



Boyd and Beyond 2014



Applying Boyd's Principles to Business Organizations

CRH of North America 2000 - 2010





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Contents/Topics

- 1. Common Features in Boydian organizations**
- 2. Market Recon and Pull: Surfaces and Gaps**
- 3. Everything you know is wrong and you need to change quickly**
- 4. Adaptive reuse: Of Snowmobiles and Steering Column Adjusters**
- 5. Finding Unique Approaches: Creativity**
- 6. Leadership: Decisions, Initiative, Strategic Direction**
- 7. Winning all the Battles and Losing the War**



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Part 1: Common Features





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Introduction: ?Nagging Questions?

What are the basic characteristics of a maneuver organization?

What are the common features of successful maneuver based organizations?

How can we apply or design these features to an organization?



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Lessons from the Master

Characteristics of the Maneuver based Organization

- **Rapidity of Decision Making**
- **Rapidity of Action**
- **Decentralized Decision Making**
- **Significant License to Execute**



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Consistent Features of the Maneuver based Organization

IMPRESSION:

- Unit Cohesion/Common Values
- High Skill Levels/Training
- New or Adaptive Reuse of Technology
- Tradecraft

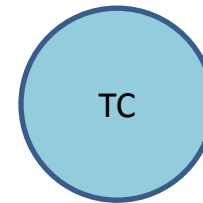
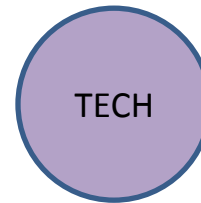
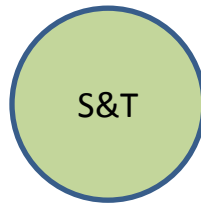
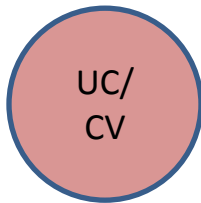


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Consistent Features of the Maneuver based Organization

IDEA: Think of these as balloons



These Features can vary in size in differing organizations but are always present

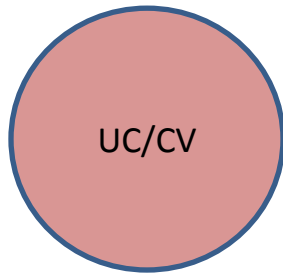


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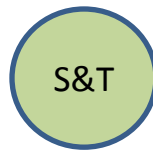


Consistent Features of the Maneuver based Organization

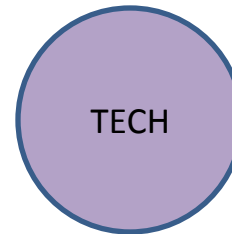
Example: Afghani Mujahedeen vs. Soviet Union



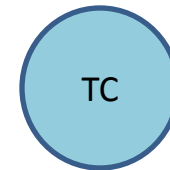
Religion/Culture



Born Fighters



US Stingers



Basic Sit. Awareness

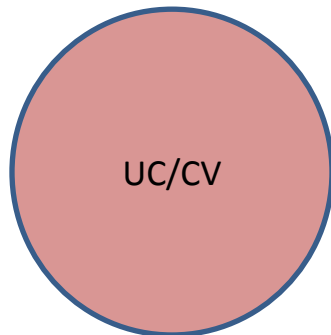


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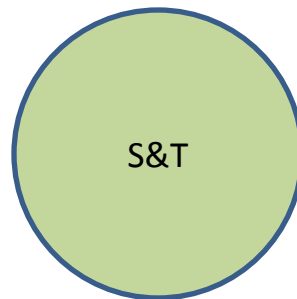


Consistent Features of the Maneuver based Organization

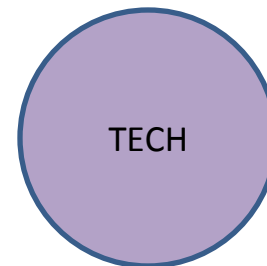
Example: Alexander de Large



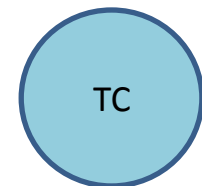
Devoted Officers Corps



Papa's Army



Macedonian Phalanx



Personal Recon/Spies

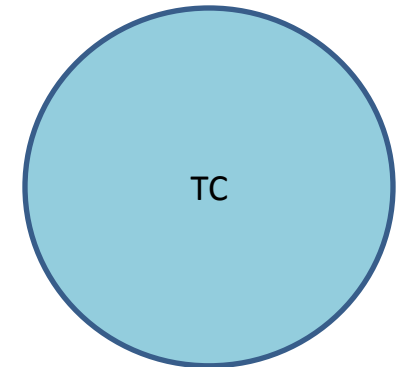
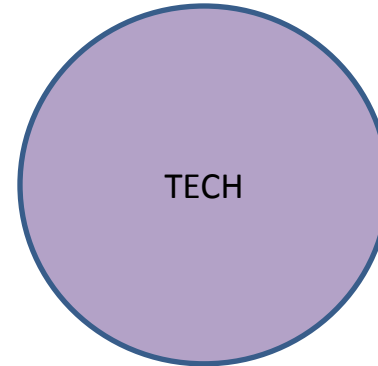
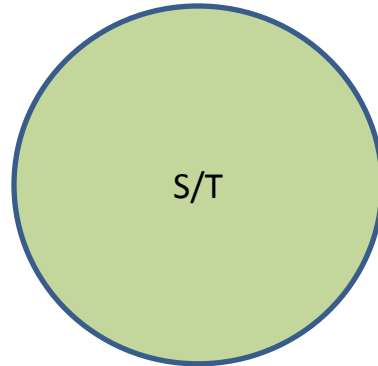
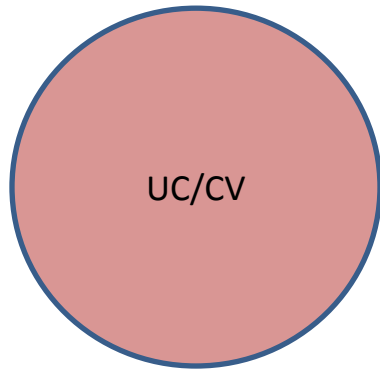


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Consistent Features of the Maneuver based Organization

Example: The Mongols



Tribal/Transfers Forbidden

Year round Training

Stirrups/Recurved Bow

Infiltration/
Sleepers Cells



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Consistent Features of the Maneuver based Organization

Conclusion:

Go look for yourselves:

Check out Scipio Africanus, Belisarius, Napoleon, Stonewall Jackson, T. E. Lawrence, Guderian, Rommel, Patton, etc., etc.

You will find these consistencies in every maneuver based organization



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Real World Application: CRH of North America 2000

Team was selected carefully (HR manager was the second person hired)

Bought fewer “A” players with enhanced span of control

Little or no micromanagement: Mission Orders

Success builds Esprit de Corps – Celebrate every victory...together

Frequent feedback: “What’s going on”

UC/CV



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Real World Application: CRH of North America 2000

Training and certifications for Technical requirements

Hands on career planning and support (JL and the CRH IT department)

Personal instruction: PF and Finance

Developed “curricula” for each department and function

Encouraged teaching and speaking at conferences

Mandatory reading list for staff, Warfighting, Maneuver Warfare Handbook, Certain to Win, The Goal

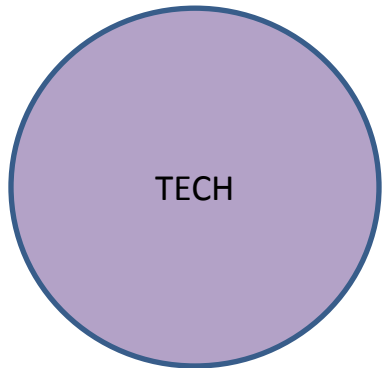
S/T



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Real World Application: CRH of North America 2000



Leader in Materials Development (high tensile steel)

Co-development of Motors and Gearboxes (Bosch and IMS)

Leader in Mechanisms Development (PEL, Height Adjuster)

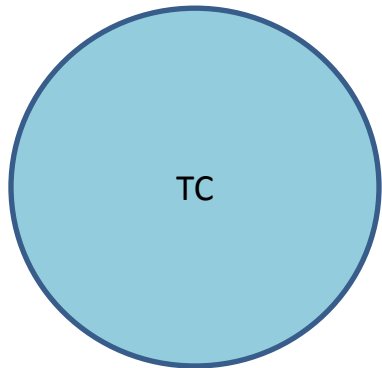
Manufacturing systems superiority (Press Lines)



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Real World Application: CRH of North America 2000



Misdirected competitors (the one motor story)

Focused on Infiltrating customer 's customer's Engineering

Researched customer activities (Edgar, Analysts Calls)

Created networks of informants

Developed contacts at media sources



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Part 2: Market and Maneuver





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Market Pull: Surfaces and Gaps

Question: What is Pull? What is it contrasted with?

We generally think in terms of PUSH or PULL systems.

A PUSH system is one where the planning and forecasting take priority. Organizations must predict and execute a plan based on the predictions. Actions are “Pushed” by the plan

A PULL system responds to external stimuli in real time and resources are “Pulled” to the Demand identified by those external stimuli



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Market Pull: Surfaces and Gaps

Pull systems have gained in popularity

Recon Pull: In recon pull, we start the attack going without waiting to plan. Our recon forces find weak spots in the enemy lines, and pull resources to take advantage of the weakness (the expanding torrent).

Manufacturing Pull: A manufacturing pull system is where processes are based on demand. The concept is that each process pulls the resources required to deliver based on customer demand.

In both cases resources are pulled to where required whatever the “plan” may be



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Market Pull: Surfaces and Gaps

Market pull operates to identify and pursue high probability opportunities.

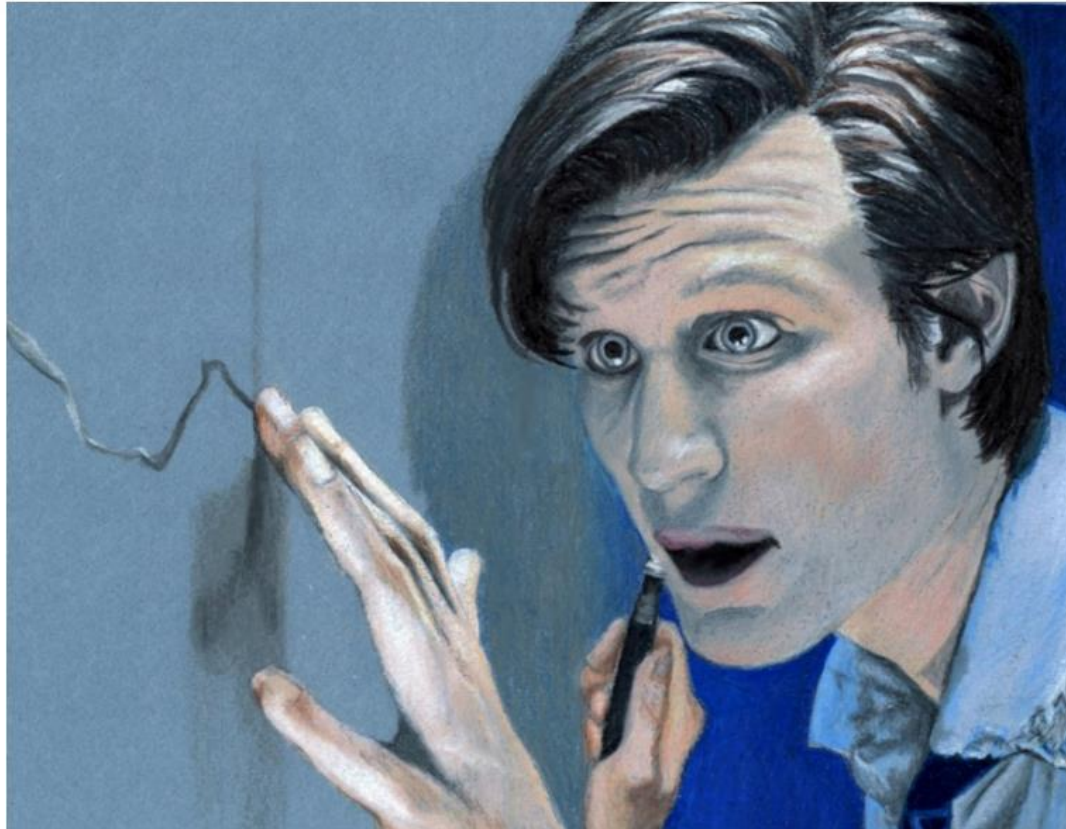
These opportunities are in excess of actual budgetary resources.

