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PROFIT BY RAISING A KEY FUNCTION TO THE NEXT LEVEL: TOOLS TO BUILD A WORK LEVELS SHIFTING STRATEGY

by Julian Fairfield

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The importance of understanding complexity and how it relates to corporate strategy and growth is the focus of Julian Fairfield's article, "Profit by Raising a Key Function to the Next Level: Tools to Build a Work Levels Shifting Strategy". An ex-perienced consultant with global experience in implementing requisite concepts, his position is that companies that dominate markets are those who operate at a higher level of complexity than their competitors. Similar to the approach taken in his popular book Levels of Excellence, Fairfield integrates other management theories—such as the McKinsey "7 S model"—with requisite concepts.

Organization Design, Levels of Work & Human Capability

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Profit by Raising a Key Function to the Next Level: Tools to Build a Work Levels Shifting Strategy

Julian Fairfield

WHAT'S IMPORTANT

- Companies that lead their market are often operating at a higher level of work than their competitors.
- Successful strategic planning articulates how functions presently differentiated at one level, are subsumed and integrated within a new function at the next highest level.
- Integrating requisite organization levels and holonic theories with business tools such as McKinsey's 7S Model and Porter's Five Forces, provides key insights into whether an organization will be successful.

One may think that a company determined to lift quality one level would focus resources on that function. Actually, the quality function can't be lifted without lifting the level of all functions that contribute significantly to quality. It requires a congruent lifting of product design, procurement, process technology and even maintenance. If these functions are not lifted, they will draw the quality function back down to the lower level. The effort will wither as soon as the quality change team disbands.

This article is the explanation of the recent thinking of a global strategy consultant and how several new ideas have changed the way that I approach creating effective business strategies. I have seen that, when possible, a work levels shifting strategy produces the greatest returns, but is also requires more creative effort and potential risk. The thinking behind a successful such strategy can be difficult, but understanding it gives you the tools to create your own, no matter what the design.

A good place to start is by seeing how the quality function has evolved over time from lower to successively higher levels of work complexity.

The Evolution of the Quality Function

When I worked on a lathe in a manufacturing plant in the UK in the 1960s, quality control was performed by *end-of-line inspection*. Every four hours a level II inspector would come around and randomly measure my output for out-of-specification conditions. For every faulty piece I produced, ten pieces were subtracted when my piecework pay was calculated.

Upon moving to the United States in 1972, I started work as a department manager in a plant that manufactured telephone cable. The approach here had developed to *quality assurance through operator inspection*.

The operator at each station was responsible for making go/no-go quality decisions and adjusting the machine accordingly. At the end of the process, the finished cables underwent final quality assurance by the QA department, led by a level III manager.

By the time I left cable manufacturing in 1979, the process had evolved to *statistical quality control*. Quality assurance had been centralized under a level IV, head-office vice-president of product quality. They had a full complement of staff, down to level II statisticians located in the plant. We still did our "go/no-go" inspections at the plant level, but the results were monitored at headquarters.

This provided the basis to both change the specifications and to develop higher levels of quality through process innovation. The objective of the quality function was still couched in terms of cost/benefit; exceptional quality was not seen as a value in its own right.

I later lived in Japan, where I was exposed to the concept of *total quality management*. There quality was the focus of level V management—even level VI. In a Japanese smelter that I studied, improving quality was the ongoing objective of every employee. Quality was viewed as a strategic variable. It continued to be valued as a method of reducing costs and improving quality for customers, but it was also valued in its own right as giving each employee meaning and an opportunity for creative activity.

Over a period of 15 years, I had witnessed the evolution of the quality function through four levels, from an end-of-line inspection to something that was part of the meaning and creativity of the people of the firm. When I learned work levels theory and reflected on my experience in light of it, I realized that one could see the same process of evolution in any function. It is the basis of progress.

The Evolutionary Path of Strategy

Strategy itself has undertaken a similar evolution, from a level III concentration on execution in a single function to a level VII focus on global markets.

Level III (1850): Functional execution, usually operations. Success was seen to be driven by the single function/holon of production. "You can paint it any color, so long as it's black."

Level IV (1900): Business unit profit. Profitability was recognized as the result of the interplay of new product development, production, sales, and finance a fully-fledged business, a holon that could sustain itself over time.

Level V (1970): Relative competitive position. Research by the Boston Consulting Group (BCG) showed that profitability was not only a function of competence within a single business. More often than not, profitability was a function of the relative competitive position of one business to all others in that industry.

