

## In this issue

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### Wang's "IT and organizations"

Information Technology (IT) has significant, high-technology impacts not only on organizing the teams and individual work, but on organizations themselves. As any other high technology, information technology allows and requires to *do things differently* and to *do different things*. IT changes the technology support net in the organization – and the organization itself.

IT therefore enables and accelerates ongoing organizational transformation from vertical hierarchies down to horizontal networks of distributed, autonomous teams. The flattening of hierarchies is a long-term process which started with the reintegration of labor, task and knowledge some decades ago. Only in the later, more obvious stages of the spontaneous decline, hierarchies are also being "dismantled" purposefully, with the generous assistance of IT.

Information Technology is itself being replaced and supplemented by the newly emerging Knowledge Technology, moving from symbolic description of action (information) to action itself and its coordination (knowledge). Information age is rapidly shifting into Knowledge era as knowledge is establishing itself as a major form of capital. These rather vast shifts cannot leave organizational forms unaffected.

Professor Wang has provided a review of the literature on the IT and organizations linkages. It is clear that IT enables, catalyzes and triggers especially business process reengineering efforts, but in itself IT does not have the power to eliminate hierarchy. IT can be used to strengthen the hierarchy or to dismantle it, both. The impetus and stimulation for organizational change comes from globally competitive pressures on serving the customer in original and innovative ways. Information flows can strengthen bad decisions and choices and it can support the good ones.

It is a myth that IT stimulates information flows and eliminates hierarchy, concludes Wang. Information and information technology are widely shared, globally accessible, easily transferable and copied. They do not represent reliable competitive advantage. Only knowledge, only a superior ability to coordinate action of many, can become a true competitive advantage.

Wang presents a three-stage model of the "migration" of organizations in response to IT challenge.

This model consists of "knowledge link", business process reengineering (BPR) and "transaction link" sequence, as experienced by "migrating" organizations. BPR and IT benefits are interlinked: the latter does not happen without the former.

### Khan, Tung and Turban's "Telecommuting"

Telecommuting has become a significant part of rapidly accelerating work-mode trends, including teleworking, self-service, work-at-home and autonomization.

People like telecommuting, they dream about it, hope for it and in many states, from California to New Jersey, even organize for it (Southern California Telecommuting Partnership), in conjunction with their home offices and work-at-home entrepreneurship. Only in Southern California, more than 126,000 people telecommute every day. Telecommuting is an elegant solution to the vexing problems of traffic congestion, pollution and alarming waste of time due to traditional commuting to work. Even some governments are able to support these beneficial trends as part of a broad movement towards self-reliance and self-service.

For some corporations, the benefits of telecommuting are also clear: larger productivity and creativity of employees, less alienation, more autonomy and increased maturity and responsibility – some corporations even thrive on enhancing such characteristics of the workforce. No wonder that advanced economies, like USA, Japan, Hong Kong, Singapore, Canada and Australia are the pioneers of telecommuting, already reaping competitive benefits, while Europe is not even considering the issue. Perhaps Finland, with its unexpected emphasis on individual information technology and telecommunications is going to break ahead, even though work-at-home and telecommuting are still rather alien to Scandinavian cultures.

The authors consider telecommuting a major business process reengineering mode, which may change the structure, climate, and operations of organizations. Here they have set to explore the differences in telecommuting attitudes between Singapore and the US. This is interesting because both countries are

clearly on the forefront of telecommuting efforts, even though they are more governmentally driven in Singapore and more spontaneously market-driven in the US.

It is all a matter of trust. High-trust societies (USA, Japan) will have no problem with and will actually thrive on telecommuting, while the low-trust cultures (Europe, Africa, China) will resist these advances and miss on these newly emerging competitive advantages. As always, high-trust economies will continue to thrive, while low-trust economies will continue to stagnate or sputter. Self-reliance and employee responsibility and initiative cannot become productive without relying on human trust as a productive force of the 21st century.

### **Mackenzie's "Distribution of work"**

In the second part to Mackenzie's *Organizational Work*, a new measure (added to some 250 of them in existence) of organizational work, the M-curve distribution, is introduced. It shows the classification of work tasks in terms of their class: 1. planning, 2. directing, controlling, coordinating, and 3. execution. It is therefore a normalized three-dimensional vector. It also allows to classify the tasks in terms of their level of aggregation.

This is a simplest possible measure of three estimated proportions of the types of work in an organization. It is obvious that the resulting M-curve "shapes" will vary quite extensively, but there will be some vague underlying order to the typical variations. This kind of classificational distribution allows to describe organizational work in terms of appropriate M-curves and their distributions at different levels of aggregation. There are even M-curves for individual positions, the IM-curves. Mackenzie then calculates the differences between a pair of M-curve distributions and even entire distribution of M-curves across different levels of task process aggregation.

This kind of extensive mapping and classification is supposed to allow meaningful direct comparisons between different organizations, across the contents and contexts, for example, the work of banking with the work of quality assurance.

Mackenzie explores some of the underlying regularities in "shapes" of M-curves in different areas of organizational work.

The IM-curves are used for exploring the work structure at different positions of seniority: VPs, directors, managers, clerks, etc. This type of analysis

provides useful information needed to diagnose and solve performance problems associated with position shifts and transitions.

### **Mackenzie's "Empirical measures of work"**

In the third part to Mackenzie's *Organizational Work*, empirical results based on the theory of organizational work are presented. The data from seventeen organizations are described, eight hypotheses presented and examined using the data.

The hypotheses presented are related to the shapes of M-curves measures, three-dimensional vectors of relative proportions of types of organizational work. The "shapes" of these curves, like downward-sloping, upward-sloping or the hump-shaped, are obviously dependent on the chosen order of vector components and these must be carefully monitored for any replication.

Main conclusion appears to be that the distribution of organizational work tends to be stable over time, at least in stable, non-reengineered organizations.

Systematically collecting task and work structural information cannot be an easy task, especially since there are no previously published data suitable for this purpose. Gaining access to any organization for such obviously "unsexy" and uninteresting purposes must clearly overcome a lot of executive obstacles, disinterest and loathing. Achieving even basic initial understanding of the nature of work performed by individuals or units is a time-consuming process. Even Mackenzie and his MAC, Inc. have been doing this kind of systematic investigation since 1986 while performing organizational design projects for client firms. The data represent only ten different corporate entities and even that is a result of an enormous and daunting task.

What seem to be the main conclusions of this enormous effort?

Managers do more than making decisions and processing information: they also work and manage organizational work. Mackenzie is one of the first to show that organizational work can be described, measured, and analyzed. He interprets TQM, ISO 9000, BPR, etc., as a beginning of a search for methods of improving the management of organizational work.

We might agree with that. After Taylorism, which concentrated on the work and labor performed by workers, the work performed by managers has become the major competitive tool in the era of knowledge capital and global competition.