As the opportunities are explored, positive responses from the market are reinforced (i.e. money and people), and negative or flat responses are abandoned.

Opportunities are transient and shifting. These “gaps” can open and close quickly. Taking advantage of an opportunity presented requires agility and fast decision making abilities.



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In effect, you are running your corporate hands down the surface of the market “wall” and looking for “cracks” or “gaps” that you can exploit.



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You then try to make sure that you increase the size of that gap as quickly as possible. So that you can “pull” the resources needed to increase the probability of success.



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You may have to exert your will upon a gap to make sure you can get through it successfully. In business, the pyrotechnical device used is your intellect!



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Surfaces and Gaps: Example

Remember these?



The Vinyl 33.3 LP Record



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Surfaces and Gaps: Example: No Gap

These things made artists and record labels rich. They couldn't be copied, bootlegged or played in the car. They gave record companies power and an unassailable position.





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Surfaces and Gaps: Example: Small Gap, the 70's

**Tapes began to change things.
All of a sudden copying became
Possible. However the product
was of inferior quality or the
equipment was incredibly bulky.
There were other problems as
well!**





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Surfaces and Gaps: Example



Got Pencil?

Certain quality issues were also apparent



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Surfaces and Gaps: Example: Gap opening 2001, MP3



Starting in 2001, Digital reproduction became the new industry standard



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Surfaces and Gaps: Example: Gap opening 2001

And Then.....



.....came

And the record companies (and the artists) began to really lose money

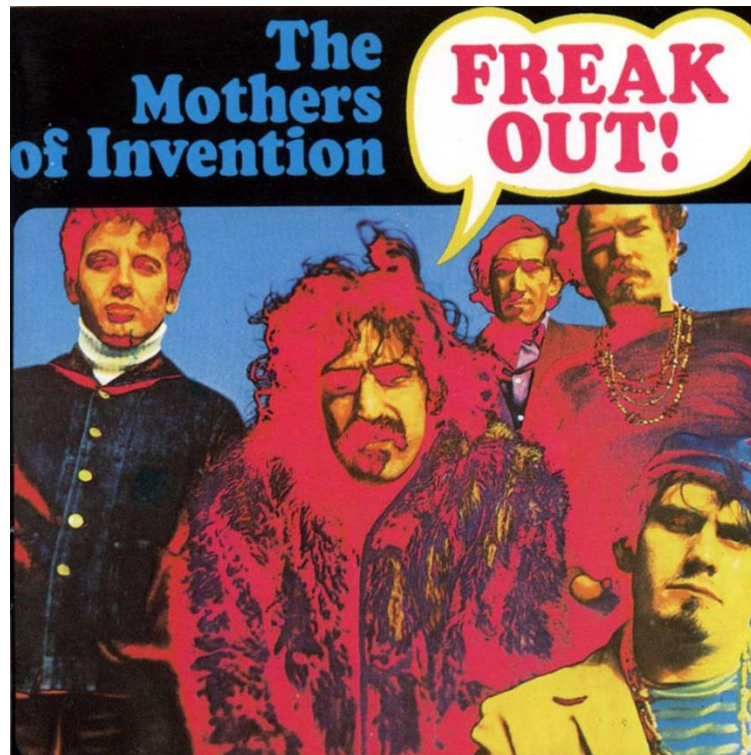


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Surfaces and Gaps: Example: Gap blown open, Result!

Record Company



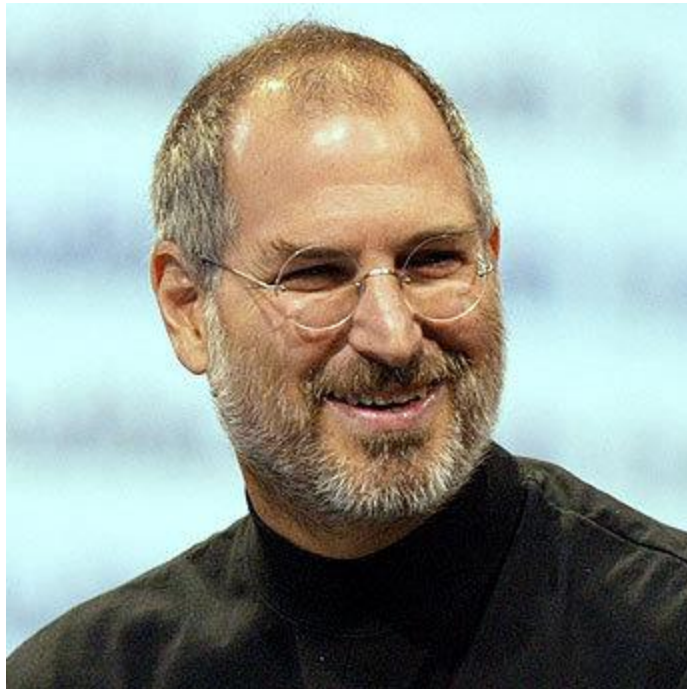
What to do....what to do?



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Surfaces and Gaps: Example: Gap blown open 2003



**Jobs sees his chance. The gap isn't in the hardware, it's in the business model.
Jobs lets the market help him to form the minds of record company execs, then strikes**



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Surfaces and Gaps: Example: Gap blown open 2003



Jobs creates a new business reality by finding and exploiting the gap



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Surfaces and Gaps: Example: Gap found

Real World Application: CRH of North America: 2001



Ford Freestyle



Ford 500

CRH was invited into Lear to solve a technical problem

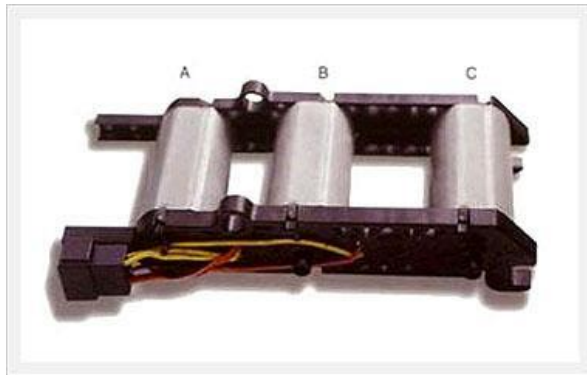


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Surfaces and Gaps: Example: Exploited

Real World Application: CRH of North America



In the interests of “cost savings”, Lear corporation had wedded itself to the “Tripack” motor system. This system took up a lot of room under the vehicles seat and Ford wanted that real estate.



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Surfaces and Gaps: Example: Better Tech REALLY helps

Real World Application: CRH of North America



CRH used a flexible motor/gearbox design which allowed us to move the motors around. These gearboxes had been designed by CRH



The Lear one piece motor "Pack", (designed by an outside supplier) which was inflexible and could not adapt to Fords package requirements



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Surfaces and Gaps: Example: Getting behind their lines

Real World Application: CRH of North America

Our “flexible” design allowed us to solve the customer’s problem.

Since our personnel were “A” players, and we “pulled” resources to the project our development and product launch went smoothly. The OEM didn’t have to step in and spend money solving problems during new product introduction.

Once we launched the product, our focus on quality and reliability showed to advantage when the 12 month warranty costs per carline came out. The warranty costs were about 85% less for the CRH product than they were for comparable Tier 1 offerings.



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Surfaces and Gaps: Example: The ever expanding torrent

Real World Application: CRH of North America

By 2004 we were working with Ford (without a Tier 1) to develop a new specification for their seat adjusters going forward.

As if by magic, some of the unique and proprietary properties of the CRH seat adjusters found their way into the new Ford specifications.

We were able to keep expanding the “market gap” and kept pushing through the ever expanding gap and completely took the Tier 1 supplier out of the equation.



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Results!



Real World Application: CRH of North America



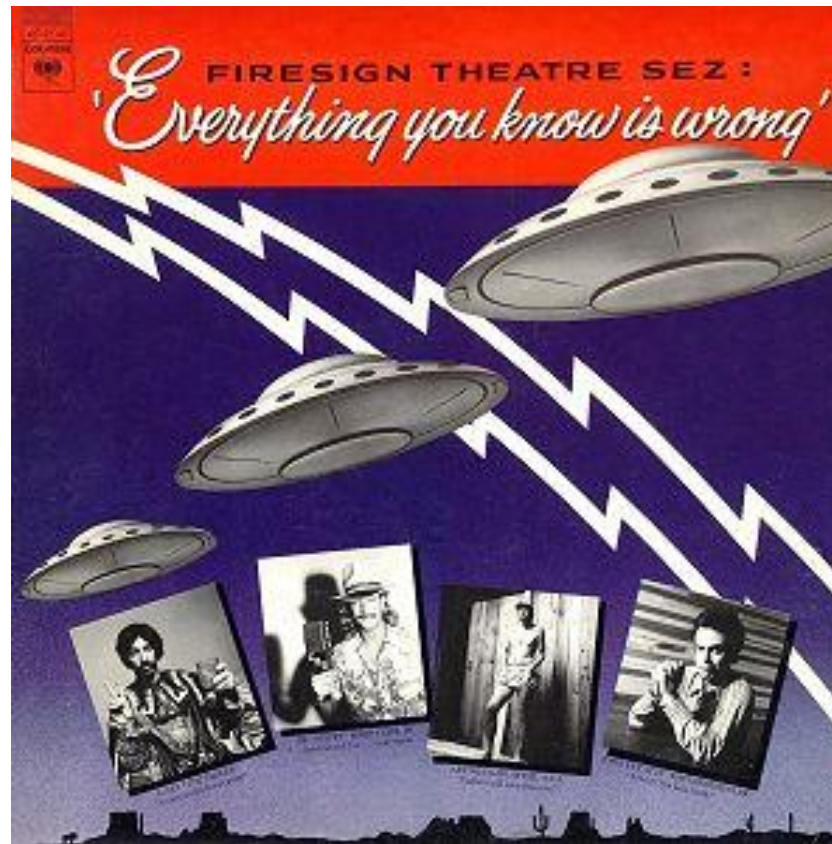
The result was that in 2005 we took the Ford F-150 (and four other programs) away from a major Tier 1 supplier and won the business. They never even saw it coming



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Part 3: Everything you know is wrong

