

## 64 Functions (& 4 Dimensions) of Leadership and Management

Specifying When and How Much of Particular Management  
Functions Are Needed So Such Functions Can Be  
Delivered By Means Other Than a Designated Social Class  
(An Expensive Fixed Inventory) of Managers  
*TOWARDS JUST-IN-TIME DELIVERY OF MANAGEMENT  
FUNCTIONS WITHOUT "MANAGERS"*

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**RESEARCH QUESTIONS--the Intellectual and Research Foundations of a  
Just-in-Time Leading/Managing Science:**

1. What are the bases upon which top people in any field rise to the top of their field?
2. What are the functions that people nominated as great at managing/leading and that people nominated as naming themselves as having been greatly managed/led specify as essential functions to managing/leading?
3. What are alternative ways, to an expensive fixed inventory of people--named managers or leaders--to deliver essential managing/leading functions?
4. How can we measure the amount of managing/leading and appropriateness of the sort of managing/leading being delivered to any group by any system of delivery? How can we accurately compare the capability of different systems for delivering managing/leading functions to any group?
5. What is the correlational, and longitudinal causal linkage between delivery of the essential managing/leading functions found in this research and reported in this paper and quality of outcome and performance for all stakeholders of any organization? Do the functions that this paper's sample of excellent leaders/being-led-persons specify actually cause good outcomes for stakeholders and which stakeholders with what conditionalities/contingencies?

An argument can be made, from the standpoint of what just-in-time inventory has found as the cost-benefits of fixed inventories of parts, that a fixed inventory of leaders or managers is not worth what it costs, and, it can be argued that a designated fixed social class of people is not the only or best way to deliver functions of leading or managing to people and organizations today. Alternative ways to deliver leading and managing functions can be imagined and implemented but they depend on a good model of the functions basic to leading and managing.

**METHOD--ask Suppliers and Customers of Leading/Managing (nominated as excellent at leading/being-led) What the Functions of Leading/Managing are:**

1. Ask suppliers nominated as great at delivering managing/leading functions what constitutes great managing/leading.
2. Ask customers nominated as having been greatly managed/led at one time or

**another what constitutes great managing/leading?**

- 3. The same categorization procedures applied first to the answers to 1 and 2 above, and then second to well used books on managing and leading, so that several models of great managing/leading result--one from suppliers and customers, and the others from research published on managing/leading for comparison purposes.**

Asking academics for such functions, in the past, has produced such greatly distorted function sets as those represented in Harvard Business School, Case Studies (and the great distortions in business practice that produced the global finance meltdown of 2009). Asking leaders and managers produces distortions as great or greater than overly rational academic distortions (these, after all, are the experts who led the meltdown in 2009). Instead of these approaches, an expert systems and quality process modeling approach were embedded in an interview instrument administered to 150 leaders and managers nominated by 315 high performer people in a stratified sample of 63 different areas of society, half American, half global. All mentions of leading/managing functions, levels at which functions get applied, domains (horizontally segmenting organizations) at which they get applied were marked in transcripts, grouped, groups named, similar groups grouped, such super-groups named, and so on, then a principle of ordering was applied to top level items, and by analogy to all other levels and domains till all items at all levels followed roughly the same principle of ordering. Then branch factor at each level and across levels was unified. The result is called a “fractal concept model” and has memorization and application properties superior to usual irregular network models. 64 functions, all of them mentioned by at least 44 of the 150 respondents in the sample, are included in this final fractal concept model of functions of leading/managing. 36 levels (vertical scales) and 15 domains (horizontal traditional areas of organizing) at which the 64 functions are applied to handle any of 256 system effects from the non-linearity of the world (the system effects model, one of 4 dimensions of leading mentioned in this article is developed and presented in another chapter of this book). The 64 functions thusly applied at particular levels and domains to handle particular system effects constitute the 4 dimensions of leading/managing that the research of this paper presents. Future research will explore uses of this model to measure quality of leading/managing, gaps between amount and types of leading being delivered and amount and types needed in particular situations, enterprises, and groups, as a curriculum for training people, and as an agenda of what it is that alternative delivery vehicles for delivering leading/managing functions are to deliver. A general metric of the quality of leading/managing, measuring amounts and types delivered compared to amounts and types needed, as well as quality of delivery of amounts and types being delivered (regardless of whether needed or unneeded) results.

**RESULTS--a model of 64 functions of managing/leading organized fractally; 3 models from summarized research publishings for comparison. With this tool we can now begin to measure, evaluate, and assess various alternative ways to deliver these functions to any group under any circumstances. Also, if such measurement improves the model and validates it, we can measure how well any system delivers these functions and how well these functions impact outcomes that various stakeholders care about.**

**Getting Specific**

Research into organization effectiveness (Cameron and Whetten, 1980) has tended toward ambiguous results because it was found that no one viewpoint always dominated evaluation of such performance, hence, there was no stable, single

authoritative viewpoint for determining what is good and bad performance all or even most of the time. Indeed, what is good performance in a certain 3 year period tends to insure bad performance five or ten years later. Any slightly experienced manager knows that you “can always make your numbers” but at a cost of “cannibalizing your ability to make the same

numbers some years in the future". The present can always be optimized by suboptimizing a longer stretch of futures. Also you can never know what framework will dominate performance evaluation in the future as new technologies, side-effects of current policies, and new powers arisen utterly change what is important and what catches attention.

If organization performance is profoundly ambiguous, with no hope of a single stable authoritative criterion for measuring it, then individual leader and manager performance is the same. How can we, given this ambiguity, get specific about what "good" leadership and management is and make people capable of it?

### **What Do Great Managers and Leaders Think Great Management and Leadership Is?**

We could ask chemists what great management and leadership is. We could ask people in failing organizations what great management and leadership might have saved them. However, how can we be sure that chemists or people in failed organizations actually have known and seen "in any way" good leadership and management? We need to ask people who we are sure have experienced "good" leadership and management of various sorts. The only population that we can be sure has done this is the population of people now held quite generally to be great leaders and managers of current organizations, movements, or campaigns.

### **Defining "Greatness" of Leading and Managing**

In total quality practice "quality" is what the customer says it is. In leadership, "leading" is what leaders say it is and what those led say it is. In management, "managing" is what managers say it is and what those managed say it is. When the supplier of something and the consumer of something disagree about what the something is, we tilt towards the supplier's opinion where the domain is highly scientific and the knowledge involved complex taking years to learn. We tilt towards the consumer's opinion where the domain is not highly scientific and the knowledge involved in not out of the scope of learnability of average consumers. Leading and managing fall into the latter category so we can tilt towards consumer definitions of it where supplier and consumer definitions differ.

### **What If We Succeed in Finding the Fundamental Functions of Leading and Managing?**

Fundamental such functions might be defined as functions that all leaders and managers have to master to perform at all satisfactorily. Fundamental such functions might be defined as functions that all above-average leaders and managers have that distinguish them from average ones. Fundamental such functions might be defined as functions that, say, handle well 95% of all cases actual leaders and manager actually face in any given year or organization. Fundamental functions might be defined as elementary ones, that is, ones that can be combined into composites that handle any possible situation beyond the handling capability of any of the elementary ones. For the moment, allowing any of these definitions of "fundamental", we can ask the question above--what if we succeed in finding such functions?

If we had a set of functions of leading and managing that were fundamental in any of the above ways, then we could do the following:

- require that all would-be leaders and managers master them
- set up training and examinations to get people capable of them and make sure they have developed such capability
- find exactly when and where each such function is needed in any sort of workplace
- find exactly what amount of each such function is needed, in general, to handle basic types of situations people face
- investigate to find the best way to deliver such functions: of the type of function needed, of the amount needed, at the time and place needed
- investigate any claim of "I am a good manager/leader" or "he/she is a good manager/leader" or "that is good managing/leading" using what amount of what function was actually needed, when and where, compared to the amounts and functions actually delivered by the leaders/managers involved; in other words, did the people deliver the right amounts and types of functions when and where they were needed using conditions that define when and where such functions are needed.

The idea of alternative ways to deliver managing

functions does not mean much to people who have only used or known one way to deliver such functions. The truth is, most people have only seen such functions delivered one way--by a specially designated social class called "leaders" or "managers". This social class constitutes an expensive fixed inventory, not a just-in-time inventory system. Everywhere else in the business world, over the last 40 years, companies all over the world have replaced fixed inventories with fluid just-in-time inventory systems, where demand-pull instantly sends a signal through supply processes causing what is needed to be made in just the amount and type needed and quickly delivered to exactly the point where needed. Imagine, now, a just-in-time leadership/management system where exactly the amount and type of management/leadership needed at some time and place was, by instant signal constituted and delivered there. If we can define a fundamental set of leading/managing functions, we can define conditions of when and where certain amounts of them will be needed, and create a just-in-time leadership/management system that gets leading and managing to conform to inventory disciplines in place for all other resources of work.

#### **Some Benefits of Establishing Just-in-Time Leading and Managing Systems**

It is no surprise to anyone with experience in business that delivering any business function by a fixed inventory has severe costs and problems associated with it.

- when little managing/leading functioning is needed, managers/leaders to "look managerial" or "look leaderly" generate unneeded such functions
- when much managing/leading functioning is needed, manager/leaders seldom if ever recognize how many such functions, how much of such functions, when and where, are needed exactly--they rather prioritize and approximate in order to make the amount and type of leading and managing needed never appear to exceed what they, as single individual people can deliver
- **THE RESULT:** both too little managing/leading functions and too many are delivered, just about all the time--the amount and type of function provided nearly never matches what is needed; amateur delivery of managing/leading functions by fixed social classes has the same overshoot and undershoot

problematics of all other fixed inventory systems in businesses.