Level VI (1980): Industry structure. Michael Porter demonstrated that profitability was not only a derivative of internal business capability and relative competitive position, but also of the domestic industry structure. Some industries were

inherently more profitable than others. Industry profitability is a function of the relative power position not only with competitors, but also with suppliers, customers, and potential competitors.

Level VII (2000): Worldwide industry structure: The domestic industry structure model was forced to move up a level by international trade and the realization that super profitability decay curves were accelerating. It became apparent that profitability in industries with trade products was driven not by domestic dynamics, but by evolving worldwide industry and social structures.

As businesses differentiated at one level, successful strategic thinking moved up into the next higher level, integrating the lower levels. Successful strategies at the higher levels were predicated on successful execution of the strategic thinking at the lower levels.

It is this process of differentiation and integration that is explained by the theory of *holons*.

Holons and Holonic Shifting

Both in the real world of things and in the conceptual world of humans there is an upward evolving hierarchy of differentiation and integration of differences, each level of integration providing the next level of difference. This results in higher and higher levels of complexity. Everything is not only a whole in itself, but also a part of a greater whole, both a "whole" and a "part," or what Arthur Koestler called a "holon."[1]

Work levels theory is a reflection of the holonic structure of reality and consciousness. It provides insight into different levels of strategy and the organizational demands of strategic change.

The physical world shows this ordering. Starting at the bottom, we move from subatomic particles to atoms, to molecules, to complex molecules, to compounds of complex molecules, which are the stuff of planets, solar systems, galaxies, and finally to the cosmos itself.

Humans then extend this patterning of differentiation and integration into abstractions like nuclear family, extended family, tribe, nation state, unions of states, and ultimately the globe or United Nations

1 The idea of holons was initiated by Arthur Koestler (1967) then developed by Ken Wilber.

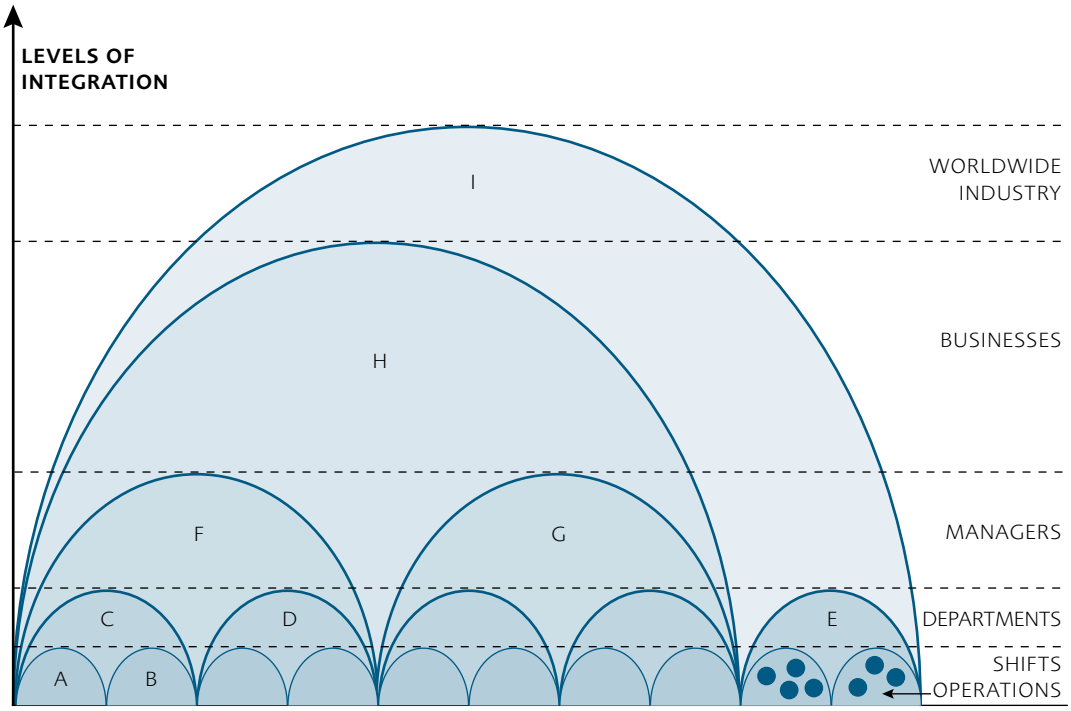

FIGURE 2.5.1 A HOLONIC SCHEMA OF BUSINESS

In the world of business we do the same thing (Figure 2.5.1). For example, an employee on the night shift is part of the assembly department, which is in turn integrated into the production function, which is integrated with additional functions (such as sales, marketing, finance, etc.) to make up a business. The business is differentiated from competitors, but integrated into a domestic industry structure, which in turn is integrated into a worldwide industry structure.

