In This Issue

Van Olffen and Romme's 'Role of Hierarchy'

In the era of the accelerated collapse of vertical hierarchies of command and the rapid emergence of the Horizontal Corporation, at the times of enhanced self-management and self-organization of network teams, Van Olffen and Romme have set out to explore the relationship between self-organization and hierarchy.

The authors are quite aware of the inefficiency of command hierarchies in the modern business management: they are seeking answers to the question whether there is *any* role left for the hierarchies in the future.

Main concept is the idea of dissipative self-organization, as a string of interconnected but unstable and continually transformed equilibria: 'Order through fluctuations' of early Prigogine and Jantsch. The authors call it *autonomous self-organization.*

The concept of hierarchy is redefined as an organizational mechanism contributing to the intertemporal stability of the system as a whole. This is of course the same role as the traditional hierarchy wielded over the centuries.

The difference lies not in verticality, but in positions contents: instead of authority and status, it is the accountability which now differentiates economic agents (some are more accountable than the others). Traditional power, authority and status are now derived not from the fixed position, but from dynamic knowledge, responsibility and accountability.

The authors, inevitably, conclude that administrative hierarchy, with sufficient layering of accountability, provides an efficient way to structure human organizations, especially the large ones. The breakdown of large organizations into small autonomous units of plants within plants and corporations within corporations has not been explored.

The authors argue that 'at least some layers of hierarchy remain intact' and that horizontal corporations are relatively rare. This is of course true and it remains to be seen if this is the final conservative 'equilibrium' or if the fluctuations of global competition are propelling business organizations towards intracompany free markets, a most powerful organizational and variety-matching principle known to man.

Administrative hierarchies are only alternative mechanisms for coping with environmental variety. Are modern corporations going to combine free markets with administrative hierarchies? Can this be done successfully? Is the 'Third way' in your corporate future?

Hofstede's 'Multilevel Research'

Geert Hofstede is a leading proponent of the so-called *multilevel research*, a research that analyzes the same data at more than one level (individual, organization, country). In this paper he argues against the overspecialization and parochialism towards only one level of societal, social or sociological research.

Multilevel research must cross interdisciplinary boundaries and it is therefore still very rare – the unsettling inheritance from the era of specialization, division of labor and strict disciplinarity in some of the sciences. Hofstede concentrates on the social sciences.

The metaphor used is that of the gardener who has to pay his full attention to flowers, bouquets and gardens. Otherwise he would be much less of a gardener and much more of a somebody 'in the garden'.

On the example of IBM projects, Hofstede shows that the jump from the individual to the country level yielded unexpected and even revolutionary insights. The view from the garden level provided new understanding of the conditions under which the flowers flourished.

This is the age-old question of the components-

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systems relationship. Holism (according to Smuts) proposes that the components and their relationships are affected and influenced by the whole they comprise. That is, not that the components only determine and give rise to the whole, but also that the whole itself determines and 'shapes' the components. This circular nature of holism demands multilevel investigation of science; in fact it defines science as multilevel investigation. A unileveled, specialized assay can hardly amount to a science, except by political consensus.

Hofstede resonates Smuts's circular holism through his cases: from individuals to countries and from organizations to individuals. The division of labor, although quite suited for pin-factory manufacturing or financial speculation, is much more difficult to justify in social sciences. The study of gardens is not just an extension of the study of bouquets or flowers. In fact, it is difficult to study flowers outside their habitats, fields or gardens. The social reality involves all levels simultaneously. All social sciences study parts and aspects of the same undisciplinary world, and artificially induced disciplinary parochialism defeats the purpose of the scientific effort itself.

That Nature is undisciplinary is a well known and well appreciated fact. That humans cannot do without carving it into arbitrary disciplines is another fact. The two shall not be reconciled – a great loss to us all.

Lin, Vassar and Martin's 'Service Factory'

Small manufacturers (less than 250 employees) comprise approximately 96% of all manufacturing in the US. The era of large hierarchical manufacturing corporations seems to have ended. The remaining dinosaurs are breaking down into autonomous entrepreneurial units, forming networks and networks of networks.

The authors argue that the adoption of a *service factory* orientation (Chase and Erickson in 1988) will give the small manufacturers the competitive advantage they are seeking.

The service factory orientation is encouraged on the basis of expanded service sector (70% of the US labor force, not of the national income as authors insist), command and control structures have collapsed (although they remained in many service organizations), the service industry can serve as a role model for manufacturing (although services are still mostly organized as traditional manufacturing companies of the mass-production era), and service has become a major strategic weapon for manufacturers (which is true and crucial).

Although some small manufacturers still pursue specialization, like the large 'dinosaurs', most have discovered the economies of scope and integration, process reengineering, mass customization and product/process flexibility.

The authors believe that the service factory concept is promising both in terms of future research potential and as an aid to management endeavoring to gain competitive advantage for the small manufacturer. This belief is often repeated and studied in the literature, although the small manufacturing *practice* is embracing service only as a complement to their integrated manufacturing, not as an extension or even adoption of the vast service-sector administrative hierarchies and specialized, mass-production processes of the past.

Modern services have thus become virtually indistinguishable from modern products: the right mix of products and services is a new and fully customized 'product package' delivered by both service and manufacturing companies. The old distinction between production and service has disappeared even from modern textbooks. Manufacturers have thus become service-oriented, service providers significantly product-oriented.

Traditional distinctions between producers and consumers, between products and services and between products and processes are rapidly disappearing. The authors are well aware of the process.

