

In This Issue

Dooley, Johnson and Bush's 'TQM and Chaos'

It is being increasingly discussed and argued whether or not TQM represents a new management paradigm. Is TQM just a stage to be overcome shortly? Is it only a part of a broader, emergent global-management paradigm rooted in process re-integration and reengineering? Or is TQM a simple dogma, fixed and incapable of continuous innovation and improvement?

The authors have explored TQM's relationship to more modern theories of complexity, chaos and self-organization.

The mechanistic, Newtonian paradigm is based on the notion of equilibrium. External and internal disturbances, deviations, fluctuations and perturbations to equilibrated systems are to be controlled, managed, reduced or removed. If a system is not in equilibrium, it is to be helped or pushed to attain it.

More complex, non-mechanistic and self-organizing systems operate typically far from equilibrium, incorporate external fluctuations to continually transform themselves, improving, searching, evolving.

While equilibrium and control are the attributes of the traditional hierarchy of command, it is disequilibrium, autonomy and empowerment which characterizes horizontal self-managing organizations.

Can significant dimensions of business organization be reduced to searching for quality equilibrium? Can a learning organization be conceptualized on the principles of equilibrium? Or are the organizations more flexible, more adaptive and more creative if they operate far from equilibrium, 'at the edge of chaos'?

TQM is significantly Newtonian: it defines quality deterministically, via specifications and standards; it measures deviations through traditional statistics; it 'improves' systems by reducing their

variation and through simplification and standardization; it searches out equilibrium and optimum; it uses 'cause and effect' diagrams of Newtonian mechanics; etc. TQM is rooted in the control charts of the 1920s and 1930s.

As a result, high entropy and unsustainable degree of uniformity, underlined further by forcing the ISO 9000 standards or Baldrige criteria, is starting to emerge. Yet, the system is sowing the seeds of its own demise. If everybody is doing the same thing, TQM, then competitive advantages, necessarily, will be found somewhere else.

TQM is all practice and no theory. With no learning, its evolution has become stunted. Moving beyond TQM has now become mandatory.

Coman and Ronen's 'Subcontracting'

Subcontracting or 'outsourcing' have become favorite tools for filling in the gap between the market demand and currently limited production capacity. Subcontracting is a precursor to supplier integration or supplier co-location: modern tools of world-class manufacturing.

The authors have selected subcontracting in spite of its short-term nature. They develop a simple ratio for product priority rating and so enhance the Theory of Constraints for the make-or-buy decisions.

Optimal design of a corporate portfolio of resources, like, for example, via De novo programming, represents the optimal way of deploying limited resources. In the case of suboptimally designed systems, there remains the problem of binding versus non-binding constraints, unbalanced and disharmonious organizational resource allocation, which requires outsourcing.

The authors note, quite properly, that when no subcontractors are available, the company has to *optimize* its resource allocation to maximize its production throughput.

Outsourcing is a way of elevating capacity *ex post*, i.e., after the design, through the usage of subcontractors rather than supplier integration. So, outsourcing is (or should be) an integral part of the standard Theory of Constraints.

The authors insist that product price, cost of raw materials, total working hours per product or hourly rate are totally irrelevant to the outsourcing decision. Only contractor markup per product and the time per product matter. They also note that often a single resource constrains the capacity of the whole facility. Obviously, products with the highest contractor markup per constraint minute are manufactured in-house while the lowmarkup ratio products are outsourced.

The article concludes with a simple numerical example offering a comparison of standard accounting, the Theory of Constraints and the make-or-buy enhancement for both no-subcontracting and subcontracting situations.

They conclude that traditional cost-accounting aggregation of constraint and non-constraint hours generates lower throughput than the Theory of Constraints. Enhancing the Theory of Constraints by including the make-or-buy decisions leads to an overall improvement and allows supplier-customer matching on the basis of mutual competitive advantage.

Kondo's 'Standardization and Creativity'

Most of the competitive world is now familiar with the ISO 9000 Series Standards to assure product quality. Does following such standards impose constraints on creativity and innovation?

Professor Kondo of Kyoto argues that standards and creativity are mutually complementary, not mutually exclusive.

Any dimension, criterion or measurement, including that of quality, becomes entrenched and institutionalized through standardization. One finds it more and more difficult to compete along dimensions which are increasingly standardized. Standards-based management is the last stage of quality as competitive advantage. New dimensions and new criteria (like customization, time and innovation) are emerging together with the peren-

nial cost, productivity and ecological impact.

Following preset standards is deadly in any production, any manufacturing, any culture. Modern customers want fully individualized customization at the lowest price and in the shortest time: they take quality increasingly for granted. Following standards is not the best human but the machine-fit ability and prerogative.

Machines can follow standards, humans create.

Prof. Kondo pauses to reflect why sports, although physically and even mentally more demanding, are always more pleasurable than work? Cannot work be remade into a sports-like activity, full of creativity, motivation, joy and a sense of achievement?

Although Kondo strongly argues that work standardization does not prevent the display of creativity, the reality is increasingly being stacked against him. He knows that: 'It is doubtful that any single standard can be the most efficient way for all people'. Of course it cannot. Not only for all people but, most importantly, *not for all companies* under all circumstances. Some companies can only thrive in the competitive environment through unleashing all of their creative powers, not through following externally (even internationally) imposed standards.

So, at the end, Kondo discounts standards: 'It is important, at the end of basic training of novices, to make it clear to all of them that the working methods they have learned so far are no more than the basic actions. Having mastered them, they should try to develop methods that suit their individual physiques and temperaments'. That is, learn the standards, then try to overcome them, improve them, move beyond them.

