

## 40 Inventive Principles with Business Examples

### Principle 1. Segmentation

A. *Divide an object into independent parts.*

- Segment multiple similar installations (ex., production machinery) into separate installation modules
- Use 7 step problem solving
- Divide a work force (micro or macro) into functional areas
- Multiple sales interfaces (kiosks, mobile, store front)
- Divide an organization into different profit centers
- Segment a large project into tasks
- Segment your market by customer profile
- Use Strength, Weakness, and Opportunity and Threat analysis
- Delineate different product attributes to the customer

B. *Make an object easy to disassemble.*

- Mix and match services
- Flexible savings plans
- Use of 3<sup>rd</sup> party business services
- Use of contracted workers
- Modular manufacturing processes
- Modular panels for office space
- Intermodal shipment systems

C. *Increase the degree of fragmentation or segmentation.*

- Empower entire organization for some functions (ex., safety).
- Push decision making to the lowest level possible.
- Employee suggestion programs
- Telecommuting employees
- Multi-source raining programs

### Principle 2. Taking out

*Separate an interfering part or property from an object, or single out the only necessary part (or property) of an object.*

- Provide only highest value added services/products and contract support services.
- Improve inter-organizational communication.
- Eliminate performance reviews
- Eliminate weakness based management philosophies (concentrate on employee strengths)
- “There are no bad employees just bad systems.”

- Lean Manufacturing?
- Just-In-Time systems (materials, services, inventory, etc.)
- Contract manufacturing services for internally developed products.

### Principle 3. Local quality

*A. Change an object's structure from uniform to non-uniform, change an external environment (or external influence) from uniform to non-uniform.*

- Spend the most time on your highest value customers
- Perform low value added activities to the minimum acceptable level
- Give standard service contracts and sell full-service contracts
- Utilize quiet zones in the work space

*B. Make each part of an object function in conditions most suitable for its operation.*

- Let employees choose their own salary
- Allow work force to “bid” on work shift
- Locate operations in business friendly regions
- Build “innovation areas” into the work space.
- Locate manufacturing management offices on the factory floor
- Coordinate work shifts to customer needs

*C. Make each part of an object fulfill a different and useful function.*

- Utilized specialized job functions (positions on a sports team) instead of cloned and broad based job functions
- Arrange organizational structure by function instead of by product.
- Function based assembly lines
- Separate sales, manufacturing and service.
- Advertise on delivery trucks

### Principle 4. Asymmetry

*A. Change the shape of an object from symmetrical to asymmetrical.*

- Skew workforce focus onto most valued added operations
- Plan for light service requirements for recently sold products and heavy service requirements for post warranty products.
- Flex work force with seasonal cycles
- Pay higher salaries in high cost regions.

*B. If an object is asymmetrical, change its degree of asymmetry.*

- 360° feedback (customers, suppliers, peers)
- Moderated discussions between employees and supervisors

- Completely focus activities on seasonal or event based cycles
- Smooth salaries between management and operations

### **Principle 5. Merging**

*A. Bring closer together (or merge) identical or similar objects, assemble identical or similar parts to perform parallel operations.*

- Merge Financial and Operations Accounting.
- Merge Sales and Service organizations (customer contact).
- Massive parallel computing (mainframe)..
- Personal computer networks
- Sets of colored markers.
- Physical and mental health services from same organization.
- Competitor mergers.

*B. Make operations contiguous or parallel; bring them together in time.*

- On the job training.
- Working lunches.
- Merge sales and service functions.
- Coordinate the entire production (or business) process.
- Prototype while designing.
- Simultaneously completed components converge for assembly.
- Continuous flow assembly line (or business process).

### **Principle 6. Universality**

*A. Make an object or structure perform multiple functions; eliminate the need for other parts.*

- Broad based skill sets in workforce.
- Merge gas station, fast food and convenience store services.
- Merge engineering, production and quality control operations.
- Let customers eat in your kitchen.
- Merge communications, computing, music player, internet access and photographic capabilities into a single device.

