- Quality
- Finance
- Planning

- Health & Safety
- Engineering
- PDIP / Continuous Improvement
- Purchasing
- Administration
- Maintenance

Harry thought that, ideally, the control room meeting should be no shorter than 25 minutes and no longer than 30 minutes. If issues arose and people became bogged down in debate it was considered best to 'park' the issue, select individuals to continue the discussion outside of the control room meeting and have them report back on the outcomes the following day.

There was also a danger that the meeting can become too short, so Harry would constantly reinforce the team to remember that the control room was about monitoring and communicating the performance of the business so it was always important to strike the right balance between being too brief and skipping over the issues and being too weighty and bogging people down with unnecessary data.

Harry was using the control room both to deploy policy, and to change culture. So he would always remind the group of what we were trying to achieve. The control room was there to help us:

- Aim to create an open & honest culture
- Establish a no blame, no excuse environment
- Get the team to speak with data, not with opinion
- Encourage measurement, to drive improvement
- When problems are found we should be owner/action oriented
- To foster and build team spirit

Ever biblical, Harry had established his "ten commandments of the control room" to make sure that certain undesirable behaviors would not manifest themselves.

THE TEN COMMANDMENTS FOR THE CONTROL ROOM

1. Thou shalt attend on time.
2. Thou shalt not leave before the end.
3. Thou shalt have your board updated before the start.
4. Thou shalt listen to each & every speaker.

5. Thou shalt turn off thy mobile phone.

6. Thou shalt not whisper in the corner.

7. Thou shalt not take over from the facilitator.

8. Thou shalt not argue.

9. Thou shalt not yawn.

10. Thou shalt enjoy the control room.

If some miscreant chose to show up late he or she would find the door locked. No excuse was permissible. Ringing phones or whispering would result in a withering look from Mr. O'Boyle. The control room was a tight ship and as serious as a heart attack. Harry would use the interest and level of participation and engagement to take stock of the management team and to establish who would end up "on the bubble".

The Control room was to be always available and always kept up-to-date.

Plant management would hold the daily production meetings in the control room.

All plant manager team members were required to attend, and provide a delegate if they were not going to be available. The data posted was to be accurate and relevant.

Targets were always to be clear and the status to targets was to be clear, and the data presented was always to be the ***same as in the monthly operational reports***. Another aspect of what both Harry and I were always trying to minimize was redundant reporting. Our idea was that the required information should be developed once and then used many times rather than being developed over and over again in different and time and labor consuming ways to please some upper management yo-yo.

For some reason many companies that are in the business of designing and manufacturing products seem to spend more time on reporting than they do on figuring out how they should design and make their product. A manufacturing organization must be focused on keeping the corporate train on the tracks and not on the colors on the dials of the gages and instruments. And yet we had seen this happen over and over again at some of the largest organizations with which we had been involved.

Harry also was very particular about language. There were banned words in the control room and Harry was very serious about these. Use of any of these words would bring an immediate rebuke from Mr. O'Boyle as he considered them "inimical to the laudable goal speaking with data in an unequivocal manner". Whatever the hell that meant. These words were:

BANNED WORDS INSIDE THE CONTROL ROOM

1. IF

2. BUT.

3. MAYBE.

4. SHOULD.

5. HOPE.

6. WOULD.

7. COULD.

Reviews of each functional area generally resulted in certain actions to be performed within a given time allotment. Each action had an owner. The owner was required to report out on the given date.

Harry's approach to the control room was predicated on a 12 stage journey toward plant "actualization". This sounds a little bit Maslowvian, but there was a really well thought out process that Harry had used many times and which he had refined over the years.

The first stage Harry called "Awakening". This is roughly analogous to the requirement that an alcoholic admit to himself and to everyone else that he or she has a drinking problem. Without admitting that there is a problem, there is very little chance to progress.

As we have already seen, Harry did this by using the Socratic Method. That is to say that Harry would ask questions in such a manner that the members of the plant staff would soon start saying to themselves, "why don't we know the answers to these very basic questions about the state of our business?" The key here is that Harry was already steering them towards a concept of ownership. He would invariably have them thinking about "their" business by letting them come to the conclusions themselves.

Once Harry had walked them into the fact that there was, indeed, a problem, he would start to move the management team into stage two, "Target Awareness". What were the plant's targets? What should they be? How should they be determined? What was "normal" in other, similar plants making similar products? What was "world class" performance in any targeted area? What about "my" targets?

Harry would start by establishing the first target. This was to find out where we were at present for each selected KPI. What was the product schedule? What were the customer releases? How many days on hand did we have of what products? How many customer complaints did we have? Were any purchased components late? What was the status of new equipment being commissioned? Did we have any quality issues with incoming material? What was our scrap rate? How much were we spending on expedited freight? What was the status of our training program? How much revenue did the plant generate? How much profit?

By asking these questions and developing these questions in an open forum where everybody was present and everybody began to see an overall concept for the business

and how they as individuals fit into the overall business perspective. This would make the transition to stage three, “Accountability”, seem seamless and natural.

The management team, in an open forum, would begin to see how their particular area of responsibility was part and parcel of the overall success of the enterprise. Harry would be observing each member of the management team closely at this stage to see who stepped up and who shied away. Those who tried to prevaricate or resisted accepting accountability in their respective areas of responsibility were noted. Stage three was generally the first evaluation of the competence of the team although they generally didn’t realize it.

Once Harry had gotten to the point where they accepted their accountability for their portion of plant performance, it was a simple step to the stage four, “Ownership”. This stage moved a team member from the point where he or she realized that he or she was accountable for the results in his or her are of responsibility, to the realization that they also ***owned*** that area. It was theirs; they owned it and they were there to make sure that their processes ran hot, straight, and normal towards their targets.

The first four stages represented the basics; it was what you needed to start building a team. Everyone was aware of their positions, aware of what was expected from them in these positions, and aware of their accountability and ownership in reaching the targets to be set for their positions. At stage five, Harry started the process of linking the Tactical level to the Operational and Strategic levels. Stage five was “Financial Awareness”.

Financial awareness involves getting the plant management team to understand where they fit in the bigger, corporate picture. Financial awareness is also the world’s greatest BS filter, because everything is ultimately reflected in the financial performance of the plant. It does not take long for an intelligent facilitator (Harry, for example) to make this abundantly clear. How can quality be OK if we have customer complaints, costs for containment and third party sorts? How can materials management be OK if we have obscene levels of expedited freight and excessive days on hand of purchased parts?

How can production be healthy if we have a mountain of rework to manage and scrap is at five percent of sales revenue? Finance is the great leveler. Once the team begins to link their control room to the financial performance of the plant, they begin to understand their place in the corporate world order and the need for Operational and Strategic initiatives becomes much easier for them to comprehend. They realize that, eventually, the financial performance of the plant cannot be hidden from, and will serve to expose all BS.

At this point, the control room is forcing the plant management to think and behave like big boys and girls. So now we have to introduce some basic statistical thinking into the game. Stage six is “Trends”. Trends are important in two ways. First, they allow you to chart things in such a manner that you can begin to understand variation., and second, they allow you to set intelligent targets with some basis in reality and to play “catchball” with your team members in determining what are reasonable targets, rather than ending

up setting targets with no logical basis in reality and represent a “management fiat”. The number of upper management idiots I have met in my life who would just throw out a target, with no basis in fact whatsoever, and then flog his or her employees for missing the “target” is mind boggling. If we use data and trends to establish targets, we begin to achieve the first critical entanglements between the corporate “Strategic Policy” level and the shop floor “Tactical” level.

All of our KPI’s and metrics are part of a system, and all systems have variation. It is completely stupid to reward a plant production manager in one month when he has a .5% of sales revenues scrap rate and then to flog the same person the next month when the scrap rate goes to 1% of sales revenue when the average over two years proves that the average scrap value per month is .7% of sales with expected +/- 3 sigma variation of 3% with no discernable trend upwards or downwards.

Yet despite years of exposure to statistical methods, you would be appalled to see how often just this kind of non-rational foolishness persists. Admittedly it is most prevalent in legal or finance types who tend to have difficulty with mathematics in the first place. As these two fields of study are disproportionately represented in the highest levels of modern American corporate management, I suppose it is not that difficult to understand why rooting out this type of behavior proves so difficult.

Using trends helps to show a picture. We can immediately see if we have a positive evolution of the data or a negative evolution of the data, or if the data is just bouncing around within predicable levels of variation.

If we have a positive trend, we can go out and figure out why. If we have a negative trend, we can go out and figure out why. If we have no trend at all, we know that we will have to go out and do something to the system if we hope to achieve a positive trend.

So after the first few weeks, Harry would start to have people chart their KPI’s to see if there were trends and what might be done to get a positive trend started or stop a negative trend or even just to understand why we were having a positive trend so that we could reinforce the behaviors that produced it.

It was at this point that Harry usually first made his initial personnel moves. By this stage, Harry had been observing the team and making notes, taking stock of the situation and coming up with his personnel decisions. Usually, precisely at this point, Harry would make his structural changes. Harry did this at this point because he was about to enter one of the most critical stages. To galvanize the team for this, Harry would make his changes. He felt that when the team sees the bad actors removed and the efforts of the contributors recognized, the team would cross-link between functions and start to act in mutually supportive roles, “It’s like an ice hockey team Donny, a constantly moving system that is mutually supportive, and where even defensemen score goals.” He would say with that cunning grin on his face.

So Harry would enter stage seven, “Teamwork”. Indeed, Harry’s concept of teamwork was very much like a Hockey team. The team had to flow. They had to change their positions based on what was happening in the game. They had to support each other. They needed to coordinate. They had to have their heads in the game.

For this to work effectively, the chemistry was important. So out went the bad apples, and in came the people that Harry had been grooming, and then Harry would start working the newly energized team. Harry was absolutely convinced that you needed the right personal chemistry within the team if you expected superior performance. Harry was right. My own experience had been that with the right team, I could almost not fail, but with the wrong team, even in the most manageable of situations, I would often have trouble succeeding.

Now Harry would start to point out the linkages between the differing functional groups and the financial performance of the unit. He would show how all activities supported one another; how it was better to think about what you were doing to the cost structure of the plant when you asked for more heads. Harry was getting the team to operate as a system rather than a collection of individuals, and this for Harry, was the essence of teamwork.

The next stage was to bring the most valuable linkages between the Operational level and the Tactical level, because it was here that Harry began to introduce all of the tools. Because the pump had been primed, because Harry had prepared the soil and provided the proper nutrients, the team wanted these things. They were not seen as some stupid mandate from corporate, they were seen as a way to get better, to improve the team’s position, to get “fit”, and to begin to compete.

So these tools would be seen and regarded as methods to improve the fitness of the team and the plant, and when they were introduced, they found immediate and willing acceptance. Stage eight was the “Continuous Improvement Cycle”.

In this stage, Harry would show why quality is so important. Although passion for the product is a critical, absolutely critical, success factor, it is not why quality is important.

If you are not committed to creating the most interesting, most innovative product, with the best quality product, you will not succeed. But that is not why quality is important. If you do not want to solve the markets problems or address its needs with the quality and utility of your products and designs, then you should stay out of the design and manufacturing business. You need that burning determination to be the best, but that is not why quality is important.

Quality is important, because the absence of quality decreases throughput. The absence of quality increases inventory. The absence of quality increases operating expenses. Quality means that all system elements are performing, as they should do, without waste, and without unnecessary costs. Quality is the underlying foundation of the Toyota Production System and the Theory of Constraints. It is what drives Kaizen, 5S and Lean. Quality is

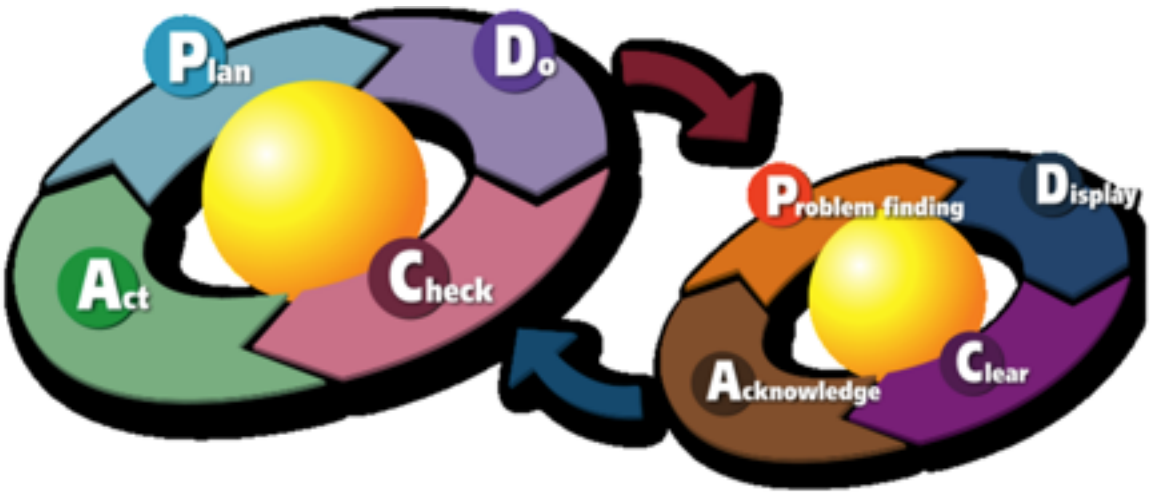
efficiency. Quality is an economic imperative. Quality means organizational fitness. Organizational fitness means competitive edge. Quality will make your company a long distance runner.

The “Continuous Improvement Cycle” was designed to foment the relentless daily pursuit of better quality and more efficient systems. This would, in turn, improve profitability.

This stage was concerned with forward motion. By now Harry had the plant management’s attention. They were aware that they needed to improve and by now they had developed and were tracking KPIs, and they were trying to determine trends. They felt like it was their plant and they were ready to operate as a team. So the machine had been designed and built and now Harry would start turning the wheel. Harry would stress that he was not interested in “revolution” but rather “evolution”. In other words Harry didn’t want drastic change, he was interested in many small incremental changes. He would employ a lot of analysis and some synthesis to help the team develop a systematic improvement methodology.

Harry would weave this effort into the control room and have individuals and teams report out on progress through the use of data and trends. The continuous improvement cycle would and should flow out of the control room and onto the shop floor so that all employees would be aware and involved in the process. Harry as the top plant manager of course would be standing there the entire time gleefully turning the handle on this machine and grinning as he dispensed advice and direction; again, always doing this by asking questions designed to elicit constructive reflection.

Harry always began this stage by working with the team to design a “C.I. Roadmap”. The “C.I. Roadmap” was, in fact, a fleshed out version of the time honored “Deming Wheel”



Harry would apply this basic principle in a manner specifically adapted to spurring the management team into action to implement the “Continuous Improvement stage”. This required an intimate linkage to the next stage, which was Stage Nine, the Training/ Coaching stage.

Having gotten the basics out of the way, the training would start. Harry used to emphasize the importance of training by showing how it had helped him. When we had first met, I had told Harry that I spent a lot of time studying team performance throughout history. I had made it my business to try and identify the common elements between successful teams. I had come up with five key consistencies that are always present when one looks at successful teams:

Unit Cohesion (Teamwork)

1. Training
2. Use of Intelligence, Misdirection and Deception
3. New Technology or Adaptive Re-use of Technology
4. Dumb Luck (Right place at the right time)
5. Harry asked how long I had been working on this. I said that I had been involved in this research for about three years. Harry then proceeded to explain to me how he had learned it in three days. It was the only time Harry ever told me a specific story related to his military exploits.

“Well Donny me lad, let me tell you a little tale about the value of training and teamwork from my perspective.

Many companies use buzzwords like training, teamwork, or preventive maintenance and they honestly have no clue what this really means. In fact I would say that unless you have been in a situation where you have maybe coached a winning team to victory or where your life depends on it you don't know the power of these few words.

Training, when you need to perform a surgical military strike on an assigned target, is critical. It doesn’t matter whether you go high or low tech with the assets you use, those assets have to be well trained. When people talk about the military, they seem to understand that units like Delta force, the Navy Seals, or the SAS are very well trained so that they are very effective. So why then do you expect in the business world that an unfit or poorly trained unit could achieve exceptional results?

Teamwork is another word bandied about carelessly in the business environment, and again, most ‘management types’, in my experience, have no real clue as to the power of true teamwork. How many ice hockey, football, rugby or any sports teams involved in a

real world level of competition, win the top prize if they are not a cohesive team? None, that's how many. I will tell you about how I learned this.

Some time ago, while you were drinking beer at the Paeffgen in Cologne, I was part of an 8 man recon team in a small group of islands off the coast of Argentina. We called them the Falklands and the Argies called them the Malvinas. Moving about was tough going. This was hard land to traverse with very little that was flat. It was bloody cold and wet, and our gear was the traditional issue although we all had some extra equipment, which was not always permitted as weight was always an issue when tracking many miles a day.

We had walked for nearly 16 hours with few short breaks. We had been doing this for three straight days and we were in need of a more extended break. We had observed enemy movement and reported that back to our HQ, however we did not engage them because our mission was to reach a high vantage point over the town of Port Stanley and advise on enemy strengths, tactics, and movements. We were trying to identify weakness in the defense posture that they had adopted.

We were half a day ahead of schedule, so I called a longer than normal break. My team needed to be prepared for the next week and I needed them in top form for what could happen next. Most people absolutely do not understand what "teamwork" can really mean. In our squad, each one of us knew each other better than we knew our girlfriends, brothers and sisters, etc.

I knew where my team was and they knew what I was doing, more importantly we knew what we were supposed to do in multiple scenarios and we knew each other well enough to anticipate how we would all react given any particular set of circumstances. This is the essence of true teamwork.

We dug in just under the ridgeline with an exceptional view across this rugged land. This was essential for both our survival and to the successful completion of our mission. We had established a complete 360-degree field of view and we all had fields of fire established. There were never any night vision goggles back then, but we did have monofilament fishing line that we rigged across the only two rugged tracks in or out of our position. Any movement across those tracks and an old fashion tin would rattle and then all hell would break loose.

Shorty, a six foot five Yorkshireman, had the primary route in covered with a grenade launcher and machine gun. The only 7.62mm rounds we carried were for the L7 machine gun, which was effective, but was heavy and needed a lot of looking after. We were mostly armed with the smaller caliber 5.56mm NATO rounds that fed into extended 45 round magazines that fed our preferred weapon, the M16A2. This was a very effective weapon even though it weighed in at just a scratch lighter than eight pounds. Other members of my team were Trevor, the toughest guy I ever met, who stood a good 5 inches taller than me, not that I am small, and we teased him about keeping his bloody great head down. Little Tommy was our sniper. We could all shoot pretty damn well, but in high cross winds and at extreme range there was no one better than Tommy and I

wanted no one else watching our backs. Steve was on the radio. He was always as mad as hell and twice as mean as the rest of us put together. He always wanted to be first man through the door or the last one out. All of our gear was well maintained. Preventive maintenance is the first rule in warfare. If your gear breaks down in the middle of a firefight, well, that's you, fucked. So you make sure all of your gear is in tiptop shape ***before*** an engagement so that is stays reliable in the first place. It always amazes me how many people with military backgrounds forget this simple rule once they get back to the world. Not only was our gear cared for so that it didn't go down at an inopportune moment, but we were all cross-trained on weapons systems, commo gear and even first aid. We were a well trained, fighting fit team. We operated as a unit and trusted each other with our lives.

That night, shortly after it got really dark came a rattle, rattle from the tin. Steve was on watch, we had been resting for no more than 90 minutes and we were in for our first engagement. Rattle, rattle went the tin again. We were all alert and locked and loaded, safeties off, and prepared for whatever came through that rough pass. The line went silent. I can remember my heart was pounding so fast that I swear I could hear it. My mind was going 10,000 miles an hour and I thought I was going to jump out of my skin but then the months of training took over, and I snapped some hand signals to the team to stay in place and check our exit route. I gestured to Mike, conveying the fact that I would need a way out if it got too hot and they got around to setting up mortars. Tommy had the covers off his scope and he was panning around. Although it was just before dawn, there was enough light to get a fix, and if an unlucky member of team Argie put his head up, Tommy would most assuredly take it off.

After about ten minutes passed, we saw maybe 30 to 35 enemy soldiers, making their way onto a vantage point on the hill next to ours. My team looked for the "go" signal and I looked at the field of fire. We were outnumbered but we had the element of surprise. The enemy did not know we were so far advanced, they obviously thought we were still at the beachhead on the other side of the island where the Mirages and the Harriers were having it out. My first thought was that what we were on was a recon and tactical intelligence gathering mission, and so my initial reaction was to bug out to retain our cover and continue to collect more information on the size and disposition of the enemy's forces. But then we saw the Argies hauling some heavy mortar and communication equipment and I realized that these guys could represent a real danger to our people and that therefore this was a tactical target that we had to go after. So I made the signal to engage.

The surprise, the pre-referenced fields of fire and above all our training resulted in the enemy unit being down to about 50 % strength in about 60 seconds. They had come to this ridge with little or no training, this was clear to all of us by the way they scattered and then were unable to compose themselves under fire. I could hear my team, 'crack, crack, crack', 'crack, crack, crack', firing multiple three shot bursts. I saw two enemy

soldiers just turn and run down the hill as fast as their legs could take them. These guys were definitely not concerned about their fellow soldiers. We advanced on the enemy unit and they scattered and started firing randomly in all directions. Crack, crack, zippppp was the noise on a rock next to me, ‘fuck’ I thought, ‘that one was close’. Tommy saw my reaction and I saw him roll around 90 degrees then take two shots, and the soldier that had fired at me was dead before he hit the ground. Before I was even aware of what we were doing, we had moved in two man teams in an arc formation and it was over in just a few minutes with all but 9 of the enemy dead or wounded.