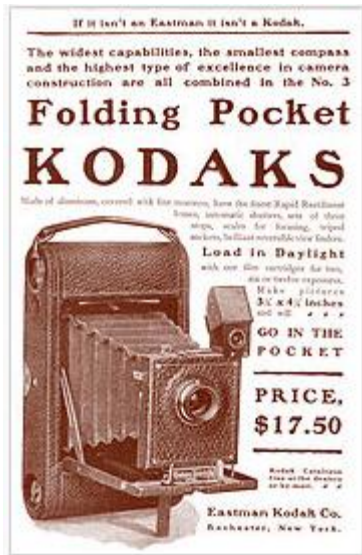




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EYKIW:Example: Kodak

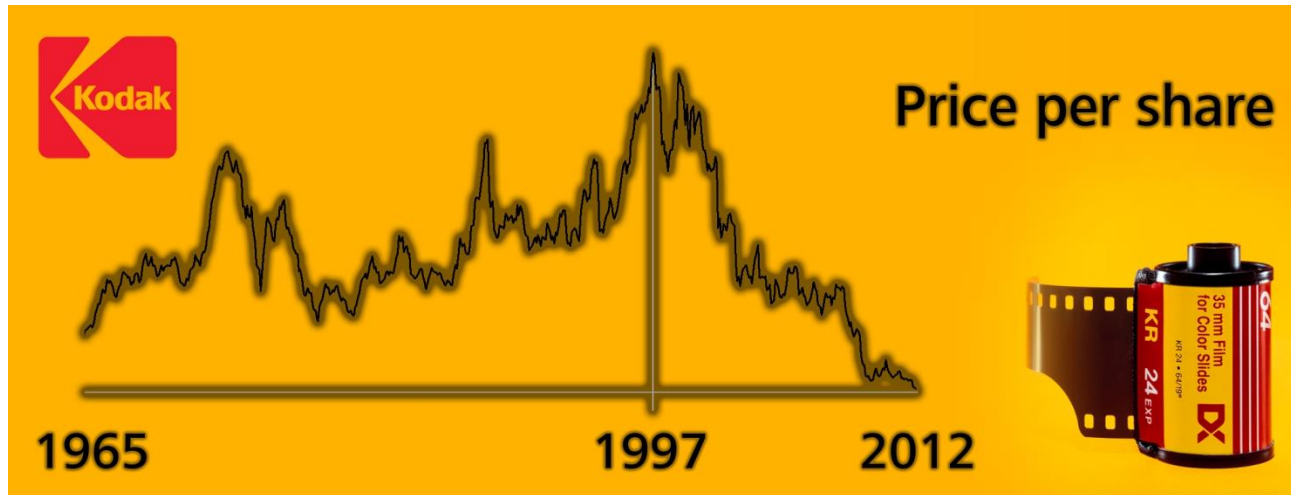


1900 – 2012 Wildly successful American icon



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EYKIW: Example: Kodak





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EYKIW: Example: Kodak



**Adding
insult**



**To
injury**

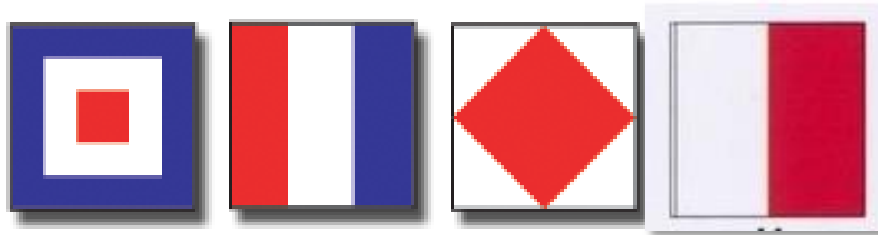
Photo of the original digital camera developed by Steve Sassoon and his team at Kodak 1975



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EYKIW: Example: Kodak

SO



Bad Leadership?

Didn't define themselves correctly?

Capital doctrine became dogma?



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Bad Leadership – Lack Of Vision

Didn't define themselves correctly – “Memory” company, not a “film” company

Capital doctrine became dogma – Didn't want to invest millions in the new tech; wanted to keep milking the cow



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EVERYTHING YOU KNOW IS WRONG!



Lessons from the Master

Keep questioning & OODAing! You must be prepared to throw even your most cherished beliefs out the window if they become dissonant with your environment.

You have to be able to “let go” of material things too. If your capital is about to become obsolete, it is better that you recognize it and deal with it than to let the market (your competitors) do so

The imperative must be to keep analyzing the environment and responding to it!



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Everything You Know is Wrong: Example: Schuler Presses

Real World Application: CRH of North America: 2004



500 Ton Hydraulic Press

- \$20 million in investment globally
- Belief in necessity of this type of press
- 400 Parts per hour
- 7 step complex line dies
- Very slow tooling changeover



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Everything You Know is Wrong: Example: Schuler Presses

Real World Application: CRH of North America: 2004



150 Ton Mechanical Presses

While visiting a Korean competitor:

We saw a press line that took our complicated process and broke it down into simpler steps

Ran at around 1000 parts per hour for the same amount of investment

Simple tools faster changeover



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Everything You Know is Wrong: Example: Schuler Presses

Real World Application: CRH of North America: 2004

- CRH ownership immediately recognized the potential advantages of this system
- A study was undertaken to determine whether the quality could be maintained
 - Once the study was completed we started our first press line
- We doubled production rates, reduced tooling costs and reduced the time for changeover
 - We destroyed the value of \$20million in assets

This could never have happened at a “normal” US company



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Everything You Know is Wrong: Example: Schuler Presses

Real World Application: CRH of North America: 2004

Several years ago a study done by MIT's Sloan school of management came to the conclusion that large American corporations were not able to innovate. This was because of several factors, the first of which was because American corporations, once capitalized, were loath to entertain anything that would disturb that capital. In other words, "We bought it, let's run it to death and woe unto all those who would come up with ideas that would threaten the basic concept of running it to death. Invest as little as possible and use it for as long as you can." It sounds like a pretty good idea, however, when this becomes corporate dogma, which it often does in the Finance driven USA, and that dogma becomes so powerful that it blinds its adherents to unfolding circumstances or a new reality, then it becomes a bad idea, or at least it was for Kodak.



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Part 4: Of Snowmobiles and Steering Adjusters Or: Adaptive Re-use





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Of Snowmobiles and Steering Adjusters

Lessons from the Master

We should all be familiar with the Colonel's "Thought Experiment"



Building Blocks

New Product



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Of Snowmobiles and Steering Adjusters

Lessons from the Master

And the Colonel's conclusion about winning and losing!

**A loser is someone (individual or group) who cannot build snowmobiles
when facing uncertainty and unpredictable change;**

whereas

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



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Of Snowmobiles and Steering Adjusters

Lessons from the Master

Boyd was probably trying to demonstrate two things here. One, that complex systems can be broken down into “building blocks” which can be adaptively reused and reconfigured into new systems saving the designer time and making him or her quicker and more effective at coming up with new solutions.

The other point Boyd was trying to make is that if we can look at things from a number of perspectives and utilize the tools of analysis and synthesis to come up with novel approaches that integrate seemingly unrelated concepts or elements we can help ourselves to be successful.



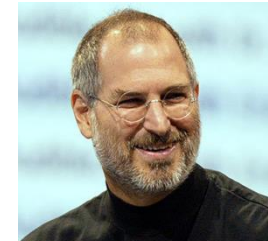
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Of Snowmobiles and Steering Adjusters: Example: The i-Pod



Steve Jobs...AGAIN



Building Blocks



New Product(s)



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Of Snowmobiles and Steering Adjusters: Example: The i-Pod

Summary: Combing the i-Pod with i-Tunes



Here we see a marvelous example of the implementation of many of Boyd's ideas. Jobs, observing his environment and orienting himself, realizes his opportunity, grabs his bag of building blocks and builds his snowmobile; the I-pod. He then takes advantage of an emerging environmental change that leads to an immediate opportunity and employs his snowmobile in an appropriate fashion. Jobs is actually able to take actions which alter the environment to his company's benefit. He is able to use the recent past to "arrange the minds" of the record company executives in such a manner that they agree to a new and radical idea. He takes and keeps the initiative. He exploits his opportunities. He is able to focus his organization to produce according to its needs. He behaves in a fluid manner to maneuver into the market breach. He produces a raging success that results in a whole lot of money coming into his organization that he then uses to produce an entire new family of products.



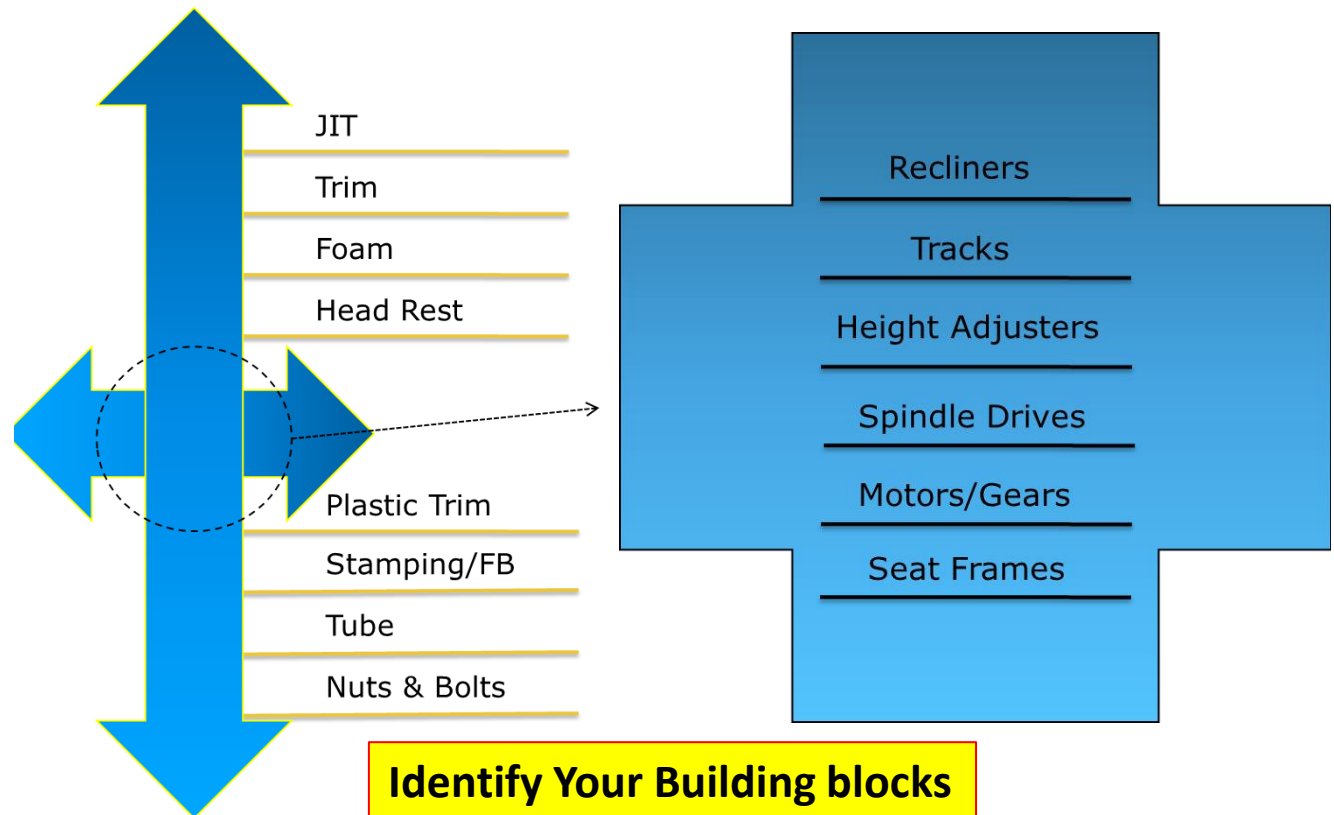
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Of Snowmobiles and Steering Adjusters:

Real World Application: CRH of North America: 2004

EVOLUTION[™]Seat

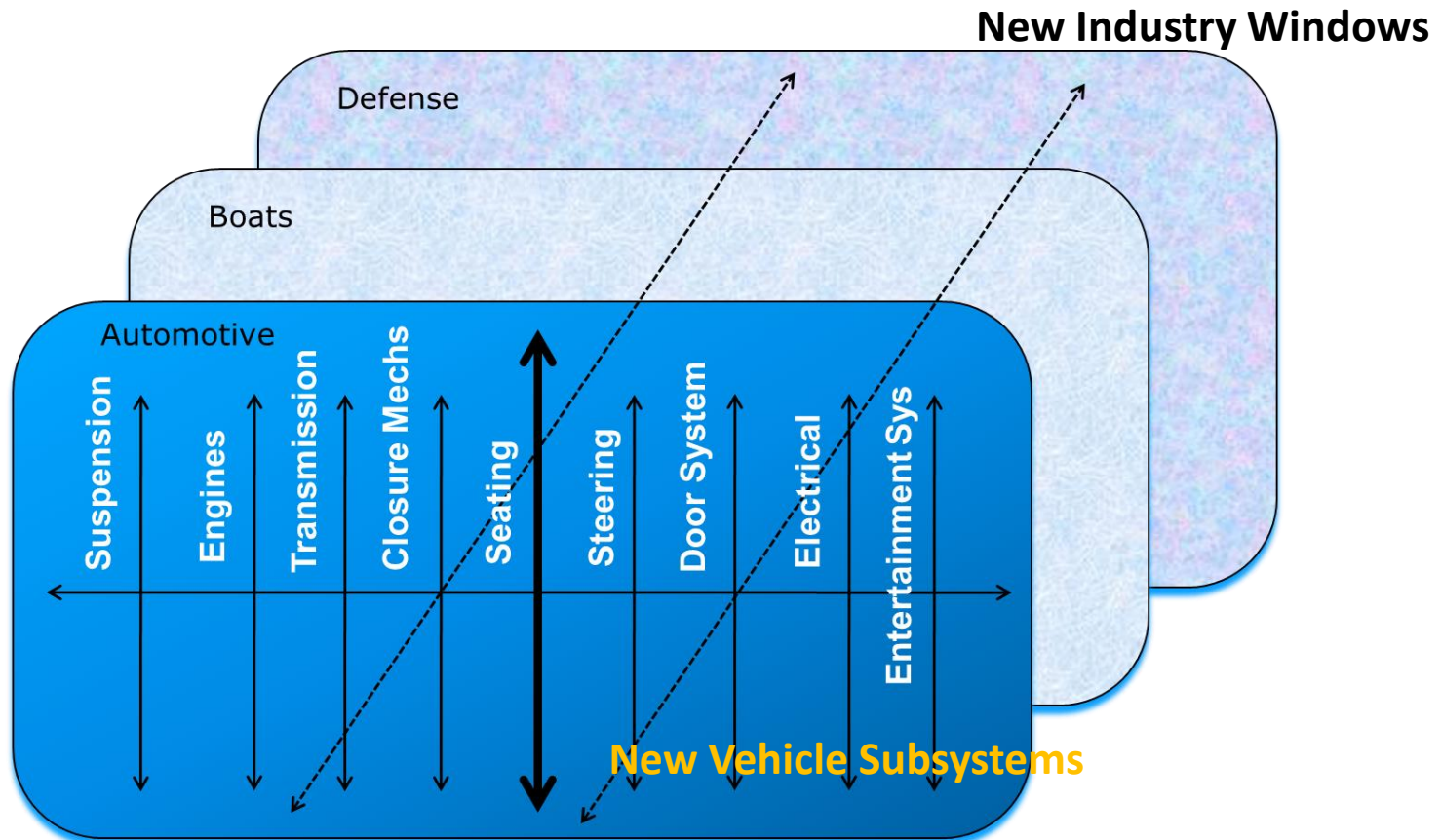




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Of Snowmobiles and Steering Adjusters: And Find Homes For Them



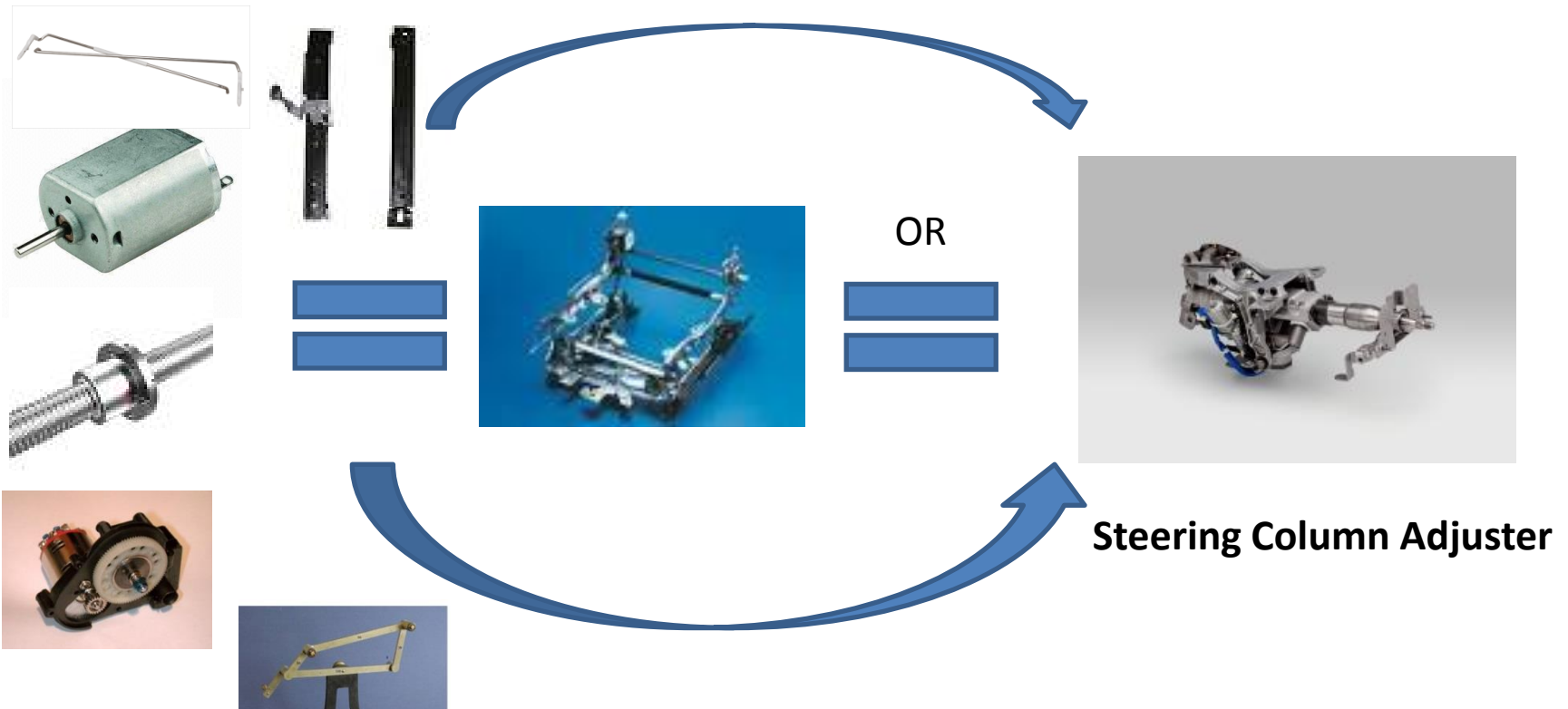


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Of Snowmobiles and Steering Adjusters: New Vehicle Subsystem

Real World Application: CRH of North America: 2004



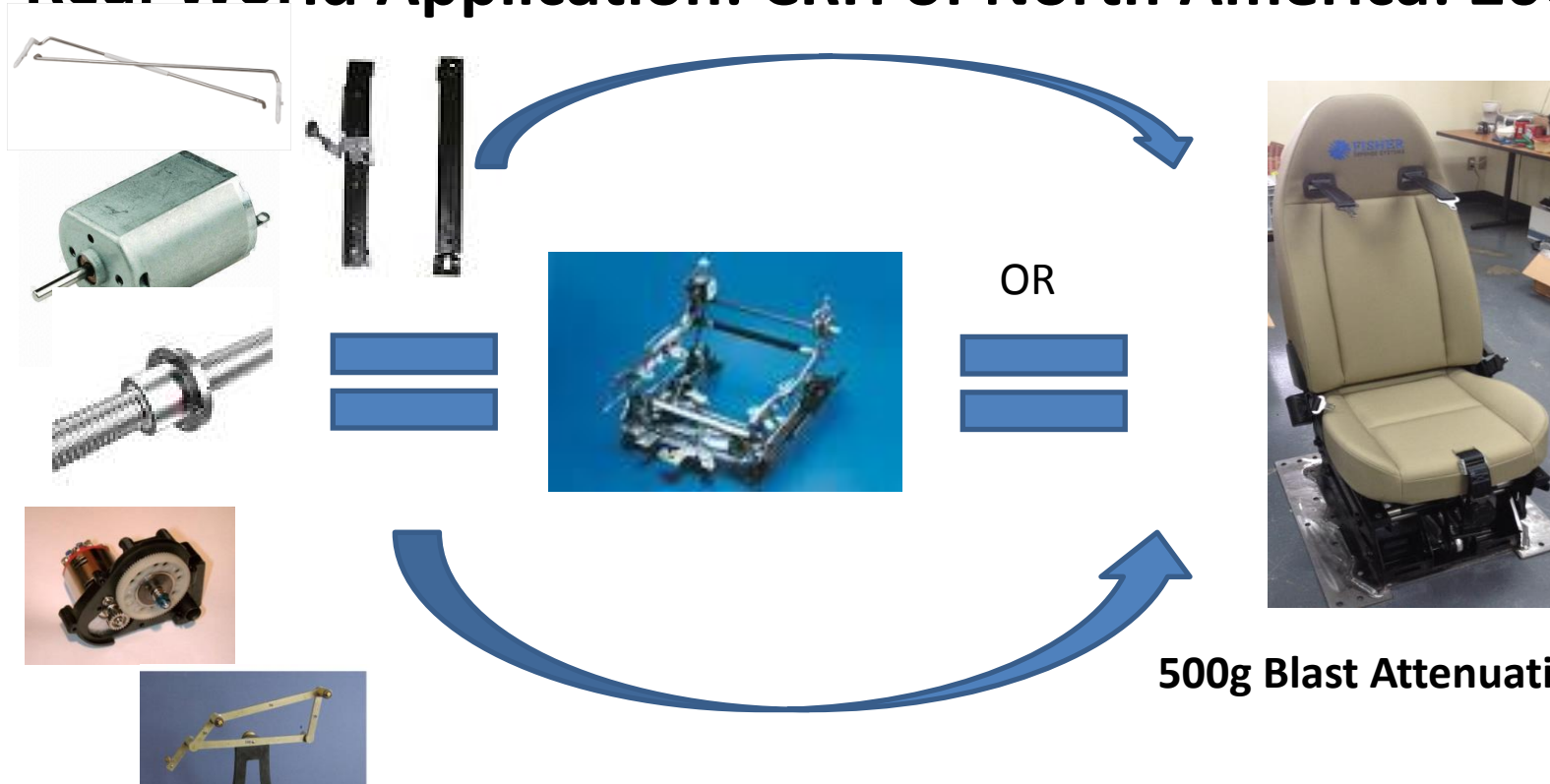


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Of Snowmobiles and Steering Adjusters: New Industry Window

Real World Application: CRH of North America: 2004





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Part 5: Finding Unique Solutions (Synthesis)





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Finding Unique Solutions (Synthesis):

The complicated orientation component of the OODA loop includes something called synthesis.