### **Principle 7. "Nested Doll"**

*A. Place one object inside another; place each object, in turn, inside the other.*

- Booths in the mall.
- Maslow's Hierarchy of Needs.
- Levels of specialization (focuses topic and deepens understanding)
- Group, department, division and corporate accounting departments.

*B. Make one part pass through a cavity in the other.*

- Tour customers and sales through the operation.
- Tour engineering through sales.
- Cross check information or data.
- Rotate new hires through operation.
- Take indicators as items pass through a part of the operation.
- Use resources during slow periods for other operations.
- Funnel customers through gift shops (Disney Land).

### **Principle 8. Anti-Weight**

*A. To compensate for the weight (downward tendency) of an object, merge it with other objects that provide lift.*

- Focus on quality hiring in deficit areas.
- Provide products or services that thrive during economic down turn (ex., movie theaters, bankruptcy services, discount retailing).
- Provide inspiration to the staff during difficult times.

*B. To compensate for the weight (downward tendency) of an object, make it interact with the environment (e.g. use global lift forces).*

- Distribute sales coupons at popular events.
- Use 3<sup>rd</sup> party ancillary services and concentrate on the fundamentals of the business.
- Sell a product by obtaining a celebrity endorsement.
- Focus sales marketing on larger demographic trends.

### **Principle 9. Preliminary Anti-Action**

*A. If it will be necessary to do an action with both harmful and useful effects, this action should be replaced with anti-actions to control harmful effects.*

- Contingency planning for possible project complications.
- Liability insurance.
- Pre-arrange for quickly expanded production capabilities during a new product launch.
- Allow for time off without pay during down business cycles.

- Implement knowledge gained from previous business cycles into subsequent cycles (continuous improvement).

*B. Create beforehand stresses in an object that will oppose known undesirable working stresses later on.*

- Rotate employees through all organizational departments before they settle down in their primary focus area
- Provide alternative compensation resources (ex., increase limits on pre-tax savings) before salary reductions
- Increase service levels to customers before announcing price increases
- Train employees in regards to cost reduction methodologies before the economy requires it.

### **Principle 10. Preliminary Action**

*A. Perform, before it is needed, the required change of an object (either fully or partially).*

- Start cost cutting measure before the business environment requires it
- Plan projects ahead of time
- Plan daily operations before hand
- Hold “map day” (i.e., documentation of major project task areas from all area contributors) before detailed project planning activities.
- Pre-build parts for manufacturing activities or facilities for construction activities.
- Inform employees about impending layoffs prior to action.

*B. Pre-arrange objects such that they can come into action from the most convenient place and without losing time for their delivery.*

- Lean Manufacturing
- Stage parts at their point of manufacturing assembly.
- Distribute meeting materials before the event.
- Practice activities before the event.
- Pre-assemble products up to the “customization” stage and then finalize after customer orders come in.

**Principle 11. Beforehand Cushioning**

*A. Prepare emergency means beforehand to compensate for the relatively low reliability of an object.*

- Develop contingency plans (economic, emergency, headcount, etc.)
- Archive important information remotely
- Install anti-virus scripts before the virus effects the system
- Include schedule penalties into contracts

**Principle 12. Equipotentiality**

*A. In a potential field, limit position changes (e.g. change operating conditions to eliminate the need to raise or lower objects in a gravity field).*

- Have horizontal (technical) career path opposed to the traditional vertical (managerial) career path
- Keep decision making at the lowest level feasible
- Insure an even playing field by empowering employees to speak-up and contribute.
- Remove trappings (executive bathroom, manager parking, executive dining room) that deliver hierarchical organizational messages
- Flatten organization (2 -3 organization levels at maximum)
- Ship only active ingredients for mixing at customer site, not inert materials

**Principle 13. 'The Other Way Round'**

*A. Invert the action(s) used to solve the problem (e.g. instead of cooling an object, heat it).*

- “There are no bad people, only bad processes”
- Build products after they are ordered
- Customize products after they are ordered
- Expand capabilities and services instead of contraction during recession.