#### **Alternatives to Social Classes as Means of Delivering Fundamental Leading/Managing Functions**

Since most people have never seen even one instance of a leading or managing function delivered by a means other than a fixed inventory of people called managers, it is important to demonstrate that there are other means available, tested, and tried by people in the past. Several such alternatives are presented here.

First, is leading/managing function delivery by rescue squad. This is delivery by teams, each of which specializes in providing one particular managing/leading function. When work or large groups need a particular function the team specializing in it is called and comes "like a rescue squad" to the group needing it. More particularly, this means of delivering these functions involves people all over a workplace weekly and anonymously filling in questionnaires analyzed statistically by a central group to determine who, where, and when, needs which function, delivered in what amount. Each workgroup has two jobs, usual work, plus a leading/managing function assigned for them to practice and master (starting with formal training, but followed up with work under mentors, then practice on lots of actual cases). When analysis of weekly questionnaire results indicate their assigned function is needed, the rescue squad schedules visits, as the expert protocol of their function specifies, to the workgroups needing delivery of that function. Where more than one function or a combination are needed, the delivery groups meet together to as a joined new unit plan delivery to the requesting groups.

Second, is leading/managing function delivery by events. This is delivery of leading/managing functions by mass workshop events tailored for each function. When a particular area needs a particular function the appropriate event is held with them as participants (and others if greater numbers are needed by the event's protocol). This starts the way rescue squad deliver does by a weekly questionnaire filled in by all workgroups to determine who where need what amount of which function. However, instead of the entire workforce being assigned to different functions to master and deliver, a repertoire of mass workshop event procedures is built up, and

applied by a central group assigned to master the holding of these workshop events when and where needed. This central group analyzed questionnaire results to determine which groups where need which amount of which function delivered by what sort of event, then they schedule appropriate mass workshop events for delivering those functions in those amounts to those in need of them. If getting a central group to master so large a repertoire of events, one for each fundamental function, is difficult, then a distributed system of all workgroups having two jobs, usual work plus one event type they master holding for others in the firm. This is similar to rescue squad delivery above. In mass workshop events, fifty to several hundred people, split into between 12 and 50 workshops, meeting in parallel, do in hours work that small groups would take months or years to finish, using exact protocols of what each workgroup does designed by studying world best people at doing some procedure.

Third, is leading/managing function delivery by a repertoire of web-enabled expert protocol work coordination processes or events. The ways this works is a library of work coordination software processes, one for each leading/managing function, exists. When groups are determined to need a particular one, they retrieve the software process appropriate and that software coordinates them through a series of actions, communications, and so forth that actualize the function. This involves web-delivered questionnaires, weekly, for determining when, who, where how much of which functions are needed. Then for each function a work coordination software process for doing that function is maintained in a software library and automatically emailed to those needing to apply that function to their own group. The group assigns its members to all the roles specified in the work coordination software and the software itself automatically coordinates the doing of the function. Building an initial acceptably skillful library of work coordination enabled ways of delivering managing/leading functions is a preparatory step needed for this system.

These are three alternative ways to deliver managing/leading functions beside a fixed inventory social class called “managers” or “leaders”.

### **Authority and Function Delivery, the Usual Questions**

Everyone contemplating any way of delivering

leading/managing functions besides a fixed inventory social class system raises the same tired question--but so many managing/leading functions ask hard things of people, persuade people to do things not really in their own best interest but instead in the organization’s best interest--these things absolutely depend on the aura, charisma, surround of “authority” to get done. How can anything but an imposing hierarchy, fixed inventory of “leaders” or “managers” ever hope to have the “authority”, hence, aura, charisma, and surround to get these kinds of functions done?

This is not the question it seems. There is a balance issue here, in reality. We can get people to do things because of respect for the skill and excellence of what and how we do things or we can get people to do things because we scare, threaten, or intimidate them with our power, position, or authority into doing things. Monkeys in the wild tend to use only the latter and, unsurprisingly, though perhaps not inspiringly, people also tend throughout history to have emphasized the latter. The truth is a third factor insinuates its way into all leading and managing.

That third factor is flight from responsibility. People in hierarchies want to reduce the scope of their own fears and responsibility by depending on magical greater others to take the heat, lead the way, make the hard decisions, and leave them blameless when things go wrong. Flight from responsibility, recognized by fixed inventories of leaders and managers, in history tended to tempt them into even more use of magic, intimidation, and the like to get people to “obey”. Leaders and managers in history frequently reduced the total amount of authority in an organization as their means of monopolizing all authority that was left. This reaches such extremes that some leaders eradicate nearly all authority in the organization that is not theirs, forcing hundreds to wait for weeks for a decision or permission or enough courage to do the obvious or serve a whining customer or fix a rapidly exacerbating problem.

People fleeing from responsibility do indeed need something big and scary to motivate compliance or motion in a coherent direction, perhaps. The issue is, using authority, in this way, reduces the total amount of authority to do things in a system, reducing gradually or not so gradually the overall ability of the organization to get things done, with people fleeing responsibility. If you populate your organization with people not fleeing responsibility,

then authority becomes both unnecessary and in the way. You depend on respect from greater skill or experience with sophisticated procedures.

### **The Concept of SWAT Authority Systems in Organizations**

When you elicit volunteers to help in a particular transformation of an organization and organize them, after awakening them, into local chapter organization where they receive formal training, and select demonstration local targets to apply their new methods to, using people impressed at those demonstrations as new recruits put through similar overall processes of mobilization, you change something profound about authority and its relation to organizations. We are all used to a fixed inventory of leaders or managers, organized like some monkey troops into a status hierarchy, with a fixed amount of authority in terms of what each person at each level is “authorized”, that is, not effectively punished, to do. When you elicit volunteers for particular transformations, perhaps several different ones going on at the same time, then each elicited level is “authorized” within the scope of its transformation, which, in turn, is rather fluid, defined more by conforming to the methods provided rather than being dictated by overt scope. That means, you can increase the overall amount of authority in the hierarchy as a whole, generating as much of it as determined by the number of elicited sets of volunteers consistent with decent execution of usual work functions and transformation functions. This is a SWAT authority system--the amount and type of authority waxes and wanes as movements pass over the entire organization or sets of related firms. Note W. J. Gore Company for over a decade has had a SWAT work system (because employees join as many teams as they wish, with pay voted by team members in proportion to contributions made, work and pay are SWAT but authority is not--since not all employees at regular times can compose and form new team.) Individual leaders or managers who try to personally exercise more authority or deploy more responsibilities to underlings miss the point. No individual’s expansion of authority can match SWAT authority systems set up organization-wide. Hannah Arendt, looking at Mao, Hitler, Stalin, and similar others, showed how expansions of individual authority usually reduce entire organization authority to the point that basic essential functions nearly everywhere lack enough authority in the people around them to get done. The Soviet Union’s collapse is a warning to any one person trying to

increase “my authority”. Increasing “my authority” is a key symptom of a leader in the process of failing. It is leaders increasing the total amount and diversity of types of authority in their entire organization that are becoming “powerful”.

### **From Respect for Persons to Respect for Protocols, Benchmarking Persons, Proceduralizing Respect**

When authority is switched from being based on persons to being based on procedures (say by benchmarking world best protocols for doing functions from the best performers in the world), then respect, going to quality of procedures used, does not get generalized to persons some of whose procedures may be world class and many of whose procedures may be lousy or hidden or selfish. Procedures are a fundamentally more scientific source of respect and object of respect than people. As much as this hurts individual leaders, you can find leaders nearly everywhere achieving this switch. Welch at GE, for example, much lauded, had a “walk the talk” campaign that made promotion by making your numbers using old procedures impossible, allowing only people making numbers using the corporately agreed on benchmark procedures available for promotion. This was a way of switching the basis of respect from persons to procedures. Welch, everyone tends to forget, had a Ph.D. in chemistry decades before treating conglomerates as banks with especially low rates of taxation, producing refurbished companies as the products they sold.

### **Manage by Building Movements (SWAT Authority at Work)**

The ideas of SWAT authority systems and switching respect from persons to procedures (benchmarked usually), achieve full form in the following widespread aspect of leadership and management in the early 2000s.

One of the ironies of our times is social movement tactics, in the 1960s condemned by business leaders, now found in CEOs worldwide, who unabashedly use movement building tactics to elicit movements of volunteers inside their organizations willing to collaborate in transforming their organizations. We also find corporate executives heading organizations built by movement tactics (Greenpeace, for example). There is a convergence of tactics, such that movements need bureaucratic expertise and bureaucracies need movement expertise.

When we look at functions that are fundamental to leadership, this convergence will be reflected--functions will divide into movement building ones and bureau managing ones.

**Social Automata Leadership, Agile Economies, Emergent Firms, Biologic Enterprise (Tuning Populations till Better-than-Wanted Results Emerge)**

Managing by building movements has itself subtly shifted, too. It has shifted from establishing usual social movement dynamics inside and among firms to establishing a new social automaton style movement dynamic among them. That needs some explanation furnished here.

Amid the convergence of movement tactics and bureaucratic tactics in leaders, we find networks of firms ("chains" of suppliers and customers in total quality theory) and networked firms (joined by internet facilities). Add to this the structuring of internal units as venture businesses, funded by annual budget competitions with firms, and venture valleys of spin-off firms around major businesses. The result is new, hence, has no one clear destiny or name. Rather a series of labels are used to refer to it.

Various indirect leadership/management regimes have arisen as inter-industry inter-company teams for which managers lack authority to fire all members, increase in number. Globalization has made what is considered "excellent", "productive", and "profitable" ambiguous as leaders in different systems and environs conceive of and implement them. As a result leading has become more indirect, in effect, the tuning of interactions and adjustment of system-wide parameters of such interactions, rather than the commanding of individual roles or workers. This has given rise to social automata leadership regimes. A larger scale of society view of the same phenomenon, the agile economy, sees internet systems, collecting customer needs unmet by existing products and firms, giving rise to automatic generation across the net of new ventures to meet those needs. When all these changes are viewed, we can see a new commonsense emerging, a kind of "biosense" replacing past "mechanosense". People and leadership are seeing biologic ways of operating as stronger and more effective than mechanical ones. Bone is admired more than steel (it grows stronger where it undergoes more stress, and it repairs itself automatically when and where injured). These

changes are reflected in what functions of leading are seen as fundamental.