What we see in each figure is ongoing differentiation and integration:

A is different from *B* but both are integrated by *C*, which has a different emergent quality than either *A* or *B*.

C can't exist without *A* or *B*. *A* and *B* can exist without *C*, but without *C* both are somehow diminished.

A, *B*, and *C* are simultaneously in cooperation and competition with each other.

If *C* becomes an apex holon, it invites integration with *D* (which is at its level) to form the emergent *F*.

Each level contains and respects all its lower levels.

Mechanics and narrow purpose exist at the lower level. Inclusive purpose exists at the higher level.

Events at any level impact all other levels vertically and horizontally.

Business Applications of Holonic Ideas

Corporations are clearly organized in a hierarchical holonic pattern, with each level of management addressing more complexity by being both the integrator of lower holons and the responsible, purposeful owner of a holon, a zone of differentiation.

Although the argument works for any holons and their apex holon, let's take A as production, B as marketing, and C as the profit and loss business unit. Production is different than marketing, and both together create the emergent business, which is different still than either of them. The business cannot exist without production and marketing, but both are diminished without the cross-integration of the business unit manager. If this is a new business with two entrepreneurs—specialists in marketing and production, respectively—they would need a crossover general manager (GM) to maximize their performance in their specialties.

The crossover manager at each higher level is required to cross integrate more and more conflicts of purpose. Time is the currency used to integrate the conflicts between these holonic levels. The higher up the holonic structure you go, the more time it takes to reach an outcome that respects both the purpose of the apex holon and the purpose of lower holons.

Production and marketing cooperate with each other to create a profitable business. They also compete with each other for resources and approval from the business unit (and maybe, for their managers, the chance to become the new GM).

The role of the GM is to create and communicate common purpose across production and marketing. Each function will have both a functional purpose and a higher business purpose. While the business purpose will take priority, actual execution always takes place at lower levels. The GM cannot sensibly ignore or overrule either production or marketing. The GM must respect and integrate both as critical components of the business unit's success.

Lack of delivery at any level in any function—marketing or production—will dilute the realization of purpose at all other levels. Contemporary business practices

like Just-in-time (JIT), efficient consumer response, *kanba*, and business process engineering all try to overcome holonic conflict and siloing by uniting holons. For example, JIT processes to remove inventory melds two holons into one.

At each discrete level, managers view the source of profitability and their purpose quite differently. Thus, they pay attention to different things; a manager's conscious attention and intention reflects the level at which he or she is operating

Insights into Applying Holonic/Work Levels Theory to Strategy

When you look at this evolution of strategic thinking and apply the holonic/work levels theory, several implications come out.

- *The strategic capability of a business is limited by the capability of its most senior manager*. For example, a CEO, appointed to a level V role, may only be capable at level IV and may make the error of being excessively production-focused with no ability to see the value of, for example, marketing (assuming that marketing has some value in this case). The business and all participants will be constrained to level IV thinking and performance.
- *Strategy is a horizon condition*. The process of differentiation is never-ending. Differentiation leads to conflict across the apex holons, which leads to integration to form the next apex holon, which leads to another differentiation. The emergence of global companies, air travel, CNN, immigration, and the Internet (i.e., increased holonic communication) will ultimately invite—and even demand—economic, environmental, philosophical, and political global solutions.
- *Each work level has different felt truths and they are hard to change*. Felt truths about the way the world is perceived to work, about how I prosper and survive, are different by holonic level and the level of skills accumulated. Our felt truths are abstractions held with survival vigor, making them resistant to change, especially in a threatening environment. These are the current personal apex holons of the manager.
- *The level IV marketing manager will know a good deal about marketing but perhaps little about production*. He or she is thus unable to integrate the needs of both. Marketing knowledge has been the basis of success and almost certainly his or her felt truths.

A levels shift in one function demands a similar level shift in all other related functions.

