

In This Issue

Persico and McLean's 'Merger of STS and TQM'

The two perspectives, the Socio-Technical Systems (STS) design model and the Total Quality Management (TQM) movement, are being compared in terms of their strengths, weaknesses and areas of overlap. The need for their synergistic merger is advocated, predicted and substantiated.

The issue is fairly self-evident: in order to increase competitiveness, quality and productivity, the system itself, its organization, has to be significantly changed, re-designed or re-structured. Without such change, we are condemned to deal only with slogans, exhortations, individual appeals or prescriptive commands.

The TQM movement has very little to say about the organizational change, flattening of hierarchies, autonomous self-management, crucial role of high technologies, co-ownership issues, etc., while emphasizing technical aspects like variance analysis, Taguchi methods, charts and 'inverted pyramids'. Hierarchical management and command systems are thus implicitly accepted, their functioning bettered or improved through top management involvement and statistical attention to customer and quality.

Because of the lack of organizational-change perspective, TQM relies increasingly on slogans à la 'Drive Out Fear!' or 'Do It Right the First Time!' – purely normative prescriptions. What are the necessary organizational changes which could bring this about? Can one 'drive out fear' and at the same time preserve the system rooted in fear? Should one discourage experimentation and creativity by insisting on 'doing it right the first time', like a robot? Is 'perfectionism' and 'workaholism' compatible with knowledge-based society? Can one improve competitiveness by nailing a few slogans on the wall?

Should not one look at network organizations,

alliance networks, amoeba systems, autonomy, self-management and self-coordination, employee/management co-ownership, internal market systems, multifunctionality, rotation as well as task, labor and knowledge re-integration? How else to understand what drives out fear, improves quality and performance and increases creativity and innovation in human systems?

Is not focusing on processes only, while ignoring culture and the complete system, a sure sign of organizational myopia? Can vague rhetorical generalizations about pride, respect, fear and 'seven deadly diseases' substitute for a reliable, optimally designed system?

What are optimally designed systems? Those, where continuous improvement, flexibility, quality and customer satisfaction are implicit, in the individual interest of all participants, where cost-consciousness is explicit and technologically supported, and where all employees are empowered in terms of ownership, responsibility, loyalty and pride.

Only one slogan might be needed there: 'No Slogans Needed Here!'

Richter's 'Corporate Alliance Networks'

The rapid demise of executive command hierarchies has been accompanied by the emergence of autonomous and autopoietic *network organizations* and alliances. This is the fulfillment of von Hayek's early calls for workers' knowledge empowerment and decision-making autonomy.

Knowledge, in order to be effective, has to be democratically decentralized. Workers, in order to be performing, have to initiate decisions, not just carry out orders. Organization, in order to be competitive, has to be non-hierarchical.

Dr. Richter of the Robert Bosch company has prepared a review and prospects of the self-organizing alliance networks which are now emerging all over the world. Their emergence is spontaneous, not subject to social engineering of the hierar-

chy-design era of the past. The *Omnia sponte fluant* of Comenius is closer to modern management era than the eternal fixations of Iaccocas.

According to Richter, corporate alliances of today respond to environmental challenges, stimulate new inter-organizational relationships and promote cooperation rather than simple-minded competition. The challenge of complexity and flexibility can only be met by self-organizing alliance, never by the central command hierarchy of the socialist era. Alliances, whether among or within corporations, do change and evolve. They are capable of reconfiguration and thus of evolution.

High technology is pushing towards reintegration of task, labor and knowledge. Alliances allow specialized companies to acquire and use broader, non-specialized knowledge. The costs of new products and services are increasing: the producer-supplier-customer alliances facilitate and allow the necessary sharing of these costs. The time to market is rapidly accelerating, product cycles are radically compressed: the condensation of corporate alliances is all but inevitable.

Richter discusses three major intrinsic characteristics of corporate alliance networks: *recursivity* (of cooperative interactions between agents), *redundancy* (of pooled corporate resources, allowing larger flexibility), and *self-consciousness* (self-defined from within, not molded externally by governments or competitors). These are remarkable properties of remarkable organizations: properties virtually unrecognizable by the surviving 'super-managers' of the hierarchical era. After living in the 'medieval citadel' we are entering new renaissance city-states of the knowledge re-integration era.

Shenhar and Thamhain's 'New Management Skills'

It is becoming quite obvious that the nature of management and managing is changing: new skills, new technologies, new functions, new motivations and new behaviors are emerging.

High technology is changing the nature of work, knowledge has become a primary form of capital, change and requisite flexibility are now strategic postures, and international competition is driving bad management and bad managers out.

Traditional climbing of the executive ladder,

from lower through middle to top management, has lost its meaning in a flat, non-hierarchical organization.