*B. Make movable parts (or the external environment) fixed, and fixed parts movable).*

- Provide product service at the customers location
- Obtain an advanced degree on-line
- Telecommute to work
- Develop a change-able organization

*C. Turn the object (or process) 'upside down'.*

- Establish the work-force as the most important part of the operation
- Provide highest level of service at the end of the product's life cycle.
- Show previews (trailers) after the movie
- Develop a rapid reaction organization that dynamically responds to environmental changes instead of trying to forecast them
- Pay customers for certain behaviors (discounts, etc.)

- Send senior management staff through “ground school.”
- Build products based on customer input

#### **Principle 14. Spheroidality - Curvature**

*A. Instead of using rectilinear parts, surfaces, or forms, use curvilinear ones; move from flat surfaces to spherical ones; from parts shaped as a cube (parallelepiped) to ball-shaped structures.*

- Design product to the human form.
- Go around obstacles instead of fighting through them
- Eliminate the traditional hierarchical organization structure and replace with a spoke and wheel system

*B. Use rollers, balls, spirals, domes.*

- Develop highly configurable products and work spaces
- Create spiral (continuously changing and growing responsibilities) instead of stair stepped career paths for work force

*C. Go from linear to rotary motion, use centrifugal forces.*

- Let the momentum of the organization weed out poor performers
- Rotate qualified employees through the management factions (shares the load and provides broad based experience to many)
- Develop circles of influence and pursue change and effect through those circles
- Inter-relate all departments through a circular organization structure and physical layout.

#### **Principle 15. Dynamics**

*A. Allow (or design) the characteristics of an object, external environment, or process to change to be optimal or to find an optimal operating condition.*

- Dynamic manufacturing capacity (product line and volumes)
- Customized products and services
- Continuous Process Improvement (CPI)
- Dynamic support team for issues, problems or projects
- Flexible benefit plans (stock versus pay, medical coverage versus pre-tax retirement accounts, etc.)

B. *Divide an object into parts capable of movement relative to each other.*

- Establish business cycles that is most advantageous to each group in the organization
- Highly mobile work force (geographically and functionally)
- Matrixed organization structures

C. *If an object (or process) is rigid or inflexible, make it movable or adaptive.*

- Eliminate rigid salary structures and replace with individual or organizational performance bonuses
- Look for problems, do not wait for them to find you
- Change employees roles and responsibilities to respond to the daily organizational requirements

#### **Principle 16. Partial or Excessive Actions**

A. *If 100 percent of an objective is hard to achieve using a given solution method then, by using 'slightly less' or 'slightly more' of the same method, the problem may be considerably easier to solve.*

- Pay for part of overtime and compensate the rest with time off
- All hands on deck safety inspections
- New product or services introduction event in new market
- Meet some requirements to a minimum level – do not waste time where it is not needed or appreciated

#### **Principle 17. Another Dimension**

A. *To move an object in two- or three-dimensional space.*

- 360° feedback (customers, suppliers, piers)
- Penetrate new markets by looking at new uses for same product or services.
- Interrelate products or services to form a net or cube of capabilities for the customer

B. *Use a multi-story arrangement of objects instead of a single-story arrangement.*

- Stacking washer / dryer
- Discount warehouse multi-story shelving
- Use 3<sup>rd</sup> party expertise for some operations (accounting, payroll, systematic innovation, etc.)
- Hide the interworking of the operation (on one level) and show the customer only what they need to see (on another level)



C. *Tilt or re-orient the object, lay it on its side.*

- Train technical depth to workforce with operational breadth
- Train operational breadth to a work force with technical depth
- Create communication structures that do not require approval and dissemination (peer to peer)
- Put recliners in the conference room
- Use lateral moves as a legitimate career path