To oversimplify it, synthesis is what happens when you are forced to draw a conclusion from an incomplete data set.

You have to think and plan in ways that are different. You have to adapt. You have to try things that are not “normal”.

Developing a non-standard “mindset” is a key success factor.

Keeping it churning is another

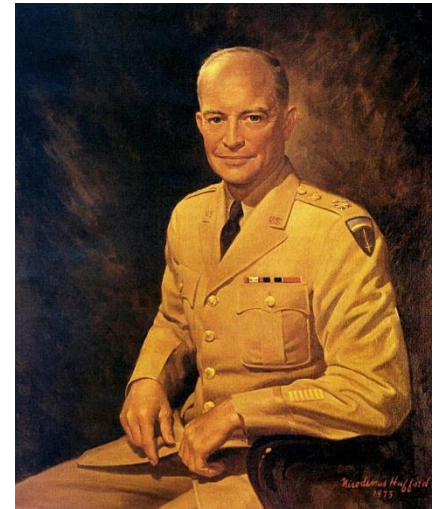


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Finding Unique Solutions (Synthesis):

“Plans are Nothing, planning is everything”



This process of planning, of turning the OODA loop again and again IS the important part because it creates a creative, problem solving mental tapestry in its possessor.



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Finding Unique Solutions (Synthesis): First we fail

Real World Application: CRH of North America: 2006



2 years; no joy





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Finding Unique Solutions (Synthesis): Winning using a Flanking Maneuver

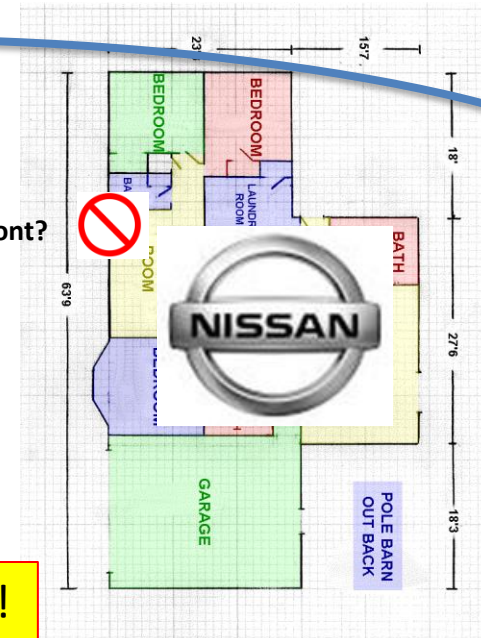
Real World Application: CRH of North America: 2006

Partnered with
Existing supplier

FUJI KIKO



No access through the front?



Go through the backdoor

There is always more than one way in!



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Part 6: Leadership

- i. Leadership and Decision making**
 - ii. Encouraging Initiative**
 - iii. Providing a Coherent Strategy**

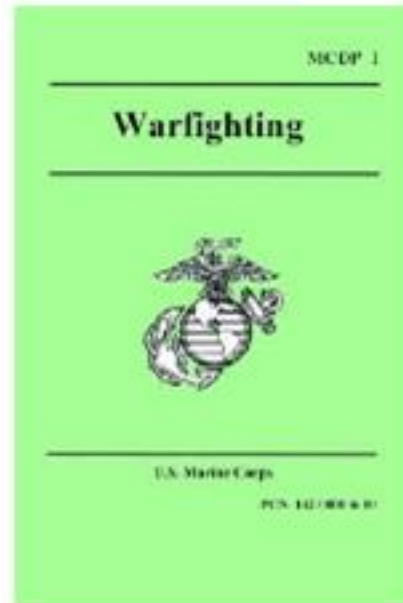




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Leadership



A Damn Fine Treatise!

Does this apply to business?



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1. Leadership and Decision Making

Postulates:

- **Business is War – Japanese Proverb**
- **Most wars have an economic impetus**
- **Most business conflicts have a economic impetus**
- **The lessons of military leadership can be applied to business**



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1. Leadership and Decision Making

More Postulates:

Leadership is, first and foremost, **about DECISION MAKING** and when, and when not to make a decision.

Decision making requires not only a system that includes the Boyd cycle, it *also requires a management philosophy and practice which drives the right to make decisions down as far into the organization as possible.*



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1. Leadership and Decision Making

Good Grief More Postulates:

In a global setting only a decentralized organization can have a fast Boyd cycle. If players have to wait as the inputs they collect are transmitted up and down the management chain, with secondary requests for more “perfect” information called for, so that the ideal decision may be reached, the Boyd cycle is going to be far too slow.

The environment is far too complex, the distances are far too great, and the fear of making an imperfect decision is far too paralyzing.



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1. Leadership and Decision Making

Go tell it to the Marines?

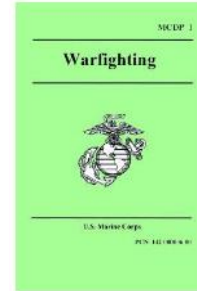
No, Let us let the Marines tell us!



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1. Leadership and Decision Making



Modern international business enterprises cannot be governed by the actions or decisions of a single individual in any one place but must to a major degree emerge from the collective behavior of all the individual parts in the system interacting locally in response to local conditions and incomplete information.

The success of an international business enterprise cannot be in the monolithic execution of a single decision by a single entity but necessarily involves near countless independent but interrelated decisions and actions being taken simultaneously throughout the organization. Efforts to fully centralize business operations and controls by a single decision maker are inconsistent with the intrinsically complex and variable nature of the global business environment.

– [This paragraph is directly adapted from USMC MCDP 1 “Warfighting” p. 13]



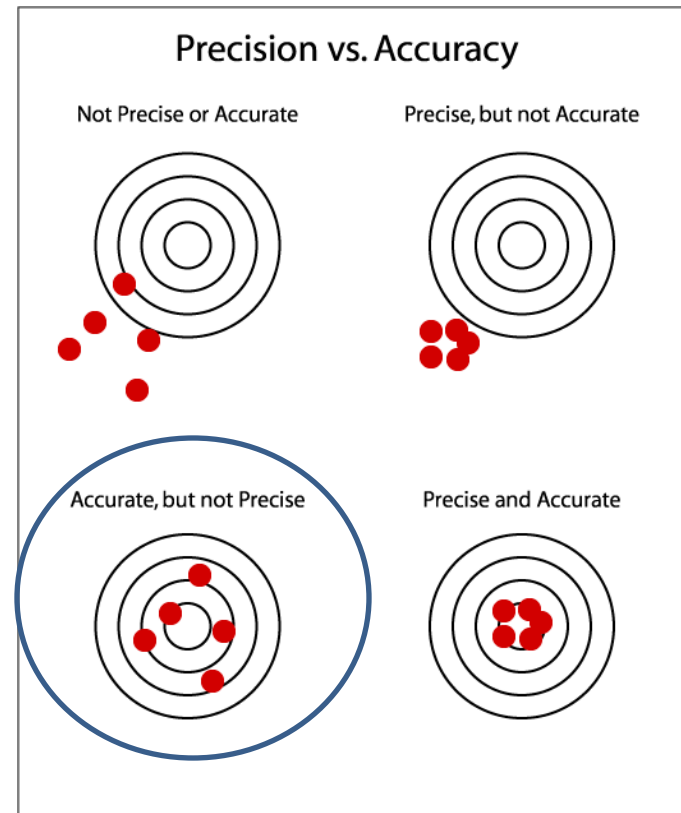
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1. Leadership and Decision Making

Embracing this approach requires that we will sacrifice some level of precision in analysis in favor of speed.

Works for me!





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1. Leadership and Decision Making: Velocity is the goal

Turning the Boyd cycle faster than our opponents is the key to winning a piece of business that we are competing for, or coming up with a new product innovation, or even just beating the competitor to the punch and locking up available capacity for a particular product or process before the competitor can act.

We take as an article of faith that a decent decision made in a timely manner is better than the best decision possible made too late.

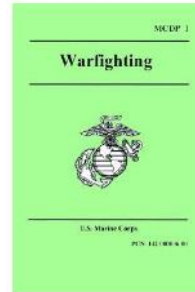




Boyd and Beyond 2014



2. Encouraging Initiative



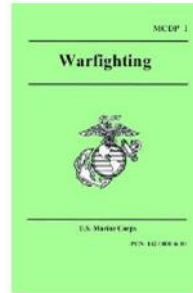
What do the Marines have to say about this?



Boyd and Beyond 2014



2. Encouraging Initiative



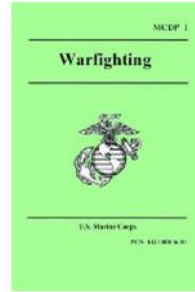
We must not stifle boldness or initiative and we must continue to encourage both traits, on the other hand, we should deal severely with errors of inaction or timidity. We will not accept lack of orders as a justification for inaction; it is every manager's duty to take initiative as the situation demands. We must not tolerate the avoidance of responsibility or necessary risk. Consequently, trust is an essential trait among leaders-trust by seniors in the abilities of their subordinates and by juniors in the competence and support of their seniors. Trust must be earned; any actions which undermine trust must be met with strict censure. Trust is a product of confidence and familiarity. Confidence among colleagues results from demonstrated professional skill. Familiarity results from shared experience and a common professional philosophy. – [This paragraph is directly adapted from USMC MCDP 1 "Warfighting" p. 23]



Boyd and Beyond 2014



2. Encouraging Initiative



But What Does this mean? How do we build trust?

This means that we must allow for a certain amount of mistakes.

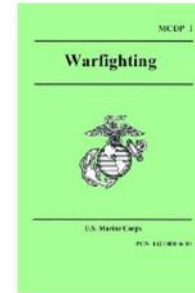
In order to minimize the pernicious effects of mistakes created by making decisions with imperfect data at high rates of speed, we must be certain that our personnel are **properly equipped and trained** to deal with their environment and their span of responsibility and control in the best manner possible



Boyd and Beyond 2014



2. Encouraging Initiative



But What Does this mean?

Practitioners of fast maneuver conflict methods accept that it is preferable to have well trained associates who exhibit high levels of initiative with the attendant ability to turn a Boyd cycle quickly, even if this means that acceptance of some mistakes is inevitable.

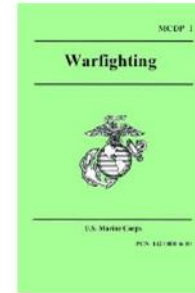
This is important because for a fast maneuver organization to be successful, we need to develop these traits.



Boyd and Beyond 2014



2. Encouraging Initiative



But What Does this mean?

I would rather go down the river with 7 studs than with 100.....

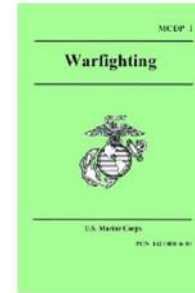
Col. Charles Beckwith



Boyd and Beyond 2014



3. Providing Coherent Strategy



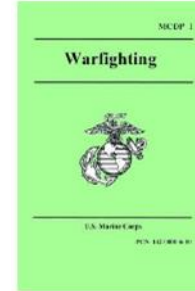
The third element of Leadership is for that Leadership TO PROVIDE a COHERANT STRATEGY SUFFICIENT TO IMPEL THE ORGANIZATION IN A DIRECTION DESIGNED TO ASSURE ITS SURVIVAL.