We secured the radio, maps, and anything else we could use, called HQ and they sent in one of the few helicopters at their disposal to bring the intel we had gathered and the one remaining live officer back for interrogation. They brought us fresh supplies and ammo, and we hauled out double time to the next vantage point.

I seek to apply these simple lessons in the control room. Once we know what to do, and once we are a team, I train the hell out of the management group. This is always my biggest bone of contention with the bean counters. I get stupid questions like ‘what if we train all these people and they leave’, to which I always reply, ‘what if we don’t train them and they stay?’ ”.

This was why Harry’s concept for the control room always ended up being a forum for the results he got from his continuous improvement program.

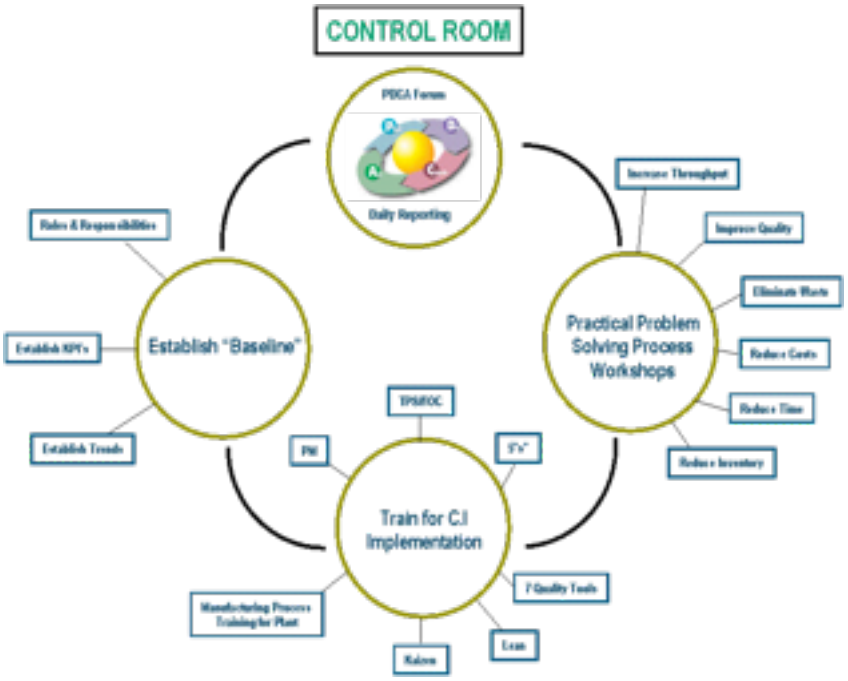
The control room would launch the initial seven phases, from awakening through trends and teamwork and then Harry would spring the C.I. stage and start training, phases eight and nine. This would lead to workshops and implementation projects, which would then be fed back in a closed loop to the control room to document progress and provide the venue for the new lean thinking, no blame environment required to keep the crank turning on Harry’s C.I. machine.

These usually took several months and a budget but, because we were now in charge of the division, were already having some success, and the Finance guy was willing to play along with the two crazies, this was no problem.

Harry was also always careful to train practically and just didn’t train so that boxes would be checked. We would sit together and work out a training program that was implemented to include basics in whatever process technologies were in play in any particular facility. Welding operators would be taught welding basics, stamping fabrication departments were taught about tools and presses and what applications were most applicable for particular materials and press types and tonnages.

Once it was clear that the departments had good solid understanding of their processes, we would turn loose the training for TPS, Kaizen and Lean manufacturing so that we would get the biggest bang for our corporate buck.

Then we would start the practical problem solving workshops and start to really ratchet up the groups performance. The control room and our hands on methods for stabilizing the patient were already yielding results. When we had gotten to North America our first months operating result had been a negative 3.7% EBIT. At that point, the owner, Bob Stein, had gotten on the phone and shared with us, in a very vocal manner, his conviction that the North American division would never make money. He was "positive" that our entire exercise would prove to be a colossal waste of time. In this case "positive" meant being mistaken at the top of his lungs, because by the end of the third month, we were at a positive 8.2% EBIT. These were the results we had gotten just by stopping the bleeding and stabilizing the patient. Over the next six months the results of the Continuous Improvement stage would begin to manifest themselves and kick in. We wondered how far we could get it before we took all of the slack out of the system. Harry reckoned we could get it up over 14%. We had to get the entire plant moving towards a lean mentality and the continuous improvement stage, using Harry's control room as a forum, would continue to help us document and track progress.



The main thing was to continue to make progress in an environment that stressed seeing the plant as an organic system, a network of interconnected events, and how each player's job performance was critical to the success of the entire plant enterprise. This had to be done rationally, in a no excuses, no-blame environment dedicated to creating a lean, fit enterprise, which could survive in the environment if piloted properly.

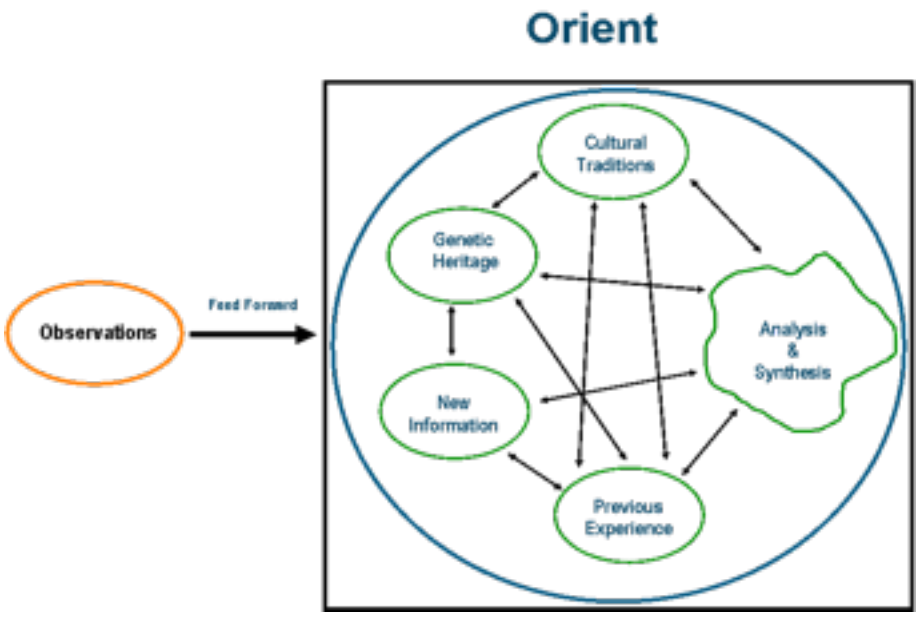
Harry would now move into the forward-looking stages of plant actualization. The first nine stages had been focused on improving plant performance in the immediate, short

term and medium-term time frame. Now Harry would start to work on heading off future problems.

One of the things that time and experience had taught the both of us, was that the local culture was not to be underestimated. When we looked at companies that had won and companies that had lost when moving from their native “homerooms” to foreign shores, we had observed that those that had failed often did so because they were unwilling to modify their own corporate and national cultures and instead had attempted to create mirror images of their homeland and its systems and cultures in the foreign subsidiary abroad. This would often run into unforeseen cultural realities and would cause internal friction and resentment. As we all know, if you get enough friction into the system you create heat. Eventually the entire thing can grind to a halt. So Harry sought to teach the team to adjust the way that they “Oriented” to the company and worked very hard at making sure that the company “Oriented” itself to the local culture that needed to be understood and respected if optimal performance was to be teased out of the system. By increasing understanding, by “educating” everybody to the possibility of the addition of friction into the system, Harry would keep the friction out.

Internal friction within a corporate system has to be minimized at all times. If the internal friction becomes too great, the corporate organism will begin to become inwardly focused. The organism becomes sick and starts to think about itself more than its interactions with its environment. This can have deadly results for any organism, be it corporate or animal. If you become more concerned with internal disease, and if this causes you to become more focused on alleviating pain rather than finding fresh sources of nutrition, you will not be able to compete with other animals fighting for the same sources of nutrition.

During the “Orientation” phase of the Observe-Orient-Decide-Act cycle, any organism references its observations against several internal factors. It bounces new information against its previous experience and through its cultural traditions, genetic heritage and the analysis and synthesis required to try to make sense of the new observations.



If some of these factors are not completely considered, or if the cultural traditions are too ossified to adapt to the information, bad things can happen. So Harry would use stage ten "Culture: Inside and Outside" to make sure that the plant team was aware that they had to consider both the internal culture of the corporation and their national and regional cultures.

Harry would focus on making sure that the directions coming from the company, the customer, and from within the plant itself were considered in light of experience, traditions, and heritage and would pass through, rather than collide with, these factors.

By creating an expectation of the need to adapt to internally driven corporate cultural mores, Harry would be able to head off resentment and minimize friction by having the plant management understand the differences in approach between German, American and Mexican mentalities and preparing them, not to confront, but rather to adapt to these differences, and thereby a lot of needless and counterproductive friction would be avoided.

DSI, for example, was a decidedly German company. It had been in existence since 1849. The company had what might be called a genetic component. Just as certain gene pools can give certain groups advantages in long distance running, or flexibility, or advantages at mathematics, the genetic structure of DSI gave it something that was not just culturally German, but rather specifically, it manifested unique DSI traits.

Since its creation, the company had always been involved with the materials it used. We would work with boutique steel mills to develop proprietary steel formulations for use in our products. Even most German companies were not as crazy as this, but we were, and

this “genetic” component had carried forward from 1849 to 2010 and we were still involved with our own steel formulations. The thing was that this gave us an advantage.

When other competitors tried to take “off the shelf” steel that, on paper, had the same yield strength as ours, it would fail in testing. It drove them nuts. “How was DSI doing it? Why does theirs work and ours doesn’t?” It was because you could not take a superficial approach to this. You had to get into the details and understand the chemical and physical properties of the steel at a molecular level. You had to deeply understand the enabling technologies that you were using to create your product. This need to understand the physics behind the engineering was part and parcel of DSIs genetic heritage and we had to all be sensitive to this and to learn to employ it to our advantage.

Besides genetic heritage, there were also the cultural traditions that are incumbent in German companies. Germans value detail and control. Americans tend to favor independent action and improvisation. So there is a looming built-in conflict when the two cultures meet. Both approaches have advantages, but when they run into one another without having prepared the minds of at least one of the groups, collision and friction can result. Instead of taking the best aspects of both cultures, the worst of both cultures emerge. The Germans can begin to insist in control at the expense of success and the Americans can become subversive.

However, if one of the groups has been made aware of this possibility or even an actual pending collision, they can prepare their minds to be able to adapt to the situation and realize that the other group is not just being stubborn or overly concerned with aspects of business which we might find ridiculous, they have genetic and cultural predispositions that will cause them to behave in a certain way tendencially. We can therefore end with a company that takes the German love of detail and fuses it to the American tendency to improvise and end up with a system that, taking the best properties of both systems, creates flexibility. Flexibility looks like improvisation but it has solid detail based underpinnings that improvisation is often missing.

So these aspects of Genetics and Culture can have a real impact. 90% of what motivates somebody in the USA is the same in China, Japan, Germany or France. But if you do not deal with that 10% difference, you can wreck your company. Harry’s focus on “cultural awareness” was designed to minimize the amount of non-value added activity and friction that will always arise when cultures meet. Harry was always going to make sure that his plants knew how to deal with the customers, with other DSI plants in other countries, and with HQ.

Harry’s last two stages of his twelve-point actualization plan involved succession planning. First, in stage eleven Succession, Harry would insist that each of his managers plan for their own succession. This meant that each person on the staff would have to pick their most talented employee and begin to act as, what they call in the Navy, his or her “Sea Daddy”. A person’s “Sea Daddy” takes a mentorship role and watches out for development of the person. This was the type of approach that Harry wanted, and oddly

enough it was one of those moments where Harry knew if he really had the people or not. If he had them convinced, if he had earned their trust, the succession planning would go smoothly and effectively. However if it proved difficult as it often will when people are unsure of the security of their positions, people might resist in actively participating in the development of what might be a threat to their own positions and livelihoods.

If Harry was unable to engage the management group in this succession mentoring process, he would have to reboot and do more work.

At the final stage, Harry would have a team built where the plant knowledge was so deep and so broadly understood by every member of the management team that virtually everybody in the control room had the capability to do the other members' of the management teams job. Harry himself admitted that he had never completely gotten a team to that point, but he was close on a couple of occasions. Harry's theory was that with perfect interchangeability came optimal performance.

So this was how Harry expected to spend the next six months. This was his plan and his roadmap and we both knew that he would start pushing his Tactical level up as well as defining and refining his Operational level. But what, pray tell, was Donny going to do?

We figured we had about six months to complete the turnaround or else we were going to end up folding the tent.

So now I had to do my bit.

Don Week 6 - Detroit

My plan was as follows. I too would begin with an Awakening stage. Mine would be different to Harry's, as I needed to wake up the team to the fact that I needed everyone to start engaging with the environment and reading the signals it would provide.

If I could get the Detroit staff focused on how to respond to external factors and be less interested in the internal machinations of the corporate organism, we could begin to start assembling the sensor array needed to provide the information we required to keep our increasingly healthy organism moving through the dynamic, non-linear environment in an agile, opportunistic, and reactive manner.

I would hit the Detroit office and first hold a staff meeting to rally the troops. Then I could take a look at the structure and redeploy the assets in a more balanced and effective manner. I would then start management meetings where we discussed the market, market trends, market opportunities, and what we should be doing within that framework to be successful.

The focus would be on developing an organization that was taking in information from the environment and processing that information to formulate responses that seemed appropriate. The overarching goal was, however to make the management team understand that, any plan might become obsolete at a moments notice; that the goal of our

organization was to be agile. To be able to transition from one plan to another while maintaining forward momentum and initiative were of paramount importance.

During my first all hands meeting, I asked the group to tell me what business we were in. I, as had Harry, got a lot of blank stares and loose jaws. Finally someone said, “We make seat adjusters”. Then there were lots of suggestions, “we make seat structures”, “we make seat systems”, etc.

After a few minutes of this, I asked. “OK, what does Kodak do?”

“They make cameras and film”

“What do Fuji and AGFA do?”

“What is an AGFA?”

I explained that AGFA was the biggest maker of photographic film in Germany.

“OK so what did all of these companies do?” I asked again.

“They all make film”

“Do they make much film anymore?”

“Nobody makes much film anymore. Everything is digital now.”

“So what did they do wrong.”

“They didn’t do anything wrong, the market just changed.”

“What business were they in.”

“The film business.”

“Really, what does the film business do?”

“It makes film for cameras.”

“What is the film used for?”

“Taking pictures.”

“What are pictures used for?”

“To document things, what people do, where and when they do it.”

“Why is that important?”

“Because people like to look back later and remember what they did and how they looked, who they were with…..”

“So you might say that these companies were in the memory business?”

“The documenting of memories business.”

“So if they realized what kind of business they were in, what should they have done?”

“They should have started making those little memory cards that they put in digital cameras.”

“Why do you suppose that they didn’t?”

“Because they thought they were in the film business?”

“Well, it is probably a little more complicated than that, but essentially yes. If these companies had seen themselves in the memory and documentation business instead of just the film business, they may have had a different approach to their businesses. If they had defined themselves in this way, they might have been better prepared mentally for change. You see, technologies and products may become obsolete, but the basic need for documentation of memories as well as data always remains. Somebody is bound to fill that need.

So, had these companies been able to process the new information coming from the environment and reorient themselves to adapt to the new situation that was unfolding before them, as digital cameras became more prevalent, they might have been able to apply their resources to make the market for memory chips. Instead, they were locked into the view that they were film companies, with millions invested in the making and marketing of photographic film. They more than likely started way too late to recognize the threat and respond. By then, other people had filled the void.

Moreover, if they had, from the beginning, recognized the true nature of the business that they were in, they might have been into other documentation media far earlier and could have already possessed the technology, know-how and capital equipment to answer the change in the market. So how we define ourselves can be very important to the long-term success of our enterprise. We have to define ourselves in a manner that recognizes that change is always present and we must be structured to adapt to unfolding circumstances quickly and without the loss of forward motion. We should always try to prepare ourselves mentally to retain the initiative by adapting more quickly than the other guys can.” I then took the team through a similar analysis of what we did and ended up convincing the team that we were not a seat track, seat adjuster or seat structure company, but instead that we were a solution provider for kinematic problems in vehicles.”

In this way I had taken the first step to preparing the team for a more open-minded approach to going after more business with a more flexible mindset. I would next commence a weekly meeting between Engineering, Sales, Purchasing and Program Management to review. During these reviews we would discuss the market and our approach to it.

By opening the teams’ minds to what we could be, I was then able to embark on a program designed to determine what our Marketing strategic plan should be in terms of products, material, technologies, and market sectors and I would also be able to generate a Sales strategic plan with unique approaches to each sector, customer within that sector,

and sales opportunity within that customer. This would all be charted out and discussed in terms of resource allocation and deployment for the coming year. Alternatives would also be discussed to keep that team aware that everything might change at a moments notice and that we had to be ready to adapt quickly.

So at that initial meeting I wanted external focus and statistical thinking, so I spent quite some time talking to the team about unpredictable variables and how we might organize ourselves to deal with them. I also talked about the cumulative probabilities of bad things happening.

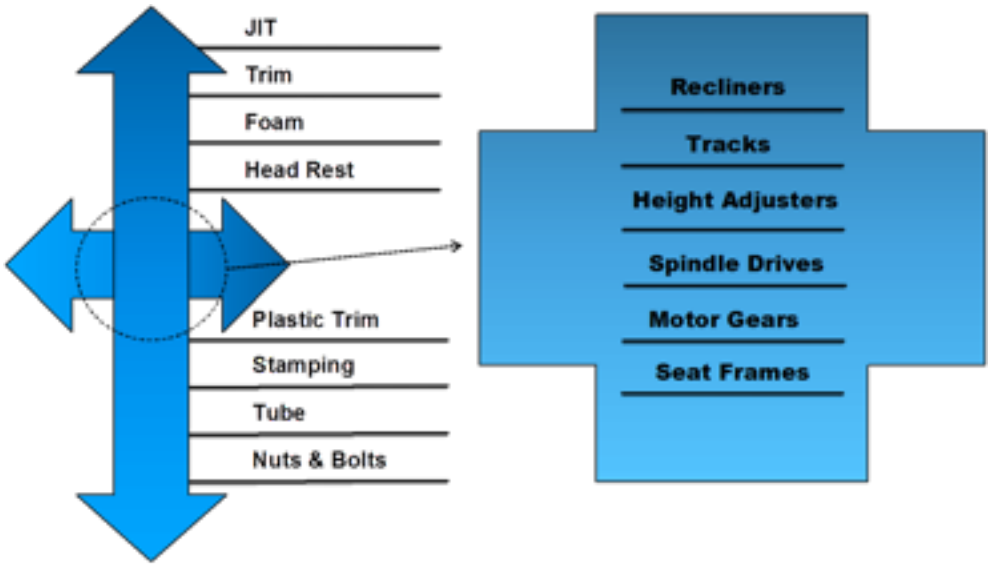
Bad Event Will Happen	Bad Event Won't Happen						Bad Event Will Happen
Annual Probability	Year 1	Year 2	Year 3	Year 4	Year 5	5-Year Probability	5-Year Probability
5%	95%	95%	95%	95%	95%	77%	23%
10%	90%	90%	90%	90%	90%	59%	41%
15%	85%	85%	85%	85%	85%	44%	56%
20%	80%	80%	80%	80%	80%	33%	67%
25%	75%	75%	75%	75%	75%	24%	76%
30%	70%	70%	70%	70%	70%	17%	83%
35%	65%	65%	65%	65%	65%	12%	88%
40%	60%	60%	60%	60%	60%	8%	92%
45%	55%	55%	55%	55%	55%	5%	95%
50%	50%	50%	50%	50%	50%	3%	97%

I showed how the five-year probability of something unpredictable and bad for our industry was almost 100%. Therefore, the ability to change plan and direction quickly was of paramount importance. How were we supposed to grow in this type of environment?

Now that I had this brewing in their minds, I asked the team to think about our definition of the company as a kinematics' solution provider. How would we approach the Market using this new definition?

So I drew an arrow.

AUTOMOTIVE SEATING PRODUCT CONTINUUM



I used this arrow to show where we were. This was the only business that we were thinking about. Even though we had a new definition of what we were, where we were was in automotive seating. There were a couple of exceptions to this, which I would take advantage of presently, to show where we could go.

Automotive seats start with simple fasteners, nuts, bolts, rivets, lock washers and move up the product continuum until completely finished seats are delivered Just-In-Time (JIT) to the automaker's assembly plant. However, it is in the very middle of this continuum that all of the real technology and innovation reside. This is the area where the mechanisms, those building blocks of the seats functionality, are integrated into the seat. Mechanisms, particularly reliable, cost effective ones, that provide the most comfort and highest degree of safety to the customer, are not easy to do. Yet this was where DSI lived. We designed tracks, recliners, gearboxes, spindle drives and had worked closely together with motor manufacturers to develop the little motors that power your car seat when it goes back and forth and up and down. Like our approach to steel and other materials, our corporate genetic heritage and cultural traditions had pushed us to working closely with our supply base to co-develop almost every component. Other manufacturers would have just looked for an off-the-shelf solution without really understanding how it worked. That was simply not DSI; we ***had*** to know.

This allowed us to start synthesizing a market solution. Again, what Harry was doing in the plants was to push the Tactical level into the Operational level by the **analysis** of his data every day to determine whether or not he was fomenting positive change. In contrast, what I would be doing was to energize the team using **synthesis** to drive the Strategic/Policy level down into Operations and Tactics.