D. *Use 'another side' of a given area.*

- Use functional analysis instead of component analysis
- Use mental inertia breaking techniques when brainstorming
- Understand what the product or service looks like from all angles (customer, service, competitor, supplier, etc.)
- Spend time in other operational areas to improve individual's contributions to the organization

### **Principle 18. Mechanical vibration**

A. *Cause an object to oscillate or vibrate.*

- Allow organizational tension to fine tune and balance the output and results
- Get the whole organization excited about projects, plans, and events
- Use the natural energy of some personnel to energize and drive a project or the organization.
- Use adverse situations to create the impetuous to create, fix, and redirect..

B. *Increase its frequency (even up to the ultrasonic).*

- More breaks, longer vacations, shorter work days
- More frequent performance reviews (approaching continuous feedback)
- Continuous "pull" communication to the masses
- Frequent customer check-ins

C. *Use an object's resonant frequency.*

- Coordinate some operational activities with other events (finalize the books just prior to tax time, provide employee resources (i.e., health check) at company picnic).
- Tie product or services to other big events (World Cup Soccer clothing, chimney sweep specials prior to Christmas))
- Provide product and services that coordinate with the users activities, not that require the user to set aside time for usage.

D. *Use piezoelectric vibrators instead of mechanical ones, E. Use combined ultrasonic and electromagnetic field oscillations. (Use external elements to create oscillation/vibration)*

- Energize the team with money, pride, and honor
- Use multi-discipline teams to address a problem all at once

- Use multiple design teams to address a new project

### **Principle 19. Periodic Action**

*A. Instead of continuous action, use periodic or pulsating actions.*

- Open for breakfast and supper
- Traffic lights
- Change product line production every other day

*B. If an action is already periodic, change the periodic magnitude or frequency.*

- Do quality checks at irregular intervals
- Perform bi-annual employee reviews instead of annual
- Reward for frequent, or infrequent, use of services

*C. Use pauses between impulses to perform a different action.*

- Perform all system maintenance between production runs
- Hold team building events after major project close-out
- Exercise during lunch
- Perform customer site auto service (i.e, windshield replacements) during the work day

### **Principle 20. Continuity of Useful Action**

*A. Carry on work continuously; make all parts of an object work at full load, all the time.*

- 24 hours a day by 7 days a week production activities
- Utilize facilities for alternative uses after work hours
- Insure constraint tools in the factory are highly utilized
- Incorporate improvement into the process continuously or at the end of each production cycle.

*B. Eliminate all idle or intermittent actions or work.*

- Read while riding an exercise bike.
- Use mobile computing during commuting
- Deliver materials while walking to a meeting

### **Principle 21. Skipping**

*A. Conduct a process , or certain stages (e.g. destructive, harmful or hazardous operations) at high speed.*

- Run through the rain.
- Utilize a hiring blitz
- All hands on deck monthly inventory
- Execute unpleasant, painful, or boring process quickly
- Rapid prototyping

### **Principle 22. "Blessing in Disguise" or "Turn Lemons into Lemonade"**

*A. Use harmful factors (particularly, harmful effects of the environment or surroundings) to achieve a positive effect.*

- All press is good press – spin negative publicity
- Turn customer complaints into a win through exceptional service
- Pursue negative feedback to understand how to improve
- Learn from your mistakes

*B. Eliminate the primary harmful action by adding it to another harmful action to resolve the problem.*

- Address resentment of long work hours by introducing fear of business failure
- Team up difficult employees
- Put a high tax on gasoline
- Increase cost of service as water usage goes up
- Charge more for alcoholic beverages as customer consumes more

*C. Amplify a harmful factor to such a degree that it is no longer harmful.*

- Utilize planned obsolescence (product failure rate drives sales)
- Rotate employees through short stint in high turn over positions
- Legalize drugs to remove profit from crime rings
- Dog parks (stop unleashed dogs in public areas by having all dogs unleashed in other areas)