Level at which the function of activity is managed

VI Chief Executive Officer	Value proposition 10 year +	Marketing chartering driving whole company	Value balanced quality	Efficient customer response (ECR)	Virtual vertical integration	Not yet needed	Balanced scorecard ($ and humans)
V Managing Director	Industry structure 5-10 year horizon	Value Equivalency analysis	Total quality mgmt	JIT inventory	Symbiotic partnership integration	Zero failure maintenance	Shareholder value analysis
IV General Manager	Relative competition position 2-5 year horizon	Consumer segment-ation	Statistical quality control	Live statistical inventory mgmt	Strategic segregation	Reliability-based maintenance	Return on equity Return on assets
III Department Manager	Internal efficiency focus 1-2 year horizon	Mass marketing	Quality assurance	Economic order quantity	Adversarial	Preventative maintenance	Profit and loss
II Supervisor	Day-to-day survival 1-year horizon	Local sales	End-of-line inspection	Eyeball check	Yellow pages	Breakdown maintenance	Cashflow
	CONGRUENCE			**CONGRUENCE**			

TABLE 2.5.1 STAGES OF INDIVIDUAL FUNCTIONAL/HOLONIC DEVELOPMENT CAN BE ROUGHLY RELATED TO LEVELS OF CAPABILITY.

- *The dominant, most profitable player in a market is often operating at one level higher than its competitors in key competitive functions/holons.* In the 1970s, the American auto industry saw quality as a cost/benefit trade-off in "statistical quality control," a level IV function. Its competitors in Japan saw it as a strategic function and created TQM at level V. The rest is history, as Ford and GM have never recovered.

This shows what was stated at the start of this article: creating a strategy for improving business performance means choosing between two alternatives. The organization can either (1) become more effective at its current level or (2) shift a level upwards. Shifting levels is much more difficult, but has far more impact. Business

FUNCTION	MEASURE	GAIN DUE TO LEVEL SHIFT		
		FROM	∞	TO
Quality	• % scrap rate • Defect rates	• 12-15% • 1-2%	∞ ∞	1.8% 1:1,000,000
Purchasing	• Cost of purchase	• Cost reduction of 10-12%		
Sales	• Sales per mobile mortgage manager	• 2 per week	∞	5 per week
	• Value per mortgage	• $80,000	∞	$130,000
Maintenance	• Availability of multi-system continuous plant	• 64%	∞	85%
Admin overhead	• Total cost of administration	• Reduced by 35-40%		
Marketing	• Shares	• Three-year record of 7% value share gains based on social insight		
	• Time to market	• Time to market weeks of months		
Operations productivity	• Labour and machine productivity	• 100-200% improvement		

TABLE 2.5.2 GAINS ACTUALLY ACHIEVED BY LEVELS SHIFTING

thinkers have long known how to improve performance by increasing effectiveness at the current level, but it is only through the lens of levels and holonic evolution that we can see what shifting levels requires.

There is considerable overlap between work levels theory and the ideas of holons. Strategic attention changes as you move up to higher levels. Higher levels of strategy (the answer to the question, "What drives sustainable profitability?") demand an increasing ability to integrate more and more competing functions across continually expanding time and space.

Functional evolution, understood as holonic evolution where the new apex holon integrates the lower ones, can be viewed through a work levels perspective. Using the 7 S Model[2] exposes the organizational changes required as one moves through work levels, and why there are considerable gains to be achieved through shifting of work levels.

Table 2.5.1 shows what different levels look like across different functions/holons. At this higher level of abstraction, you can see how each apex holon integrates the differentiation of the next lower one, and all other holonic levels below.

2 See Pascale, Richard T. and Athos, Anthony G. *The Art of Japanese Management*. New York: Penguin Books, 1981. Peters, T. and Waterman, R. *In Search of Excellence*. New York City: Harper & Row, 1982. Waterman, R. Jr., Peters, T., and Phillips, J.R. "Structure Is Not Organisation." *Business Horizons*, 23(3): 14-26. 1980.