The difference between the approaches is simple. Harry had a lot of data, a more or less complete data set. He could deconstruct that data and perform analysis to reach a conclusion. He still had to use some synthesis, but his job was mainly analysis.

On the other hand, I was faced with a situation where I could never have all of the data. I could never understand the system because it was too volatile, too dynamic, and too complex. So I had to get the team to look at an incomplete data set and synthesize a decision and create a set of actions with the highest probability for success. I also had to redesign the organization so that it could turn the observation-orientation-decision-action loop as quickly as possible.

Don Week 7 - Detroit

At the second weekly strategy meeting I brought out my arrow again and asked the group how we could start to formulate an approach to take advantage of the situation. I introduced a new concept at this point.

It is commonly accepted in the modern manufacturing environment that one of the most desirable methods to use in the production of almost any product is to "pull" the product through the plant from downstream operations. The approach is simple and self-regulating and while work centers and suppliers should be working with a schedule, the actual authority to produce or to supply comes from the end of the process chain and "pulls" the material to it.

We would use a similar concept only instead of "production pull" we would, in the Strategic/Policy Level, utilize "market pull". We would find opportunities and pull our resources towards the opportunity that we had identified. We would avoid taking on a competitor where he was strong and instead look for an area where the competitor was weak, we would observe the market and run our hands across its surface until we found a gap. We would have to orient to the found gap, reach a decision and act. Since such a gap is by its nature transitory and fleeting we would have to rapidly and ruthlessly exploit it. This again shows the importance of turning a fast O-O-D-A loop, since the gap will close, you must pull the resources you need to exploit the opportunity quickly. In this way you may utilize your scarce resources in a manner designed to pull towards a perceived opportunity. By operating your Marketing strategy in this way you accomplish three things:

First, you get there first with the most. You are exploiting some aspect that is not being exploited by your competitors (like Steve Jobs did with the I-Tunes store)

Second, you minimize spending on unpromising targets. You will only "pull" your resources to a high probability target.

Third, you show up where there is no competitive presence to offer resistance. You can therefore keep moving quickly and can have a solution to provide to the customers before they are even aware of the situation and avoid being bogged down in an extended auction where profits are minimized.

In addition to pursuing these "targets of opportunity" we would have to identify strategically important business objectives, in which we have to ***produce*** a gap that we can go through. The best way to do this is to compete asymmetrically. This means that we use unfamiliar tactics and techniques so that we compete on our terms rather than on the competitors' terms. This means that we do not have to be bigger or have more resources, we only have to exploit our competitors' weaknesses.

The best way to explain this is to cite the example of what we had done while I was the CEO in 2005. We identified the fact that our prime competitor had serious image and performance issues with our targeted customer, particularly in the Engineering venue.

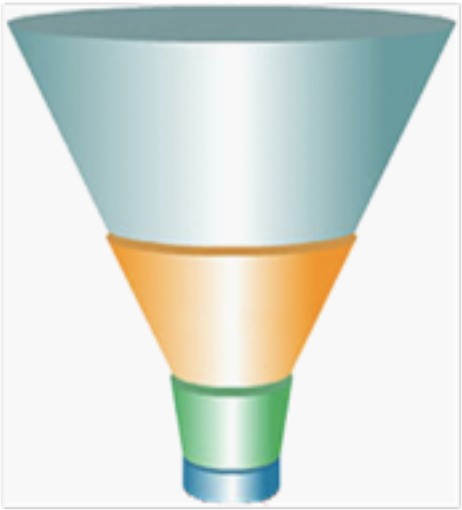
So we infiltrated the customer Engineering group and "helped" the customer write his new product specifications in such a manner that our prime competitor had a very difficult time meeting the new specifications. We had an excellent team and we were able to convince the customer that based on our past performance, he would get a product that would virtually eliminate his warranty costs, which were substantial, and give him features that he had never had before (it did, by the way).

By the time the request for quotation came out, the battle had almost been won. We had gotten so far up the "sales funnel" that the customer saw us as part of the solution and the customer-engineering group wanted our solution to the exclusion of all others.

In this manner we were able to win the contract and with that we became the biggest supplier in our segment in the North American market within eight years of arriving here.

We had gotten involved while the concept was still being finalized and this had given us a significant competitive advantage.

THE SALES FUNNEL



Once I had these points across, I asked the team for an assessment of how we would best deploy our resources. They wanted to know more about what Harry and I had in mind first. So I decided to give them a little more background the following week.

Don Week 8 - Detroit

So I had gotten the team through the Strategic/Policy level of the Awakening. I had presented them with the chaotic nature of the market, presented them with our inability to ever understand it, given them a new definition of what our mission was, shown them where we were on the product system continuum and explained the need for creating or exploiting gaps in the market coverage. Finally I had introduced them to the concept of the sales funnel and how the probability for success was dramatically increased by positioning the company up in the sales funnel where we could exert influence in the customer's decision making process. But before they wanted to discuss the new structure for the company, they wanted to know a little about direction. What, they were asking was the direction that Harry and I saw for the company. So I asked them, based on what we had discussed the week before what they thought.

They had understood that we were only thinking about automotive seat structures, and they understood that I had been telling them that this wasn't enough. But they didn't see where I was going yet. So I asked the group "What should we do next?"

"We should become more vertically integrated" came a response.

“Why”

“Because we will make more money.”

“Will we?”

“Sure we will, we will add the sales volumes that we are giving to the supply base to our own revenue numbers.”

“So you are saying that we should buy a supplier?”

“Yes, or just buy the production equipment and start doing it ourselves.”

“What, for example?”

“Well we buy an awful lot of plastic gears for our gearboxes, why don’t we start doing those ourselves?”

“Does anybody here know anything about plastic molding?”

Silence

“How long do you think that it would take us to be as good at something as someone is who has been doing it for years?’

Silence

“So we might end up spending more to make the parts than we can buy them for because we are not experts at this manufacturing technology.”

Silence

“Does anybody know how much plastic injection molding machines cost?”

“They aren’t cheap”, came a response.

“Don, why did you show us that seating continuum if you didn’t mean that we should become more vertically integrated.”

“Guys, I am not saying that we shouldn’t”

Silence

“The point of last week’s exercise was to show you the business we are in and where we currently fit into it. My point was that we currently have only two directions to go. We can either go down and start making more and more components, using technologies with which we are unfamiliar, or we can go up and start working towards delivering more sub systems and finally, the final product. All of this may be possible and may even be desirable, but there are other options.”

“What options?”

“Well, think about what we are good at.”

“We make good mechanisms and good gearboxes and spindle drive units”

“OK, and we use these in our seats, right?”

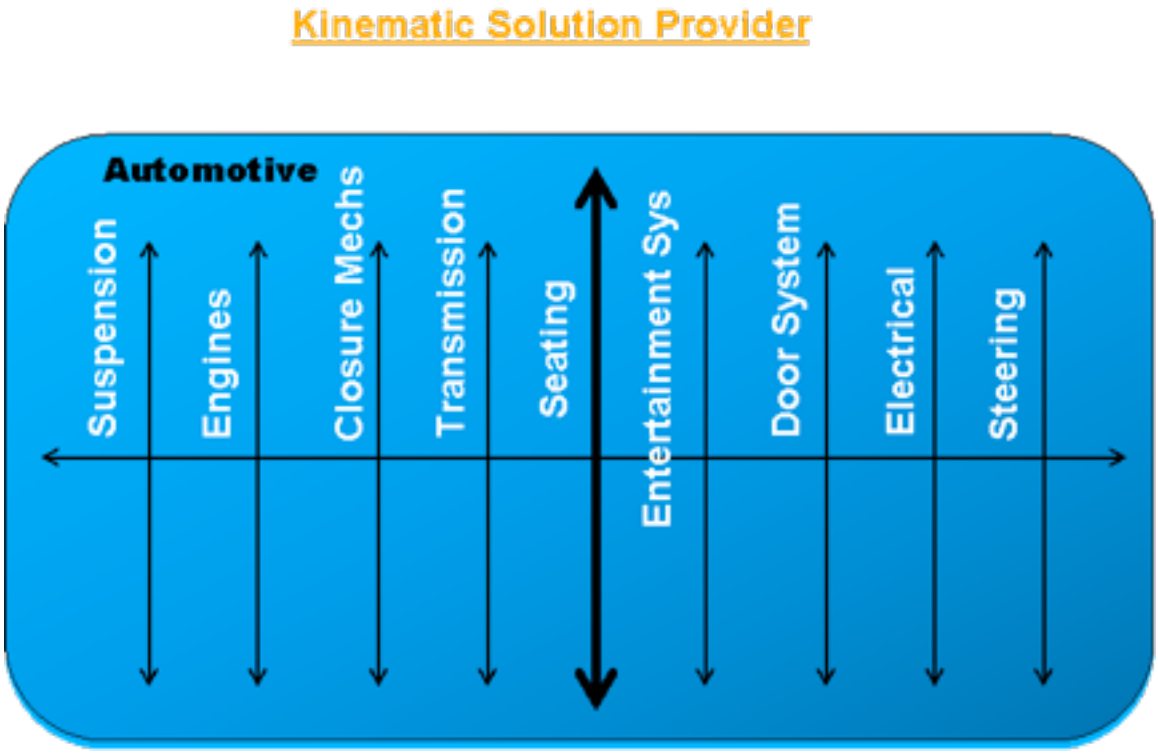
“Right.”

“Can you think of where else these might be used in a car?”

“What do you mean Don?”

“Where else, in what other vehicle systems are mechanisms, gearboxes and spindle drives used?”

Silence. So I drew another set of arrows.



“OK gang, if, as we agreed last week, our new definition is NOT a seating supplier, but rather a kinematics’ solution provider, why do we have to stay in the seating arena? There are other vehicle systems that use the same building blocks that we use in seating to create other products.

Remember, the seating system line that we drew last week had a mid-section that showed all the mechanisms that we design and produce. We can take those mechanisms and adapt them quickly to be used in other vehicle systems. For example, we took our motor-spindle drive technology a couple of years ago and adapted it to a powered steering column adjuster for one of our German OEM’s.

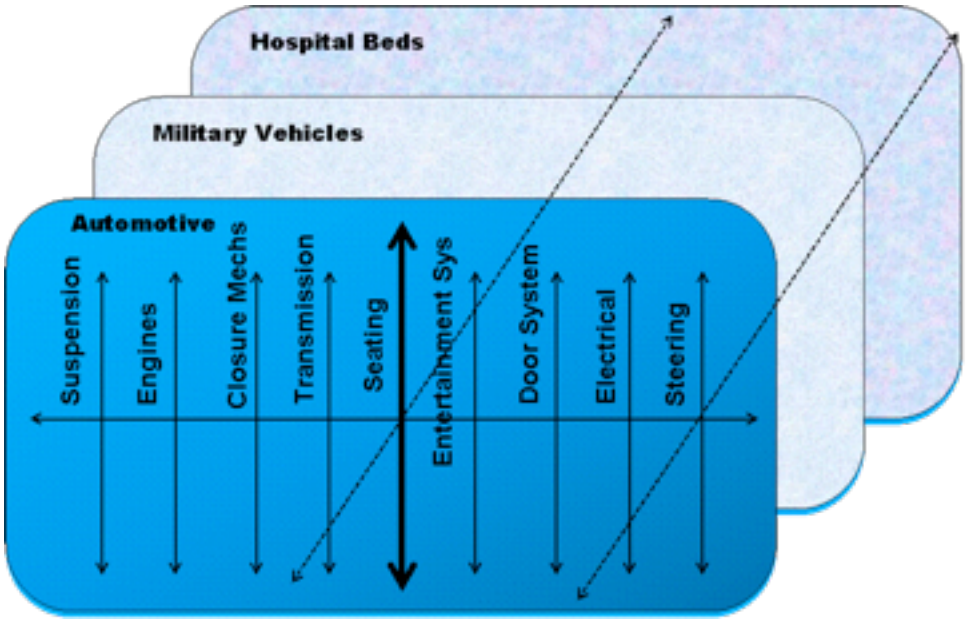
Last year, when we started the new product group, which we set up just to do this kind of thing, we found a gap for another German OEM who needed a localized solution in China. We were able to win this business because we were first on the scene with a solution. No messy quotation process. They were in a hurry and because we had our minds right, we were able to react quickly, slide into that gap and expand our customer base and our geographic presence for a product that we had just gotten into.

We just took our "building blocks" and reconfigured them to meet a new market need. This was a very good example of being able to use your talents and existing technologies to turn a fast O-O-D-A loop and, for very little investment, "pull" your resources to address a high probability opportunity. In this case, we not only increased our market penetration, but we got a brand new customer in a brand new region in the bargain.

So the question is, where in the other vehicle sub-systems, can we employ our "building blocks" to provide our customers with a solution that they need?

So our answer may be some combination of increased vertical integration along the "Y' axis, that is, where it makes sense, but also to take the current technologies that we are good at and finding other opportunities along the "X" axis.

But now, dear friends, let me really blow your minds. Think of the X and Y-axes as residing on an "industry window" that is two-dimensional. If we are clever, we can further deploy our technology building blocks along a third axis, the "Z" axis.



By taking this approach, we can further deploy our technology “building blocks” into other industry “windows”, for example the same type of linear drive technology that we specialize in can be found in both non-automotive vehicles such as military vehicles or emergency response vehicles as well as in hospital beds.

These other opportunities would have to be “reconned” to determine whether there were “gaps” that we could exploit to gain easy access to a new industry without going up against an entrenched competitor in a defensible position. Only if the “recon pull” revealed a “market gap” would we “market pull” resources to exploit the gap for maximum penetration with minimal investment of resources.

What I want this team to do, over the next three months is to develop a plan to use the approaches we have discussed during the last two weeks to turn this company, and most especially this group, into the sensor array and navigation system that will be able to guide our corporate organism through the business environment in a manner engineered to give us the highest probability of success and rapid, profitable growth. I need all of you awake and engaged. We are going to return DSI to profitable, intelligent growth and it is going to be this group that does it.”

They banged on the table, and then I bought the beer.

Don, Week 9 Observation - Detroit

So now they understood our environment, or rather, they understood that we would never really understand our environment. They knew the method we would use and they understood that we would mirror a “pull” system from production in our approach to the market and they knew that we would seek opportunities in multiple dimensions. They knew we were going to be doing it quickly.
What I needed to do now was to make sure that Harry and I both shared and inculcated a common outlook throughout the organization. It would be necessary to observe the environment as well as the results of our decisions and actions using a common approach.

If we were to empower the people throughout the organization to give them the freedom of action required to turn a fast decision loop, the danger increased that our actions would lose overall coherency or even pull the organization apart. We needed people to act boldly and show initiative, but it had to be in a manner consistent with the goals we had for the organization.

We would need a unifying concept and some basic organizational priorities that would provide implicit guidance sufficient to allow people to make decisions by themselves that would be in harmony with the wishes of the management. So, for example, increasing throughput was always desirable unless there was a negative effect on quality, or an increase in cost. We, as the leaders of the company, had to provide a common outlook if we were to give our subordinates the freedom of action they would need to truly be effective and yet maintain the coherency of the ongoing action required at all levels to turn the company around very quickly.

Another problem that we had dealt with in the past was that once you gave local groups the power to use their minds and their initiative, they would begin to act with much greater rapidity than the headquarters could process it. This tension between the requirements for control and cohesive overall actions and the necessity of allowing our corporate agents, wherever they might be, to respond to fluid situations by using fast decision loops had to be addressed.

The smaller, local gears in the corporate machine would have to keep turning quickly,

and in such a manner that the larger, central gears, could lumber along more slowly but still in synchronicity and harmony with those smaller, faster turning gears.

We needed to engineer a system that would allow the remote elements of the organism to mesh with the other parts in order to produce an integrated process. If we could design something that would get all of the gears working together, we could produce several very positive effects. We could create a transmission, which could both create mechanical advantage and would be able to control the speed, magnitude, and direction of all of those localized power sources.

We had to provide a system that would fix responsibility and shape commitment at all levels and through all parts of the company. A process that would be effective through all levels to link the differing rhythms and patterns so that each part of the entire organism could operate at its own natural rhythm without the slower pace associated with rigid centralized control while still maintaining an overall coherency of cumulative actions designed to bring about a given goal or goals.

This couldn't be done with a "vision statement" or a "mission statement" or any other superficial bullshit out of some MBA book. Harry and I were going to have to create a harmonizing tool that would be used to shape commitment and convey or carry out our intent, at all levels from headquarters to assembly line. This tool would have to allow us to focus all resources and support functions to exploit opportunities and maintain a fast tempo of operations and harmonize the efforts of many subordinates with our intentions.

Only by creating a process that would do this could we hope to successfully push those three circles together. This "process" would, in effect, allow us to put a chain around those three circles and start winching them together. Harry would use his control room and I would use my sensor array. Both would require training and a lot of personal attention from the two of us.

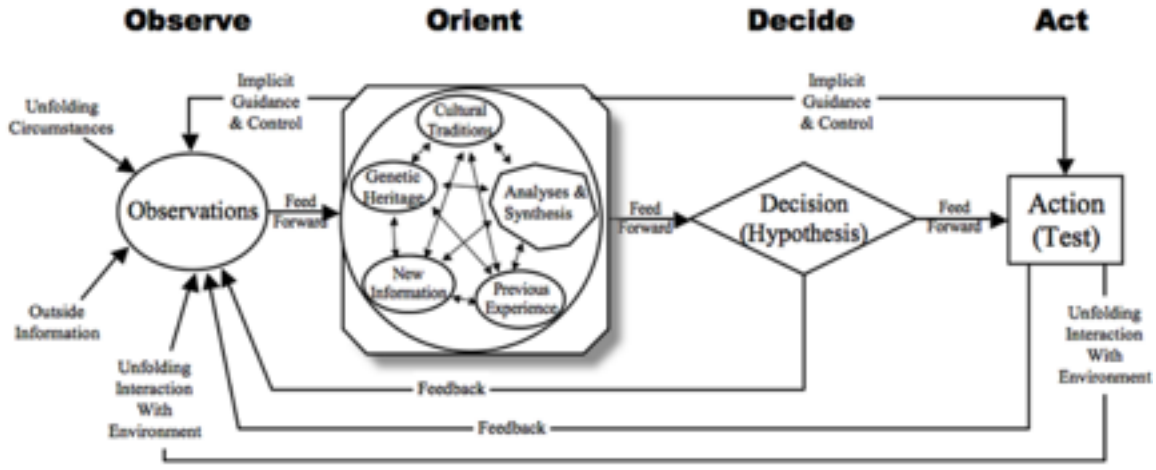
We had to start by teaching Sales, Engineering, Program Management, Purchasing and Finance to turn a decision loop. We would teach them how to observe, orient, decide and act. Of course, I would be indoctrinating as well as teaching at the same time. I hopefully would be starting to create that unity of viewpoint that would in turn create that common outlook we so desperately needed to succeed. And if I was lucky, I would learn a few things too.

Don, Week 10 Observation - Detroit

So I started off the next session by explaining that Harry and I had split up to address the two basic aspects of our turnaround. Harry, leading the operations team, would focus on organizational fitness through operations, while I, leading the SG&A and Engineering team, would focus on creating our navigation and response system.

Two missions; two teams. Since ours would be the more externally focused mission, I decided to start with the process of turning a decision loop.

So onto the screen went the O-O-D-A graphic from Boyd's 1995 lecture "The Essence of Winning and Losing," as reproduced and explained by his associate, Dr. Chet Richards, in his book *Certain to Win*:



"OK folks, we know the mission. We know what we need to do, grow profitably, and we know all those little items we have discussed over the last two weeks about how we go to market and how we attack in all directions without spending all the money in the world. Now we have to start developing an approach.

We have talked a little about decision loops, but now we should review how this works. The first step is, of course, observation. Let's take a look at that.

We see that there are six inputs into the observation stage, since four of those inputs feed back from the loop itself, let's first focus on the two that are strictly external, unfolding circumstances and outside information".

"Don, what do you mean by 'unfolding circumstances'?" asked Mindy Shilinski, from the finance group.

"That is a good question. As far as I understand it, what is meant here is that we have to observe, or be aware of, external circumstances that are not necessarily predictable.

Circumstances, which are always in the process of ‘unfolding’ before our eyes; we have to be aware of things like commodities pricing, foreign exchange effects, inter-bank lending rates, disasters both natural and man-made. We cannot affect these circumstances, we cannot change them, but we can be aware that they are there. We can understand that changes in these unfolding circumstances may make it necessary for us to alter or even completely abandon our current direction. Think about what happened to the film companies.

We can estimate the probability that certain things might happen; we can estimate the possible effects that such occurrences could have on what we do. But we must never lose sight of the fact that there are things that we can’t see; things that could radically change the way we approach our business and which could threaten the existence of our company. The environment can seem confusing. Sometimes it takes some time for things to crystallize, but we have to be able to be moving while things are still uncertain. Therefore, we must always operate in a fashion that allows us to retain the mental flexibility to change plan, concept, product, and organizational structure. We must be able to be agile within an ambiguous environment.

We must take an incomplete data set and extrapolate possible outcomes. We must synthesize a response to these unfolding circumstances. We may be able to identify some mega-trends with high probabilities that we can address, but we must always hold in our brains that things may change. We in this team must prepare our minds in such a way that we could change the entire direction and composition of the organization without losing forward momentum while minimizing our own internal friction.

So, the observation of these unfolding circumstances must become a key part of the information we feed forward to orient ourselves.”

“Hey Don, what about ‘outside information” then?