### **Principle 23. Feedback**

*A. Introduce feedback (referring back, cross-checking) to improve a process or action.*

- Track budget performance
- Track project performance
- Statistical Process Control
- Employee suggestion program
- Customer suggestion program
- Utilize customer surveys
- Continuously monitor performance (30 minutes or its free)

- Dynamic company performance dashboard

*B. If feedback is already used, change its magnitude or influence.*

- Survey every customer about service
- Review employee suggestions in weekly staff meetings
- Send manufacturing personnel to work with product developers
- Use Multi-Variant Decision Making to compare unlike scenarios
- Ignore customer feedback
- Require that each department incorporate customer feedback into their operations
- Check competitor's process daily

#### **Principle 24. 'Intermediary'**

*A. Use an intermediary carrier article or intermediary process.*

- Use a party planner for special events
- Use a courier service
- Use consultants
- Use a mediator
- Contract out support services (accounting, payroll, landscape services, etc.)
- Utilize technical writers
- Have someone proof read your materials
- Become a wholesaler

*B. Merge one object temporarily with another (which can be easily removed).*

- Place expensive, full feature, option and cheap, bare minimum performance, option with program you really want to sell
- Utilize contractors for project work
- Allow teams to combine efforts for difficult projects
- Give new employees a "buddy" or mentor
- Team up with another organization to perform a contract bigger than either one of you can handle alone

#### **Principle 25. Self-service**

*A. Make an object serve itself by performing auxiliary helpful functions*

- Use project work to train employees
- Place advertisements on your products
- Gather phone numbers from shoppers for future marketing efforts and to track demographics
- Use inventory tracking numbers to not only trigger re-orders but also to understand seasonal variations

*B. Use waste (or lost) resources, energy, or substances.*

- Heat facility with process equipment exhaust heat
- Place excess headcount onto special projects during slow periods
- Make base data from monthly accounting process available to other departments to support their decision making
- Trade waste with other departments or industries and utilize as a resource (“one man’s garbage is another mans treasure”)
- Refurbish old facilities into new production or office areas

### **Principle 26. Copying**

*A. Instead of an unavailable, expensive, fragile object, use simpler and inexpensive copies.*

- Video-conferencing
- Purchase prints instead of originals
- Display copies of expensive items (ex. - US Constitution)
- Provide samples to customers
- Wear paste jewelry and keep originals in the safe

*. Replace an object, or process with optical copies.*

- Video-conferencing
- Show real-estate on TV programs or web site
- Share photos on the internet
- Scan documents into PDF files that can be shared
- Use founder’s photo on products
- Put picture of supervisor in work area
- Sell printable event tickets over the internet

*C If optical copies are used, move to IR or UV (Use an appropriate out of the ordinary illumination and viewing situation).*

- Transmit images of products (blue-tooth) to potential customer’s cell phones as they walk by your store
- Use wide variety of source for feedback (diversity of opinions)
- View your organization and business plans through many different lenses and perspectives

### **Principle 27. Cheap Short-Living Objects**

*A. Replace an expensive object with a multiple of inexpensive objects, compromising certain qualities (such as service life, for instance).*

- Design products and services to be effective for a short period and then disposed of (diurnal publication, disposable ice chests, team for a day, paper cups, Inexpensive short lived clothing)
- Simulation Modeling, Project or Task Modeling
- Dog barking recording for home security
- Virtual tours
- Operational simulator for heavy equipment training

### **Principle 28 Mechanics Substitution**

*A. Replace a mechanical means with a sensory (optical, acoustic, taste or smell) means.*

- Virtual reality
- On-line library
- Warning bells and lights at railroad crossings
- Use smells from bakery to attract customers
- Keep animals from ingesting automotive coolant by adding foul tasting ingredients

*B. Use electric, magnetic and electromagnetic fields to interact with the object.*

