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 3rd 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 training 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 quite 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 value added operations
- Plan for light service requirements for recently sold products and heavy service requirements for post warrantee 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*.

- 360º 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 3rd 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 ressources (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" (ex. 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 dinning 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 functions (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*.

- 360º 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 3rd 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 anther 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 form all angels (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 (ex. 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 (ex. 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 alterative 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 turnover 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 form 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 on 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

B. *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 form 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 form 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 form 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 to 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 3rd 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 times
- 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 and 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
- Reward employees for risk taking

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 clam 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 quite 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 form 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