DESCRIPTOR	STRATEGY	STRUCTURE: • Leader of function • Lowest paid in function	SKILLS REQUIRED	SYSTEMS	OUTCOMES: "THE PRIZE"
Level V: **Total quality management (TQM)**	• Seek competitive advantage through quality and its through-effect on other processes	• Operations Directors (QA responsibility) $250k p.a. • Quality management officer $70k p.a.	• High level, broad based competencies in customer value offering • Forefront of continuous improvement techniques • Product/production skills less important	• Cross-functional and thorough level integration of quality function • Individuals within teams working to 2 sigma • Integration of customer into the process both for design and feedback • Failure the absolute exception. No scrap, no repair • International Standards Organization (ISO) accrediting and governing international industry standards	• Failure rates in units per million • Increased speed to market locally and globally • Quality a strategic tool
Level IV: **Statistical quality control (SQC)**	• Reduction of complete process costs	• General Manager (Quality) $175k p.a. • Quality assurance officer $70k p.a.	• Broad business comprehension • Competent quality assurance and control skills • Strong numeric and diagnostic skills	• The quality function still largely separate from other functions • Massive measuring and monitoring systems in place, trend analysis, talk to customers • Quality circle processes starting • Some failure accepted and repair function still in place • National associations co-ordinating industry standards	• Failure rates measured in parts of a percent • SQC used as a cost/profit trade-off
Level III: **In process inspection**	• Reduction of production costs • Incorporates pre and post production	• Quality control manager $100k p.a. • Inspectors $35k p.a.	• Competent statistical and analysis skills • Beginnings of specialized quality control technical skills • Writing of design specifications • Troubleshooting	• In process and end of line go, no go inspection • Repair very much a part of operations • Scrap rates measured in percentage points • Hardly ever see a customer • Industry discussion groups • Standards set but at a low level	• Failure rates in percentage terms • QA a cost to be lowered • QA as good as competitors
Level II : **End of the line inspection and customer return**	• Reduction of returns	• Production supervisor $70k p.a. • Operators $35k p.a.	• Production/product expertise • Go, no go measurement	• End of line inspection • Customer lives with lots of defects • Repair a large function pre and post sales • End of line, go no go specs on key utilities	• High failure rates but customer often wears it • Focus on repair

TABLE 2.5.E: 7 S MODEL FOR QUALITY BY WORK LEVEL

Why Lifting an Organization up a Level is Difficult

Over my career I have been able to witness the impact of work levels shifting. Table 2.5.2 highlights some of the real gains that I have seen either as a consultant or as a line manager. This has more than convinced me as to the power of work levels shifting and also the difficulty achieving it. Shifting an organization is extremely difficult because it requires both personal self-awareness and congruency within levels as necessary, if not sufficient, conditions.

When I first encountered the work levels theory, I recognized intuitively that as any business function evolved, it demanded a different organizational design. This led me to use McKinsey's 7 S Model as an organizational template to describe the changes as one moves up levels.

Taking the levels/holon model together with the 7 S model, one can develop a picture of how organizational design shifts as you move through work levels. Table 2.5.3 is a highly abstract example of the holonic evolution of the quality function using the 7 S Model. This process can be taken down to a low level within the organization.

Managers' capacity to lift themselves up one level is critical. Shifting a level requires a higher cognitive capability, a new set of felt truths and skills: this is why apex managers are often replaced when a business shifts upward.

One may think that a company determined to lift quality one level would focus resources on that function. Actually, the quality function can't be lifted without lifting the level of all functions that contribute significantly to quality. It requires a congruent lifting of product design, procurement, process technology, and even maintenance. If these functions are not lifted, they will draw the quality function back down to the lower level. The effort will wither as soon as the quality change team disbands. (See Table 2.5.4.)[3]

This is another example of the holistic holonic theory in practice and leads to two general rules.

An organization's overall level is determined by the lowest level of any of its key functions for success.

Less obviously, if a level shift has not been achieved (i.e., breaking new ground), it must initially be led at one level above the final level.

3 Editorial Note: See Glenn W. Mehltretter, Jr.'s and Michelle Malay Carter's article in this book..

	Typical Level III Function	Typical Level IV Function	Issues
IV		General Manager x 1	Can old III become IV?
III	Manager x 1	Managers x 4	Where do I get four IIIs?
II	Supers x 6	Associates x 20	Where do I get 20 IIs (usually okay 1/3 1/3 1/3 rule)?
I	Operators x 36		Need to lay off a number of people
	Total = 43	Total = 25	Net reduction of 18 people = 41%

TABLE 2.5.4 LEVEL SHIFT DIFFICULTIES

Another example will illustrate this:

As a young plant superintendent, I was part of a new plant startup that was to operate non-union, to double productivity, to halve the scrap rate, and to improve all quality parameters significantly. In retrospect, our existing unionized plants were level III operations, while the new plant was designed to operate at level IV.

Without the benefit of work levels theory but with strong intuition, senior management appointed a level V plant manager who then hired a team of level IV direct reports. Within 18 months, each objective had been exceeded. Within 30 months, virtually all of the team had been promoted and moved on. The plant had stabilized at level IV and there was not enough level IV work to keep them engaged. Structurally the site had moved from a level V organization to a level IV. The shift has significant benefits, but the difficulty of achieving it is real. Each level develops its own issues:

At level IV: Can an existing manager fill this role, or do you have to go externally, with all this entails, especially in relation to the attitude of the current level III manager?