Professors Shenhar and Thamhain have taken the Katz managerial skills model of 1955 and transformed it for the 1990s. It is to be expected that the classification of skills from the 1950s will become all but inadequate for the modern era of management. The Katz model took hierarchy of command for granted and did not even entertain the idea of its decline and demise. Managerial skills were fixed, unchanging and the same across all levels of the executive ladders. The dogma of *planning, organizing* and *controlling*, sometimes appended by *coordinating* and *commanding*, does not say anything about management or managerial skills, but plenty about convenient scholastic classifications of non-managers and educators. The authors provide a good overview of a large number of such classificational schemes of skills.

None of these classifications asks what *managerial knowledge* is, how it is created, acquired, renewed and tested. Managers do not operate with simple skills, but with evolving professional knowledge which is subject to obsolescence and incompetence when neglected. There is nothing more pitiful than watching aging 'supermanagers' of the past era, strutting their obsolescence and misunderstandings on modern TV without even realizing that they have already been.

Shenhar and Thamhain make the first step by separating skills from knowledge. Knowledge implies awareness of the causes, the why's, the explanations. Skills are good for carrying out the orders or manifesting knowledge. Skills without knowledge amounts to empty 'busy-ness'; knowledge without skills spells inadequacy and sloppiness in execution.

The main question remains still unaddressed: How is the emerging flat network organization affecting the proper mix of managerial knowledge and skills today? What do middle managers have to know when there is no middle management left?

Nilakant's 'Transdisciplinary Approach to Performance'

Professor Nilakant of the University of Canterbury, N.Z., has initiated building a theory of business performance from a transdisciplinary systems

approach, integrating individual disciplines, especially the agency and organization theories.

Models and theories of performance in organizations have traditionally been built from individual disciplinary vantage points – regardless the actual transdisciplinary nature of organizations.

Good performance of organizations has alternately been attributed to economic goals, business culture, sociological milieu and individual relationships.

The agency theory, for example, insists that organizations are simply environments for contracting relationships among individuals. Yet, inexplicably, it does not postulate independent and autonomous contractual agents of the free market kind, but introduces principal-agent and owner-manager-operator hierarchies of command-type centralized economies. The context is dismissed, performance depends on the efforts of agents and ‘working harder’ becomes a logical, though despised dictum.

Individuals cannot perform better than the system in which they perform allows them. Working harder in a system which penalizes hard work would be feeble-minded or nonsensical.

Prof. Nilakant proposes to view an organization as an instance of *team production*, a process of transformation of *both* physical (materials) and symbolic (knowledge) resources. One type of performance relates to *operational effort*, actual transformation of initial inputs into final outputs, the other is *facilitative effort*, related to coordination of operational efforts.

In other words, all business corporations are engaged in *two kinds* of production: producing ‘the other’ (goods, services) and producing ‘themselves’ (renewing their ability to produce). The second kind of production, the production of self, the ability to coordinate, is becoming increasingly more important than just producing ‘the other’.

Traditionally, facilitative efforts are carried out by managers or supervisors whereas operational efforts are performed by workers. This artificial ‘division of labor’ kind of organizational schizophrenia has led to performance losses and declines as soon as traditional hierarchies started to crumble. There can be no sharp dichotomy between operational and facilitative efforts in flat, network-based organizations. Seeing that is now all a matter of learning and accepting that the world has changed.

Romme’s ‘Self-Renewal of Management’

Increasingly popular notions of self-management, self-renewal and self-organization, all based on the idea of autopoiesis (self-production), are reflecting the simple but so far inexplicably neglected fact that all business corporations are engaged in *two kinds* of production: producing ‘the other’ (goods, services) and producing ‘themselves’ (renewing their ability to produce). The second kind of production, the production of self, is becoming increasingly more important than producing ‘the other’.

Without corporate self-renewal, without renewal of requisite knowledge, the company becomes incapable of responding, changing and competing; it becomes ‘crippled’ and it can even ‘wither’.

Especially management, management practices, behaviors and systems, have to be *continually* renewed in order to maintain their responsiveness and competitiveness. Continuous self-renewal is a more potent and more appropriate concept than ‘strategic change’ which smacks of externally induced *ad hoc* design and central command planning.

One can just look more closely at how these ‘strategic changes’ are carried out in some of the recently troubled corporations that have neglected their self-renewal. Such companies are doomed to calling in external strategic-change experts, only to fire them a few weeks later, in a strange *danse macabre* of self-enforcing incompetence.

Pervasive *autonomous strategic activities* of the firm are key parts of strategy and often are the causes, through rules propagation, of coherent strategy formation at the top.

Management repertoire or portfolio of rules govern the behavior of individual managers and lead to induced, spontaneous or autonomous action. Induced action is set deliberately and purposefully, often clashing with the spontaneous emergents. This leads to conflicts and dilemmas which can be ameliorated by changes in the induced action itself or by changes in the management rules repertoire.

The inertia of the management repertoire is often at the core of a firm’s inability to sustain success. New repertoire of behavioral rules has to be continually evolved and renewed in order for a company to remain adaptable and flexible. The breakdown of the old rules and the emergence of the new rules is a simultaneous process, making the com-

pany temporarily vulnerable and conflict-ridden. Self-renewal of the management repertoire has to be managed. Before it can be managed, it has to be understood.