**Getting Valid Data on the 4 Dimensions of Leading and Managing**

All the discussion thus far in this paper has focussed on functions that managers and leaders perform. All the point made thus far in the paper could be made using that focal point. However, there are three other dimensions, other than fundamental functions, by which the same points could also be made. They are introduced here, not earlier in the paper, in order to keep the argument crystal clear and unencumbered. The additional three dimensions are, in some ways, less controversial, and less interesting than fundamental functions are, because, in part, they are more obvious, formal, and agreed about. Functions of leading and managing is hotly contested terrain but the additional dimensions mentioned below--levels, areas of organization, and system effects--while they differ between practitioners and between theorists, are not controversial or hotly contested. They are more a matter of completeness--some leaders and managers at times can be found to be insensitive to or habitually omitting some of them, allowing dangerous levels of some phenomena to build up. It is vital to get functions right, it is vital to be complete in coverage of levels, areas, and system effects. Hence, the treatment of these other dimensions below is minimal, just enough to explain their role in the outcomes of this study and in the choice of study methods made for this study.

**The Four Dimensions of Leadership: Functions, Levels, Areas, System Effects**

Leaders and managers operate in a space having four dimensions. First, they are competent at the basic functions of leading and managing as discussed in detail above. Second, they apply those functions across a huge range of organizational levels, from within single mind strata to across entire sets of societies trends. Third, they exercise those functions at certain levels but within already pre-structured domains of organizations and the world, ranging from strategy to technology standards. Fourth, each function, applied at each level, exercised in each pre-structured domain in the world of organizations, handles surprises of various types caused by the non-linear nature of reality, on one hand, and caused by the non-linear nature of the human mind, on the other. Human nature and nature's nature constrain

what can be done and how it can be done.

**The Key Question of This Research:  
What exactly are the functions, levels,  
areas, and system effects of leading  
and managing?**

The above discussion has shown a vision of why we need to know them and what we could do if we knew them. All that remains is a way of knowing them that is more interesting, valid, and long term than getting some expert's opinion about a few of them published in some book. *Note, the research approach this paper reports on, worked out answers for functions, level, areas, but system effects was done as a separate research project using slightly different research instruments (see "256 System Effects" later in this book).*

**How Do We Answer the Key Question of This Research?**

A carefully structured reading of the research literature on leading and managing, what the myriad published studies of leading and managing have said the key functions, levels, areas, and system effects of them were, is place where we might search for an answer. However, how representative is that literature of the way leading and managing are actually conducted. The Academy of Management, for example, publishes journals, reviews, and executives that few if any actual leaders and managers read or know about. From another perspective, I happen to know what really happened inside Xerox in the 1990s and inside Japanese quality leading firms in the 1970s and 2000s--I had years of access to people at all levels and actually studied the evolution of their thinking about the big issues facing Xerox, in their opinion. When people with that sort of personal observation experience read corresponding Harvard Business School case studies, they get amazed--the distortions are so plentiful and extremely fundamental and exhibit such immense naivete about how real leaders work. The famous example that millions of people know about, is the Harvard Business School case study of Honda's entry into the US motorcycle market. A wonderful insightful rational Honda plan for penetrating the US market that actually worked, presented in Harvard's case, turns out to be distortion by professors, of their own limited skills (rational analysis) onto entirely different processes and skills in the real situation. Actual interviews with the Honda people involved showed that MBA-like rational planning played

absolutely no role in Honda's first "break" in the US market. Instead, employees of Honda, riding by happenstance on Honda scooters to work to cut costs, found crowds in parking lots around them, asking where they got such affordable scooters. Honda's break through came by chance from a cost cutting habit of ordinary employees and an emotional closeness of managers to those employees so that employee experience quickly was reflected as changes in manager plans. We have this and a lot of other evidence that what business schools and other professionals publish about leading and managing is gross, not subtle, distortion. Third party renditions are risky--by leaving leaders and managers not speaking for themselves, they open the door for professors and consultants and other third parties to inject what they want the keys to leading and managing to be (something they are good at providing perhaps?). We can trust neither my own personal observations nor academic research literature on leading and managing. We have to get leaders and managers to directly tell us what is going on, even though their own reports are distorted in serious ways.

There are dangers to direct reports from leaders and managers. Expert system builders interviewed in great detail experts in hundreds of different domains in the 1980s and 1990s. Most of the key methods and ideas at the core of how they worked were inarticulate, embedded in routines and practices, not in words. It was usual for experts to get insightful "aha!" experiences during such interviews with expert system builders--"I knew I did something like X but I never really realized that I did Y and Z too" they would say, or equivalent things. People cannot directly articulate all the knowledge, ideas, or orientations their current skills are based on or contain. Secondly, people deliberately distort reports on how they work. They too, like Harvard professors, make things more rational in reports than they actually were in processing. Third, many decisions embedded in expert practices, turn out to be wrong, when tested with real data. Leaders may everywhere do A not B, but actual experiments or survey research quite frequently finds that though they believe doing A not B works, it does not work, sometimes ever. Believing something that I do works, is not the same as that something actually working. We cannot believe leader and manager self reports either.

We cannot trust me, research literature, or direct reports from managers and leaders. Where



can we get trustable models of the functions basic to managing, the levels leaders use, the areas those levels appear in, and the system effects that generate the surprises within those areas and levels that leaders handle?

**This Paper's Source of Data for Answering the Key Question Above**

This paper takes an expert system building (protocol analysis) and a total quality (process modeling and customer requirements) approach to getting the functions, levels, areas, and system effects that leaders and managers use. It is worth noting, both to practitioners reading this article and to academics, that expert system building and total quality both were solidly implemented worldwide by practitioners for decades before receiving serious theoretical treatment in academic research. They both have solid research basis but that was developed while huge practical expansion of their use went global. In this way, I am tilting my method towards something guaranteed to produce results of interest to practitioners, while yet handling the needs of academics for data confirmation of any claimed effectiveness.

In expert systems you ask people good at some skill who the best people in the world are at that skill, and you ask such nominators what to ask the people that they nominate in order to elicit the crux of their skilled performances. You then present typical hard, frequent, typical cases to the nominees, asking every few seconds about what is on their mind as they handle these cases. Transcripts of these sessions are made, and mental operators applied to mental operands are marked in them, standardized, and the entire transcript re-expressed in terms of these standardizes operators and operands. Interviews and questionnaires can simulate these steps rather closely.

In total quality process analysis, you ask people what outputs they produce, who the customers are of those outputs, what traits of each output fully satisfy customers and which do not, what steps in the process are key in producing traits of outputs that dissatisfy customers, and what is the root cause operating in that step of the process that causes it to perform so as to cause process outputs to have traits that dissatisfy customers. Interviews and questionnaires can simulate these steps rather closely.

The expert systems approach involves getting a map of all the types of cases that respondents think

they handle and face, and getting all the frameworks and mental procedures by which they consider, frame, analyze, and handle such cases. This has the advantage of getting beyond their own "espoused" theories of what they do as well as getting beyond "espoused" theories of professors about what they do. The total quality approach involves finding from customers of leadership outputs, how well "leading" is being done and what aspects of its are not being done all that well, in view of customers of those aspects. Then procedures producing such leadership output traits that displease customers of the leadership are found and steps in them not working well, in terms of traits of output leading that customers receive, are analyzed for finding root causes of step dysfunction. This has the advantage of getting beyond anyone's assumption that any one leader, "leads well" in general and always, and instead getting to "Mr. X leads well when handling B type cases, in so far as outputs M and N are concerned but not in so far as output O is concerned". It is important to get to what functions of leading are done well and not done at all and are done poorly for any particular leader.

The expert systems protocol approach complements the total quality process modeling approach by offering precision of process explication where quality offers precision of connection of process aspects to quality of leading actually delivered to customers of "leadership".

**The Sample**

A stratified sample of 63 parts of society, half US, half global, was built, using highly abstract categories in order to distribute broadly the types of leadership captured in persons interviewed. At every level of the research sampling process a norm of half US, half global was imposed. The following procedures were followed:

- 5 eminent persons in each of the 63 strata were contacted, making 315 nominators
- each nominator was interviewed about functions, levels, areas, and systems effects involved in leading/managing
- each nominator suggested 5 established leaders/managers and 5 up-and-coming ones, all worth interviewing in full in their opinion
- results of casual interviews with the nominators, including what they thought the functions, levels, areas, and systems effects handled well by each person they nominated, were used to add to interview to be given to nominees