At level III: Where do I suddenly get four level IIIs? Will this include my existing three? Often one or two level IIIs are waiting underutilized in the wings, but one can rarely fill all these roles internally.

At level II: Similarly as level III. Although there are larger numbers at this level, this is more easily addressed because within the level I roles, there are often significant numbers of people capable of doing higher level work.

At level I: The level I roles have largely been eliminated, creating a significant issue with redundancies. Personnel reduction at level I is the source of cost reduction

and must be realized.

In my experience, it is easier to achieve the level shift by initially overstaffing a greenfield site than to lift an existing organization.

Conclusion

I've shown how in my work life I've experienced the quality function going from end-of-line inspections (level II) to TQM (level V) and how business strategy itself evolved in a similar way. With the idea of holons added to work levels theory, we see how the differentiated functions/holons at one level can only be integrated by a new, emergent holon at the next level. The emergent holon is always one level greater and provides what can seem to be a miraculous value—not merely summing the parts—but providing a transformation of them.

Let's end by integrating these ideas into praxis, showing they have affected not just how I think, but how I do strategy with my clients. Starting a new strategy, I always go the Porter Five Forces Model[4] and populate it in *holonic* form. It can have as many as 30 or 40 *holons* of potential interest:

- Competitors with several key functions for success
- Suppliers
- Market segments

Afterwards, I gather data, including interviewing for opinions around the client, competitors, and the industry to determine where the power is and who is getting the surplus. Is it: Suppliers? Competitors? Consumers? This must be reviewed for each market segment.

From this data-rich position, I decide whether the best deliverable approach is an improvement strategy—creating incremental improvements in performance at the firm's current level—or a work levels shift strategy—shifting the power balance in one or more functions/holons in favor of the client. This may mean giving up more power to the consumer and is always a climbing up of the holonic structure, the miraculous processes of the new emergent level that integrates the differentiated holons below it.

4 For more about this model, see Porter, M.E. "How Competitive Forces Shape Strategy," *Harvard Business Review,* March/April 1979. Porter, M.E. *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. Canada, United Kingdom, New Jersey: Free Press, 1980.

Shifting a level is the best way to get high returns on change, but such a strategy is very difficult to implement. The existing structures, values, and personnel all come into play. By acknowledging the felt truths and bringing them into self-awareness, one gets the opportunity to establish new felt truths by integrating and creating the new emergent apex holon.

Last, I always suggest getting creative, climbing the holonic ladder wherever appropriate!

ABOUT THE AUTHOR

Julian Fairfield's first career experiences were in manufacturing where he ended up as plant manager. From there, he moved to work for McKinsey where he specialized in strategy and organization. As part of the organizational work, he led for two years the seminal reorganization of CRA (40,000 employees) that utilized and expanded on the "levels of work" concept. This work was the basis for a book, *Levels of Excellence*, which explains levels and their relationship to systems. Julian is currently working on another book on the nature of human evolution in terms of how consciousness interfaces with our biology to produce culture(s). This has led to the interesting insight that global warming may be the most wonderful opportunity the human race has ever had. It challenges us individually and institutionally to think and act within the context of global culture or face the consequences.

GO Global Organization Design Society

GO SOCIETY PURPOSE AND VALUES STATEMENT

To support the organizing of work in a responsible, fair and healthy manner in which people are led in a way that enables them to exercise their capabilities.

The Society believes this requires applying a systems framework* emerging from reflective inquiry in which levels of work and capability are the initial paradigm and growth in human awareness is the essential process.

The benefits are organizational effectiveness, fulfilled people and organizations designed for value-creation, sustainability and social well-being.

** Note: inspired by the work of Wilfred Brown and Elliott Jaques*

The *Global Organization Design Society* was founded in 2004 to establish and operate a worldwide association of business users, consultants, and academics interested in science-based management to improve organizational effectiveness.

The GO Society fulfills its purpose by:

- Promoting among existing users increased awareness, understanding and skilled knowledge in applying concepts of Levels of Work Complexity, Levels of Human Capability, Accountability, and other concepts included in Requisite Organization and/or Stratified Systems Theory.
- Promoting among potential users of the methods, appreciation of the variety of uses and benefits of science-based management, and access to resources. The GO Society supports the learning and development of current and future practitioners by holding world conferences and professional development workshops, publishing books and a journal, and maintaining a resource-rich web site with related articles, monographs, books, videos, blogs, discussion groups, and surveys.

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