Boyd and Beyond 2014



3. Providing Coherent Strategy



Lessons from the master

“Strategy is a mental tapestry of changing intentions for harmonizing and focusing our efforts as a basis for realizing some aim or purpose in an unfolding and often unforeseen world of many bewildering events and many contending interests.”

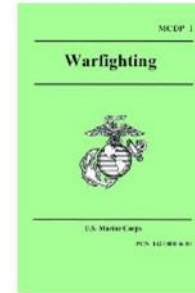
John Boyd



Boyd and Beyond 2014



3. Providing Coherent Strategy



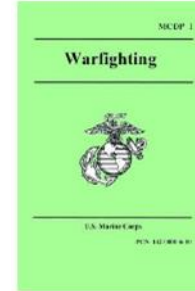
- Strategy is not a given plan for a given set of circumstances.
- It must support the creation of a fast moving organization that is very sensitive to and is sensible of, changes in its environment.
- The organization must be built to respond in an elegant manner to constant environmental changes.
- Furthermore, the organization must be designed in a manner which will allow it to take as much advantage of these changes as possible, quickly, while losing as little energy as possible.
- In short, the strategic roadmap should produce operations and tactics sufficient to design an organization which will truly thrive on chaos.



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3. Providing Coherent Strategy



Yet there is always the following caveat. When a plan is written down, after the final sentence you must consider all that you have done in light of the immortal Publius Syrus who said:

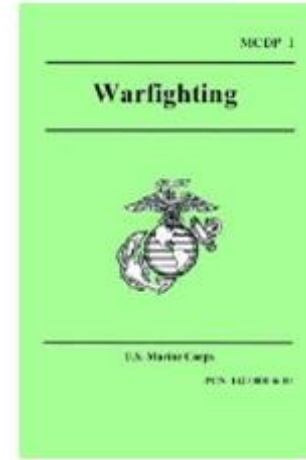
“It is a bad plan which cannot be changed”.



Boyd and Beyond 2014



3. Providing Coherent Strategy



So, What say the Marines?

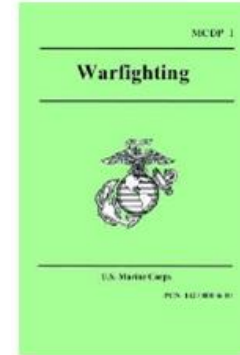
How do we adapt it to Business?



Boyd and Beyond 2014



3. Providing Coherent Strategy



The book of 3 rings!

First, we start with strategy at the highest level, the strategic policy level

Strategic/Policy Level



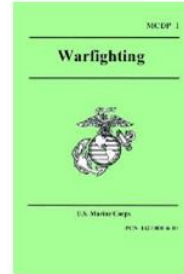
Another "lift" by Lenane



Boyd and Beyond 2014



3. Providing Coherent Strategy



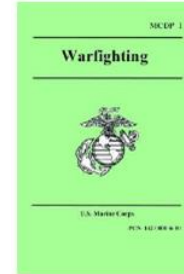
- Policy must be deployed in an intelligent manner and must serve the companies goals, which are almost always growth and increased profitability.
- But strategic policy deployment must also be achieved in a manner consistent with our capabilities.
- The strategic policy deployment goals must, therefore, always include a provision for the enhancement of our capabilities.



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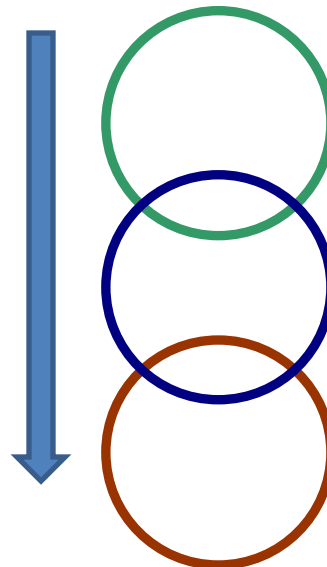
3. Providing Coherent Strategy



Strategic/Policy Level

Operational Level

Tactical Level



Adapted from "The levels of War"
Page 29

Ay! There must be feedback

To be successful, the policy must be deployed into the operational and tactical levels



Boyd and Beyond 2014



3. Providing Coherent Strategy



The Operational level links the strategic to the tactical levels and it is here that most of the intellectual heavy lifting will be done.

Strategic/Policy Level

Operational Level

Tactical Level

It is at this level that the planning, budgeting analysis of constraints and the defining of the campaign will be done.

It is here that we define the actions and the resources required to support such actions that will take place as well as specific tasks to be implemented at the tactical level.

It is here the analysis of the environment is made and the relationships to other organisms can be considered.

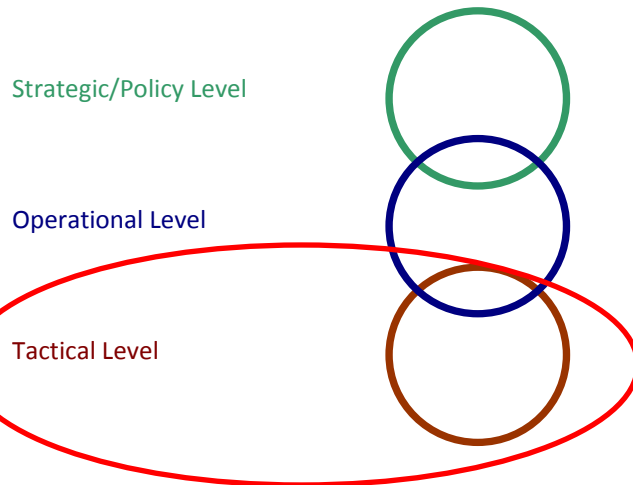
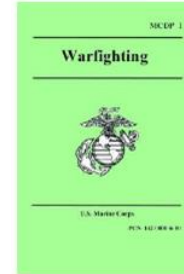
Customers, competitors and suppliers must be considered in terms of predation, symbiosis or parasitism.



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3. Providing Coherent Strategy



The Tactical level refers to the nuts and bolts of how we achieve a specific task that we consider important to address an immediate need or goal that supports a higher level operational assignment which in turn addresses a strategic policy which we are in the process of implementing.

Tactical actions might involve a control room in each of our factories, a new training program to improve responsiveness to customer requests for quotation or the development of a new program financial review procedure or the purchase of a new piece of capital equipment to increase available capacity for a growing market, etc.

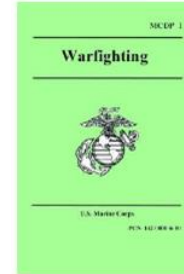


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3. Providing Coherent Strategy

Like creating a symphony



Strategic/Policy Level

Operational Level

Tactical Level



Compose



Score



Perform



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3. Providing Coherent Strategy

But the score can change!

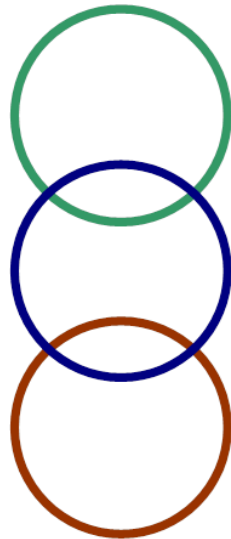
You react to what's happening.

You begin to *Interpret!*

Strategic/Policy Level

Operational Level

Tactical Level



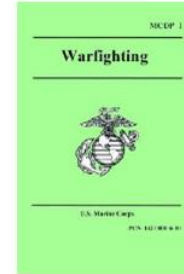
It's actually more like Jazz: You react to the other players and the environment, you use **INSPIRATION**



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3. Providing Coherent Strategy



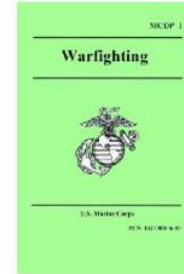
- The strategic system which is proposed here depends upon maneuver.
- Maneuver means not only moving, but also transitioning from one level or plan or state to another rapidly and with minimal loss of momentum; the better the organization, the faster the transition and the lower the loss of momentum.
- The underlying imperative is to generate speed and a fast decision loop. If we consider the effects that compressing the strategic/operations/tactical levels planning time required by an organization designed and honed to fast maneuver, this is the result:



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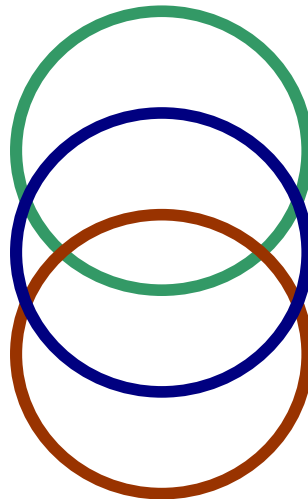
3. Providing Coherent Strategy



Strategic/Policy Level

Operational Level

Tactical Level



Compressed organizational levels and functions where there are intersections from the Strategic to the Tactical, with lots of interactions and feedback.

The Japanese call this “Hoshin Kanri”



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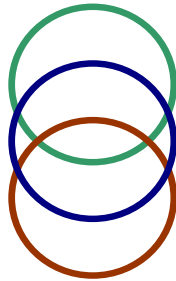


3. Providing Coherent Strategy

Strategic/Policy Level

Operational Level

Tactical Level



As we can see, the intersections and entanglements of the respective levels increase in area, the goal being that at some point the actual tactical aspects are considered at the strategic level.

This is analogous to the concept of simultaneous engineering where the goal is, at the moment a product is designed, to solidly understand more or less exactly how it will be fabricated and assembled.

This requires that a solid understanding of how things work at a tactical level be possessed by those making the strategic decisions.

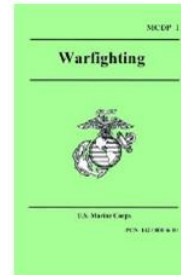
By implication, a large staff structure of persons without actual front line experience and management by a mandarin class of professional managers without actual detailed knowledge of the specific business and products is anathema to a fast maneuver approach as these will slow down the decision loop



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3. Providing Coherent Strategy



Real World Application: CRH of North America: 2009

Background:

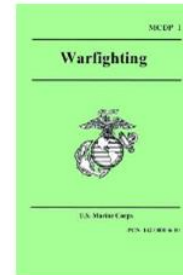
- 2009 Global meltdown in place catastrophically
- My successor at CRH of North America took a “finance driven” approach
- Plants were losing money
- Customers were angry, no new business awards forthcoming
- Spending over \$1mio in expedited freight
- Remaining staff angry, dejected and depressed.



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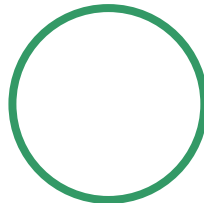
3. Providing Coherent Strategy



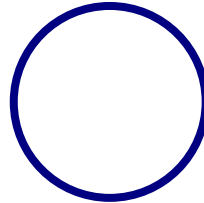
Real World Application: CRH of North America: 2009

The sets had become separated

Strategic/Policy Level

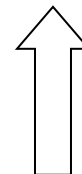
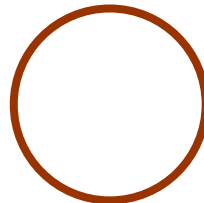


Operational Level



Get out and push!