“OK, when we talk about ‘outside information’, we are talking about the information that we either need or can get, or need to develop to orient ourselves. For example, what are the customers doing? What are their stated plans? What are their unstated plans? What are the competitors doing? Are there any behaviors that are predictable and that we can exploit for an advantage?

The outside information that we want is the kind of market intelligence that we need to be able to come up with high probability responses that will result in our success.”

“How do we get that kind of information?”

“Well, we either do the research ourselves, and/or we buy it, and we develop it by “pinging” the market to see what we get reflected back to us. We “ping” different customers, and different departments, or functions within those customers and look for consistencies.

When we combine our observations of the unfolding circumstances with the outside information, we can begin to take our partial understanding of this incomplete data set and begin to synthesize a response. Admittedly this will involve some imagination and a certain creative approach, but remember, the response, or plan, is NOT cast in stone. We have to have options to respond to changes in the market. We have to consider multiple possible futures and so we need multiple planning options, all operating under a strategic concept that allows us to bob and weave, shuck and jive, and basically develop the capacity to juke our opponents out of their shoes; in other words, will be able to respond in an agile manner."

"Could we possibly talk in some specifics that I can understand please? This all seems so theoretical," asked one of the sales guys.

"OK let's start with unfolding circumstances. What are the customers concerned with?"

"Cost and weight" said Mac Collier, one of the sales guys.

"You mean cost and mass."

"What is the difference between weight and mass?"

"Oh boy", I thought, "I have my work cut out for me here."

"We will save that discussion for later. OK cost and er, weight. What affects these things?" Different members of the team responded.

"Materials"

"Production Methods"

"Engineering"

"OK", I said, "let's start with materials, what materials do we use?"

"Well, we sure use a lot of steel"

"What is happening with steel prices?"

"They are going up."

"By how much per year?

The purchasing guy, Tony Catzo, answered; "about thirty percent last year, but it fluctuated all this year, up and down, like a yo-yo."

Now it was going to be my turn with trends and statistics. "Tony did you plot the month to month price changes?"

"No, but we know that the overall trend will be upwards"

"Have you estimated how fast and how steep the price increases will be?"

“No, but nobody really knows that, you said yourself that these things were ambiguous.”

“I did. I said that there would be things that we could never understand or predict, but when we have information, particularly historical information that we can plot graphically to look for the existence of a possible trend and how that trend might look, then I think it is advisable to do so, particularly when this particular commodity is so important to us. So please do me a favor and plot out the price evolution over the past three years on a month to month basis so that we can have a look at it next week.”

“OK”

“Now, what other materials can be used to make our products?”

One of the Engineers responded, “Aluminum”.

“OK, so why don’t we use it more often?”

“Too expensive!”

“Is the price increasing at the same rate as steel”

Silence.

“Well let’s imagine that it isn’t. If steel prices are increasing at a faster rate than Aluminium, then at some point they will reach price parity. Once they have reached parity, Aluminium, which is a lower mass alternative, might become more attractive to our customers. Another advantage of Aluminium is that it can be extruded, which means very low tooling costs, another thing that might be considered.

Now it might be that this is all wrong, and it could be that it all changes tomorrow. The point is that we have to be aware, we have to be awake, and we have to put ourselves into a mental framework where we ask these types of questions and play a constant game of ‘what if ?’

There are other materials too. Composites are becoming big; they are now used extensively in aircraft construction, as are adhesives. Right now the production costs are still too high for mass production, but what are the tendencies. Are there people working on reducing the production costs for these materials? Are the steel companies responding? Are there new developments in high strength steel that remains formable?

Other things we should be considering: Chinese labor rates are going up faster than Mexico, what should our possible responses include? Mexico is pulling itself to pieces right now. How might that affect us? The Dollar is low right now, and we can ship products from the US to Europe and make good money. But what happens when the Greek economy implodes? What effects will that have on the Dollar/Euro exchange rate? How will that affect us? What are our possible responses?

These are just some of the real life examples of what we should be doing to be cognizant of real-life unfolding circumstances. If we are to be the navigation system for this

enterprise, then we have to think like navigators. Where are the hazards? Where are the opportunities? What happens when things change? What are our alternatives? This weekly forum will become the focal point for these types of discussions, and in two months we will have a flexible game plan. We will use this forum, and the process that will result, to create our response system to the market. It will become the center of gravity, the *Schwerpunkt*, as we say in the old German, for our activities.

When we have a unified concept that provides a method for us to shape the focus and direction our efforts should take, each of you will be able to deploy a harmonized concept to each of your subordinates. The goal is to have everyone understand our intent in such a way that we do not impede the speed or initiative of our subordinates, but so that they act in a manner that is implicitly connected to our intent."

"Don, what you're saying is that we get them to do what we want without telling them how to do it."

"Sort of; what we want is to make a deal with our subordinates, the same way that I will make that deal with you guys. If you will work with me to develop this process, and if you agree to make your actions serve our plan in terms of what is to be accomplished, I will give you guys a lot of latitude to exercise your imaginations and initiative in terms of how you get it done.

This meeting will provide a weekly opportunity to throw the ball back and forth and explore mid-course corrections that might have to be made if the situation changes."

"What kind of outside information will we need?"

"We need market intelligence. We need to know what our customers are doing, what are their plans for the next five years. What new models and new platforms are coming out. We need to form an idea of what our competitors are up to. We need to know what is going on in terms of market trends. What is new in engineering and materials? "

Mindy piped up, "Why don't I get the latest data from our market research company. They have five year forward data on new models."

"Mindy, you just became the head of Strategic Planning working for Marketing. Let's meet next week with the data and get started. In the meantime, please think about whatever outside information you want or can get and think about what kinds of unfolding circumstances you might be responsible for in your area of responsibility. We will get started next week."

Don, Week 11 Observation - Detroit

So the next week I came in loaded for Bear. I had gotten them thinking and now I had to speed it up a little. So I came in with assignments.
We started with the two market drivers that we had discussed the previous week; namely cost and mass. Mindy and I spent most of the next week looking at data and talking to the

customers. All of our customers had been clear about the two items we had discussed the previous week.

When we pinged customer Engineering groups, cost and mass were reflected back. When we pinged Purchasing, cost and mass came back. When we looked at the market, we saw that the carmakers were all focused on cost and mass in all areas. The predicted growth in the electrical and hybrid electrical vehicle markets would put an even greater emphasis on mass, as would increasing global gas prices.

What we also discovered was that there were more and more vehicles being built on fewer and fewer platforms and that virtually all of the OEM's were starting to source platforms globally looking to commoditize their vehicle systems, gain economies of scale, and drive down the cost wherever possible. This meant that there would be fewer and fewer opportunities and the fighting over these opportunities would become more and more intense.

So the next week I added the question of what, considering these market drivers, would be our strategic imperatives. This time I did not compel a discussion, but rather proposed an answer immediately. I said that there were three things that we absolutely had to accomplish to survive. ***First, we had to control overhead, second we had to continue to grow our business, and third we needed product innovation.*** My hypothesis was that if we worked on these three things, ***while focusing our efforts on the reduction of cost and mass in our product offerings***, we would increase our probability for success.

Now we had to utilize our market/recon pull and spread out and look for gaps in three of our X,Y, Z coordinates. We would all consider these strategic imperatives in our various functions and bring our results back to our weekly meeting for feedback. The most promising opportunities, where we were above the sales funnel, would be decided on and would pull the resources that we had to those opportunities. We would also redistribute resources to the highest probability opportunities. So we started to give assignments out that would get us to the point where we could start to take our observations and process them for the next phase, orientation.

Rick Manyako was the head of engineering. His assignment was to investigate materials. Toby Unterdach had come to me with some intelligence about a new process that could take martensitic steel (very strong but not very formable) and combine the strength we needed with the formability required. If this would work, we could reduce the thickness of our structural sections and reduce mass. In addition, Rick was to give an assessment of composite materials and any other alternative materials that might be on the verge of breaking through to give a cost/mass benefit.

Rob Beaudreux (a.k.a. Boo) volunteered to check out a couple of opportunities in other industry windows to try and move us along the Z-axis. He said he already might have an idea.

I took on the challenge of looking at possible acquisition candidates to improve our positions in both the X and Y-axes, and Mindy and I would both work on a process for creating gaps rather than just finding them.

Finally, we would discuss expanding our Market to include not only the NAFTA region, but also South America.

At this point I realized that, if we wanted to make that final push, and entangle the three levels completely, we would need something special, or rather someone special. That night I called Harry.

“Harry it’s Don.”

“Wonderful to hear your voice young man, how is it going?”

“Actually pretty well; I think they get it. There are a couple of the guys left from my tenure, although it seems that Benny tried to run off a lot of them. How is it going on your end?”

“Pretty much the same; we have their attention now. I just have to get the old continuous improvement sausage machine turning out tasty little links of progress day in and day out and I think we will really have something. I have to hand it to you Donny my lad, setting this plant up as a one customer, one product operation makes running it efficiently pretty easy. Only one set of systems and part numbers, no overlap, no extra staff or complications. This is starting to be good fun.”

“We are still missing something.”

“What do you mean?”

“Harry, what do we need to do to get our strategic policy level really entangled with the shop floor? How can we make market, product, and capital planning relevant to what we are planning and doing on the shop floor and reporting every day in the control room?”

“I think I see where you are going with this, you want Janos.”

“I am pretty sure that the homeroom is just about ready to vomit him forth. They may be grateful if we could take him off their hands.”

“How would you use him?”

“I am thinking about giving all of engineering to him; both manufacturing and design engineering.”

“Donny, I am beginning to like this.”

“Remember last year when Janos designed a track system in six months that the designers had been working on for two years?”

“They were quite annoyed as I remember?”

“Oh they were royally pissed off. Thomas Schwantz came up to me and asked, ‘how does Janos do stuff like that’”.

“How did you respond to the swinish Mr. Schwantz?”

“I told him that because Janos deeply understands the capabilities of all of our production equipment, he never puts anything into a design that we cannot make. Schwantz looked at me like I had just waved a turd under his nose. Harry, you are going to have to ask for this.”

“I don’t have any problem with that.”

Janos, Janos Czsako that is, was a Hungarian madman who was also one of the most talented engineers I had ever worked with. Having Janos around was like having the front line of the 1978 Oakland Raiders living at your house. It was going to be messy, there were going to be problems, but come game day there was going to be some world class blocking and tackling. There would also almost certainly be a championship ring at the end of the season even if it meant kicking a fumbled ball into the end zone and then recovering it for a touchdown.

“Harry, I think we need him here anyway to sort out some of the “changes” that were implemented over the last eighteen months. I think some of our warranty issues are related to those changes.”

“Leave it with me.”

With that little detail out of the way, I focused during the next week on a plan to create gaps. I met with the sales team to discuss what we were going to do.

Don, Week 12, Observation/Orientation - Detroit.

We discussed our game plan for the market. We had proven ourselves adept at sliding along the surface of the market and finding and exploiting gaps. We would continue to follow this technique. What we needed to do was to identify small cracks in the market’s surface and insert product pyrotechnical devices and blow open gaps as well. So we decided to get a rather large light and shine it onto the market’s surface to look for those types of cracks. In the automotive business this is rather an easy matter because all of the automotive OEM’s tell you what they are planning to do in the next five years. Databases that include all of these plans are available, for a price, and you can look at what is planned and make adjustments accordingly. These OEM plans are always subject to change. Programs are reconsidered and often dropped so any solution you develop has to remain flexible. However, these plans also reveal tendencies and biases in what the OEM intends to do, and what it wants. Vehicle cycle plans, when combined with other market intelligence already can give you a running start at determining what your anticipatory direction should be. As Harry was fond of saying, “you don’t want to be where the puck is, your want to be where it’s ***going*** to be”.

The average vehicle development cycle is around three years after the request for quotation and contract award, so if we were going to get involved a year before that, we would have to be looking at start of production dates four to five years from the planning year.

Mindy and I looked at the upcoming vehicle cycle plans and decided that we had four basic approaches. There were basically four different types of business that we would be going after:

Type 1 business: New "conquest" business (required a new, manufactured gap)

Type 2 business: Existing program we needed to re-secure (gap already there)

Type 3 business: Component business for X, Y or Z axes applications (find gap)

Type 4 business: Opportunistic response to market (gap opening in front of us)

Each of these different businesses within our market would require a slightly different response. We would plan a campaign for the Type 1 business opportunities that we would be going after. This meant budgeting both money and personnel for these activities in an up-front and highly detailed manner according to a process.

For Type 2 businesses, those that we had already secured, the retention was considered a must. Since we were already "on the beach" with these programs, we would be in a "reinforce customer confidence" mode of operation. We would be working towards making sure that the customer was not looking in other directions to replace us. This would also require an overall plan, but it would be different from the Type 1 plan as we were already established and the mission would be to retain and expand our existing beachhead.

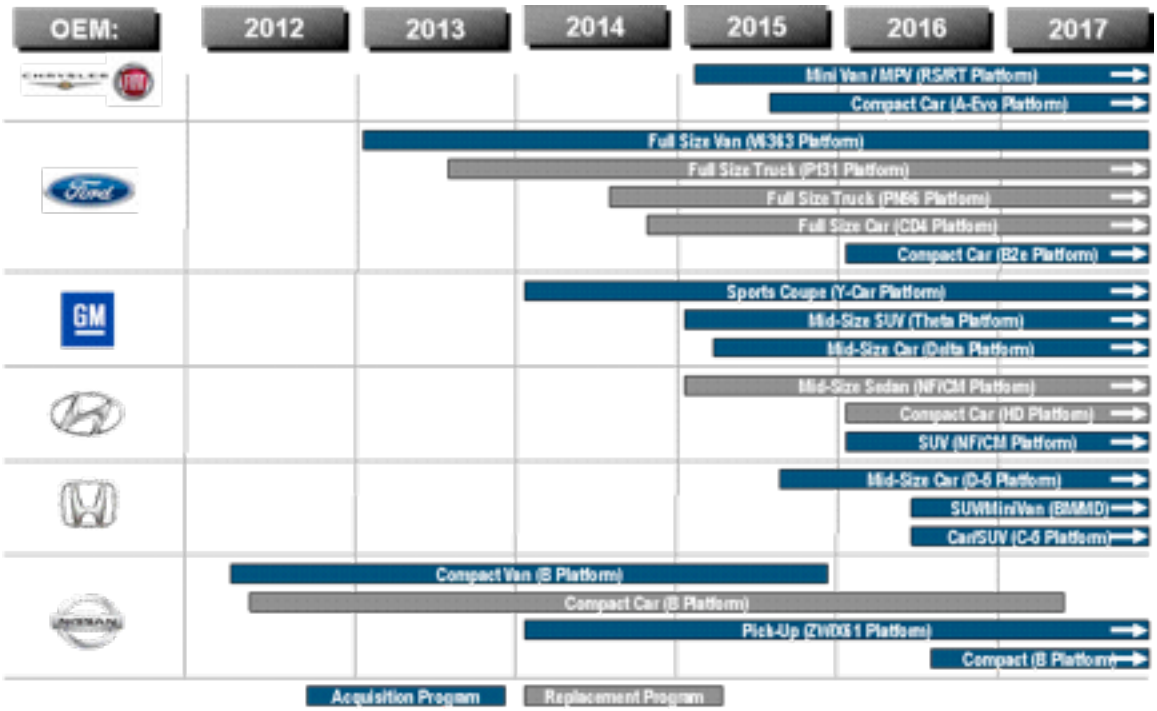
Often, gaps would reveal themselves when either a new need at a component level was discovered, or when some other supplier blew his component development and the customer started casting around looking for a new solution. For these types of opportunities, which we called Type 3 businesses we would be looking at either adapting existing components, or recombining existing building blocks for a new solution. Since these were generally opportunities that would present themselves on short notice, they could not be planned for, but rather require a rapid response mentality. These were also usually higher investment/lower return projects due to the fact that time was usually short, and the costs for component development are relatively high because components are generally mechanisms and mechanisms are complex and must be reliable. They need a lot of development work compared to say, a stamping. So we would be picky about where we stuck our noses into Type 3 opportunities. We would push into such a market gap when we saw the opportunity to help a customer out of a very large hole because these things usually create a good relationship between the supplier and the customer (you always want to be thought of as a "go to" guy), and you would put a virus into another competitors system. If managed properly, such a virus could have catastrophic consequences to the competitor who was inserting DSI into his or her companies DNA.

So these Type 3 businesses had a more strategic implication. Implications which, would often make no sense to a bean counter, but a whole lot of sense to a businessman. We would be particularly interested in a Type 3 opportunity if we could move across either the X-axis, into other vehicle subsystems or along the Z-axis, into another industry window.

Finally, a Type 4 business was the type of opportunity that could open up in front of you without any real work on your part. Some reserve capacities would have to be planned into the overall budget to allow for these types of opportunities, as they were not all that uncommon. The trick here was to be able to tell if the opportunity was real or illusory. Such things are often presented as a chance when in fact the game is already fixed. Purchasing groups must often convince a supplier that he has a chance when indeed he really has none. Suppliers are used as clubs against each other to bludgeon pricing lower and lower. For a supplier to jump through such painful and difficult hoops requires a belief that he or she actually has a good chance to win the business; most of the time he or she do not have such a chance. The game is rigged, the fix is in, and the supplier who already has the project in the bag is just being pinched for money. You have to be able to discern if you are just a rabbit, or if the opportunity is real. You don't want to launch an operation and spend a lot of treasure on a dry hole.

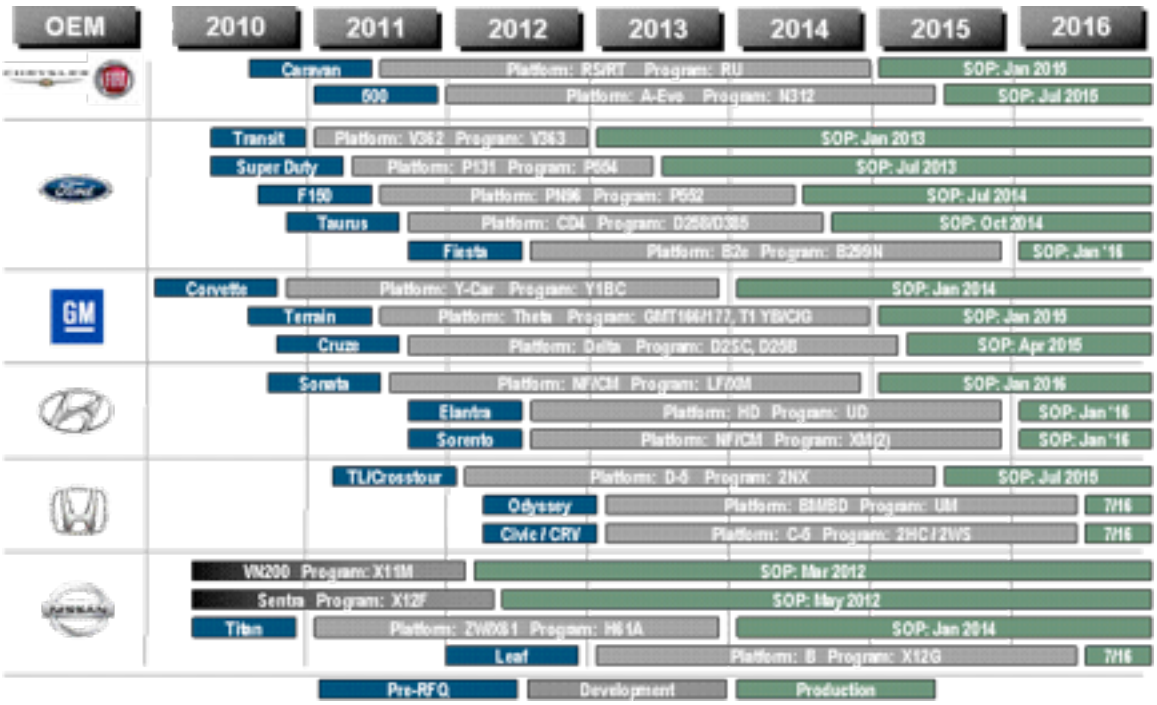
We would have to look at the vehicle cycle plans and plan our campaigns for Type 1 and Type 2 businesses in light of the market drivers for low cost and low mass product solutions while remaining focused on our strategic imperatives for growth and product innovation. We would continue to run our hands over the surface of the market to explore for Type 3 opportunities and continue to develop our intelligence network to assess whether Type 4 opportunities presenting themselves to us would merit our genuine attention or an illusory response designed to minimize effort and expense on our part and maximize damage to the real supplier.

So away we went. By the following Wednesday we had looked at the market and assembled our "opportunities" list and we produced an overview of the Type 1 and Type 2 businesses that we would be looking at. The question was that if we were going to start going around creating gaps, we would have to know how many of these bombs we would need and how much we were going to have to invest to buy the bombs needed to blow open the gaps. When we were done it looked like this:



Acquisition business (Type 1) and Replacement business (Type 2) opportunities for the customers we had targeted were broadly distributed across the six customers we were looking at. Of the twenty programs that would be launching between 2012 and 2016, we already controlled six of the programs, which left fourteen new gap expansion bombs that we would need.

We would need to get up the sales funnel and so we needed a plan to do this. As we knew, we had to get involved 12 to 18 months before the request for quotation would come out. We assumed a three-year development timeline for each vehicle and then took a twelve-month lead on when we thought the request for quotation would come out. So a vehicle that would launch in the beginning of 2015 would need three years to develop, which meant that the vehicle subsystems would all need to be sourced at the beginning of 2012. Adding our twelve-month timeline to get into the sales funnel soon enough meant that we have to start our marketing activities at the beginning of 2011. We would need to develop a process and a budget to achieve this and we would have to get it done by the middle of 2010 in order to get it into the 2011 budget. As we were already in June of 2010, we were already under the gun. So Mindy and I laid all of the opportunities out and took a look. The results were already unsettling:



We were already way late on the new acquisition project for Corvette and the Nissan Titan was also right on top of us. We also had to get busy with the Ford projects coming up and we had no budget. We had to figure out how much this was going to cost and how we were going to scrounge the dough to make it happen.