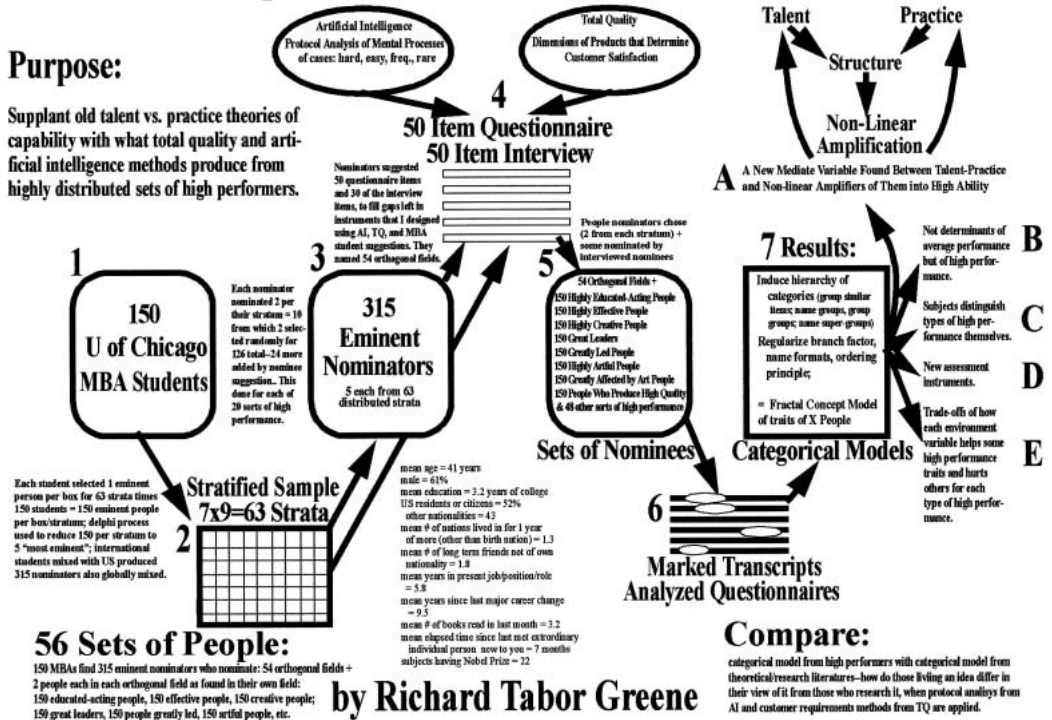
- dice were used to randomly choose one of the established and one of the up-and-coming leaders/managers each nominator nominated
- where the randomly chosen set of people was extremely skewed, compared to base population rates of gender, age, geographic distribution, a new randomly chosen set was chosen (with a limit to 5 rolls of dice to prevent creeping bias)
- the 2 times 63 = 126 people thusly chosen were given full interviews, and during those interviews these nominees at times suggested other leaders/managers we should approach, adding 24 new nominees, later given the full interview, making a total of 150 people in the final sample.

	Science	Art	Humanities	Social Science	Engineer-ing	Professions	Fad & Fashion	Lifestyle	Systems
Economic	technology ventures, idea markets, invention markets	museums, exhibitions, concerts, tours, coffee houses, clubs	resource limitation management; mystifications, historic preservation	economics: markets, pricing, regulation, trade regimes & orgs	financial engineering, inventors agriculture	business and management advertising & marketing	fashion designers, branding, multi-industry marketing by events	housing, communities locale type	technical innovation, quality movements
Political	voting gaming representation campaigning	awards, cannons	agreement limitation management, power embeddings realization	political science: elections, campaigns, administrating, consensus	cyberdemocracy, internet funding of campaigns, net volunteer management	administration military	party politics, third party movements	involvement dimensions	policy deployment, dissatisfaction deployment
Cultural	ethics and religion policy making social clubs charities	art venture districts	meaning limitation management, false consciousness identifying	anthropology: deliberate culture invention, community enhancement	community organizing, environmental,	religion education	lifestyle inventions, green movement	performing-consuming balance; diet, videogaming, manga	diversity management & expansion
Social Change	democratization globalization	social cabarets	confidence and direction limitation management, frame-limited revolts	sociology: social process and structure--decline, fixing, invention	innovation venture districts/clusters	movement builders	intellectual movements, liberation movements	social entrepreneurs, self funding "profitable" charities	coalition building, foundation grants
Traditional	astronomy geology meteorology oceanography space sciences	painting, music (song writers, performers, conductors), sculpture, dance, comedy, drama (theatre stars, movie stars), poetry,	history philosophy	tribal community: festivals, calendars, wealth inheritance, bias in laws	exploration, civil, architecture	medicine, nursing welfare	crowd generation, trend riding marketing, trend seeding, social imbalance exacerbations	festival organizers, theme parks, global event organizers	value sharing, negotiation, non-medical healing, reputation networks
Establishment	physics biology chemistry math	performance, design	literature, counseling regimes, critics, awards, theatre industries	rise and fall of civilizations, rutted cultures	mechanical, electrical, aeronautics & space	law & justice	epidemic generation, rights movements (human rights etc.)	consumer movement	value sustaining/imposition
Emerging	information media silicon and non-silicon computing h/w	digital art, interactive art, socially composed art, cyberart, virtual worlds	applied humanities, group composing, composing contests	networks, social virtuality	biological & genetic, computer, internet society, nano tech--their blends	info tech, quantum devices	internet options: 6 billion channel TV broadcasting, agile economy	lifestyle inventors, micro institution development via viral growth regimes	complex adaptive systems research

# The Human Capability Definition: Research Process Flowchart

## Purpose:

Supplant old talent vs. practice theories of capability with what total quality and artificial intelligence methods produce from highly distributed sets of high performers.



by Richard Tabor Greene

## The Instrument--an Interview

Building an interview for handling 4 dimensions was in some ways much easier than building one for any one dimension. That is because we could ask respondents to distinguish information provided for any one dimension from information provided for the other three. In practice, this sort of discrimination work greatly clarified respondent thinking and answers. Again and again when asked for a function respondents would provide a level or area or system effect and vice versa. By getting them to distinguish all of these, much improvement in precision was obtained. It is worth noting that more specific prompts, in order to get respondents to be specific, say, for example, presenting typical cases to them, had the deficit of perhaps biasing respondents, getting them into narrow contexts where they forgot other contexts.

The interview was designed to approach respondents in stages:

Expert Systems items:

- what did respondents do every 15 minutes yesterday
- what did respondents do every 15 minutes the

same day a week earlier

- what are respondents planning to do every 15 minutes tomorrow
- how do respondents see leadership--its contents, its aims, its methods, its problems, its opportunities
- how did respondents see leadership in the past, a year ago, five years ago, 20 years ago
- what do leaders handle, what do they not handle
- when did respondents start leading, why, what for
- when did respondents first see themselves as "good" leaders, why
- who are the best leaders they have met, in the opinion of respondents, why, what did those leaders do well
- who are the best leaders ever, in the opinion of respondents, why, what did those leaders do well
- what should leaders in general do that they generally not do, why
- what should respondents do as part of their leading that they in general do not do, why

Items Distinguishing functions, levels, areas, system effects

- what are all the functions respondents now perform at work, why, when, for whom, for what outcome
- what are all the levels at which respondents now seek out situations to handle
- what are all the areas of organization functioning that respondents now concern themselves in any way with
- what are all the types of surprise that respondents have encountered in the past few years
- what distinguishes function A that respondents mentioned from function B
- what distinguishes level A that respondents mentioned from level B
- what distinguishes area A that respondents mentioned from area B
- what distinguishes system effect A that respondents mentioned from system effect B
- when is paying attention to level more important than paying attention to function
- when is paying attention to function more important than paying attention to level
- when is paying attention to area more important than paying attention to level, plus similar items
- respondents list the five best leaders they know and for each what functions they were superb at and which ones they were not so good at and why
- respondents list the five worst leaders they know and what made them inadequate or bad at leading in the respondent's opinion.

#### Quality Process items

- what outputs do you produce as a leader
- who receives each of those outputs
- what aspect of each output fully satisfies customer 1? customer 2? etc.
- what aspect of each output dissatisfies customer 1? customer 2? etc.
- what process produces output 1?
- what step in process 1 probably contributes most to it having trait 1 that dissatisfies customer 2?
- what causes step 1 to have the trait 3 that probably contributes to output 3 having a trait 4 that dissatisfies customer 2?

Respondents were also asked to rank by frequency that they encountered, by importance, by degree of change going on various dimensions of role model manager performance as specified by Xerox and various dimensions of practical intelligence as specified in research by Sternberg and others. See

the appendix at the end of this article. They were then asked to specify such dimensions that seldom were important to them personally as leaders and ones always important to them.

In addition certain doorways, intended to elicit images of leading or managing beyond personal biases and habitual views, were used:

#### Doorway 1: Metaphor

- What is a great leader like? What is their way of operating like?

#### Doorway 2: Difficulty

- What stymies or stops or defeats everyone except great leaders?

#### Doorway 3: Uniqueness

- What about how great leaders do things clearly reveals the leadership functions with which they act?

#### Doorway 4: Evolution

- What about the greatest leaders you know now differs from the greatest leaders you knew decades ago? How is the set of capabilities that great leaders have changing over time? In what direction?

#### Doorway 5: Surprise

- What surprises do great leaders generate through their work? What do they do that less great leaders do not do? What do they not do that less great leaders do do?

#### Doorway 6: Wit, Inventiveness

- What do great leaders invent or improvisationally do that less great leaders do not do?

#### Doorway 7: Revolt

- What mistakes, faults, flaws, or errors in people or the matters of your domain do great leaders engage or solve that others skip or exacerbate?

#### Doorway 8: Alternative Way

- What would poor leaders doing of X look like? What would great leaders doing X look like? What other great leader way of doing that same X is there?

#### Doorway 9: Factors

- What factors tilt a person toward great leadership? What factors tilt a person away from great leadership?

#### Doorway 10: Alien Viewpoint

- Would an alien from another world be able to distinguish people on the basis of whether they were great leaders or not? If not, why not? If so, what would they notice to make this distinction?

#### Doorway 11: Conquest

- What do great leaders conquer that less great leaders fail to conquer?

#### Doorway 12: Emergence

- What emerges from the actions or behavior of great leaders? What do they produce beyond what they envision or intend producing? Why? How?

#### Doorway 13: Hiring

- What do you expect of people you hire that you get only from great leaders that you hire?

#### Doorway 14: Civilizational Need

- What behaviors from people do particular aspects of our entire civilization need that are in terribly short supply now? What specific aspect of our civilization needs what specific behavior type? Why? How?

#### Doorway 15: Social Needs

- What unmet social needs today are noticed and practically engaged only by a few special people? What do most of us lack that causes us to not notice or not practically engage these needs?