- Employee magnetic badges allow entrance to facility
- Metal detectors at airports
- Use intuition during problem solving

*C. Change from static to movable fields, from unstructured fields to those having structure.*

- Sweeping Radar (scan environment)
- Electric perimeter dog fences
- Hand held metal detector

*D. Use fields in conjunction with field-activated (e.g. ferromagnetic) particles.*

- Electronic tagging activates sensors (electronic check-out) as customer leaves store
- Use triangulation to locate cell phone users in the antenna grid
- Align goals by exposing organization to information sources (fields)

### **Principle 29. Pneumatics and Hydraulics**

*A. Use gas and liquid parts of an object instead of solid parts (e.g. inflatable, filled with liquids, air cushion, hydrostatic, hydro-reactive).*

- Use influence, or pressure, from environment to trigger activities
- Flow the service or organization through the customer base
- Cushion the organization from abrupt changes in the environment

### **Principle 30. Flexible Shells and Thin Films**

*A. Use flexible shells and thin films instead of three-dimensional structures*

- Reduce options available to customers by targeting customer profiles with different pre-selected options
- Use facades to create customer “feelings” about services
- Use film/video as part of sales material
- Use temporary structures for events or short term requirements

*B. Isolate the object from the external environment using flexible shells and thin films.*

- Use org within an org structure
- Protect a portion, or all, of the organization with regulations and policy
- Create employee grade structure with varying benefits
- Coffee cup thermal sleeves

### **Principle 31. Porous Materials**

*A. Make an object porous or add porous elements (inserts, coatings, etc.).*

- Create permanent “temporary positions” in the org structure to be filled periodically as business variations require it
- Set up processes to absorb information from all sources necessary
- Initiate a sabbatical program
- Combine services with other providers to create a complete package to the customer

*B. If an object is already porous, use the pores to introduce a useful substance or function.*

- Fill holes in organization structure with expanded capabilities (i.e., hire Administrator with a marketing background)
- Use holes in organizational structure to be filled by a roving staff member that helps bridge inter organizational gaps and communication flow
- Use a “light weight” or lean organization to support nimbleness and quick reaction times
- Create viewing windows (controlled transparency) into the organization which in turn benefits from being partially open and sharing

### **Principle 32. Color Changes**

*A. Change the color of an object or its external environment.*

- Change the “feel” of an area with lighting and paint colors
- Change the frequency of an event
- Color code paths, procedures, or choices
- Indicate status or alert level with color

*B. Change the transparency of an object or its external environment.*

- Hide operations from the customer
- Make all parts of an operation transparent to the rest of the organization
- Address all issues head on and with openness
- Filter information for customers or associated work groups

### **Principle 33. Homogeneity**

*A. Make objects interact with a given object of the same material (or material with identical properties).*

- Base line operations with other organizations and competitors
- Trade employees with other organizations
- Temporary assignments in other departments
- Share data with other parts of the operation
- Have all team members work off the same plans
- Attend conferences
- Hold industry events and share knowledge
- Allow the top performers from different departments work on projects together

### **Principle 34. Discarding and Recovering**

*A. Make portions of an object that have fulfilled their functions go away (discard by dissolving, evaporating, etc.) or modify them directly during operation.*

- Have new hires perform general broad based services as they move towards their eventual permanent position
- Temporary assignments
- Use 3<sup>rd</sup> party service providers for one time or repetitious jobs



B. *Conversely, restore consumable parts of an object directly in operation.*

- Provide mental health periods and rejuvenation services for employees
- Give compensation time for overtime efforts
- Reenergize employees with celebration of goal orientation events
- Continuous training programs

**Principle 35. Parameter Changes**

A. *Change an object's physical state (e.g. to a gas, liquid, or solid).*

- Modeling/Simulation
- Customer profiling
- Virtual interfacing (meetings, shopping, etc.)
- Tele-commuting