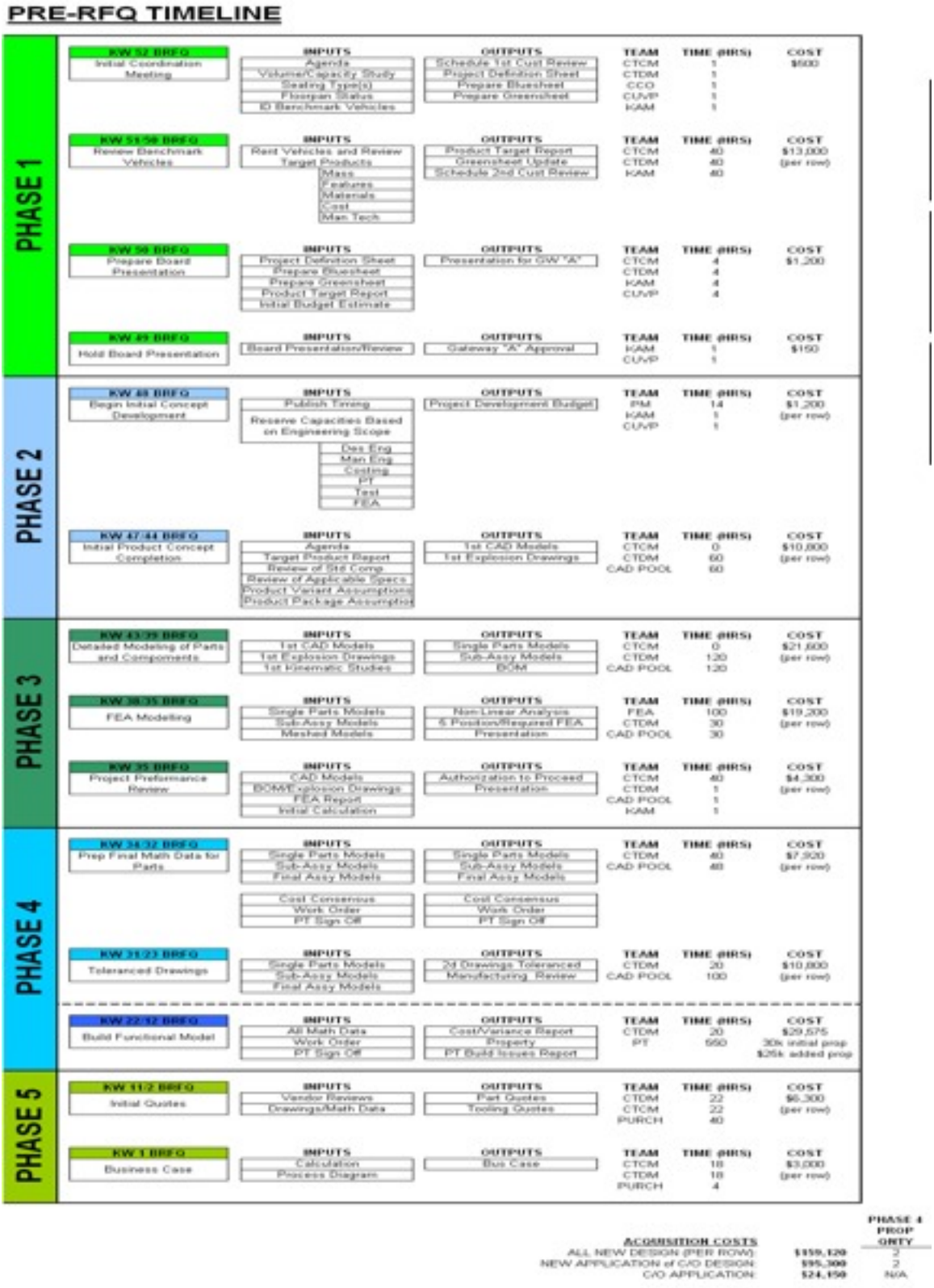
We needed a process to attack or even create the gaps required to improve our situation, so we reconvened a meeting with the sales and engineering groups to determine what to do. The first step was to create a “concept team” out of our existing resources. We then gave the concept team a five-phase process for dealing with new opportunities or existing business. The concept team would develop solutions based on market input and approach the customer at least twelve months before the request for quotation would be issued. The team would then make a proposal to the customer in a manner designed to give the customer a product that he or she could take to their management and present as one possible solution. As long as we could get them to listen and always get a follow up meeting, our chances would improve as we proceeded down the timeline helping the customer to solve their issues and design tasks.

It took us most of the day to define a basic process and estimate the costs that we would incur in pursuing this line of gap development. We could then approach the other members of the board with a defined game plan that showed how much money we would be investing and for which specific steps and what the outputs would be. This would give the beanies at least some feeling that we were controlling the situation and minimize the normal resistance of the conservatively minded to anything that looks unfamiliar or risky.

We defined the team, the timeline and the expected results. We even put in a board review. just before we went into steel for the functional model that we would take to the customer shortly before the Request for quotation came out.

We designed a five phase program that would take place between 12 to 18 months before the expected RFQ would appear. We would benchmark, develop a target product based on feedback from the market, add our own insights and then approach the customer. For each phase there would be inputs and output defined. Resources would be defined budgeted and allocated so that the plan would be funded. A “concept team” would be established within our functional structure so that our organization would reflect this more market oriented structure. The team would be defined and would include a concept team commercial manager (CTCM), a concept team design manager (CTDM), the key account manager (KAM) for the particular customer, the customer business unit vice president (CUVP) and the chief commercial officer (CCO) as well as the engineering and engineering services personnel required to create that best interactions with the customer.

The process would begin with benchmarking and would end with a functional model made for the customer and with decent engineering drawings, initial quotations from the supply base and a solid business case that would allow us to maintain an understanding of the projects financial status throughout the negotiations for the award of the production contract. The system would look like this:



So here was our process. It started with a four-week initial phase during which we would go out and benchmark the best available products that competed against our targeted

program. We would go and make an initial proposal to the customer to see if there was the possibility of creating or exploiting a gap that we would then be willing to pull resoIf If the customer showed initial interest, we would prepare a “Bluesheet” that detailed the opportunity in terms of volumes, possible revenues and program specific customer team details and tactics to be employed. If the customer showed initial interest, we would also prepare a “Greensheet” that would script the next meeting and give objectives and arguments that would be used to try and convince the customer that we were serious and had a unique decision to offer that would give the members of the customer team all a personal “win”. We would try to show how our proposed product would provide better functionality with a low mass, affordable solution that would make everybody look good and the customer happy. We would attempt to insinuate ourselves into the customer’s design process a year before his solution would be ready for quotation bay the supplier base.

If this initial foray found resonance with the customer, if a gap was present or could be blasted into the customer’s market surface, we would report to the board and proceed to the next phase where we developed a detailed budget and initial technical proposals would be developed with the customer’s engineering group.

If we continued to enjoy acceptance and support from the customer, we would move into the third phase, where we actually started to produce details and CAD models that we could begin to package into the customer’s vehicle environment. We would attempt to incorporate our own proprietary features or technologies in a subtle manner at this point to secure our position in the competition for the production contract that would come at the point at which the request for quotation was issued. The customer would now be in the process of becoming more and more concrete with his product solution and we would be involved in mixing the mortar. We would then have initial computer modelling created by our “push-pull” people in the CAE/FEA departments. This would help us to make sure that what we were developing would really work and we would be ready to move on to the next phase.

If, at any time during this process, we thought the gap was closing, or the customer appeared to be interested in moving in another direction, we could always shut down and cut our losses. This would be important as only high value targeted business merited the expenditure of our treasure. A running assessment would be used while moving from phase to phase. The “Greensheets” would provide an objective method of determining whether or not the customer was serious and providing the information and support required justifying our further expenditure of corporate wealth in the pursuit of this business.

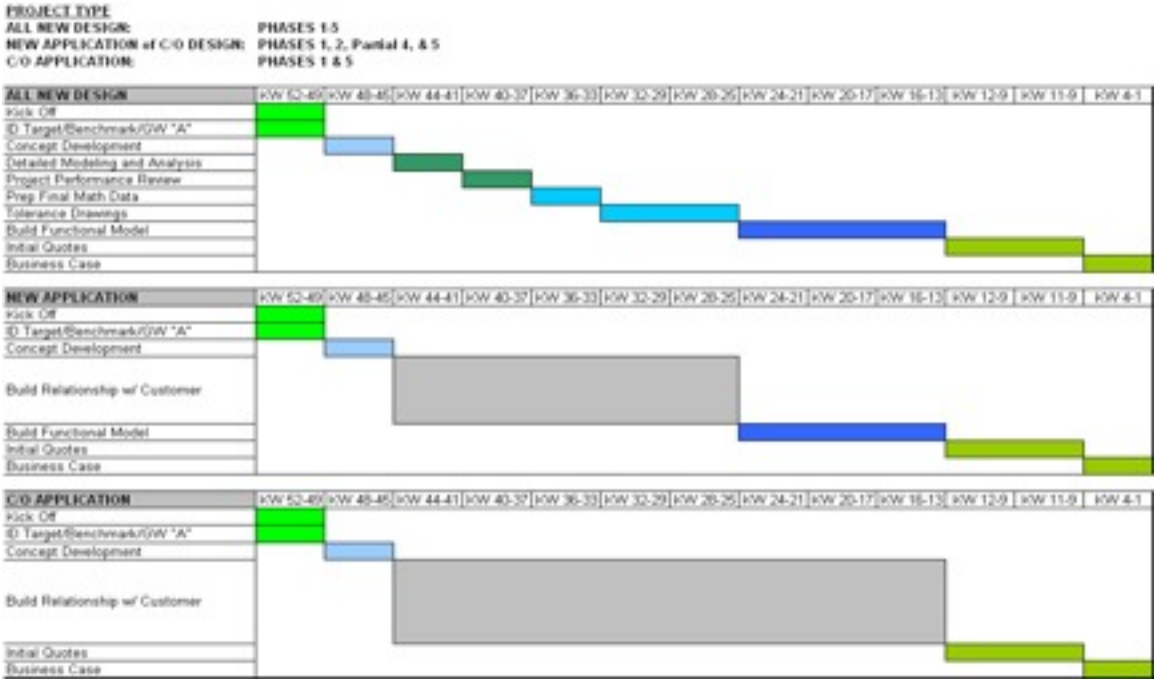
In the next phase, phase-four, we would be getting pretty serious. At this point we would be producing toleranced drawings of individual parts and sub-assemblies. We would then produce a functional model to present to the customer showing the solution that we had developed together. The customer could in turn, take this property to management and demonstrate a solution in hardware. All of this was designed to demonstrate to the

customer the value of doing business with DSI and to make the customer want our solution to the exclusion of all others.

If we still felt that we were on a solid foundation with the customer at this point we would get the drawings quoted and prepare a business case for our management showing where we were just before the request for quotation process started.

By having started early, and by having decent drawings with the important tolerances already established we could quote the parts and help minimize the cost creep associated with late additions of tolerances that surprise the vendors and give them the chance to increase the price of their parts. In this way, the accuracy of our business case was optimized at a very early stage and we could track the variances that were sure to come in a very precise manner.

The timing for this five-phase process would operate as follows:



For each targeted Type 1 and Type 2 business, we would start one year before the request for quotation was expected. The “new design” type would be the most expensive and

time consuming. The costs for chasing the Chrysler mini-van could be almost half a million bucks because there were three rows and each row would cost around $150k.

Nevertheless we had decided that this would be a strategic imperative because the field continued to be a solid niche market, perhaps even the biggest niche in NAFTA, and the field had been abandoned to Honda and Chrysler.

We wanted this business and were willing to fight for it. So we would have to decide what content we would chase and we would have to go back to the homeroom and get a check to finance these endeavours. First however we would need to ping Chrysler and see what we could do and whether or not there would be any crack in the market surface that we could shove a product grenade into and blow into a full fledged gap.

Alternative approaches for Type1 and Type 2 businesses would involve putting an existing structure into a new vehicle application. This would be considerably less difficult and expensive than an "all new product" approach but had its own associated difficulties. People, particularly non-product management types see products like ours as commodities. The problem is that automotive seating structural systems are not like light bulbs or rolls of toilet paper. They are engineered products. A seating system's primary role in the event of a crash is to hold the driver or passenger into what we call "design position". This position assures that the active and passive safety systems can be as effective as possible and protect the occupant from injury or death if at all possible.

All vehicles are different. They have different natural frequencies at which they will resonate. Each vehicle body has its own unique stiffness. Each transfers energy in a unique manner with its own "crumple zones" that define how the vehicle will behave in a crash. So putting an existing structure into a new vehicle application can offer up some variations that require fixing to pass vehicle testing.

The easiest is a carry over application into an existing vehicle body type. You can run into surprises here too, but the probabilities are lower. A new or carry over application of an existing structure allows much more time for focusing on the customer relationship. This does NOT mean ball games and rounds of golf. It means discussing with the customer how you can help him or her solve their problems. Creating success for your customer cannot be over emphasized. Companies do not buy products, people who work for those companies do. Understanding the needs of your customer and providing value in terms of world-class products so that the individuals can shine is a very important aspect of winning in this game.

Having thoroughly discussed our approach, Mindy and I decided that we would need to link this entire process together. This would be a longer-term affair and would have to be performed over the next month. We would roll out the plan as it was, but we would have to link the sales plan to a customer specific plan, that we would have to link to the individual targeted projects "Bluesheets" and the tactical plan for each project, the "Greensheets".

We decided that, having completed a market overview we needed an appropriate market response to each customer, as they are all different. This customer-by-customer strategy would be developed during a one-day seminar by the sales team responsible for the

customer. Each customer team could invite whomever it considered important to the development of the individual customer strategy and attendance would be mandatory. I would facilitate and guide the seminar. We would have to chew through enough inputs to be able to produce a "Strategic Customer Analysis", which could be condensed into a one page document for review by both the team and by management. The data would, as in Harry's system, ***be developed once and be the same as in the monthly sales reports***. In this manner we would again mine the data once and use it in many different applications, thus hopefully minimizing any redundant non-value adding activities related to reporting.

The analysis that we would perform during this seminar would lead us to ponder the unknowns and the impenetrables of each customer and synthesize the best response we could conceive of at that particular point in time.

We would consider our current and potential sales, our team, the customers team, where we wanted to establish linkages between the teams, what influences the individual team members have on both sides, the status of our primary competitors and possible strategic partners, what support or resources we needed and what information was missing and needed to be developed. We would then perform a current situational appraisal, discuss what the best future situation would be, and then do a tactical plan of what had to be done to get us from where we were now to where we wanted to be.

This process would help us in our orientation to the customer within the market. We would then synthesize our work and produce the "Strategic Customer Analysis" document and issue it. The document would represent a macro approach at the Strategic Policy Level and we would use another system to start to push toward developing the linkages between the Operational and Tactical levels. The "SCA" documents would be assembled into a complete sales strategic plan that would be combined with the marketing strategic plan. Everybody's eyes would be open with a very strong external focus. The sensor array would feed the navigation system and the brains to guide our very fit corporate organism would be in place. To make sure we kept current and kept processing new observations, we would perform a quarterly update.

Strategic Customer Analysis

- Defines Customer Strategy
- Shows Macro Targeted Business
- Shows Macro Linkages
- Shows Macro Tactical Plan
- Gives Macro Appraisal
- Shows Macro Action Plan

- Is Updated Quarterly

These sheets were adapted from the Miller-Heiman system and we had found them and many of the concepts from the Miller-Heiman approach to be superb tools which we adapted with great zeal.

We would then show the linkages and report to management as follows:

Once we had the Sales strategic plan done we could combine it under the overall Marketing Strategic Plan and fold it together with Harry's Operational plan so that we would have an integrated plan that not only showed how to get organizational fitness combined with a first class navigation and recon system.

The difference between our system and most other so-called Strategic planning systems was that ours never lost sight of the shop floor and linked all activities to measurable goals that would be agreed to by the entire management group and conveyed to every associate under our command. These goals would always be traceable to a financial objective. We understood that the product stood in the center of our focus along with the customer. If we could address the Market intelligently and we drove out waste wherever we could, the money would follow, and we would be more competitive than anyone else in our market segment.

So the following Friday, the second Friday in April 2010 we rolled up the entire plan in the Friday meeting. On the following Monday, I would be on my way down to Mexico to review the system with Harry.

Friday morning we started. The first thing we laid out were our major observations. These we condensed into a few salient points.

Fuel Prices would probably continue to increase

1) Steel prices would probably continue to increase
2) Electric and Hybrid vehicles would become more important
3) There was considerable global overcapacity for vehicle production
4) Profit margins were being squeezed
5) Auto makers were becoming more involved in subsystem design
6) Sourcing patterns were becoming global
7) More and more vehicles were being made on fewer platforms
8) Platform sourcing opportunities would reach a low in 2015

There followed an involved discussion over three hours of how we were going to respond to this. Although this may seem a rather short period of time for the "orientation" phase to take place, we had a group that had been discussing the foundations of the theory for several weeks and were mentally prepared to reach conclusions quickly and efficiently. I had wondered whether or not any of the previous weeks Friday meetings had been effective or if the message had gotten through. Did the staff understand how we wanted to expand the business, the X, Y, Z analysis, market/recon pull and surfaces and gaps?

They had gotten it perfectly. Even the Japanese guys for whom the concepts must have been difficult in a second language had obviously grasped exactly what we were trying to get done.

In short order we reviewed the new process Mindy and I had outlined and the targeted business opportunities that we would target. We discussed the macro economic uncertainties and that the increases in fuel and raw material prices, when coupled with the growth of electric and hybrid electric vehicles, validated our recognition that our product strategy had to be cost and mass driven. We then considered what possible effects the capacity glut and the continuing profit squeeze might have. We concluded that there was an increasing probability that publicly traded companies might, in the near to middle term, be forced to exit the automotive sector as the returns available were insufficient to create interest in such a companies stock. What did we think were appropriate responses that might be taken to take advantage of such and exit from the business from bi publicly traded companies? There was also a countervailing consideration that although the automakers were squeezing supplier profits, they needed companies with global reach to provide support for the increasingly global aspect of the business.

Having reviewed the newest information that we had culled from the market, the information would be used to help us to reach a planning solution. We then, yet again, reviewed our previous experience. Out of this we determined that that most of DSI's

biggest past successes had come from precisely the type of approach that we were contemplating here.

We had almost always been successful when we coupled early involvement with the target customer on specifically selected projects, exhibited a willingness to give information to the customer and respected the realization that the customers were individual human beings who we had best make look good. When we coupled this pro-active approach with the introduction of really world-class products that were among the best from a function, technology, and materials standpoint, we could be very successful indeed. Why not document, understand, and define and refine this fact pattern and turn it into a policy to deploy throughout the organization?

DSI's genetic heritage was that of a 19th century German company from the Ruhr pocket. The DNA of DSI almost compelled a hands-on, "we must understand everything" approach to the business. We designed our own gearboxes, we specified our own steel, we co-designed the motors and spindle drives that others made, we designed and built our own tooling and capital equipment, and our prototype shops were not only the best in the business, but were a matter of corporate pride. At a time when most everybody else was outsourcing and indulging in any number of other financially driven idiocies, we were hanging on to our corporate know-how like grim death. We knew that if we could present a plan that resonated with these genetic elements, we would gain acceptance from our own board while maximizing our probability for our plan to succeed.

Reviewing our own cultural traditions was a more alarming proposition. The unofficial national motto of all German companies is a direct lift from Lenin. If I have heard it once in Germany, I have heard it a million times; "Trust is good, control is better". Because the lessons learned from the German military have been lost due to the marginalization of Germany's military following the Second World War, none of the positive behavioural aspects of those organizations have survived. The horrors of the Nazi regime, coupled with the self-immolation of the entire German nation in 1944 and 1945 have created an almost visceral, reflexive reaction to anything that smells of having come from military sources.

What has developed instead is a love of constant daily reports, spread sheets, and micro-management that is only possible in a country with one time zone and a size that is small enough to reach out and get anywhere within the entirety of the nation in a matter of four or five hours by car and one or two by plane. In short, Germany *can* be micro-managed because of its size and the "relative" homogeneity of its population. For most German managers, control has become more important that success.

This meant that we would have a countervailing problem, in that we would have to provide enough reporting to keep the bureaucratic elements within the Teutonic homeroom comfortable that they were in charge and give them time to comment and to advise and consent on as many aspects of the plan as they could think of.

This was not considered to be a weakness, although it most certainly was, but rather a simple fact that we would have to deal with.

Having considered all of these points, we proceeded to synthesize a plan that we felt would give us the best chance to succeed. What we came up with was a simple approach to getting on with expanding both our product pallet and our market.

We developed a set of tactical imperatives to support the three strategic imperatives of product innovation, growth and overhead control. The team worked out six major objectives that we would handle as the corporate "navigators" as follows.

Define and plan for upcoming OEM opportunities

1) Feature a low-mass product
2) Expand penetration for 2nd and 3rd row products
3) Look for "niche" opportunities
4) Plan to move into growth territories (South America)
5) Increase our skills in trim development (Y axis)
6) Increase vertical integration along X-axis
7) Increase our global alliances
8) Move into a new industry window (Z axis)

The most important tactical imperative was defining and planning for the opportunities that would be presented to us in the market by the OEM Automakers. Since fuel and raw materials prices would continue to rise, we would have to look at making a low mass seat a priority. This direction was reinforced by the expected rise in electric and hybrid electric vehicles. Our use of high tensile, formable steels put us into a good position to get an early head start in this area, but we would focus our R&D activities toward a medium and long-term solution using alternative materials as they became economically viable.