Turban and Wang's 'Telecommuting'

Telecommuting is one of the most potent results of the combined computer and information processing revolution. In its ultimate impacts, telecommuting changes the nature of the corporation, reengineers it towards horizontal structures, changes the individual and social life as well as the

very nature of production and consumption. Turban and Wang attempt to review the experiences of telecommuting so far.

Clearly, telecommuting has already gone through a number of stages and the very label reflects the old factory and office paradigm. Ultimately, telecommuting will merge into what can be characterized as teleworking, work at home and essential self-employment and selfservice. As such, telecommuting is the harbinger of a permanent and radical change in the way work is accomplished in a society.

The dynamics of social research follows a familiar pattern: a new technology emerges and starts affecting and changing the ways things are being done. For example, automated teller machines (ATM), optical scanners, personal computers, etc. A significant group of writers is skeptical of the advance and argues against the technology. A substantial arguments between the proponents of the new and the defenders of the old ensues. Thousand of papers are being written, arguing the pros and cons. Research is being done.

Ultimately, the new technology becomes a part of every day life of every citizen or employee, there is very little to argue about, the defenders of the old shift their attention to a new technology and the cycle is repeated. In the meantime, the caravan goes on, marching to its own, different drummers and seeking its own goals and purposes. The arguments of researchers hardly affect it.

What is interesting about telecommuting is the need to justify it, to defend it, to list its pros and cons. Within a short decade, telecommuting will become a part of our every day lives and all these arguments and 'struggles' will be forgotten, as are the fights over bar codes, optical scanners, ATMs and self-serve gas stations, not to mention the work-at-home and self-employment.

Self-service supermarkets were maligned because the shoppers 'will miss the friendly chats with the shopkeepers'. They do not. Telecommuting and work at home is maligned, because the employees 'will miss the social environment in the factory or at the office'. Some social environment! Let us think how to use this remarkable innovation wisely and effectively.

Warner's 'Human Resources in PR China'

PR China is facing increasing problems with managing its human resources. There is still a strong 'iron rice-bowl' policy, extremely hierarchical attitudes and habits, Soviet-derived rules and bureaucracies, over-reliance on labor rather than on knowledge and technology, etc.

Free markets function only in very limited consumer goods areas and the major outcome of the reform is that the government (state, regional, provincial, local) has become a major 'capitalist': investor, entrepreneur and speculator. This is potentially very discouraging as the government 'invests' the taxes of its subjects, rather than its own earnings.

Professor Warner pays special attention to the so-called 'labor-force markets', via investigating ten pre-selected enterprises. He notes the extension of labor contracts to the whole workforce in most of the enterprises. This represents a move away from the institutionalized Marxian world of rights and social rights, with life-time employment and the right to work. Markets and contractual arrangements, as well as the notion of competition, are starting to penetrate into PR China.

But PR China has over 760 million of productive population. Fully fledged labor-markets will take a very long time to evolve. Entrenched personnel practices, hierarchical bureaucracies and Marxian guarantees have been firmly imprinted on PR Chinese minds and habits. Politics still dominates the economics, as it must in a system where government itself has become a capitalist.

Communist officials and government bureaucrats are quickly capitalizing on the access they have to state assets and plunder the public coffers. Amid the commercial boom and the purported triumph of reform in China, the process is starting to dominate Chinese economy. New huge monuments, this time to business and speculation, are being erected.

Economics can be 'in command' and the economic growth may be impressive, but the urban discontent is smoldering just under the surface. The assorted governments are no entrepreneurs. Professor Warner also concludes that the future of PR China looks less rosy than the optimists among China-watchers have led us to believe.

The future of PR China, in fact, does not look too rosy, beyond cashing on the cheap-labor dividend expressed in an increased acquisition of temporary consumer goods. In the world of global competition, the cheap labor is ceasing to be a competitive advantage and the hierarchy of command has become a clear hindrance. Government is neither a match nor an alternative to a private enterprise.

Kim's 'R&D Policy of Korea'

Korea has undoubtedly one of the most dynamic economies in Pacific-Rim Asia. In the era of global competition, however, Korea can no longer rely on technology and R&D imports. It has to evolve its own R&D institutions, reformulate its technology policy and reengineer its corporations. In Korea, the government has deliberately and directly undertaken a very active, top-down policy towards creating a climate conducive to enhancing science and technology.

Professor Kim discusses this reformulation of Korea's R&D policy as a necessary consequence of the successful but now mostly exhausted industrialization path with imported technology.

Although technology is one of the most important (after knowledge and skills) determinants of productivity and economic growth, technology import cannot substitute for the internal knowledge creation, technology support net development and building up competitive (not only comparative) advantages in the long run. Korea's technology imports are 100 times as large as are technology exports.

While in the advanced countries, increasingly, small manufacturers and small businesses are starting to dominate, Korea is burdened with huge manufacturing conglomerates (Cheabols) which are supposed to respond flexibly to changing customer demands and accelerating competitive pressures. Cheabols are now in the dire need for corporate reengineering, decentralization and delayering. Can the governmental top-down approach support small and flexible firms or is it doomed to perpetuating Cheabols?

Clearly, it is the technology exporters, not importers, who are continually building the most reliable brainware and support nets for their technologies. In that sense, the US and Japan remain dominant forces in microelectronics, computers and telecommunications: they have the best technology platform for the next century. So far, there are no 'challengers'.

Korea's Cheabols are unable to respond quickly to the incessant changes in scale and scope of the advanced markets. Korea must mobilize the human capital, financial and other resources for domestic R&D to maintain a continued industrial growth path, complemented by imported technology. Korea has to promote its own technological innovation with R&D efforts that are essential in meeting the constraints imposed by the rapidly changing global economy.

Only then can Korea aspire to join the advanced economies and societies on a more permanent basis.