B. *Change the concentration or consistency.*

- Happy hour
- Seasonal specials
- Special teams for special events (planning, forecasting, etc.)
- All hands on deck maintenance week

C. *Change the degree of flexibility.*

- Customizable services based on customer needs
- Dynamic hours of operation based on requirements
- Flex - hours for employees
- Rotating employees who provide support when and where needed based on changing company needs

D. *Change the temperature.*

- Calm down employee fears during tough economic teams
- Pump up work force by sharing organizational goals
- Coordinate organizational efforts by setting challenging goals

### **Principle 36. Phase Transitions**

*A. Use phenomena occurring during phase transitions.*

- Use period of relaxation after major project delivery to reflect on perform strategic planning activities
- Take advantage of major market shifts to enter (or exit) markets
- Use phases of team development (Forming, Storming, Norming, ,Performing) to reflect on past performance and set goals for new performance levels

### **Principle 37. Thermal Expansion**

*A. Use thermal expansion (or contraction) of materials.*

- Utilize eager volunteers for project work opposed to unexcited recruits
- Take advantage of a “hot” market to introduce new products and services.
- Utilize a “hot” market to provide buffer when rolling out new business processes, work divisions, or developing new capabilities

*B. If thermal expansion is being used, use multiple materials with different coefficients of thermal expansion.*

- Place your most energetic people in the most demanding positions
- Place your most energetic people in the areas of slowest growth
- Create work teams from individuals with different attributes (skills sets, energy levels, areas of interest)

### **Principle 38. Strong Oxidants (‘Boosted Interactions’)**

*A. Replace common air with oxygen-enriched air (enriched atmosphere)*

- Team up with a new partner (internal or external) for planning purposes
- Provide performance incentives to employees
- Involve entire organization in promotions and special programs
- Bring in performance coaches
- Infuse new blood into the organization (new hires, contractors, non-profits, etc.)

*B. Replace enriched air with pure oxygen (highly enriched atmosphere).*

- Tie employee pay levels directly to company performance
- Utilize retreats or “off-site” planning sessions – highly focused environment
- Remove all extracurricular job expectations form key program manager’s plate
- Move parts of the operation directly into the area it services (customer floor, internal manufacturing department, etc.)

c.) Expose air or oxygen to ionizing radiation, D. Use ionized oxygen, E. Replace ionized oxygen with ozone (atmosphere enriched by 'unstable' elements) .

- Accelerate bonuses with accelerated performance
- Utilized forced distribution of performance ratings and the resulting rewards
- Foster the Black Sheep in the organization
- Bring in devil's advocates
- Bid high risk jobs with equally high rewards
- Operate in a highly fluid and somewhat volatile manner

### **Principle 39. Inert Atmosphere**

A. *Replace a normal environment with an inert one.*

- Flatten your organization and drive decision making to the lowest level possible
- Eliminate pay for performance and replace with government styled pay grades
- Create work environments that foster team work and cooperation not individualism and competition
- Develop a calm and relaxing working environment
- Develop and practice contingency plans – no knee jerk reactions

B. *Add neutral parts, or inert additives to an object.*

- Utilize unbiased parties to review and provide feedback as to plans and programs
- Create quiet areas in the work environment
- Have customer representatives provide a neutral buffer between the organization and its customers
- Entertain your customers whenever they must wait

### **Principle 40. Composite Structures**

A. *Change from uniform to composite (multiple) structures. (Awareness and utilization of combinations of different skills and capabilities.)*

- Insure diversity in your work place and on project teams
- Deliver information in a wide variety of formats and medias
- Include all pertinent disciplines on program and project teams (Finance, Engineering, HR, Sales, etc.)
- Look at problems and issues from as many angles as possible
- Get input from a wide variety of individuals
- Utilize strategic and tactical players on teams
- Insure mix of strengths throughout the organization
- Use consultants for some positions
- Create specific job responsibilities for each individual in the organization