Since we had seen that the 2015 vehicle launch schedule was going to be meagre, to say the least, we would have to expand our content per vehicle to maintain our revenue base. Fewer opportunities would mean brutal competition and fewer wins as people did stupid things to retain business, like taking business at a loss to retain market share. Our advantage in this type of exercise was that we ran a three hundred million dollar company with about sixty people plus our plant personnel, so our overhead was much more manageable than larger competitors, who preferred to have more people with marginal pay and marginal abilities. We could quote at a lower rate and still be profitable, in addition we designed and built most of our capital equipment and repeat visits to the big Tier 1 manufacturing facilities had convinced me that they were paying far too much for

the capital equipment that they outsourced. Hence a larger cost per item produced than us as the capital cost per piece was magnified by the higher amortization rates.

On paper we could hold our own and deliver a better product more cost effectively than the big boys, however they had size on their sides and could simply decide that they were going to take on a project at any price and figure it out later. Even if a major project turned out to be a loser, they could chin the problem by spreading the loss over billions of revenue. It was also not their money at the end of the day, it was the shareholders, and another man's money always spends easier than your own. The big Tier 1's could afford to do stupid things and did so with alarming regularity. We on the other hand worked for a private owner and we could not afford to behave in an irrational manner. So we would have to play a margin game where we would have to stop quoting at a point where the net present value of the project that we were quoting approached zero. Our competitors could and often did keep going after we had reached our walk-away price, but their walk-away \price was higher than ours in the first place, so we had won a few big projects based on the fact that we had the OEM Engineering groups advocating our solution and we were close enough on price that we would get the nod based on the facts that the costs were close enough, we had better products, we had an unbroken string of successful launches behind us and our warranty costs were much lower than the Tier 1 suppliers were.

But as the opportunities became fewer, there was bound to be some real desperation quoting going on. This meant that our plan to stay as far up in the sales funnel as we possibly could, would become more critical and we would also have to expand our product offerings to include more content per vehicle so we would need to target second and third row seat structures so that we could attempt to get more our of fewer opportunities. Our "pre-request for quotation process" would be critical in helping us to determine what we should be offering the customers based on the benchmarking that we would do.

We also decided that we should go after some of the niche players who were specializing in non-mainstream vehicles. Since the big boys were focused on big wins with hundreds of millions in lifetime revenue, there would likely be opportunities for a company like DSI to try to insinuate ourselves into the smaller players like Tesla, Fisker or Carbon Motors. We would attempt to sell them seat structures from older programs that we had tooled for people like BMW and Mercedes but that were one cycle behind. The tooling was already there and the products were still highly competitive when compared to the rather agricultural systems that were being offered by some of our competitors. In this way we could offer a product with low tooling costs at an attractive price to automakers who would otherwise be forced to develop and tool their own products, which would be a pricy proposition. Furthermore, we would likely not run into the big boys, who would regard such programs as uninteresting, due to their rather paltry revenue expectations.

This, in a nutshell, would be our approach to our first tactical imperative. We would take the opportunity list and go after all the projects that we had listed, going after all rows

with products to be designed with cost and mass optimization as the top priorities, striving at all times to get as far up the sales funnel as we could.

Where the opportunities looked positive, where we got immediate resonance from the customer, we would immediately pull resources to that gap and try to get a foothold quickly. In addition to this we would apply the same approach to some of the “niche” players who were emerging to address the electrical and hybrid electrical market as well as the specialty vehicle makers who covered racing and law enforcement.

One major task, divided into three sub-tasks down, we reviewed the second major tactical imperative, which was to find organic growth elsewhere for our organization. This would mean expansion into “new world” markets. Happily, the “B” in “BRIC” stands for Brazil. We needed to organize two particular tasks for a foray into Brazil. First we would have to ping our customers to look for resonances. If we could get the support of an existing customer for a foray into Brazil, it could simplify matters dramatically. Secondly, we have to go down and take a look for ourselves. We had to have developed a pretty solid plan if we were going to get our board to endorse an expansion into a geographical area that had traditionally repeatedly shown itself to be quite the commercial vale of tears.

Number three on our survival imperatives list was vertical integration. The market had shifted and the pressure on profits was becoming more and more extreme. Customers were starting to dictate the mark-up they would allow for purchased components. This meant that even if you had done most of the design and integration work on a product, you would be limited in the amount you could recover through the allowable mark-up and what was “allowable” was quite frankly, paltry. If suppliers wanted the revenue, they were going to have to become more and more vertically integrated.

This was one of the big reasons we decided that this would be important. The other reason was that we looked at the returns available in the automotive sector and our major competitors who were publicly traded were not making enough money to remain attractive to investors.

Companies like Apple, Google and Cisco were returning earnings figures well above 20% . The big publicly traded Tier 1 suppliers were averaging under 6%. So why buy their stock? We sensed that there was an increasing probability that they would be forced from the automotive supply sector the way ITT, Rockwell, Allied Signal and United Technologies had been in the mid 80’s.

If this did indeed occur at some point in the future, there would be a supply vacuum that we could step into if we were prepared. So we looked up and down the automotive seating continuum and considered what would be the smartest move that we could make. As usual there was more than one answer.

On the one hand, if we moved towards seat upholstery development (foam pads and cloth and leather seat covers), we would get closer toward being able to supply complete seats should the opportunity arise. This would move us towards an ability to be able to

approach the OEM's with an all-in solution if and when one or more of the Tier 1's decided to pull the plug on their automotive seating business. The barriers to entry were low, (investment and required know-how were much lower than for metals and mechanisms) but if we made obvious forays into these areas with the OEM's, the Tier 1's were likely to view this as an existential threat and start developing countermeasures to our moves. We did not want to do this. We liked the enemy asleep, so this would be a risky move unless we could find a way to do it quietly.

The second possibility was to look at a solution that would give us better integration within our current wheelhouse. This would mean integrating more of the supply chain for items that we did not currently have the ability to supply. Harry and I examined the possibilities for this and decided that if we were to go in this direction, an M&A approach would be the fastest way to pick up the more expensive capital requirements and more exacting skills needed for our particular line of products. Organic growth would simply take too long and be too expensive. Better to buy both the capital and the guys with the know-how to make it happen.

We ended up focusing on two things: 1) finding a stamper with some large presses to buy so that we could make the large stamping that we currently had to purchase from outside suppliers and 2), to look at a company that made linear drives with motor and spindles that could be used, not only in seating systems, but also in steering column adjusters, sun roof applications, adjustable pedals and power window lift systems.

In this way we could address both our third and fourth tactical imperatives.

The plan was beginning to show potential but we were too small to go it alone. As global sourcing patterns by the OEM's started to become more common, it became obvious that more and more cars were going to be made on fewer and fewer platforms and that the OEM's were looking for the ability in the supply base to provide a global footprint for the same product to be made on multiple continents.

The big Tier 1 suppliers had this kind of global coverage but DSI did not. We had good capabilities in Europe and North America, but we only had a peanut operation in China and nothing in SE Asia, India, Brazil or Japan. If we were to play with the big boys, we would need to cultivate alliances sufficient to quote a big global program as a team. We had to be able to match the big boys without actually becoming the big boys.

Years ago, I had set up a JV with a Korean company and I had recently made friends with a well-known Japanese supplier of automotive seating components. We would devise a plan where we would approach both of these companies and attempt to create a global footprint and a couple of targeted programs to go after, if we were able to get them to agree.

Finally, we would look for a way to get into another industry. We would seek an entry where we could utilize our existing strengths; something that would offer the same type of kinematic issues and challenges that we were already familiar with, something like

what we already did, but in another venue. We wanted to utilize all of our know-how in a market segment that offered better returns than those in the automotive sector. We wanted to be able to adaptively reuse our existing tech in new combinations and permutations so that new products would be developed with existing know-how. We would look at the medical and aerospace and non-automotive vehicular markets and make a foray at whatever looked best.

So now we had the outline of a plan we needed to orient ourselves and make some decisions and start to act. Here is what happened.

Book 2 - Reality sets in

I had thought that we were being very clever when we sited our Mexican plant. The thing was extraordinarily easy to get to. You just had to go to the left most of the three bridges going from Brownsville, Texas to Matamoros, Mexico, and then turn left at the first major intersection you came to, and then it was a straight shot of about 2 miles to the very edge of the city. You could then turn right and directly into our plant.

Of course this decision had been made in 2004, when the world was very different. There were two things that we had not reckoned with, the first was that this great road on the edge of town, which made access to our plant very simple and effective, carried on, further out of town, to a place called, I shit you not, Baghdad beach. There was even a sign that said so.

Now, I had occasionally asked people in the plant about Baghdad beach and whether it was nice. Would it be a good place to go on the weekend? What kind of amenities did they have there, and so on. I was always discouraged from going to this beach in a rather vague manner; “eets not so nice” or “zer eezz nothing der senor” or some other variant of the same message. Now, being an American, I can be rather thick about subtleties or reading between the lines. My 15 years in Europe had provided me with a better sensor array for this type of thing than most Americans, but the on/off switch still requires manual activation. If the stimulus was not sufficient to get me to activate my sensitivity array, then I tended to carry on as a block, a stone, or other senseless thing. Since the warnings had been so innocuous, I failed to activate my sensors and so did not solve the equation until much later.

It turned out that Baghdad beach was a landing area for a great deal of contraband heading straight for the Estados Unidos. Gringos turning up to admire the sunset on Baghdad beach were likely never to witness another, and so my well-meaning associates had discouraged all such visits to, what amounted to, dope central. This central fact passed unnoticed until 2009 when the escalation in Felipe Calderon’s noble attempt to domesticate Mexico took the annual death toll arising from these activities from under 1,000 in 2004 to over 7,700. By the end of 2010 the estimated death toll would reach well over 15,000. But by the end of the first quarter of 2010, unpleasant things were already spilling over to the point where they began to be noticeable to even the most dull-witted Yankee tourist, including me.

The first thing that I had noticed when I came down to visit Harry the following week (for a little coordination meeting on our respective planning activities) was that the lightly armed Mexican border control types running around in their “Lobos” (a Ford

F-150 pickup truck in Mexico) had been replaced by serious looking military types in full body armor hanging off of "technicals" of various breeds and proportions, all sporting the ubiquitous "Ma Deuce" (Browning .50 caliber machine gun) as well as cannons of various dimensions and complexions. Along with this distinct upgrade in armament, we were now being seriously "eyeballed" as we drove through the customs station. The former attitude, which was typified by a cigarette hanging out of the mouth, and bored disregard for another bloody Yankee, having now been replaced with a raptor-like gaze of full attention and consideration. By now, we had sent the Detroit team back home and the only other American who was there was Boo. It was a very good thing as this would be a memorable day.

We rolled into the plant at 8am went for a walk around of the shop floor and headed up for the 9am daily control room meeting. As I was watching Harry review the plan for the day, my eyes were drawn to the window into our parking lot. A blacked out SUV had pulled into the parking lot and the guard was reacting in a rather singular manner. The normally relaxed and, dare I say, slouching posture of a Latino male had transformed itself into a ramrod straight, switched on and definitely paying attention mode. The rear window of the SUV rolled down and a sub-machine gun barrel poked out in the direction of the guard and a lively exchange between the guard and the occupants of the vehicle ensued.

At this point I did what would normally have been unforgivable in a control room meeting; I interrupted the proceedings and drew the attention of the assembled management team to the bit of Kabuki theater that was playing itself out in the parking lot less than fifty feet from where we were.

After a moment, the guard, who had obviously performed the mental calculus needed to determine that his four-dollar an hour job (fully fringed mind you) was not worth dying for and let the SUV into the parking lot. It started towards the main entrance to the plant.

"Harry, I believe we are being boarded"

"Donny me lad, you have a fine sense of the obvious"

"I don't suppose you have any automatic weapons or other ordinance about do you?"

"Why no, the authorities frown on firearms for non-criminals around these parts."

"Kind of makes you feel like you're back in England doesn't it."

"Donny, I think that this is not quite the time for levity, but you are correct, it does, a bit."

"Well since we have no method of defending ourselves, and since I am pretty sure that this bunch is looking for a gringo or two to kidnap, might I suggest that we exercise the better part of valor and get to the bolt-hole?"

"Donald Linkwood, you have read my mind, and I am happy, but not surprised, to know that you have designed a factory with a good old fashioned Tudor style bolt-hole in it.

Top marks me boy. I might suggest that we get there with some alacrity as our guests are sure to be here in just a matter of moments and I think it would be a good thing if the staff had plausible deniability regarding our presence and possible whereabouts."

I gestured towards the door and said to Harry and Boo, "gentlemen, shall we?"

Harry turned to Daniel Alcazar, his production superintendent and said, "Daniel, we have not come in today and we are not expected, comprende?"

"Si, Mr. Harry, I get it."

We proceeded, with all of the haste that dignity would allow, into the plant and towards the door to the unfinished extension. We unlocked the door and pushed through into the darkened section of the plant extension just as our guests were showing their party favors and noisemakers to the ladies at the reception desk.

"This way" I said and headed towards the foundations that we had poured for a planned paint line that was to be installed when we had exhausted the available capacity in our other plant in Alabama. The foundation for this planned paint line had a hidden sump for paint sludge that could just hold the three of us so we squeezed through the entrance hole and took up residence in the sump well.

"You see the problem that we have here Harry is that there is no way out, so it's not really a bolt hole, it's just a hole."

"Well Donny, it's admittedly not as luxurious as Saddam's but I suppose it will do. Might I suggest that we suspend any further discussions until the situation resolves itself?"

We sat in silence for about 20 minutes. I marveled at the focus and heightened sensory perceptions that are provided by raw terror, as every squeak, pop and click were audible and every smell was magnified. I was appalled to realize that Boo used Old Spice after-shave. There were some raised voices audible irregularly, but no gunshots and it did not seem that anybody even got into the extension.

Daniel became audible moving through the plant extension and calling for Harry.

"Mr. Harry, they are gone. It is all clear."

"Harry, do you trust Daniel?"

"Oh, yes he's fine."

"OK, then let's go change our underwear "

We clambered out and decided that we had had enough plant for the day, and headed out to get back across the border and into Brownsville.

Although we wanted desperately to exercise the better part of valor and not risk a return to the Mexican plant, the reality of the turnaround forced us back. We both faced this inevitability in our own manner.

Since I have been familiar with guns of all types since I was a young boy, my reaction was simple, I just grumbled and bitched about not being able to carry a firearm in a feral country where the only selection criterion for gun ownership seemed to be membership in a criminal gang or a hopelessly corrupt police force.

Harry handled the matter in a slightly different manner. He acquired a new pair of Tony Lama cowboy boots and contrived to add, as a piece of standard equipment to this rig, a Fairbairn fighting knife. To those of you who are unfamiliar with the Fairbairn, it makes our more famous "Ka-bar" combat knife look almost friendly. Where the Ka-bar is a one sided combat knife, although it is sharp on both sides at the business end, the Fairbairn is a proper two-sided and rather vicious looking dagger. Developed by a British cop of the same name in China between War 1 and War 2, the Fairbairn soon became a favorite of British commandos. It was utilized with great success in their unofficial campaign to visually inspect the voice boxes of all German sentries manning the Atlantic coast during War 2 prior to June 6, 1944. The Fairbairn has an extremely pointed end, which makes it as effective at pokery as it is at slicery. There is something very unsettling about the Fairbairn. It looks, well, hungry. It is the Hannibal Lecter of knives. It wants to bifurcate your liver. It would love to meet your aorta, up close and personal. There are no redeeming social values about the Fairbairn; nothing tame or polite. It was obviously designed to do one thing. You are not going to slice bread or salami with it. It will not be useful on a boat. It is a killer, pure and simple, and it looks the part.

Harry loved the bloody thing.

So despite my admonitions about the questionable wisdom of bringing a knife to a gunfight, Harry was not to be dissuaded and the Fairbairn was soon carried in the boot as part of Harry's daily regalia.

Three weeks after the botched kidnapping attempt, I was back for a follow up with Boo. The city's accelerating decent into anarchy had started to embolden every punk and degenerate in Matamoros. The streets were becoming more and more unstable as the big boys, the Gulf cartel and the Zetas, were occupied with each other and were no longer maintaining any semblance of order. My first day back, we headed to one of our favorite local spots, "Los Portales", for a quick lunch. Harry said he needed to stop at an ATM to get some dough and asked if I would provide top cover as he worked the buttons to get the required currency. Sure enough, as I kept lookout, we were approached by two teenage boys who proceeded to brandish one of those cheesy Pachuco switchblades at us and who then proceeded to demand money. I was standing between Harry and this set of larval felons so they did not immediately see Harry make the grab for his boot. What they did see was an English fireplug with a brush cut emerge from behind me brandishing this terrifying Fairbairn knife and informing them, in the classic Paul Hogan manner, that what they were showing us was not really a knife, but that the Fairbairn most certainly was. As in the movie, our would-be assailants quickly lost their nerve and retired from the field. Harry was grinning like an idiot until I informed him that the line he had used was not indeed original and was the intellectual property of an Australian. This slight

humiliation dampened Harry's mood somewhat but he maintained that he had never seen the film and did not know who Paul Hogan was. He remained convinced that this had all been the best kind of fun and only the failure to spill a little of the old red vino had been missing to complete the festivities.

After a delicious lunch of baby goat (Cabrito) we headed back to the plant as Harry was bursting with pride about something he wanted to show me.

Harry got us back to the plant and proceeded to take me out to the shop floor and led me to a flip chart with several plant employees who were all beaming with pleasure and pride. Since we had stopped the plant's financial bleeding and ended the rather expensive practice of shipping parts around the country with airplanes (normally trucks or railroads are utilized) and had killed the quality problems coming out of the plant, we were beginning to move on to the optimization of processes. We had an added incentive to do this because we discovered around the end of March that the customers were scheduling parts that we could not keep up with. The line had been configured originally in one way and under the scintillating leadership of the previous administration, had been reconfigured in such a manner that the capacities were no longer sufficient to reach the volume of part production that we had promised the customer. New carlines were being added and we now calculated that we would no longer be able supply enough parts by the end of April. So the fuse had been lit and if we were to avoid a painful explosion we would have to find the bottlenecks and relieve the constraints in one big damn hurry. To facilitate the teams' efforts to find solutions, Harry had been using his control room to go through all of the processes and seek improvements.

So now I was trundled up to the welding area and the area supervisor began to explain that by observing the welding area, he had found that one machine, with one set of fixtures was making a very high volume part was proving to be a major bottleneck and yet there was available capacity on other machines, so he sat down with the toolmaker and the production superintendent and began to take a close look at the fixturing system that holds the individual parts in place during the welding cycle. They puzzled together after their shifts for about three days and then came up with a solution to modify the fixture so that it would accept multiple designs without compromising the quality of the original variant. The result was that the high volume part could now be scheduled to run on other welding machines as capacity became available. This allowed us to produce about 30% more of the high volume variant than we could, up to that point, and it would allow us to meet the April requirements without even breathing hard.

This entire effort cost the company about $750 and had saved investing in additional welding equipment and the labor force to run it. These additional costs that had not been considered in the original plan and would have amounted to about $200,000 in investment along with around $25,000 in annual running costs. This solution had been achieved, not by a brilliant engineer with all the right schooling, nor was it achieved neither by brilliant financial analyst with brilliant insights, nor by an outside consultant for $2000 a day plus expenses, this optimization to our system had been defined,

developed and implemented by a guy who makes far less that somebody flipping burgers at your local McDonalds.

Harry gave the guy 200 bucks and the rest of the team 100 bucks a piece and they were over the moon. The interesting thing was that they never mentioned the money Harry gave them. The only thing that they talked about how good it felt to be able to suggest a solution and to be able to develop it by themselves. They were as proud as punch and eager for another challenge. Harry through leading, but also by knowing when to back up and get out of the way, had motivated the group and gotten them switched on to the idea of getting more with less. He was moving the tactical circle into the operational circle. He was pushing the rings closer together despite having to perform this feat in a country on the edge of anarchy.

Fresh horrors emerged in the weeks following. Bodies were discovered in the field next to our plant. One of the high speed contraband convoys coming in from Bagdad beach seriously misjudged the braking distance required to avoid an eighteen wheeler pulling into our plant. The resulting carnage involving a crashed SUV of the large persuasion had strewn the road in front of the plant with body parts and a large quantity of white powder whose pedigree and provenance were obviously South American. Harry watched the cleanup operation which he said was as slick and speedy as anything that our own Christians-In-Action would have been capable of. The entire mess was gone within 20 minutes.

The unfortunate pilot of the offending 18 wheeler was taken away by the gang and we expected that he would suffer a painful and protracted death involving propane torches and wire cutters. To our surprise he was released the next day with no discernable wear other than a few blue spots on the arms and face. The owner of the trucking company's brother, however, was found the next day hanging from under an overpass.

Despite these amusing diversions we continued to improve the plant financial performance and by May we were seeing 12% EBIT figures in our Mexican facility.

I flew back to Detroit the following Monday for a staff meeting with the rest of our management team members and met with our first major setback.

We had looked at C-F, and their minivan as a strategic priority. This was a chance to design three rows of complicated mechanisms and to attack what had become, a niche market. With two of the big three having exited the minivan segment, there were only a couple of major players left, one American, the other, Japanese. We had worked extensively with C-F when they had been DC and so we had assumed that we would have a good chance of insinuating ourselves into this business.