#### Doorway 16: Self Growth

- What limits to your own aspiration and growth as a person have you accepted, perhaps harmfully, that greater leaders probably would not have accepted? What people do you know have settled for less than life really offers them and what do they lack, in terms of specific behaviors or capabilities, that causes them to settle for less?

#### Doorway 17: Panoply

- What are all the behaviors that great leaders you have known exhibit? What are all behaviors you can identify found only in who are not great leaders? What are all the types of capabilities that great leaders have that others do not?

### **Analysis of Data Produced by Applying the Instrument**

All functions, levels, areas, and system effects mentioned in any way in all transcripts of all interviews were marked. Similar items were grouped, groups named, and those groups grouped by similarity to other groups, those super-groups named, and so on. Top level categories, inductively derived in this fashion for this hierarchy of named groups, are put in order and that same ordering principle applied to all items on all levels and across all levels. Then a branch factor is chosen and imposed on all groups, forcing all groups on all levels to have exactly the same number of component items. Where too few

exist, the most contentful ones are split. Where too many exist, the least contentful ones are fused. The overall result is a fractal concept model specified by its branch factor and its overall ordering principle.

A second such fractal concept model of basic functions of leading and managing was developed from literature on leading and managing. Similar groupings in the two models were then spotted and fused, with terminology adjusted to reflect common terms in research literature.

There is a reason the results were put in fractal concept model form and not some less regularized form. The uniform ordering principle and branch factor of this form leads to easy memorization of the entire model and easy application of it. Less regular forms are harder to hold in mind, and find your way conceptual among, and for those and similar reasons, harder to apply.

Answers to some common questions follow. Why did 64 functions make it into the model and not some other number? Originally, before regularization into fractal concept model format, there were 69 functions in the model, cutting off membership where the largest drop in frequency of mention occurred. Regularization changed 69 into 64 to fit a 4 by 4 by 4 branch factor format. That means five functions were fused with other functions to reduce 69 to 64 items. Fusing consisted of changing group names and orderings of items to be consistent with inclusion of a single new item in the group. To what degree do these items represent a consensus across the 150 respondents? The best estimate of that is the cut off frequency of 44 mentions of 150 possible. Items mentioned by less than 44 of the 150 were dropped from the final model. How were groups named--the final model has such rational-looking names that it is hard to see them as inductively arrived at? There are several principles of good group naming. Outside categorizers were used, not familiar with this research, to group similar items and name groups, applying these principles of group naming. One is the representation principle which holds that a good group name embodies all the meanings shared by all the members of its group. Another is the relational principle which holds that a good group name





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### **Result One--A Model of the 64 Basic Functions of All Leadership--Minimal Prose Presentation**

Leaders do four things, exercise influence via organizing resources to do missions, manage stakeholders via making all around them succeed with them, improve quality via improving what customers require and the means of providing that, and establishing creation via transforming strategic landscapes in surprising ways. They exercise influence via structuring resources so that goals can be set and met, by becoming present throughout organizations enough to create the culture in which others work, by influencing various flows of people, money, information, product, market position, and by building decision through accepting problems, crises, goofs, opportunities and turning them into choice and direction. They manage stakeholders via making all around them, above, below, left, and right in hierarchies succeed, by teaching all stakeholders the trade-off costs of their needs/requirements, by using their organization to manage many other organizations, and by making all around them into highly visible surprises to others. They improve quality by detecting and satisfying voices of customers, processes, superiors, and suppliers/collaborators, by matching process capabilities to customer requirements, by continually improving how subordinates improve bureaus, processes, events, and ventures, and by routinely handling all sorts of things that bust up the poise, concentration, and plans of subordinates. They establish creativity by substituting inventing for conforming or following, by passing waves of needed transformation across organizations and sets of related organizations, by cultivating capabilities far beyond current requirements, and by getting more and more functions done by faster and more creative means, moving functions from being handled by bureaus to processes to events to ventures.

Leaders structure resources to that goals can be set and met and so that how they are met gets improved. They assign functions to bureaus/departments, organized into hierarchies. They assign functions to processes, some stretching across organization boundaries, others across organization levels. They assign functions to events combining people across bureau and process and organization boundaries. They assign functions to ventures, where new organization, authority, and capital matches novelty of idea and chance.

Leaders become present throughout large organizations, present enough to influence the culture in which others work. They give people a sense of going somewhere worth effort and sacrifice. They persuade, negotiate, influence, and broker deals among groups and organizations. They delegate functions to others and arrange continual deployment of functions across arrays and levels, organizations and professions. They communicate competitively, putting out enough messages of enough power aimed at the right points in organizations and psyches to overcome myriad unfocussing hostile messages from various environments, internal and external.

Leaders manage various flows of people, money, information, product, market positions, capital, strategy, and execution through organizations, markets, industries, and economies. They select which resources--people, capital sources, information and so on--to use and manage their rate of input into the organization as well as they rate of egress from it. They incent use of various resources, controlling how they are used and developed, giving public recognition to uses that need to be replicated or followed by others. They appraise how well each resource flows and is applied to goals by people. They discipline how resources are handled by intensifying to reward, help, fix, stop, change, punish particular resource uses putting goals or organizations missions in jeopardy.

Leaders turn problems, crises, goofs, opportunities and the like into choice and direction, that is, they build decisions. They distinguish what is needed from what is unneeded, and what is important from what is unimportant. They absorb most crisis and problem statements and reduce away excess emotion, fear, competition and the like, in them, shrinking them into normal work contents. They seek problems to match solutions they already have and they seek solutions to problems they already have. They discipline the processes by which they and their organizations find decisions to make and make them. They set up groups in configurations and processes so they make particular decisions, and they keep an eye out for emergent decisions that no one set up or anticipated.

Leaders manage stakeholders, making all around them succeed. They make themselves, their peers, their bosses and subordinates successful, turning them into leaders or better leaders. They teach all stakeholders--investors, professions, competitors, collaborators, regulators--the trade-off costs of

emphasizing their own needs and requirements over those of others. They use their own organization to manage or greatly influence other organizations -- technologies, products, customers, innovations, standards, collaborations, ventures. They turn all around them into highly visible surprises to others, using timing, visibility, and surprise tactics.

Leaders make all around them in hierarchies succeed. They recruit people, develop people, and get rid of inappropriate people for all four roles--self, peer, boss, subordinate. They build community among people of each role type. They spot talents and faults of people in all roles around them and steer each person into growing strengths and fixing weaknesses. They balance job, lifework, profession and hobby as separate careers they develop in parallel, and they balance self development, intellect development, social development, and career development in parallel as well.

Leaders teach stakeholders the trade-off costs of emphasizing their own needs and requirements over those of others. They manage the expectations of stakeholders and the yields they expect or do not expect. This is spotting how the "wealth game" is defined by existing laws and loopholes of society and playing that game fully. Leaders balance development of capability and exploiting already developed capability. This means figuring out how not to cannibalize future returns by tactics to optimize current ones. Leaders balance short term with long term results, short term with long term tactics, so that both short term and long term success become possible, actual. Leaders figure out the costs of current focusses, so that errors stay survivable not fatal.

Leaders develop technologies, products, customers, innovations, standards, collaborations, and ventures by using their organization to influence and manage many others. They spot, choose, apply, and generate trends and invest in surprises. They optimize novelty to get real useful performance from it, often spotting value that others miss by not knowing how to use things. They transform parts of bureaucracies, increasingly, into ventures and coalitions, so the form of the organization becomes more and more emergent. They develop processes and events shared between organizations and work to improve their capability.

Leaders make all around them into highly visible surprises to others by working on timing, visibility,

and surprise tactics. They manage appearances so that virtue is not vitiated by failing to look like what you deeply are. They manage realities so that appearances do not become a substitute for real accomplishment. They manage to avoid possible futures that are unwanted. They manage to connect to possible futures that they want. Doing the latter requires getting whole organizations or sets of them nimble enough to side-step, turn around, leap, and bend around whatever is in the road.

Leaders improve what customers require and how to supply that. They develop quality. They detect and satisfy voices of customers, process, CEO, and suppliers and collaborators. They match customer requirements with process capabilities to fulfill them. They continually improve how subordinates improve work, bureau, process, event, and venture. They identify and handle non-routine things that bust up the plans and upset the people around them.

Leaders detect and satisfy various voices around them. They do this for the voice of the customer, the voice of the process, the voice of the CEO, and the voice of suppliers and collaborators.

Leaders match what customers require with what processes of their organizations become capable of. They detect and track what customers require and what processes are currently capable of. They preserve through operations the voices of customer, process, CEO, and supplier and build capability to meet what those voices require. They develop the capability to influence forces causing what customer require to evolve and causing new capabilities to be there for processes to use. They balance between searching for better grasp of customer requirements and searching for better capabilities with which to meet those requirements.

Leaders continually improve how employees improve bureaus, processes, events, and ventures. They establish all these as the organization mission requires. They get employees continually improving them all. They maintain and normalize improvements once they are made so they become established parts of how things are and are done. They expand the scale and scope of improvements till continual improving becomes continual inventing.

Leaders identify and handle non-routine things that bust up others' plans and poise. They identify errors and crises and handle them when others are upset by them. They identify collaborators and

competitors and handle them, even when they newly emerge unexpectedly. They watch wave after wave of new technology, precisely timing and choosing which to engage and how to propel the organization mission. They diagnose the neuroses (costs of talents) of era, self, other, nation, gender, and profession and operate beyond their confines.

Leaders surprise everyone by transforming strategic landscapes. They change the field of battle before, during, and after battle. They surprise all around them by inventing not following trends and market forces. They select transformations their organizations need to make and enact them. They cultivate capabilities far beyond what is needed now for present purposes. They transfer more and more functions from bureau to process, from process to event.