Tactical Level

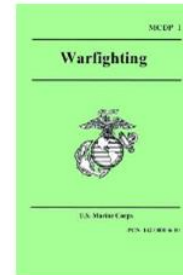




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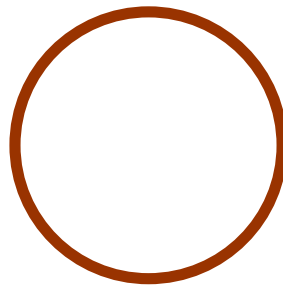
3. Providing Coherent Strategy



Real World Application: CRH of North America: 2009

Task 1: Stabilize the Factories: Triage

Tactical Level



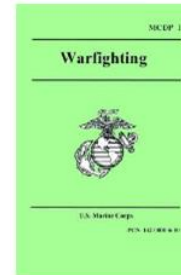
- Moved Management team to Mexico
- Walked all lines and processes
- Focused on Materials Management
- Reactivated PM system
- Layouts of all Fixtures and WPC's



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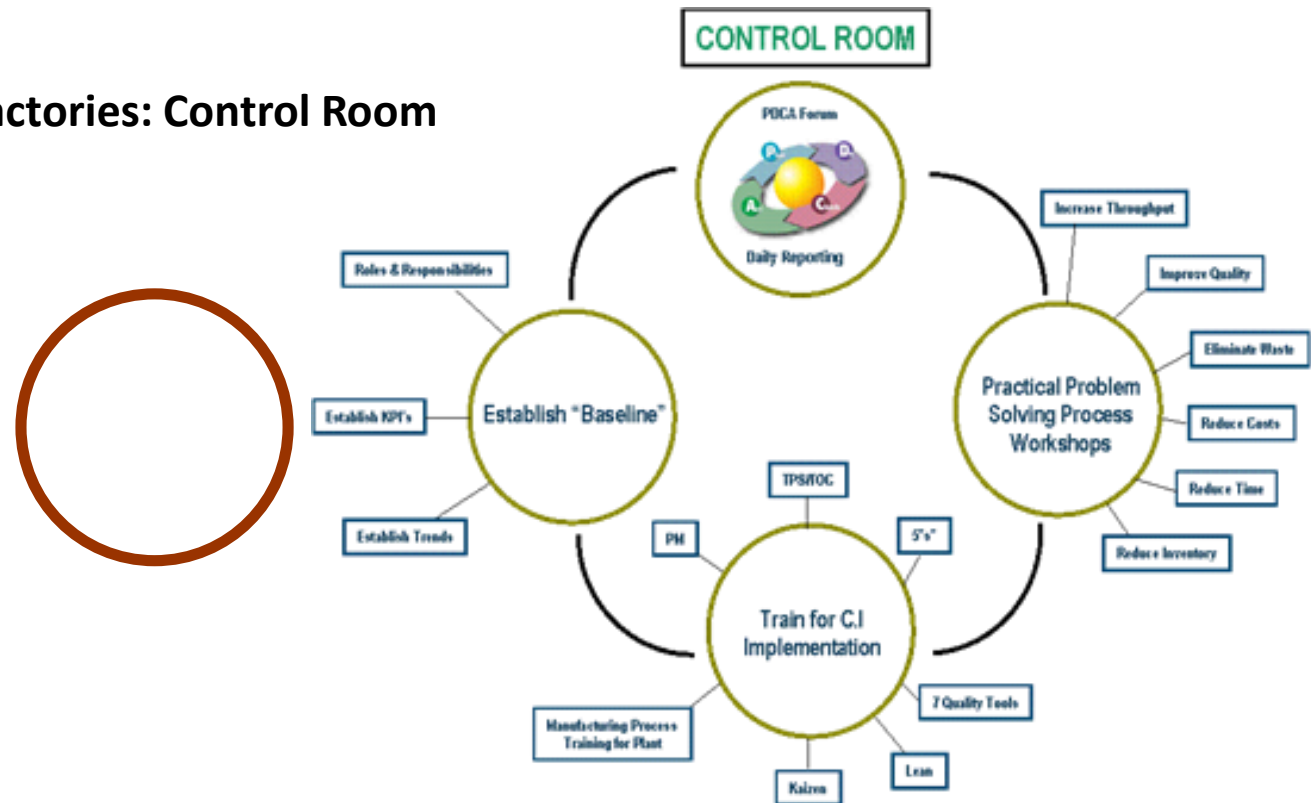
3. Providing Coherent Strategy



Real World Application: CRH of North America: 2009

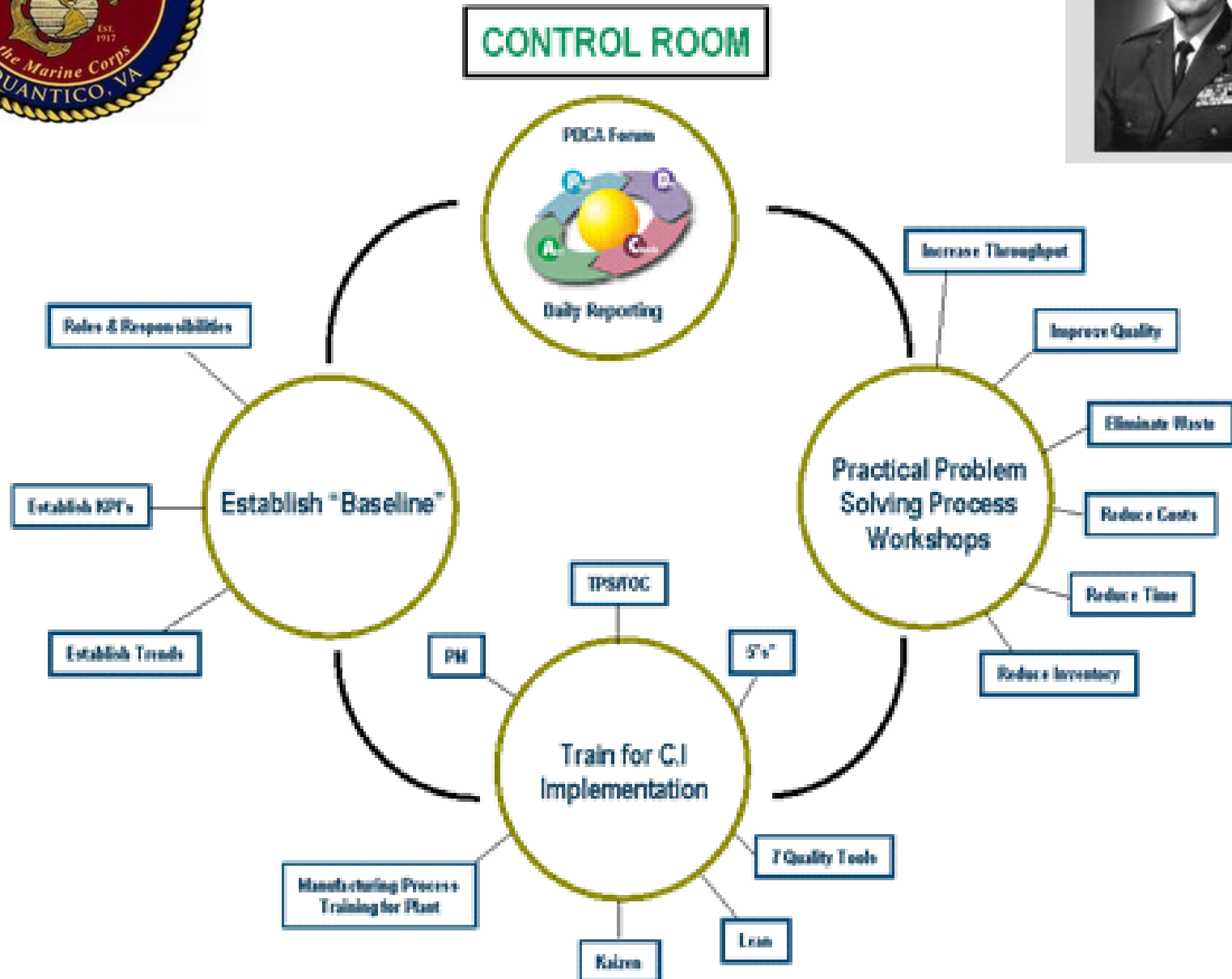
Task 1: Stabilize the Factories: Control Room

Tactical Level





Boyd and Beyond 2014

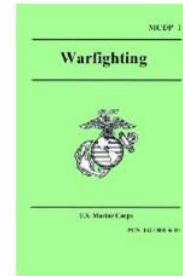




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3. Providing Coherent Strategy



Real World Application: CRH of North America: 2009

Task 2: Stabilize the Customers:

Strategic/Policy Level

Market research

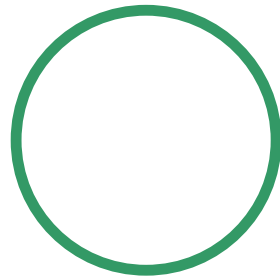
Engineering analysis

Manufacturing trends

X, Y, Z analysis

Targeted Business list

Marketing and sales plan



**We then used a basic “toolkit”
To develop a new coherent strategy
and re-establish our position and
Standing with the customer
Base.**

**Within six months we had won our
First new contract since 2007**

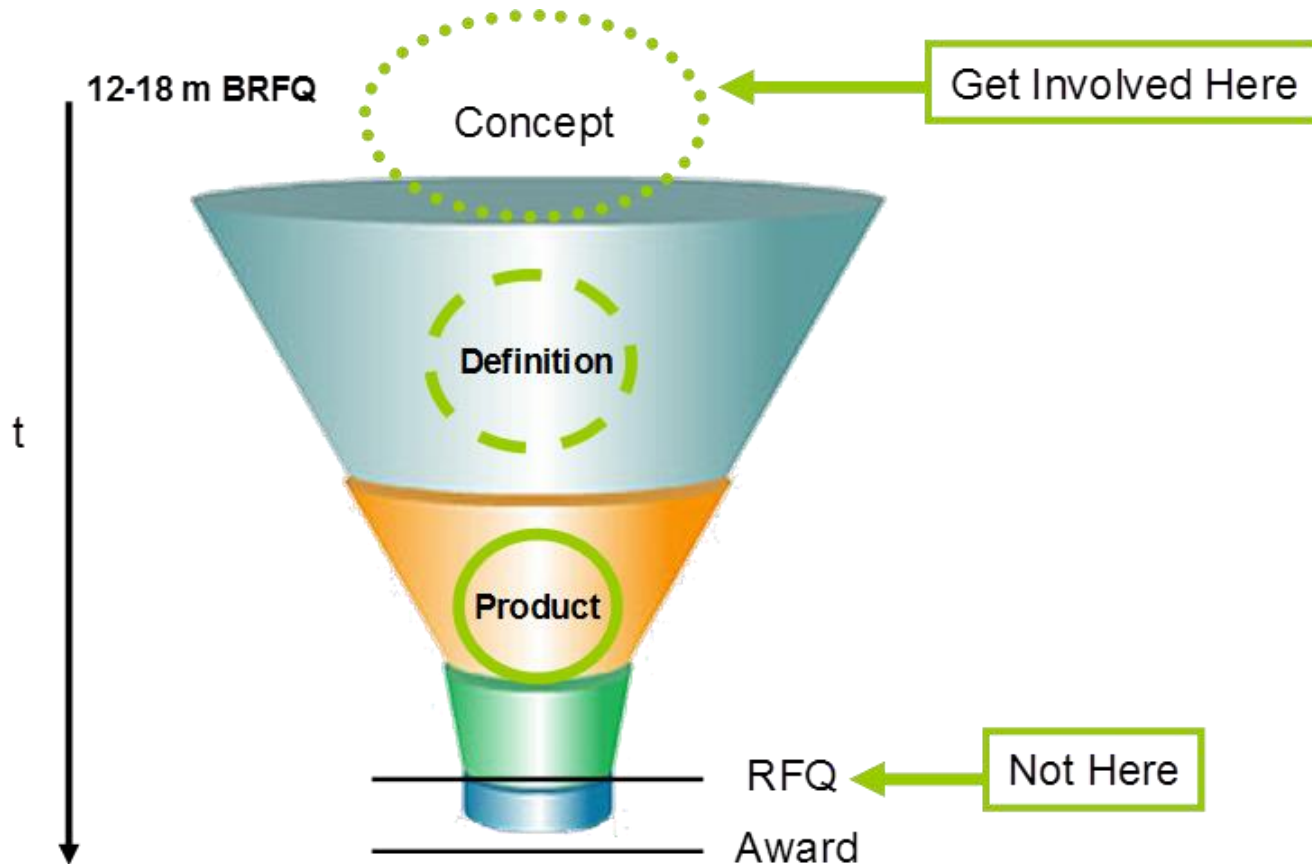


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3. Providing Coherent Strategy