Minivans were no longer a "mainstream" business that our competitors would be all that willing to kill for, so the chances that we could win the business with enough margin to survive looked pretty good. The problem here was that it would take a lot of engineering money to develop a sensible alternative which would operate to scare off the more

finance driven Tier 1's. In addition, the product could not easily be deployed into other vehicles.

This looked like a pretty good way of establishing ourselves in a defensible niche as long as we were willing to spend the dough to develop a viable alternative to the incumbent supplier, who would be confident and would not think he had to work very hard to retain the business.

So we had begun to call customer Engineering and Purchasing, just to ask for a sit down and discuss possibilities type of meeting. No reaction. We gave it a couple of days and tried again. Still nothing, not even a call back. So I called one of my old colleagues with whom I had worked pretty closely on a program which had gone pretty well. I got a hold of his e-mail address, left a message, and never got a call back. I then tried leaving messages on his phone, again, no response.

Since knocking at the front door was not yielding any results, we started looking at side doors, back doors and even windows for a way to get into this suddenly daunting corporate edifice. Finally after about two weeks of poking around we got to the bottom of the problem.

The Chrysler guys were swamped. They had very few people doing a whole lot of work. They were so busy shooting alligators that they were in no position to think about draining the swamp. The mini-van seating system was acceptable as was, and they had no interest or intention of looking for another solution. So there would be no support for our endeavor from either Engineering or Purchasing.

So we immediately made the decision to stop all activities and redirect the resources to the other programs we were chasing. We would have to wait for another cycle to come around before we even considered this business again.

Second on our targeted business list was the General Motors Corvette. Thus far we had developed business at both Ford and Chrysler, but we had not been able to crack GM. We did have a few contacts and so we proceeded to call any and all people we knew in Purchasing and Engineering to see if we had a chance at this business. Sure enough, the cans rattled on the wire.

Our friends in GM Engineering had realized that the Corvette seat was not competitive with any of the high end German or Italian sports car seats from either a technology or comfort perspective. The Corvette platform management was looking very seriously at one of the Ferrari seat structures as a benchmark product and it just happened to be one of the products that we had designed and which we produced in Europe. We would be our own benchmark. Perfect. The crack was there, now we just had to stick a commercial grenade into it and blow it open and we would be in at another major US customer. There was however, as there usually is, a catch.

GM was not yet following the common German practice of awarding the complete seat business to one of the big Tier 1 suppliers but dictating to that Tier 1 supplier which sub-suppliers would receive the components business of the seating system such as the tracks that move the seat back and forth, the seat structure, leather seat covers etc. This meant that we would have to go through one of the Tier 1 suppliers. We would have indirect support from the GM platform and Engineering team due to our position as the benchmarked supplier but they could not and would not exert any direct overt influence on the decision. They could and would coach us, but they could not sponsor us. We would have to persuade the Tier 1 who was awarded the business to work with us.

This was a problem because most of the time the large US based Tier 1 suppliers had their own indigenous metals and mechanisms divisions and would always strive to steer all business to their own people first. This was such an endemic problem that we had, in the twenty or so years that we had been working with Tier 1 suppliers in both Europe and the Americas, only once had we been awarded a program from any Tier 1 supplier. This was when the Tier 1 supplier had been unable to solve a technical packaging problem and was forced to use an outside supplier. We had then won the business. Once exposed to the quality and technical benefits of our products, (there were virtually no warranty or customer complaints), we had quickly become a major supplier at Ford and had displaced several Tier 1 products.

Because the large US Tier 1 suppliers were financially driven, they were not innovating enough. They were offering the same product lines over and over to the OEM's, attempting to milk multiple product cycles out of the same capital equipment and thus improve their appearance to Wall Street. This meant that their US products tended to be rather agricultural when compared to Germany , where OEM's were decidedly more product focused and the automakers were engaged perpetually in a kind of a "I have cooler tech than you" contest that drove them to innovate constantly and keep pushing the envelope in terms of products, manufacturing technologies and materials.

What all of this meant was that we would have the GM platform and engineering group quietly supporting us because they wanted the Corvette to have a seat that reflected a European standard that would approach Ferrari, Porsche, Mercedes, BMW and Audi, but that the Tier 1 would be fighting to retain this business for their in-house seat mechanism suppliers.

A little team synthesis was required. As the great Enlightenment scholar Peter Gay has stated, "synthesis demands regard for complexity". So we huddled and discussed the potential courses that would lead to success. Our conclusion would be based on an incomplete data set. We were going to start spending money as we wanted to have a working functional model before the customer asked for it. So were the chances good enough for us to start committing funds?

What emerged from our team meeting went something like this. There were two possible Tier ones that were seriously contending for this business. One was the incumbent, who

had those agricultural designs, his own metals and mechanisms division, and a plant virtually right across the street from the GM Corvette plant in Bowling Green, Kentucky. This company was also operating under Chapter 11 bankruptcy protection. The other was a German supplier who was also preferred by GM, had the right pedigree but did not have mechanisms development in the US and no bricks and mortar anywhere near Kentucky.

We had already approached both of the contenders and came away feeling that the German company was a little too slick, a little too cocky, and a little too stingy with information for our tastes. They were superficially encouraging but were very non-committal when real information was required. The American company, on the other hand, seemed very interested in proceeding with us and was asking all about the Ferrari seat mechanism. Now this could also be a ploy as these guys had a track record of getting us to work up a concept and then saying that they were sorry but the program had decided to go in another direction. Three years later we would see our concept on the market made by someone else. So our observations, our past experience, our culture and heritage needed to be analyzed and the basis of some decision would have to be synthesized out of this process. This is what how we decided what to do.

We created a list of 27 major observations that we thought were important enough to significantly influence our decision.

First we looked at the external business environment and concluded that there was still a lot of uncertainty that would be affecting the decision making processes of the principals. This was the first half of 2010 and the dust had still not completely settled from 2008 and 2009. People were still nervous and unsure of what was going to happen in the immediate future and this would cause them to be conservative in their approaches and circumspect in their actions. Corporate denizens, who in the best of circumstances are incapable of bold action due to the architecture of the modern companies, would be extremely slow to do anything that would contain the odor of risk. No matter how they saw this fact pattern, they would tend, in this environment, to minimize risk, and exposure of all types. They would be slow to implement new materials and new manufacturing technologies, they would seek to minimize investments of all types, and they would seek to increase revenue while minimizing expense.

Second we looked at the OEM and tried to assess the probability of how they would behave. By now GM was focused on product. They were looking to create world class vehicles and the horrible idiot days of Ignaki Lopez had been consigned to the scrap heap of history. GM did however have to be careful as they were under a lot of scrutiny from a lot of people who knew absolutely nothing about automobiles or the automotive industry. They needed great products, but they needed to husband resources and pursue a policy of active conservatism in investments of any kind. They needed to repair the relationships with their supply base so that they could get a stable supply platform in place. They

would want a world class product for the Corvette, but they would want a minimum of risk associated with this project.

Next we looked at the German competitor. We knew that the GM Engineering guys really liked this group but this attraction was counterbalanced by several considerable issues. The Germans had no track record. They were not a traditional GM supplier in the NAFTA region. They were small, so they had no deep pockets to reach into, and they had no production capacity for metals and mechanisms anywhere near the GM plant. We then considered our reactions to this German outfit. We had all come away with an immediate feeling that these guys were not to be trusted. There seemed to be baggage that we didn't understand but we knew that they would not see an advantage in picking their suppler early. We were also concerned that their location was directly across the street from our major competitor and that it would just be a matter of time before they asked our competitor for their thoughts. We regarded these guys as a sort of Frankenstein's monster. Years previously we had enjoyed a monopoly position at Mercedes-Benz when they had decided to use exclusively a patented seat track system that we had developed. But Mercedes forced us to give a license to these guys so that we would not be a monopoly supplier. The result was that we put, what would become, our biggest competitor into our business and these guys had been a thorn in our side ever since. Unfortunately, they were very, very good. Indeed they were the only competitor who I was scared of.

Finally we considered the US Company. Although they were not a world class metals and mechanisms developer, they had never admitted this to themselves. Their tendency was to try and make their own products whenever they could although they were not doing themselves, their customers, or the market any damn good by doing so. They were not above lifting an idea or two, and they had never given us a single program unless they were unable to solve a technical problem that forced them to turn the business over to us. Not the best basis for a project where a lot of collaborative effort would be required. However, these guys were in bankruptcy, the project would require a significant investment in resources and capital, the returns would be relatively small, and the OEM Engineering group was making it clear that they would not rejoice if presented with a product that would be more appropriate for application in a tractor or combine.

We boiled down the observations in a four step process (see illustrations) that allowed us to decide on a course of action that we thought would have the highest probability for success.

We listed the observations and then rated them three times to distill what we thought would eventually drive the decision. We simply made a visual importance scale by reducing and then eliminating the non-essential data set to come up with a stripped down set of decision drivers as follows:

OBSERVATIONS:

Illustration 1:

1. The overall economy is weak
2. Capital is expensive and difficult to come by
3. Confidence is low
4. Raw materials prices are volatile
5. Project is relatively small <30k vehicles per year
6. Project is high visibility at GM – Product is GM's coolest car
7. Project will be engineering driven and engineering intensive
8. GM want this product to compare favorably with German/Italian vehicles
9. GM is just emerging from bankruptcy
10. GM seating development is done out of Germany in most cases
11. GM is publicly discussing the need to improve relationships with incumbent suppliers
12. GM likes the German company
13. The German company probably needs local mechanisms support
14. The German company has no manufacturing plants near the GM facility in Kentucky
15. The German company is not behaving in a serious manner towards us
16. The German company shares cultural traditions with our company
17. The German company is in the same industrial park as our main competitor (also a German company)
18. The German company's parent competes with us in Germany
19. The German company is not a traditional GM supplier in the US but is in Germany
20. GM does not respect the US company as a metals and mechanisms developer/supplier
21. The US company has its own metals and mechanisms division
22. The US company has a seat plant right next to the GM production facility in Kentucky
23. The US company has often behaved in a misleading manner in the past
24. The US company has appropriated ideas and concepts from us in the past
25. The US company has never sourced business to us in the past unless it had to
26. The US company is operating under Chapter 11 bankruptcy protection
27. The US company is a longtime supplier to GM

OBSERVATIONS: ESTIMATED IMPORTANCE LEVEL 1

Illustration 2: First sort for importance

1. The overall economy is weak
2. Capital is expensive and difficult to come by
3. Confidence is low
4. Raw materials prices are volatile
5. Project is relatively small <30k vehicles per year
6. Project is high visibility at GM – Product is GM's coolest car
7. Project will be engineering driven and engineering intensive
8. GM want this product to compare favorably with German/Italian vehicles
9. GM is just emerging from bankruptcy
10. GM seating development is done out of Germany in most cases
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20. GM does not respect the US company as a metals and mechanisms developer/supplier
21. The US company has its own metals and mechanisms division
22. The US company has a seat plant right next to the GM production facility in Kentucky
23. The US company has often behaved in a misleading manner in the past
24. The US company has appropriated ideas and concepts from us in the past
25. The US company has never sourced business to us in the past unless it had to
26. The US company is operating under Chapter 11 bankruptcy protection
27. The US company is a longtime supplier to GM

Illustration 3: the first idea cull resulted in the following 15 observations being considered key

OBSERVATIONS: ESTIMATED IMPORTANCE LEVEL 2

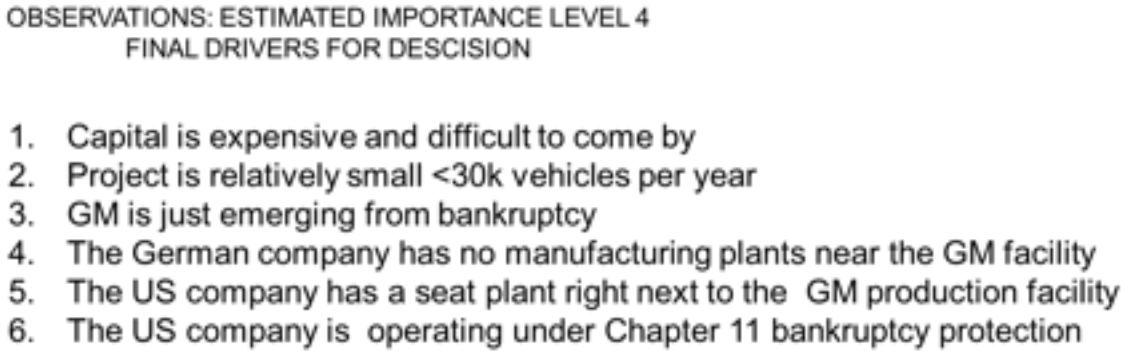
1. The overall economy is weak
2. Capital is expensive and difficult to come by
3. Project is relatively small <30k vehicles per year
4. Project will be engineering driven and engineering intensive
5. GM is just emerging from bankruptcy
6. GM seating development is done out of Germany in most cases
7. The German company probably needs local mechanisms support
8. The German company has no manufacturing plants near the GM facility in Kentucky
9. The German company is not behaving in a serious manner towards us
10. The German company is in the same industrial park as our main competitor (also a German company)
11. GM does not respect the US company as a metals and mechanisms developer/supplier
12. The US company has its own metals and mechanisms division
13. The US company has a seat plant right next to the GM production facility in Kentucky
14. The US company has never sourced business to us in the past unless it had to
15. The US company is operating under Chapter 11 bankruptcy protect

Illustration 4: we re-rated again

OBSERVATIONS: ESTIMATED IMPORTANCE LEVEL 3

1. Capital is expensive and difficult to come by
2. Project is relatively small <30k vehicles per year
3. Project will be engineering driven and engineering intensive
4. GM is just emerging from bankruptcy
5. GM seating development is done out of Germany in most cases
6. The German company probably needs local mechanisms support
7. The German company has no manufacturing plants near the GM facility
8. The German company is not behaving in a serious manner towards us
9. The German company is in the same industrial park as our main competitor (also a German company)
10. GM does not respect the US company as a metals and mechanisms developer/supplier
11. The US company has its own metals and mechanisms division
12. The US company has a seat plant right next to the GM production facility
13. The US company has never sourced business to us in the past unless it had to
14. The US company is operating under Chapter 11 bankruptcy protection

Illustration 5: final list of key factors for decision and action



This was a process where we had weighed the observations, assigned them a relative importance and distilled our analysis to the point where we were able to synthesize a course of action based on our best guess of the way things might occur based on an admittedly incomplete data set. We would keep our options open and prepare ourselves to change direction with a minimum loss of forward momentum and internal friction.

Our conclusion was that the entire decision would be based on risk minimization. How could GM get the best product with a minimum of exposure? We also looked at the German company who had the ear of the customer but not the means of production or the track record to support the project. So they would appear to GM as a solution with a high risk factor associated with using them. If the American company could be brought to engineering heel, and agree to use a world class seat adjuster rather than their usual offerings, they would have an experienced supplier in the best logistical situation possible utilizing existing infrastructure and relationships and offering a world class product. The American company would minimize tooling and investment and offload a significant engineering expense while making the customer happy if they would go forward with us. So despite their past bad behavior, we concluded that the best action was to pour the bulk of our resources towards working with the American company as they would emerge as the winner in the contest with the German company and their finance guys would lead them to conclude that the investment required to create their own product was not worth the return for this project. At the same time we would keep the door open with The German company, but not give them any concept information that could be passed to the bad guys across the street. We wanted to keep them dangling while we put most of our efforts in the other direction.

Over the next six weeks we focused our engineering activities on the American company, created a functional sample for them and received confirmation that, due to the current financial situation, they had no intention of trying to develop their own solution through an impeccable source we had developed. We negotiated our price and began the

development of the product. At the same time we kept talking to the Germans, just in case, and soon were told that they were also talking to our competitors.

Four weeks later GM awarded the American company the project based on the DSI adjuster.

We had our first big win of the year. We had a prestige project at a new customer, most of our basic engineering work had already completed for the original OEM, we could use existing tooling for many of the components, and we had gotten one of the projects on our targeted business list and it would be done with a minimum of all forms of investment.

Using this same systematic approach, we, over the next two months, successfully pursued projects which resulted in substantial business awards at both Ford and Hyundai.

Along with the Operational improvements we had made we had now developed and were awarded major programs at three OEM's, one of which was a new customer for our firm.

We also started a little M&A activity with a local Detroit boutique investment banking firm. I had talked to Bob Stein and I knew that if we really wanted to go after second and third row seating structures we would have to acquire a company with some big presses. Bob gave us the go ahead and I started talking to our investment banker, Jim Quill about opportunities. He immediately came up with Spartanburg stampings, so we started to look at these guys seriously. They had big presses, and they made large body stampings like quarter panel and roof stampings. This would not only give us the press capacity we needed, but would put us into other vehicle sub-systems and take us down that X axis.

Now it was time for some "chi".

John Boyd repeatedly talked about Sun Tzu and his concepts of "cheng" and "chi". These concepts, reduced to their simplest forms, reflect what might be described as "normal" behavior (cheng) and "innovative" or "unexpected" behavior (chi). These are transient concepts as something which is, at first, unexpected and which surprises your customer or competitor (chi actions) will become cheng actions once your opponent recognizes them.

As we had already discovered through a little research, the returns in the automotive sector were depressed to the point that there was an increasing probability that one or more of the big, publicly traded, Tier 1 companies might decide that there were other businesses available that would offer better returns and exit the automotive business to pursue other, more lucrative opportunities. We were able to perform at well over twice the industry average because we were a privately held company that was very Market driven and had a low overhead. Our people were better paid than anybody but the top dogs at a publicly traded company but there were a lot fewer of us, we all had much greater span of control (we all did more things) than our publicly traded counterparts and we were generally better at our jobs. We did not have the whole compliance

superstructure required to service the SEC and we did not have the armies of non-value added mandarins dreaming up new systems and procedures that did nothing to reduce inventory, find constraints, improve throughput or make better quality products.

Privately owned companies also have the advantage of being able to focus on the customer without distraction, as long as the returns are sufficient to please the owner. Publicly traded companies have to focus on both the customer and the street. Their focus is generally limited to 90 day intervals. Four times a year they have to go to New York and explain to a bunch of pimply faced kids from Harvard and the Wharton Business school why they should continue to buy their underperforming stock.

The amount of spin that these guys can put on their explanations could generate an electro-magnetic field sufficient to power a small city. Eventually though, the underlying market realities catch up with them and, in the past, they would have to buy something to create enough smoke to keep the pan from becoming too hot. Some of these guys had been doing this for years. They would realize that they were running out of excuses, find some outfit to buy, gin up the M&A boys, go to corporate with a story about how this would be the deal of the century, buy the company, shoot the management, botch the integration, and then boo-hoo-hoo back to corporate and the street about how there were "unforeseen" problems with the acquisition that would depress performance for some time, but that soon, everything would be OK again. There were companies out there that had played this game repeatedly and successfully.

The problem was that they were running out of big companies to buy where the transaction could be used to confound their respective boards as well as the analysts on Wall Street. We thought that the probability that they would be caught out was increasing; that it was just a matter of time before somebody at headquarters or a couple of fund managers realized the pattern and started to put the pressure on to get out of, what amounts to a 4% earnings before taxes and interest business.

This might well lead to a supply vacuum that we could take advantage of, if we had the skills developed to do so.

We had also looked into the possibility of a "Z" axis move into another industry window.

We had another brainstorming meeting where we discussed hospital beds, window drive systems as well as various other ideas, but we also began to focus on the non-automotive vehicular seating industries; in English, bus seats, ambulance seats, large truck seats, and seats for military vehicle applications.

At this point Boo piped up and said that he was acquainted with a gentleman who was involved with trying to develop IED resistant systems for the Army. His responsibilities included seating and he had discussed the need for a seat that would mitigate blast damage when a vehicle hit a mine or IED. He was looking for an entire seat.

I asked Boo to call the guy up and set up a meeting.

Two days later we were sitting in an office at a US Army complex called TARDEC near Detroit and were being regaled by the head of ground survivability about the cost in both treasure and human suffering of spinal injuries received by our soldiers when their vehicles got blown up going over various explosive devices.

The man was looking for someone to help him develop and write specifications for a blast attenuating seat that could turn a blast with a force of around 80,000lbs under the vehicle to a force of around 6,000lbs in the seat and do it in 5 milliseconds. He wanted an entire seat with a seat cover and padding.

We said that we wanted to help and we would get back to him in short order.

Boo and I were both corny enough to think that if we could save the spine of even one American soldier, that our career's would have been worth it. We thought that if we could develop such a seat, put ourselves into a new industry window, and develop a new skill set within the organization that would likely be of use later, we could call it a good day for DSI.

We went back to the office and we called a meeting with Engineering and the boys in our prototype shop, Toby's gang. It took about four hours of discussions that went from calm and deliberate to a lot of honking and squeaking but we came up with our snowmobile.

Metaphorically that is.

As we have repeatedly stated, one of Boyd's fascinations was the recombining of elements to create a new application of existing technology. He had a legendary thought experiment that we have also discussed called "The Snowmobile". What he did was to discuss how skis, a motorcycle motor, a caterpillar track, and a bicycle's handle bars, all pre-existing product sub-systems, could be recombined to create a completely new and very useful product, the snowmobile. As we have also said before, this is also essentially what Steve Jobs had done at Apple, particularly with the I-pod. Steve and his team had taken a Walkman, a memory stick, and a bunch of CDs, given it a slick design and voilà, a new product that took the world by storm.

We had a different problem, how were we to create something that could save our soldiers spines in two weeks or less, that nobody else had come up with, out of parts or sub-systems that we could find laying around. How could we solve this problem?