The remaining question is: is this the best way to learn, practice and enhance human creativity?

Baruch's 'Business Globalization'

Globalization has moved away from being a cliché to becoming a very serious strategic consideration for most businesses. This global integration of business activities goes well beyond exploiting some simple comparative (cheap labor) or even competitive (tax breaks) advantage. Economic

considerations do play a role, but they are not decisive. Rather, it is the global searching for knowledge, skills and competencies – and therefore productivity growth – which drives the phenomenon. Human knowledge has become the primary form of capital and it is becoming scarcer and dearer.

Dr. Baruch is taking a look at globalization from the cultural and behavioral perspectives. Although there is a global management system convergence emerging at the corporate level, the cultural differences still remain at the country level. Although people would like to move freely from corporation to corporation, they cannot do so because of the national restrictions and limitations, imposed or implied, on employment permits. Although people can readily function in similar management systems, they cannot do so within radically different cultures.

The dilemma for corporations is obvious: should they try to bring people to the workplace or bring the workplace to the people? When concentrating on labor, the first option is self-evident; when concentrating on knowledge, the second option becomes mandatory.

Dr. Baruch discusses the use of global Human Resources Management (HRM) with special attention being paid to Recruitment, Training, Socialization, Career Development, Performance Appraisal and Industrial Relations. Corporate practices must be adjusted when a firm goes multinational. Managing people across national boundaries is more complicated and quite different from local practices and traditions.

It is quite obvious that 'bringing the workplace to people' will become the major strategic HRM-challenge of the 21st century. International telecommuting, teleworking and teleconferencing holds the largest promise of cross-boundary and cross-cultural adaptiveness and effectiveness. Mass customization on a global scale is a good strategic enabler for the entire process. Work-at-home represents the best way of entering the global knowledge space while avoiding the strains of traditional physical transfer. Moving anything else than brain's productions will become a luxury for a globally competitive corporation.

Dr. Baruch has issued a challenge for examining the new role of HRM in global management.

Kagan's 'Entrepreneurs and Linearity'

Dr. Kagan has explored an interesting question: 'Why do business owners and entrepreneurs resist consulting advice?' Objective and rational advice, derived from strategic, market and financial analyses, is often resisted, adjusted or, if implemented, significantly biased to reflect entrepreneur's basic 'feel', vision and intuition.

If the entrepreneur does not navigate by objective, rational information, then by what star does he steer?

This fundamental dichotomy of rationality versus intuition was the main discussion topic at the very birth of *Human Systems Management*. We have, at that time, called for an integration of the two modes of inquiry and decided to establish a journal which would facilitate such synthesis. Traditional 'objective' rationality is mostly linear and linearity-based, incapable of handling non-linear shifts, jumps, or unexpected turnarounds in business dynamics.

Innovation, creativity, ingenuity and knowledge production – all the most important factors of modern competition – are not taken into account in the world of net present values, expected values and average returns on investment. Such 'aggregate' management cultures can well function in the linear, highly predictable world of producers, but are ineffective and rightly abandoned in the unpredictable and ever-changing world of consumers.

If all is going well and 'as presumed', one can use averages-based forecasting and decision making to some advantage. As soon as there are qualitative shifts, turbulent adjustments and heightened competitive uncertainties – as is the case most of the time – such linearity cannot be adhered to and is being intuitively discarded in favor of intuition.

The radical shift from mass, statistically behaving markets to small, individual 'micromarkets' and niches, has made market behavior less predictable, less statistical and less linear. 'Linear' consultants who are peddling averages are being ignored not only by entrepreneurs but also by larger corporations which are forced to shift towards mass customization.

It is the disequilibria, qualitative shifts, statistical

unpredictability and wild fluctuations which create entrepreneurial and market opportunities. It is the non-linearities by which entrepreneurs must navigate and guide their actions. It is the individual, non-statistical, unique perception and interpretation of the world which makes an entrepreneur succeed or fail.

Nodoushani's 'Professional Management'

Prof. Nodoushani has addressed the professional ideal in management history. Is business management a profession? Or is business management merely an art of making money? Is management a form of public service, dedicated to upholding certain quality standards, or is it merely a skillful scrambling for competitive advantage?

Is professional management facing the death through its widely accepted fraud, abuse and mismanagement – the sure sign of unprofessionalism and deprofessionalization?

The rise of professional management was historically connected with the rise of coordinative hierarchies and public corporate ownership accompanied by the decline in family businesses around 1900. Knowledge and skills have become more important than ownership and family relations.

Professional managers had no proprietary stakes in the enterprise and the bankers had radically separated property and family, owners and

employees, etc. Meritocracy has emerged, with its human capital and modern corporation.

The decoupling of ownership and management and the atomization and dispersion of the ownership into the public domain were powerful incentives and tools for breaking up family-based national capitalism and replacing it with international access to property and power.

The institutionalization of management, the increased dependence on the knowledge and skills of professional groups, are the base of the 'postcapitalist' society, based on knowledge as a primary form of capital.

In all these movements, managers were supposed to start thinking of themselves as public servants, in the tradition of T. Bata. They created and supported institutions of professionalism, from schools and conferences to certifications and standards. Yet, there is continued public mistrust, calls for regulation and monitoring and the crisis of legitimacy in professional management.

The self-management, employee empowerment, flattening of the hierarchy, integration and despecialization, and intracompany markets are all eroding the exclusive professionalism of managers.

Managers themselves were unable to uphold the professional ideal and succumbed too easily to the gospel of profit maximization, a temptation which is successfully (and necessarily) resisted, degraded or even punished by all other professions.

Customer and quality orientation are now leading management out of this predicament.