Start early, use infiltration

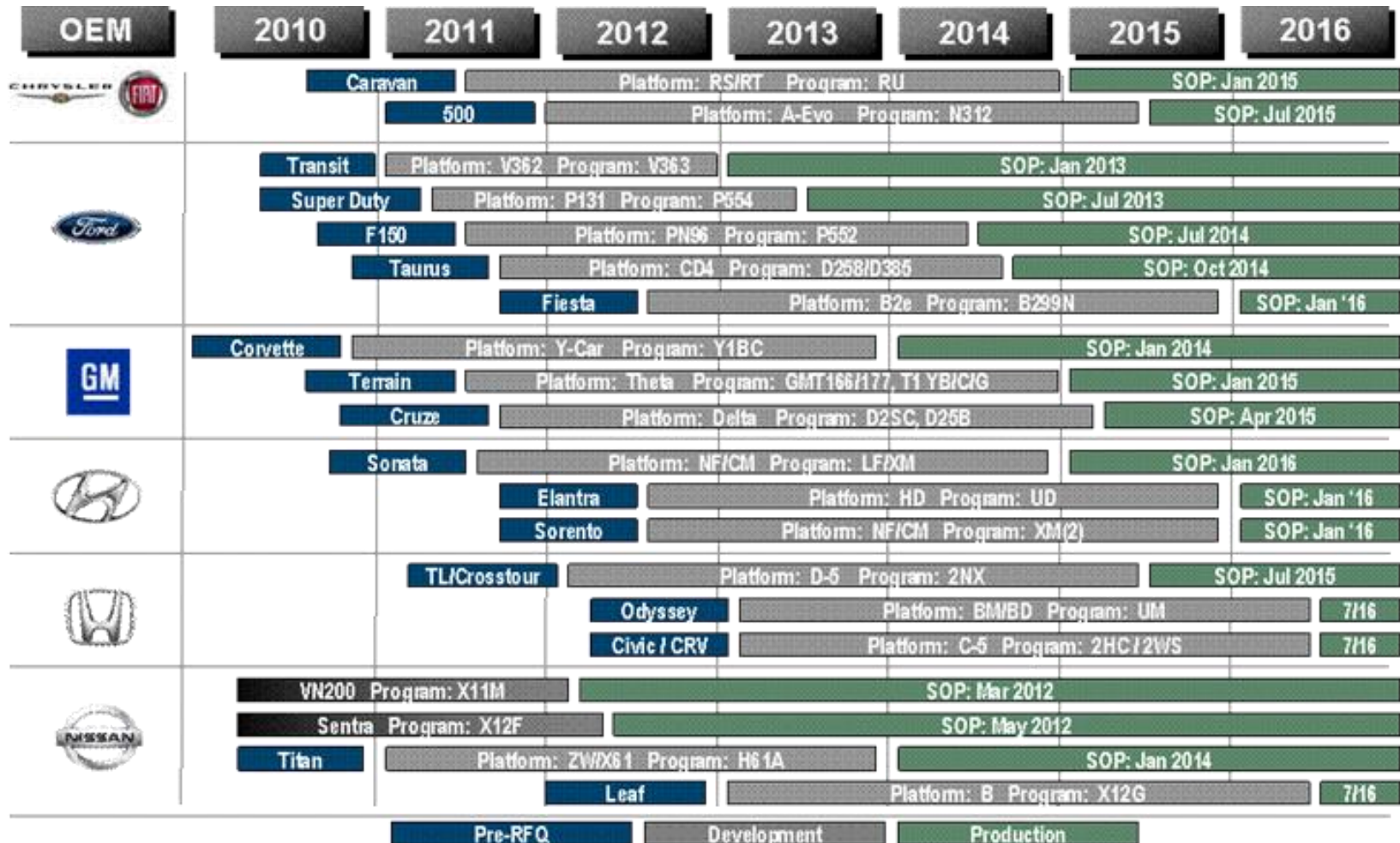




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3. Providing Coherent Strategy: Have a Plan!





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3. Providing Coherent Strategy

Turning an OODA loop to win a new contract: (2009)

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

Problem: Pick a partner to win the Corvette with

Step 1: collect observations



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3. Providing Coherent Strategy

Turning an OODA loop to win a new contract: (2009)

1. The overall economy is weak
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Step 2: Begin Orientation



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3. Providing Coherent Strategy

Turning an OODA loop to win a new contract: (2009)

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Step 3: Apply Analysis & Synthesis



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3. Providing Coherent Strategy

Turning an OODA loop to win a new contract: (2009)

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Step 4: Complete Orientation



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3. Providing Coherent Strategy

Turning an OODA loop to win a new contract: (2009)

Step 4: Identify factors for decision and decide

1. Capital is expensive and difficult to come by
2. Project is relatively small <30k vehicles per year
3. GM is just emerging from bankruptcy
4. The German company has no manufacturing plants near the GM facility
5. The US company has a seat plant right next to the GM production facility
6. The US company is operating under Chapter 11 bankruptcy protection





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3. Providing Coherent Strategy: Results

Corvette Seats Dissected: C6 vs. C7 - CAR and D...



CAR AND DRIVER



All told, both new seats in the 2014 Stingray are light years ahead of what they replaced. We're glad General Motors listened to the innumerable amount of complaints the C6 seats received and decided to rectify the problem. Now, along with the other upscale interior adornments, the Corvette can truly compete with its across-the-pond rivals in any head to head challenge not based solely on bang-for-the-buck. America's sports car is finally world-class.



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3. Providing Coherent Strategy:

Strategic/Policy Level

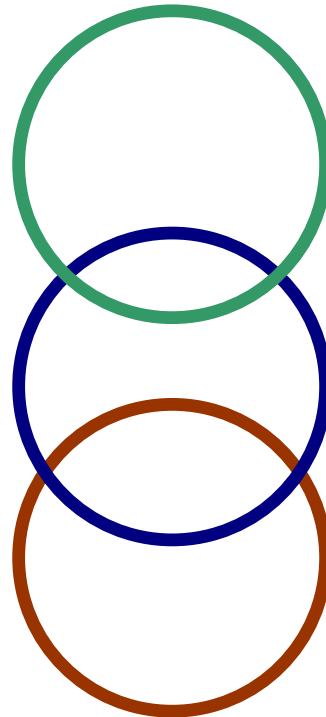
- Market research
- Engineering analysis
- Manufacturing trends
- X, Y, Z analysis
- Targeted Business list
- Marketing and sales plan

Operational Level

- TOC
- Process Analysis
- Hoshin Kanri

Tactical Level

- Control Room
- Kaizen
- TPM



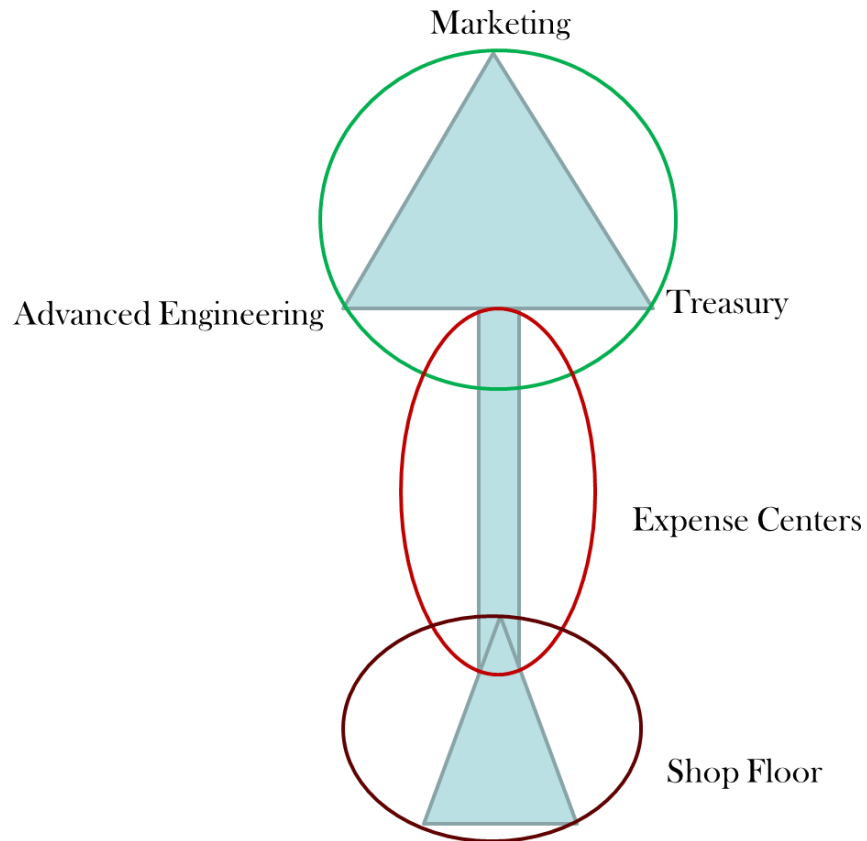
At the operational level
We focused on “right sizing”
Functional groups and
Analyzing each process looking
For redundant or non value
Adding steps (you’d be surprised)
And we formalized Hoshin Kanri
As a method of playing “catchball”
Between the three sets



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3. Providing Coherent Strategy:



**My favorite metaphor
“The Arrow”
Strategic Policy supplies
the “broadhead”.**

**The operational set is the shaft
needs to have the correct mass,
not too thin, not too thick.**

**Finally the tactical set provides
Stability, balance and equilibrium**



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Part 7: A Cautionary Tale

Winning all the Battles and Losing the War/ What Happened to CRH





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Maneuver Warfare is susceptible to attrition

You must close and end it quickly or.....



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Real World Application: CRH of North America: 2010

The main thing that John Boyd gave as a goal was “to reduce your opponent to the point where he was only sure of one thing, the inevitability of his own defeat”. The ability to so compose the mind of the enemy so that he just gives up is, I believe, the ultimate expression of the Colonel’s system.

It was therefore, absolutely delightful for me to sit at a meeting between the head of a Tier 1 “Automotive Experience” with my owner at the beginning of 2010 and listen to him offer us all of his NAFTA metals and mechanisms plants.

Owner however decided to hold out for ALL of the Tier 1 metals and mechanisms plants worldwide. The head of Tier 1 automotive said that he would get back to my owner on this.



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Real World Application: CRH of North America: 2010

The Gentlemen walked away and got back to his headquarters and with six months was convinced by his management team to make an offer for CRH that can only be described as preposterous.

So great was the offer, and so high over the actual market value of CRH, that it can only be described as stupid.

If maneuver conflict tactics have a weakness it is that they are, in the end, susceptible to attrition warfare. If someone gets a hold of you, brute strength can overcome elegance and agility. Faced with a payday of biblical proportions, my owner sold CRH in 2011.

Within the year, the formally profitable CRH plants were losing money, all of the CRH senior management had gone, and the inmates were running the asylum.



Boyd and Beyond 2014



Thank You for Listening

I'm Buying!