Professor Romme has performed a useful service towards enhancing the requisite understanding of rule-based behavior of management.

Suomi's 'Cooperation in Information Systems'

The notions of cooperation are now replacing simple-minded competition fixations not only in business and management but also in other areas, like information systems research. Strategic alliances, joint ventures, partnerships, resource pools, networks and cooperative agreements are reaching not only to technology, labor and money but, more importantly, to knowledge and information as main forms of capital.

Traditional competition paradigm is being pushed more and more out of center by hard and every-day business practice. Belated arguments of academic 'military strategists' are weak and hurt rather than defend its failed dominance. The cold war of dumb and cut-throat competition, where both sides are condemned to losing, is over.

The point is that cooperation does not exclude but enhances competition – as can be seen from professional team sports. Free market system is based on both tacit and contractual cooperation. Competition is the sharpest where the team spirit and cooperation are all-pervasive, like among autonomous 'amoebas' of Kyocera corporation. The 'Zero-Sum-Societies' of economic 'warmongers' never really existed: there is no point in winning if both sides lose.

Professor Suomi has explored the cooperative paradigm, using Oliver's six types of interorganizational relations: necessity, asymmetry, reciprocity, efficiency, stability and legitimacy. These six determinants of cooperation can be seen functioning in the information area, ranging from telecommunication networks, airline reservation systems and jointly owned software houses to mainframe facility management, joint ventures in newest technologies and consulting groups.

All in all, Suomi presents 24 possible and different 'pure' cooperative arrangements from which real cooperative agreements are composed and through which their dynamics evolve.

Basic cooperative hypotheses are then put forward, searching for why cooperation emerges, why it fails and why it succeeds. Suomi's hypotheses are still untested, enormous amount of research work remains to be done in the area of cooperation. But the area is becoming better defined, more explicit and clearly visible – younger generations of researchers all over the world are already entering the new field.

Competing with one's own or others' standards and expectations – rather than simply 'competing' with others – is a human key to maximum human performance. *Human Systems Management* will continue to support and evolve the cooperative paradigm in business and management.

Coman and Ronen's 'Management by Constraints'

Professors Coman and Ronen introduce a Management by Constraints (MBC) approach and apply it to management of information and information systems in organizations.

Quality assurance in software, information systems and computer design problems is especially vexing and costly as more than 70% design and programming errors are still left for the customer-user to discover. In fact, many U.S. computer and software companies have discontinued their free service and advice hot lines: the customer now has to pay extra for fixing the errors he himself discovers.

Instead of improving quality, many companies are thus 'integrating' customers into their production process, as recommended by TQM gurus, so that the customer himself can find the problems, report them back to the company and pay fees for receiving pre-recorded telephone advice on how to fix them. This myopic policy is sure to backfire.

TQM 'definitions' of quality are to blame. Ranging from 'fit to requirements' to 'fit the usage and user', such slogans say nothing about suppliers, producers, customers and their relationships.

The MBC (Management by Constraints) methodology helps managers to concentrate on the most critical issues: critical success factors, bottlenecks, constraints and limitations. Such constraints can be internal (limited resources), external (limited demand), policy motivated (reluctance, inertia) and so on. These constraints have to be identified, el-

evated into focus and eliminated.

This process represents a continuous recursive policy of system's goals identification, determining measures of performance, identifying the constraints, deciding on exploiting the constraints, subordinating all else to this critical decision, elevating system constraints and recursing through the process as needed.

Quality is most often the constraint No. 1. However, making it the customer's responsibility does not amount to quality elevation but customer degradation. Improving quality should not stay the No. 1 issue. If it does, it is a sure sign of corporate inability to remove it as a critically constraining issue.

TQM, as any other dogma, can become a part of company inertia and sclerosis. Similarly, slogans of 'Continuous Improvement' can become hindrances if they signal fundamental and final acceptance of the underlying system. For example, a company can embrace mass production rather than mass customization, declaring that 'continuous improvement' of mass production lines is now its strategy. Some improvement! Some strategy!

Coman and Ronen's paper provides some early warnings against this creeping TQM and Continuous Improvement myopia, dogmatism and inertia.

Their MBC methodology, although presented only in the MIS framework, can certainly be expanded towards helping to prevent the above described elevation of corporate inertia into strategy.

Berne's 'Managing Diversity'

In her comment Berne argues that without a moral imperative, (a sense of 'should', or 'ought', derived from principles and beliefs regarding the treatment of human beings), the diversity programs will fail in their effort to build more competitively successful organizations. Three theoretical views of diversity are considered. It is pointed out that these representative views do not acknowledge the innate weakness of typical diversity management programs. This commentary claims to predict not only the likely failure of the programs themselves, but also that the programs will by design cause deeper and wider dis-ease within the organization.