We started with the seat structure, we designed automotive seating systems, These systems, at least the ones we design, are very good at managing energy that comes from hitting things or being hit from front to back and from side to side. If you get t-boned by some idiot, our seating systems will help save your life (if you have used your seatbelt). Likewise if you hit somebody in front of you or you get rear-ended, our seating systems will hold you in just the right place for the airbag to catch your face instead of the steering column or windshield doing so. We knew that the forces we would be dealing

with would be considerable so we took out strongest seat structure as the first element. We made a seating system for a tiny European car that was so small that any impact would be fast and severe. This system could handle a 60g pulse which, for a 200lb man is about 12,000lbs of force, good enough, we figured, to handle the forward and backwards and side to side forces we would be dealing with, so we took this as our starting point and then moved onto the up and down consideration, where we had already been given our 400g to 30g in five millisecond target.

We would not have a lot of room to work with as this system had to fit in existing vehicles and it had to rest itself as there would be two impacts to deal with, the acute and brutal upward movement caused by the explosion of the mine or IED and the second, lesser impact of the vehicle crashing back to earth.

We decided on a shock absorber. Buck, our tool designer and an inveterate tinkerer said he had a shock absorber designed for the larger variety of moto-cross bikes in his garage that might just do the trick. It would compress, recover and be ready to compress again quickly enough, we figured, to handle the up and the down events. We got then got on Buck's CAD tube and pointed and fussed until we had a four bar collapsible linkage system that would require about six inches of compression to push the piston of the shock absorber for the entire possible length of its available travel. We put a kind of a pedestal around it and we had a basic concept to play with.

Meanwhile, I had called an old buddy of mine who had done seat covers and foam development with me years ago who I knew was looking for work. I told him to come down to the shop. He lived in the area and when he got there I told him what we were working on and asked if he would like a job as a contract engineer to help develop the fully trimmed seat with us. He immediately accepted and added that he knew of a source who could provide us with special polyurethane foam formulations that were being used in the NFL flak jackets that quarterbacks wear to keep their ribs by being stove in by energetic defensive linemen and blitzing linebackers. I said great, at this point we are going to listen to all ideas. We agreed on a five point seatbelt system and we had the beginnings of our snowmobile. The guys went away to start building the thing in the prototype shop.

The next morning I called Bob Stein, our owner, and explained to him what we were up to. Bob was a former panzer officer and he went for the concept immediately. I told him I needed about 75,000 dollars and, although his enthusiasm was somewhat dampened, we had done enough together for him to trust that I would not be idiotic or profligate in spending his dough. Once I had the green light I bought Walt a very expensive German sewing machine and some tools for making patterns, got him some of the mini-car seat structure and told him to go at it

Three weeks later we were standing in front of a test stand which would drop our seat from a height great enough simulate about a 360g pulse. We were skeptical and curious.

The seat dropped and we looked at the result; from 360gs to about 45gs in our first time out of the chute.

It was very encouraging.

We would need to change our cushion pan, get a stronger shock absorber and add more of Walt's magic foam and plow through a mountain of details but we had something that we thought might work. We took the results to the Army and they were so encouraged that they asked whether or not they could keep the model and show it to a bunch of NCO's who were returning from Iraq and Afghanistan to get their input. We agreed.

The feedback from the review was that they liked the idea very much but that they hated the seatbelt system because it impaired "situational awareness". This meant they did not like to be restrained in any way. They had to have their heads on swivels and wanted to able to spot trouble coming from all possible directions. Seatbelt systems inhibited the freedom of movement that was required to provide a level of situational awareness that they were comfortable with. They also were concerned that the seatbelt system would slow them getting out of the vehicle in an emergency. In Afghanistan,when you need to get out of a vehicle quickly, you ***really*** need to get of the vehicle quickly

This was a setback because the occupant had to be in the seat for it to function the way it was supposed to. If the occupants were not belted in, they could end up anywhere in or outside of the vehicle during and after an explosion.

I called around to one of the seatbelt suppliers I knew and explained the problem. They asked me to stop by and see them because they had been working on something that just might do the trick. When I got to their offices they made me sign a non-disclosure agreement and then led me into a room where they had a seat set up. They asked me to get into the seat and fasten the five point belt. I did so. I was asked if I could lean forward and move from side to side with perfect freedom of movement, I could. I was asked if I thought this would address the issue that the battlefield NCO's were worried about. Again I said yes, "but", I asked, "How does this system get the occupant into the seat in the correct position for the shock absorbing sub-systems to work?"

"Like this" the man said and with that he pushed a button on a remote control unit he was holding and I was winched into the seat in an instant. My response was as brief as it was articulate. I simply said "Holy Shit".

"Would you guys be willing to fit this into a seat for me to show to the Army?"

"Absolutely, but wait there's more."

"Ginzu knives?"

"Better". He pushed another button and the system relaxed its rather appalling grip on me.

He then produced one of those die-cast model cars and pushed another button. “Now this model has a sensor in it, and every time this model departs from a position that would be considered “safe” watch what happens.” He flicked the model to the side simulating a skid in a real car. The minute that the model started its skid the seatbelts tightened up again. “Wow” I said, very impressed.

“And now for the grand finale”; he pushed yet another button and the seat belts sprang from the latch and retracted back to the sides of the seat. “You can mount the button on the steering wheel, then one touch and you are out of the vehicle faster than a bookie’s runner.”

“When can you install this in our seat?”

“When can you have your seat over here?”

“How about tomorrow?”

“We will come to you”.

“Fine”

By the third time we had dropped the seat we had met the requirements.

It was now July, that month Harry hit 14% earnings before interest and taxes in Mexico and had our other plant in Alabama approaching 10%. We were meeting every week to review progress and had successfully pushed the circles together. Moral was up and we were innovating. Customer confidence had been restored and we had booked three major new programs and were pushing this military program forward at a speed I had not believed possible. After sales and administration costs and engineering as well, we were still well above 9% earnings before interest and taxes. This was well almost three times the average number for suppliers of interior automotive components in North America.

It had been 7 months since we had hit the ground.

Strategic/Policy Level

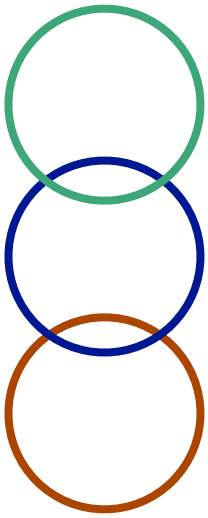
- Market research
- Engineering analysis
- Manufacturing trends
- X, Y, Z analysis
- Targeted Business list
- Marketing and sales plan

Operational Level

- TOC
- TPM
- Kaizen
- Hoshin Kanri
- 7 “weapons”

Tactical Level

- Control Room



We now wanted to take stock of our progress and create a “picture” of how we had pushed our three circles together. So Harry came up and we holed up at a hotel in the area for the weekend to show what we were doing and exactly how we were doing it to show the entire management team exactly how all of these seemingly unrelated activities were indeed part of a larger and hopefully coherent set of actions which, when looked at in total, revealed what we had been up to for the last half year.

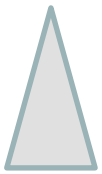
We looked at our three circles and tried to come up with an appropriate metaphor that everyone would understand and we talked about it for a while and decided that the three circles could be represented by an arrow.

When we had arrived on the scene, our arrow had been broken. There was no union, or even intersections of the sets that combined to form an arrow. The individual sections of the arrow were improperly designed and had poor individual performance characteristics.

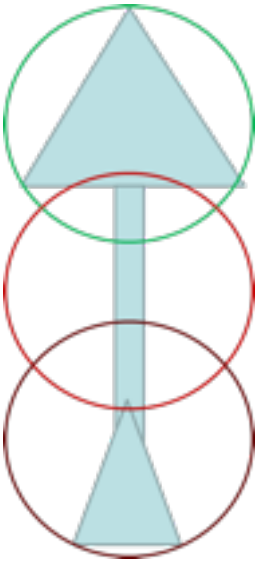
Strategic/Policy Level

Operational Level

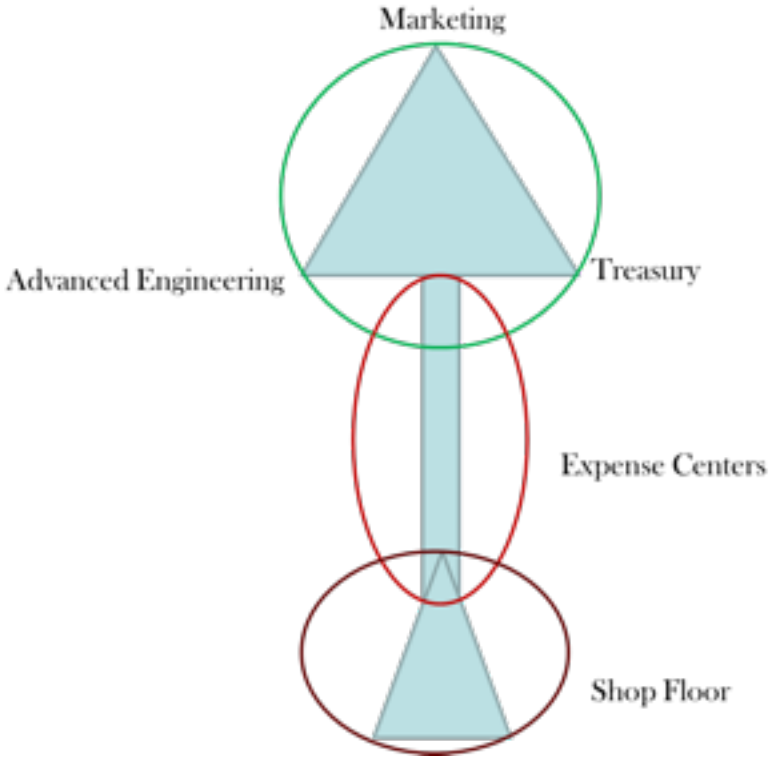
Tactical Level



What we had done up to now was to get the arrow back into one piece and we had begun to rescale the head, shaft and tail of the arrow so the company could hit the market with the head of the arrow designed to do maximum damage. The shaft had been reconfigured to be thinner and yet still have enough mass to drive the head effectively and the tail had been broadened to provide stability in flight by producing superb, stable operational results.



Functionally, the system would look like this:



The company would be market driven and remained focused on adapting to the market quickly. Marketing would remain on the lookout for changes in the external environment and would work with Advanced Engineering to develop products, manufacturing technologies, and select materials based on a best estimate synthesis provided by

O-O-D-A'ing constantly and in real time. Treasury would consider how to best protect the company against difficult variables such as foreign exchange, raw material, and logistics as well as keeping abreast of government compliance issues and gaining effective access to capital markets.

Market forces and possible changes in unfolding circumstances would provide us with enough data to make mid-course corrections based on our evaluation of the admittedly incomplete data set which would be discoverable at any one time.

Expense centers would be subject to the relentless daily pursuit of streamlining and reengineering to eliminate wasteful or non-value adding steps. The more efficient we could be, the lower overhead we would have, and the more competitively we would be able to quote

.The trick would be to remain effective. The expense centers had to retain the mass they needed to be efficient transmitters of corporate force. Everything had to be done inexpensively, but it had to retain high quality. Any cost cutting that would damage any expense centers ability to perform its functions in a world class manner would have to be

avoided at all costs. We would also look at the long term effects of any cost cutting measures as it could affect product or process quality.

For example, DSI had always built its own capital equipment and tooling. There were many voices, particularly from the dreaded finance weenies, that argued that we could cut costs and be more profitable by outsourcing this activity. In the short term this was true, but by losing the control of capital equipment design, by relying on a third party to do this, we would most certainly lose the ability to control the costs and the maintenance of our assembly lines and we would impair our long term ability to drive out costs as we lost "fitness" and understanding in the area of how to make things on the shop floor.

One of our big Tier 1 competitors had made the decision to outsource prototyping as a means to cutting costs. They achieved the cost cutting, but robbed their engineers of the hands-on interaction with the products they designed at an early stage. Their products had been suffering ever since.

So in dealing with expense center optimization we would have to be surgeons and not butchers. We would have to give the team a framework within which to operate. This was simple enough, "drive out costs and inefficiencies, eliminate all unnecessary keystrokes and process steps, and do everything you can to accelerate the movement of product through the plant and to the pay point, but DO NOT do anything that will negatively affect product quality in the near or long term and DO NOT do anything that will affect our collective know-how in a negative way."

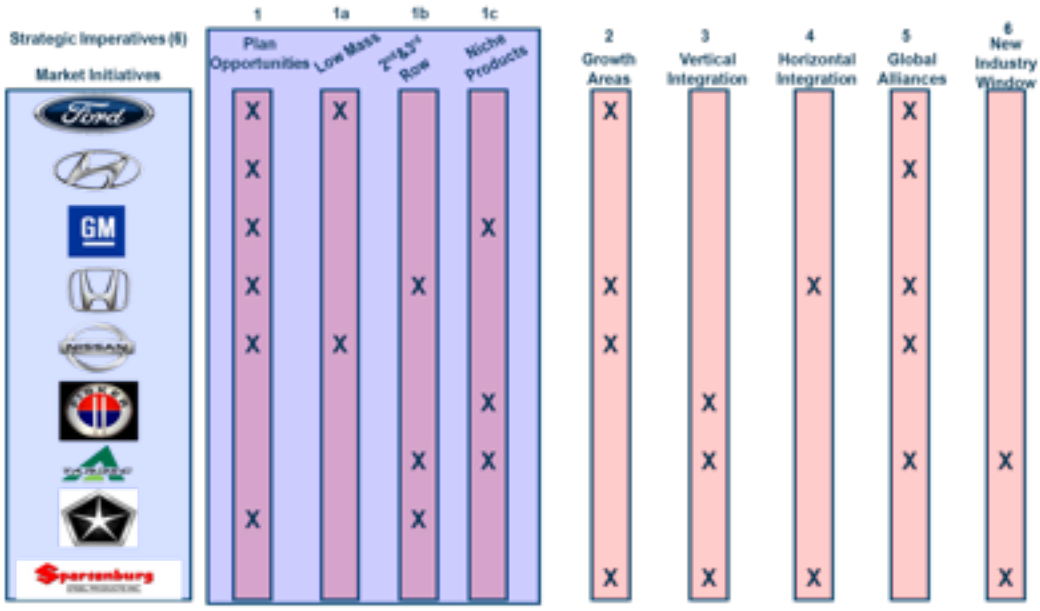
Finally, we would continue with Harry's path towards operational actualization that would provide the stability and commitment to excellence that we needed from the shop floor. By following Harry's control room system, operations would give us the consistent performance that we needed to remain stable in our flight through the business environment. The longer we got along Harry's 12 step path, the most stable and efficient our arrow would fly. Consistent solid and ever improving financial performance had the tendency to keep the people from corporate who wanted to "help" in their cubicles and out of our hair.

Finally Harry and I decided that a visual representation of our outwardly focused activities would be useful in informing our team what we were doing and how each element fit into the overall plan.

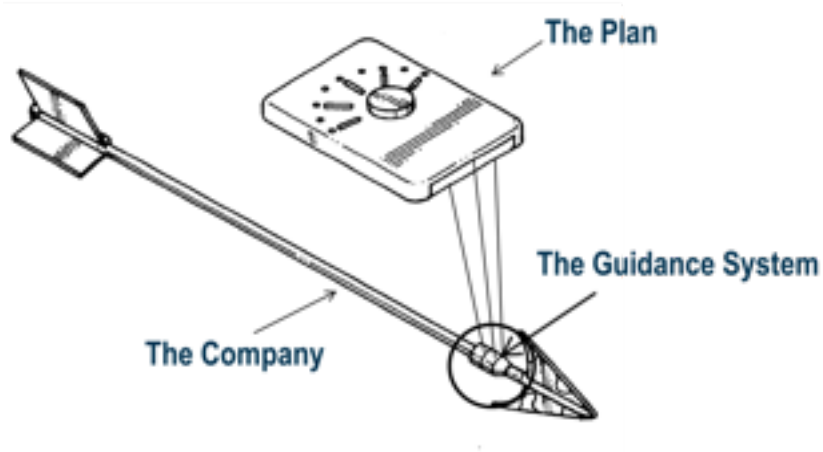
Our plan had been conceived around six key objectives, the target for our arrow. These six strategic imperatives had included:

1) Planned Opportunities with three sub sets
    a. Low mass products to respond to market directions
    b. 2nd and 3rd row seating applications to add to our 1st row products
    c. Niche products for niche markets that we thought would be more profitable
2) Movement into a new growth area (Brazil)
3) Vertical integration to get ready to respond to the changing market
4) Horizontal integration to move us down the X axis
5) Global alliances to help us respond as an alliance to the Tier 1's
6) Moving into a new industry window along the Z axis

When we looked at our actions by initiatives, the plan looked like this:



All of our market initiatives out of our plan had multiple strikes on our strategic imperatives grid. Many of our initiatives hit four or five times on the grid. Using this plan as the guidance system for our arrow, we looked to be in very good shape for the second half of the year. We just had to continue as we started and we should beat all of our targets and really move DSI into a stronger position.



Book 3: The End

Around the third week of July, Bob Stein called. He started with attaboys for the whole management team. “You guys have pulled off something I didn’t think possible, everybody over here thought that the US was a terminal case and you guys would never make a penny. It has really been a great job by the entire team but you and Harry have really performed beyond my wildest expectations. It’s been a bloody good job and your bonuses will reflect your performance.”

“OK chief that’s enough. I am just glad that I got the chance to show that the machine we built over here worked if operated properly. If we get the team going again, and orders stay where they are projected to be, we will be almost $350 million in turnover this year. When you think that in 2000 we were at $20 million, it really feels good.”

“Like I said Donny, bloody good job; by the way, can you do me a favor?

“Sure boss, what?”

“We are going to need some outside financing on this big European program we got so we have been to the banks and they are all talking about risk management and risk mitigation. Remember when you had that environmental study done back in 2000 to check the land in Alabama for any environmental issues?”

“Yeahh, I remember that”

“We don’t seem to have a copy of it over here in the German office, you go through the files and see if you could dig it up and send a copy over with FedEx?.”

“Sure I think I can find it, it might take me a while though, that was ten years ago”.

“I know, but see what you can do; it’s kind of important, and Don, keep it quiet.”

“Ok chief, I will call you back tomorrow.”

I hung up the phone and called Harry. “Harry, we are being sold”.

“Donny me lad you have lost your mind, this place has never performed better. We are rolling in cash. In seven months we have gone for 6 percent down to 9 percent up; a bloody 15 point swing, we are booking new business like it’s going out of style; Stein wouldn’t sell now, no bloody way!”

“He just asked me to dig up the original environmental assessment on the Alabama property.”

“Oh my god we are being sold.”

“That’s my take. He said it was for some risk management thing required by a possible lending institution.”

“Rubbish”

“With a capital “R” Harry me boy. I guess he takes me for an idiot. You would think he would know better.”

“Bobby can be, well, variable is the best word I can muster.”

We got on a plane and flew over to our headquarters to confront the lion in his den. The sputtering denials, wild arm movements, gesticulations, and nervous twitches served only to confirm what we had suspected. The company also leaked like a sieve and our “suitor” was even worse. By the time I had left the office I was getting calls from former colleagues on both sides, all atwitter about the takeover.

After another two weeks of misdirection and prevarication, Bob yielded to the inevitable and brought Harry and me over to be players on the “Due Diligence” team. The team would be responsible for putting to rest any doubts that the suitor had concerning the offer to buy DSI.

Stein continued to deny that the company was for sale even though everybody knew it already. The result was that all progress ground to a halt as people became increasingly inwardly focused and started to try and position themselves to be seen in the best possible light when the new owners Tier 1 death squads came around to see if anyone was to be considered as a candidate for “reeducation” or if the entire management team would just be taken out back and shot.

People are more intelligent than upper management generally gives them credit for.

Harry flew back to watch the store and try to keep the numbers up while I stayed in Germany to man my post as company propagandist.

Predictably, our number peaked in July and we never again got above 14% EBIT in Mexico and 9% EBIT in Alabama. Harry was able to stabilize the plants at about 12% and 8% respectively, but the fire was out of the bellies. My guys in Detroit started pimping their resumes and setting up interviews and were completely unfocused.

We never landed another piece of business after July.

The exodus began in August and by December not one member of my sales team was left. They all had smelled the coffee. People who have worked in a smaller, agile, strategically oriented company where they have a large span of control and where they are treated like adults generally will have problems working in the stultifying atmosphere of a large publically traded company where decision making is inevitable but glacial and where the spectators second guess every little move that the employees make in their little cubicles of responsibility. Here the quarterly report rules. I understood and wished them all the best.

I knew it was time for me to go too.

I gave notice in January of 2011, just before the sale of DSI became final but I had a six month notice period and Stein wanted me to work through it to help with the integration.

Stein had big plans. He had been promised that he could run the combined metal division and do it in a way that assured that we would continue to be profitable. He was fired in October of 2011, less than ten months after the sale was complete.

Harry decided to stay and try to educate the barbarians. He made his stand and actually won a few converts, but his straight up approach and “no bullshit” mantra rubbed several people, including his new boss, the wrong way. Harry was fired in December of 2011.

I went to one of the last privately owned companies in my branch, where I am currently the Managing Director of the European division. I have hired most of my old team, although I lost Mindy to an OEM, and I will just go back to doing what we did at DSI and I am confident that we will make the Tier 1’s howl. As soon as I have a couple of plants, I will get Harry back too. At the end of the day it is people that are important. John Boyd had a simple six word motto, “people, ideas, technology, in that order”. I could not agree with him more. These supersized outfits never seem to get that, but it is really the truth. So I am now rebuilding, and I have a new bunch of guys to do it with. I already have a plan, but that is another story.