Leaders establish creativity dynamics in themselves, their organizations, and other people. They find problems, delaying the definition of them, and refusing to take them as first presented. Leaders set up darwinian natural selection, “genetic competition” automatons among firms, among ideas, among vice presidents, among projects. Leaders manage many different size scale of insight process, by alternative engagement with detachment, accumulating on all scales failure indexes till inverting such indexes adequately specifies and eventual solution. They seek unwitting conformities and assumptions about how work is done and encourage all, themselves and others, to continually invent new work means as preludes to inventing new work or business or art products.

Leaders select how their organizations need to transform and enact such transformations. They unleash entire movements of applying more stringent measures of success to organization parts, determining which to continue as is, which to repair, and which to sell off. They elicit volunteers, form them into local chapters, equip them with new ways of work, and demonstrate their power on local demonstration projects. They introduce multiple diverse frameworks for viewing work goals and means and both enhance that repertoire as well as enhance application of it to continually uncover new opportunities or flaws. They actively shut down initiatives and movements that have done what they can do, refusing to be attached or romantic about past successes.

Leaders cultivate capabilities far beyond what

current situations require. They expand diversity and combinations of diverse things. They actively heighten isolation and nonconformity throughout organizations, so unusual capabilities grow impressive enough in scope to astound and motivate people when later connectivity make others aware of them. They actively heighten combination and interfaces so things not normally combined get combined and examined for innovative value. They actively exploit non-linear dynamics (butterfly effect, avalanche effect, attractors, 1st mover advantage, increasing returns to scale, etc.) to arrange for emergent outcomes better than planned for ones. They set up social automatons and tune the interactions of their basic units till better-than-planned results emerge.

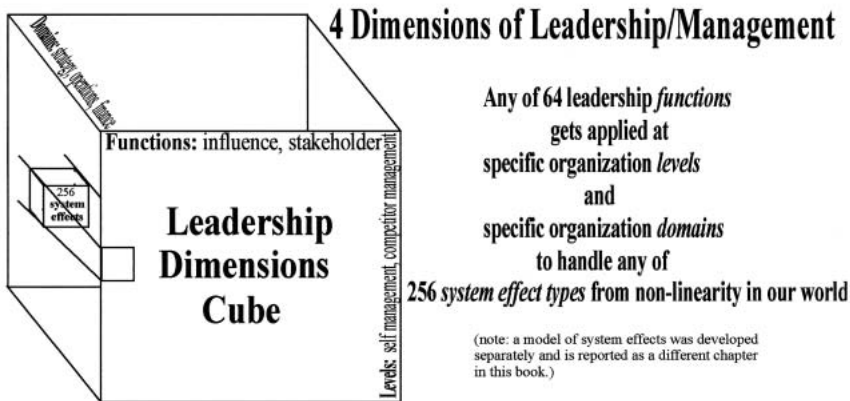
Leaders continually move functions from execution by departments to processes to events, getting faster execution by more expert procedures, with more organizational learning side-benefits at each step. They set up mass work events and mass knowledge development events and mass knowledge deployment events so boring work does not become “jobs” some unfortunate people do all day for years. They set up mass invent events and play events so that imagination and morale make major leaps of improvement at regular intervals. They set up mass contact events and mass research events so they operate on facts far beyond those available to competitors and regulators. They develop, continually, better event design and holding capabilities so events use people’s time better than those people working individually could use the same amount of time.

## **Result Two--The 4 Dimensions of Leadership Cube**

There are three other dimensions, beyond functions, developed by this research. It is useful to visualize them all as a cube, at each intersection of which are all the system effects that leadership functions, applied to organization levels, and standard established organization domains, have to handle. We have functions, levels, and domains, intersecting, and at every such intersection are 256 different system effects that generate surprise types to be handled by leadership functions acting at those specified levels and domains.

### **Some Observations on the Models**

Though it is my intention to let the models speak



for themselves, in this paper, there are a few insights latent in the structuring given to ideas in them that will forewarn readers about other latent insights to be recognized there. First, people who cannot manage themselves cannot manage other people. Hence, the Levels model starts off with six careers and three ultimates without great management of which, there is not emotional or social room for managing anything else. Second, timing, one of the Domains in the model above, is much more of what leaders do than most books and research articles report. Large organizations tend to already have projects going on for any conceivable topic of future interest to them. So leaders are nearly always surrounded by all the right topics being pursued by some project or another. What they do, however, is examine the heft and timing implicit in those projects. They adjust the surround of projects till it reflect the heft and timing of threats and opportunities at large that the organization faces. There can be a correct project on X but it is being run with a lower budget and priority and it is developing appropriate human resource skills at too slow a rate to keep up with the opportunity that is emerging to match it. So leaders promote that project on X to a level of resourcing that better matches timing and skill needs of the opportunity it represents. Third, production and care/attention tasks, where leaders distinguish business units on several different size scale and sectors of society, show some of the breadth of engagement, outside the organization they “lead” that they get involved in, in order to “lead”. You have to engage the environment in pluriform ways in order to see how to orient the organization you “head” appropriately in all that. The functions model with its four main areas--influence, stakeholder, quality, creativity--says a lot about what leaders say leading consists of. Within that large message are a few

items worth noting here. Surprise, developed and delivered under the creativity rubric of the model, is an essential work outcome in a world where everything is people, whose expectations define where attention goes. You cannot keep attention by doing the same thing better and better. That will cost you, eventually, all the attention of all the people around you. You have to surprise just to keep people awake around you. Leadership manages expectations much more than some models of it suggest. Heightening isolation, function 56 in the Basic Functions model, surprises quite a few people. Leaders actively increase isolation of groups and ideas in organization. In the early 2000s this is an unpopular idea because it cannot be used by computer network and systems companies to scare firms into buying more software and hardware. “Knowledge management” campaigns emphasize getting everyone more and more connected to everyone else, till, one can easily predict, everyone is just like everyone else, all variety disappears from the organization, people start getting bored with each other, losing attention, and all creativity dies. Leaders have never done this--they work oppositely--increasing isolation of some projects and ideas and increasing connection of others, so that a continual stream of surprises comes and so that each such announced surprise continually gets connected to resources needed to bring it to fruition in large competitive markets.

### Uses of the Model and Future Research

Research is needed to confirm the 64 functions in this paper’s model, as well as the Levels and Domains. It should be remembered that this paper’s model of functions, levels, and domains comes from leaders in 63 strata of society, not from business or

government agency leaders alone. The breadth of the sample this paper's model is based on fills it with aspects of leadership missing from purely business or political leadership models.

The beginning of this paper laid out a robust agenda for using a model of functions, levels, and domains if one were to be made available. I summarize those aims, as uses of the model to be tested experimentally in the near future, below:

- specify functions of leading/managing to be delivered by social class, rescue squad, events, or work coordination software
- measure gap between amount/type of functions needed and amount/type of function now being delivered
- measure total quality of leading by combining measurement of functions-delivered gap with quality of delivery metrics
- serve as curriculum of what to train people in and what software/technology tools are to support.

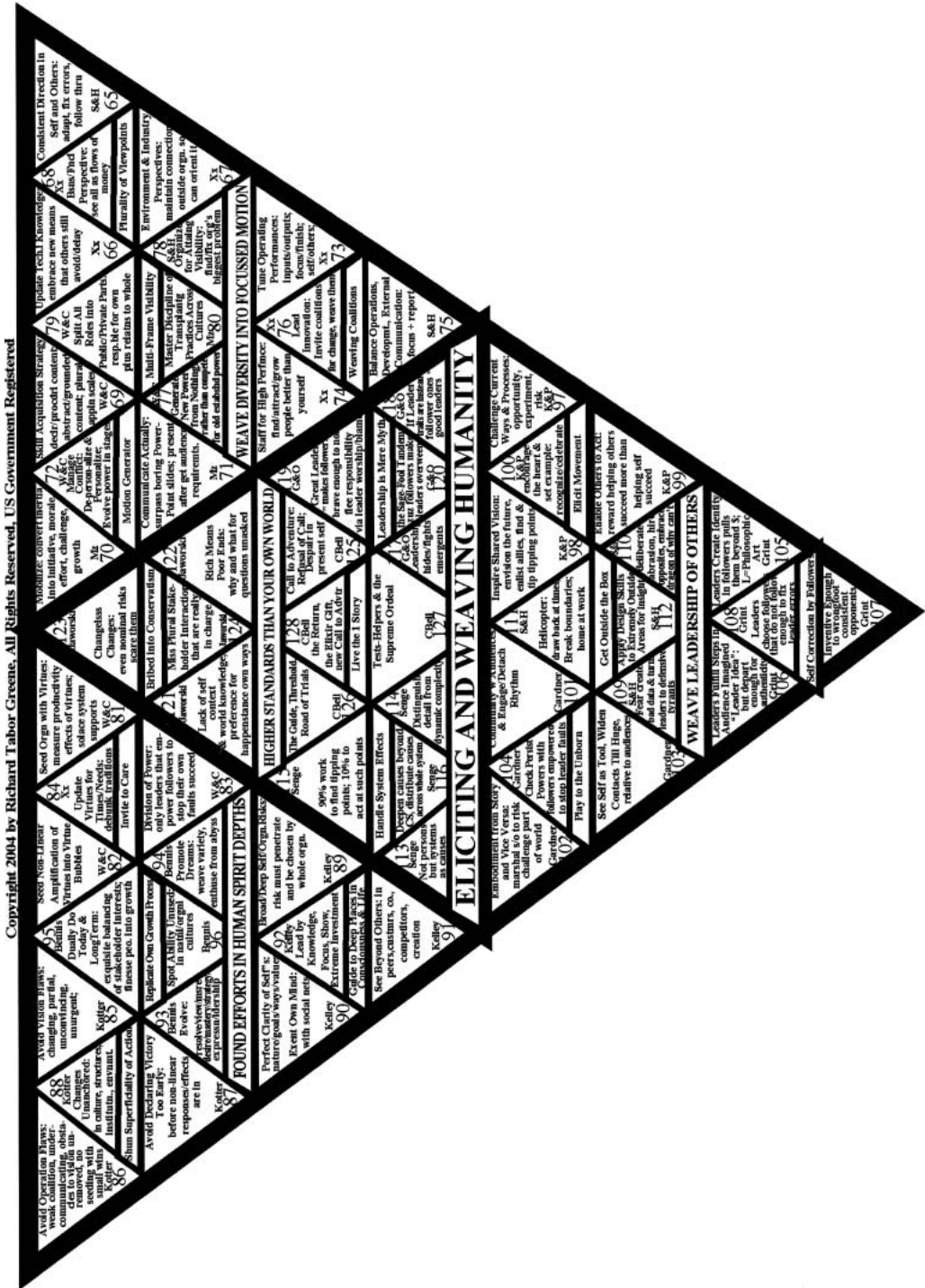
Copyright 2003 by Richard Tabor Greene, All Rights Reserved, US Government Registered		Leadership Domains (Where Leadership Functions, Horizontally)							
		resources			structure				
Management Levels		strategy	human resource	finance	organization	operation	accounting		
Leadership Levels (Where Leadership Functions, Vertically)	careers	job	career path types	connector proximity	well paid exploring	place for projections	visibility packaging	elevating criteria of success	
		family	spot emergents & crystallizing experiences	cloud of uncles educate	monthly family meeting	project spaces all circulate among	annual family project/initiative creation workshop	joint vacations with other model families = benchmarking	
		media	experience compiled into publications, professorial roles,	place followers in media organizations	productivity basis of creating	ongoing compilation processes: deeds into media	breaking delusional media conventions	story profit greater than deed profit	
		hobby	grow into major profit center	build network in diverse parts of society	match investments with noted deeds	constantly produce, constantly create	developing love	library of creations, awards, roles attained, exhibitions	
		profession	grow into source of new jobs & eventual high profits	meet peers at other firms	company sponsorship where possible	volunteer roles in key conferences, events&associations	edge of knowledge development events and seminars	cross-discipline trend spotting & application locally	
	ultimates	lifework	explore till crystallizing experience found	find and link to mentor greats	tax all other career types	the main task every week	dream of being remembered 400 years from now	supreme historic excellence shot for, audience of unliving	
		self	be's into hates, scheduled diversity encounters	bridge communities	live on half year after tax income	well paid exploring till crystallization	next role to fix weaknesses	anxieties of existence met and tamed	
		health/fitness/nutrition	evidence-based eating & exercising	dead people	50s 1hr/day; 60s 1.5 hrs/day, 70s 2 hrs/day, 80s 2.5 hrs/day	salads for volume, fatless meats, 15 hours/wk exercise	exercise you love to do so you do it	run up huge stairways without breathlessness	
	hierarchy	group/team	stretch weakness, use strength dual assignment types	rotating leadership type roles among all members	assigned job plus initiatives invented & their income	social virtuality	multi-tasking among 40 initiatives and/or 12 org forms	all become leader of 64 basic leadership functions in 5 years	
		boss	empower bosses as year subordinates, assist them in improving & attaining their goals	powerful indirect subversion of unwarranted boss tampering interventions	initiative proposals widely circulated as boss distractors	projects that make boss famous	trade slack & freedom from intervention for false delivered to boss	boss as foreign minister role in outside world	
	task forms	subordinates	rotate all thru all leadership functions till excellent	diagnostic conversation time	accurate avoidance of bad apples during selection	64 leadership functions quad, diagnostic conversations	diagnostic conversations on what function now needed	all become leaders in 4 or 5 years of rotating thru functns.	
		peers	invent collaboration initiatives that make peers famous	widespread personal networks	social events for recruiting to ideas	management by events events	event choice, set up, holding, follow up, publicizing	distraction from backstabbing behaviors	
		department	library from which teams, processes, events elicited	high flyers, subversives, routine: subpopulations	initiatives in support of CEO advice, minimized costs	board (deadwoods), working-group (five wires), age reps	elicited by interest: processes, task teams, event teams	all stakeholder satisfaction; all initiatives sold/funded	
	meta-tasks	process	library from which departments and events elicited	high flyers, subversives, routine: subpopulations	initiatives in support of CEO advice: 15% time self improvement	4 voices satisfy: CEO, customer, supplier, new means/technology	waste eliminate, continuous improve, expand improves into leap innovations	pull efficiencies, infrastructure update fineliness, empire dumping efficiencies.	
		event	world best protocols, masses do quickly functions usually done by small staffs	entire department, entire process staff, entire firm workforce, multi-firms	self funding sales of event products	parallel workshops, crossed by taskforces and by punctuating event/teams	tuning inter-intra-workshop relations, protocols, products, clan focus	new ability developed of each member, outside reviews of event products	
		production process	circle delivery of means & technologies	JIT inventories of management, parts, procedures	socially virtual dept.s, processes, events interpenetrating	disguised coalitions	phase gates	quality function deployment	
	production tasks	problem/opportunity	problem defining and problem finding and problem inventing	mind extensions	slack resources, hiding places	micro-institution development	resource scarfing, new functions folded into authorized ones	lost or missed opportunity costs	
		change	system causality networks & liberty, freedom, historic dream, conserved novelty	order, movement, historic institution	self funding substeps	micro-institution development	social automata	substitution versus addition	
		business unit: investment	diversification, out of scale regularity finding	industry insiders	pension, risk, speculation markets	fractal risk-returns	spotting investor psychology effects/chances	opportunity cost	
	care & attention	BU: project, profit center, firm	reserves for predictable and emergent problems	managing flow into and out of unit	debt vs. equity tradeoffs and risk/present value profile	blends/sequences of Mintzberg's org types	department-process-event blends	financial face per each stakeholder	
BU: industry, economy		race: technical base update to customer need/expectation update	time balance of human minimally elab talent leverage edn systems; globally competitive professional mixes	saving versus spending lifestyle--tuning these with policy	coordinated infrastructure update campaigns	incentives for investing old infrastructure funds into replacement new one	leverage private sector forces into upgrade process		
BU: non-profits, social movements, government agencies		self funding micro-institution development biologic growth	volunteer joblet mixes	micro-products and micro-services for micro-prices	micro-institution development	tuning ingredients in local replication unit	pruning invading big business styles, costs, habits, regulations		
growth	BU: art, movie, entertainment, fashion, publishing	Hero's journey dynamics applied: to invention, producing, selling	trend network tipping points & connectors	paradigm invent and paradigm exploit investing	plans as improvisation locales	teams intersecting at structured events	collateral profit locales		
	BU: clusters of ventures, consultancies	8 year knowledge "product" cycle	recruiting baby fields	selling new knowledge set every 8 years	technology niches on niches ecosystem	idea, job, person, firm, method mixing, crossing, flowing means/events	time for ideas to find org. l homes, for org.s to find idea chances		
	ventures	structural holes	polar hiring (compensatory)	venture finance: bootstrap, angels, vcs	generalist/specialist phase transitions	clustering parasites	funding incrementally scellable futuric visions		
network	technologies	dept to process to event technologies evolution	civilizing nerds	separate technology development from product development	critical mass implementation and focus	unlocking user impacts	measure business impacts versus user learning error costs		
	alliances	map frame differences that cause messages to be differently interpreted, offer events	diversity competencies	competitor threats blocked by alliance inclusion investment	manage by events event types	email cascades	alliance evaluation of contributors		
	customers	evolve normal quality to delight quality	line as leaders	lost opportunity costs saved fund customer-is-right costs	customer community building	quality function deployment	regular satisfaction measurement		
invisible assets	suppliers	I am my suppliers	co-location	co-investment	kaizen	managing inter-org processes	chain capabilities		
	competitors	show them misleading clear action stream	distact them with profession agenda	expenses of misleading actions	projects for show only	disguise various actions as heading 1 direction	are they buying your story		
	knowledge	KM = managing knowledge creation = creativity and knowledge use	overly distributed & overly concentrated workforce knowledge	knowledge markets	categorical, causal, procedural models	conscious & automated model application	educatedness = awareness of models operating inside you		
invisible liabilities	diversity/globality	diverse types of diversity, encounter deepening and acceleration	travel across non-local: eras, genders, nations, homes, professions, orgs	inspection costs of going global, immense bias error costs of globalized locality	plural leaders of any one group by mission and stretch	transplanting practices across culture	framework repertoire breadth, extent, depth, change		
	ubiquity	information communities	fractal technologies	techno ecosystem niches	increasing returns to scale	device conversation mngge	disaggregation		
	decision/risk	learning to live in actualities not possibility	consult excluded ones	cost/benefits of info search versus decide now	multi-org cascade processes	social automata emergent decisions	error analysis from defined solving process		
invisible liabilities	power	power devt process: lib, free, history, save novelty	SWAT authority system	not finance constrained	event delivery of management functions	arendt, may, campbell, kegan process	focused vs. distributed		
	systems	distributed, deepened causes; surprise theory	espoused vs enacted agendas	side-effect costs	population management	side-effects as main effects	tuning interactions till avalanches/increments		

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	market interaction			satisfiers			knowledge interaction		
	marketing	distribution & sales	service	quality	cost	delivery	timing	innovation	standards/ platforms
turn your followers into leaders	innovation invent and promote	discipline stretch events, places, deeds	discipline stretch events for subordinates	all direction stakeholder satisfaction measured	opportunity cost of each job chosen; neuroses developed	job shrinkage to make room for invention & innovation	invest in baby fields till they mature	address firm's root problem	certified accomplishments & contributions documented
joint family drama, orchestra, unique building	cross-network spark events, places, deeds	constraint envelop innovation pushed by entire family	constraint envelop innovation pushed by entire family	modify world for selves, selves for world	costs of locality of all sorts, assessed via locality break trips	quality conversing vs. quantity	teach up system from kids to adults	regular outside professional assessment	invented events & schedules shared with partnering families
use media 1 to sell to media 2, 3, 4	monthly mailing to "met" strangers	events organized around key media	events organized around key media	dimensions of difference analysis	too early exposure	event based delivery and ongoing stranger contact	repertoire of tools focussed on opportunistic events	character revealing versus fitting in media performances	best in genre goal
display or performance events arranged	presents to key connectors in other networks	raise crops of disciples	raise crops of disciples	benchmark with world's and history's best	aspects of life not developed or productized	personal, peer, and event evolution	ten year rule	conventions used for expression rather than vice versa	genre conformance
represent to regulators and peer professions	collab events with intersecting other professions	recruit and train next generations	recruit and train next generations	promotion to key roles and commissions	appearance supplanting reality	own firm superiority maintained	technical base changes not resisted	industry combinatorics	multi-firm alliances, cluster development
sell chips and pieces in sequence to key disciplines	get recognized as a great at some point in your life	enrapture strangers into becoming disciples	enrapture strangers into becoming disciples	prune away contingent localities till 400 years later done	your entire life's point and worth	powerful connections to key disciplines done while still alive	beyond neurotic concerns of your own era	clear extrapolation beyond all past accomplishments in your discipline	turning idea into product
the "I" brand	people you've turned into leaders	lives you've turned on to depths faced	lives you've turned on to depths faced	educatedness 48 dimensions	neuroses	lives you've transformed	diversity types encountered per age	extend self development till creativity	Kegan stage models
read Tues. NYTimes health section, plus major med journals	socialize key exercise types into clubs, trips, events	cure fitnessness caused illnesses of friends and family	cure fitnessness caused illnesses of friends and family	anti-disease based eating and exercise	tax as prevention time or as hospital time, your choice	daily vitality	five year evolutions to fitness along key dimensions	food and exercise inventions	eat out, friend food enemies; workday exercise enemies
publish deeds, propose job extensions, replace old technical base	replicate own victories via "circles" program inventions	Just-in-Time Managing	Just-in-Time Managing	all group activities use individuals better than work alone	fractionalizations	emergent sensitive designs	virtual team time designs, switched among	study life of the team	democratic rules of order treatment repertoires
scientific identification of boss satisfiers, competition, ambitions	social channel of access developed	boss' six careers as customer of your service inventions	boss' six careers as customer of your service inventions	future ventures co-imagined and done together	time investment in lower criteria of performance	late night, early morning, joint vacation spontaneous work sessions	as key component ideas/forces coalesce	styling relations as virtue within venture	ten year visions you enlist succession of bosses into supporting
enlist in vision of own initiative fitted into assignment	diagnose neurotic imbalances, deliver event function	punctuating events, stretching routine, visibility get deeds	punctuating events, stretching routine, visibility get deeds	all become leaders in 4 or 5 years	diagnostic conversation time	manage by events demonstrations	regularly and irregularly scheduled events	invention of new means for doing leadership function	management by events protocols
cooperating peers made famous: coalitions built	event preparation subevents	training in particular event set up protocols	training in particular event set up protocols	great performance in events held	chances for subversion & backstabbing	event preparation subevents	aging substrates and strategies of overall firm	common methods learned in jointly produced MBE events	MBE event protocols
processes enabled announced, measured event	contribution per crossing process and event	per crossing process per CEO advice for initiatives	per crossing process per CEO advice for initiatives	impact on processes, external firm customers and internal capabilities	locality of deployment of resources available to key deed	meeting cascades, MBE events, process leader meetings	meeting cascades, MBE events, process leader meetings	number and type of elicitations from library supported	protocols and leadership functions mastered by all over time
transparency to voices; celebrating departmental contributions	cross unit extensions of processes	inter-process, intra-process, department events	inter-process, intra-process, department events	satisfaction of 4 voices: CEO, customer, supplier, new technical base	waste elimination	horizontal cross function cascades, MBE events	process, meta-process, meta2 process	knowledge compilations	performance platforms
fractal theme in set up events, holding event, follow up events	event cascade process events	existing leaders made consultants, new leader layer developed in workshops	existing leaders made consultants, new leader layer developed in workshops	anxieties of following protocols handled well	crowd and free rider distortions	well rehearsed leader role performances	carthartic process designs	social automata emergents during event beyond plans	protocol and role output format standards
stable customer and process requirements to execute against	no jerking around of global suppliers	separate: technology, product, process, market development	separate: technology, product, process, market development	six sigma	customer price deployment	global sourcing	kanban pull flows	project post-mortems	enterprise resource platforms
folded own initiatives under CEO ones	coalition building	match CEO and customer agendas	match CEO and customer agendas	abstract leverage	role in others' agendas	formal support after proof of principle	non-tampering	root cause frameworks	solving process standards
pain sharing	whistle points	impact versus operation conformance measures	impact versus operation conformance measures	historic contradictions	careerist for show over-changing	social process coverage	pre-crisis designed crises	tuning automata	system parameters
random walk leaves successful firms only visible = illusion of method	coalitions to share, deny, reduce risk	fresh alternative targets researched continually	fresh alternative targets researched continually	spot baby industries	phase gates for losses	bubbles	ecosystem dependencies among baby fields	observing over-reactions	angel investing vs. validated idea investing
segment/channel/mess message feedbacks	sell chains	service chains	service chains	satisfaction chains	cost chains	supply chains	JIT management delivery	organizational combinatorics	alliance invention; technology ecosystems
hero firms made and announced	consulting companies sell "re-engineering" to new infrastructures	venture firms compete to lower price, up functions in new infrastructure	venture firms compete to lower price, up functions in new infrastructure	regional/national/trad e-block competitiveness	sequence costs of delaying some infrastructures, accelerating others	government incented private venture invention	sequence of coordinated parallel inventions	taxing risk avoidance	anti-trust versus trust laws
viral local marketing	local self replication	Kegan self transformation stages	Kegan self transformation stages	social automata tuning parameters: connectedness, diversity, patching	routines undermined by movement elicitations	evaluation events, local chapterization training, demonstration application, replication	trend riding	cellularization of other technologies, products, services	local microinstitution ingredient configuration mix
event marketing	inter-connector paths, network spanning events	mass market take-offs	mass market take-offs	stratified responding	styles fight routines, manager fight artists, managing creation	event delivery	trend riding	community spirit diagnosis	selling "characters"
unit of competition deployment	marketing by events	resourcing across community of practice technique re-inventions	resourcing across community of practice technique re-inventions	idea homelessness, firm idea-less-ness	T-shirt culture versus blue suits culture	organization life cycle: continual birth, babies, adolescent, adult, dying organization groups	accelerated idea-application space cultivated over decades by myriad institution types	incubator incubators	standard interfaces, performance metrics, documentation
selling by events	e-commerce net distribution	customer communities evolving to co-design	customer communities evolving to co-design	protect past customer investments	sell learning cost vs financial cost of buying now	mature operation discipline on immature idea invent/develop discipline	technology ecosystem niche lifespans	customer designed ventures	collaborative product-set alliances
competing solutions to customer problems not new tech for itself	envy-building pioneer customer nurtured	managing learning and fear cost control	managing learning and fear cost control	taguchi technique	social/technical substitution experiments	root causes targeted	living with technology for decades of incremental adjustment till great	technology combinatorics	cross-industry alliances
cost of sales missed by incompatibilities and lack of inter-operability	cross-units distributed to	quality information flows	quality information flows	process reliability, event product usability	excuseless plurality inspection	overt events and behind the scenes eventlets of established solace system	genba schedule building	short cycle times, mild technology increments	user vs. supplier convenience balanced
branding	physical and social virtuosity	incorporation in MBE events	incorporation in MBE events	22 dimensions that determine satisfaction	cost of lost customers	as I want it when I want it delivery	educative vs. exploitive sales to customer wants	customer driven product invention	best practice socio-technical sets
vision events	training events	information flows	information flows	quality function deployment	phase gates	customer price deployment	dual development supply chains	customer driven supply chains	systems matching
leaks to and at professional association events	key employees leak key info to mislead	genuine collaborations	genuine collaborations	ratio of misleadings to genuine collaborations	futile projects to mislead competitors	let competitors work for some leaks	plural time scale misleads	offer misleading interpretations of unholdable actions via actions	alliance platforms
internal publishing industries	reviews, critics, awards events	standard cognitive tool set and mind extensions	standard cognitive tool set and mind extensions	knowledge model type matches	knowledge compilation cycles, re-inventing across disciplines	social and technical delivery JIT	darwinian idea competitions	mind extensions extended	social indexing and/or cognitive list limits
respond to frame difference not just message differences	leadership cleavage shifts	tools for diversity management	tools for diversity management	breadth of frameworks applied	time to decide, time to context, time to deploy	JIT by type needed	democratic rules of order development of treatment/frame repertoires	manage by balancing	interaction tool sets
invisibility to user	automated community	compatibility connection	compatibility connection	reliability vs paper	coordination/learning cost	device secretarying	social cellularity	social virtuosity supports	conversing standards
pain sharing of not decide and decide pains	context sharing	frame difference explication	frame difference explication	fractal decisions fractal career rewarding	valuing safety	blend versus add	valuing not deciding	framework combinatorics	process versus event delivery
find whistle points	comedy disguise	continual stakeholder satisfaction impact measure	continual stakeholder satisfaction impact measure	leader who makes followers into leaders	freedom from possibility	hormone driven or monkey-like managing	person, life, problem cycle matching	invent power from mere promises kept	event delivery of power
other parts environment or any 1 part	system parameter settings, connectedness etc	reflexivity subsystem	reflexivity subsystem	designed vs emergent surprises	scheduled improvisations	pruned repertoire expansion	fractal evolving trajectories	system fractality	social automata management







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