In this issue

Jordan's 'Strategic reengineering'

Business Process Reengineering (BPR) is often done in a particular functional department or division, or as a demonstration project in a plant section, but rarely through the whole company. This defeats the very notion that BPR has to be focused on key processes and not functional departments. Even more importantly, for the sake of competitiveness, the entire organization should be flat, team and process oriented, not functional/departmental as the traditional hierarchy of command.

That is the main reason why BPR has to be initiated, carried out and sustained from the top down. Vertical corporation can only reengineer itself by transforming its own hierarchy: very little can ever happen in a hierarchy of command from the bottom up. So, the top–down approach is imperative.

Bottom-up approach is possible only in a flatter, democratic and employee-empowered organization, i.e., it could become effective in the later stages of reengineering.

Prof. Jordan cautions that top management might not be up to the task. Top management might not be able to perform this top-level, strategic task of reengineering due to lack of insight, understanding and leadership: they are good at maintaining status quo, preserving the very hierarchy that keeps them 'on top'. Or, if they do initiate the process, they remain unable to reinvent the lower-level processes that would guarantee sustained implementation, increasingly from bottom-up. Yet, top management people cannot implement and sustain BPR from the top.

Top executives are the only and most suitable agents to initiate and support BPR, yet they are unable to implement it companywide.

Another problem of top management is that they are easily taken by the 'how' of BPR and are prone to ask the 'how' questions, although they operate (or should operate) in the 'why' domain. Top management is for asking *why*, middle management for determining *what* and operational levels are the only appropriate levels to be concerned with *how*.

Prof. Jordan insists that unless a top-level model exists, one cannot assist the contribution to the whole of lower-level processes. Unless that top-level model is homomorphic, i.e., retains the operational characteristics present in the lower-level, in more detailed systems, one cannot make that assessment. For BPR, however, one establishes the desired operational characteristics in the top-level model and requires that the lower-level processes affect them. Such approach will not do.

A downward-reflected homomorphic model can serve as a mechanism for reducing the number of interfaces that must be enumerated, which should be retained and which are critical. Its serves to communicate the higher-level management strategy to each subordinate organizational level.

BPR has become a necessity for all competitively aspiring organizations. It is therefore desirable to start developing company-wide models and approaches in order to assure not only the success of BPR, but to avoid the waste so typical for half-hearted, half-baked efforts based on fashionable and short-lived cherry-picking of scattered ideas from too distant blueberry hills.

Bär and Fialho's 'Taylorism and TQM in Brazil'

Two Brazilian engineers lament the problems and disappointments about implementing TQM in Brazil. Although TQM and especially reengineering (BPR, process emphasis and reintegration of task, labor and knowledge) are being adopted all around the world with excellent results and sometimes incredible gains in productivity and competitiveness, the results in Brazil have been less than impressive.

The authors find the causes in 'cultural aspects inherent in each region', forgetting that both TQM and reengineering are culture and value-free, being successfully implemented in Germany, Italy, USA, Japan and even Eastern Europe.

If in Brazil the word 'work' is identified with torturing somebody with a kind of stick with three ladder pieces in the point, that in itself is not the cause of failure of TQM or BPR, but rather a reflection of culture which is deeply rooted in labor rather than knowledge, in hireling work rather than entrepreneurial initiative and thus in a crude form of Taylorism rather than in quality, performance and autonomy.

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It is clear that Taylorism is and will remain suitable for (hired) labor-oriented economies and societies of low trust and cooperation. TQM and BPR will become successful in (autonomous) knowledge-oriented economies and societies of high trust and cooperation. Hence the success in Japan and USA and the failure in Brazil.

The authors seem to be aware of this, because they keep referring to "TQC, as applied in Brazil" and compare it, correctly, to neo-Taylorism. The very fact of referring to TQC (i.e., control) and not to the worldwide TQM (i.e., management) is indicative not only of the knowledge gap and isolation, but in itself is the proof of authors' assertions.

Of course, there is hope for Brazil and all other low-trust, low cooperation countries. It involves build-up of social infrastructure, social cohesion and human capital. That in itself must come from other sources than TQM and BPR.

TQM and BPR are not techniques that could be applied under any normal circumstances, like brushing one's teeth. TQM and BPR are philosophies of management, ways of thinking and modes of interacting and belonging. In themselves they require a change in culture, sometimes radical, as the ones that have actually occurred in Japan and USA.

Taylorism/Fordism will increasingly fail in the space of global competition, culture no culture. Some countries will find courage and ability to abandon the curse of the division of labor, other will not.

Katsioloudes 'Socio-technical analysis'

The very label 'socio-technical' involves both the social and technical aspects of an enterprise.

While in the past managers and consultants concentrated on the 'social', because they considered the 'technical' to be given an fixed *a priori* (by engineers and the imperatives of technology), in the era of business process reengineering (BPR) it is precisely the 'technical' which is finally understood as not given at all, but actually subject to such a radical restructuring that the 'social' is more fundamentally affected than through traditional direct intervention.

This is why the STS (socio-technical systems) analysis remained so limited in its success, quite out of proportion to its promise. Its focus on social subsystem was doomed from its very beginning, because this 'social subsystem' is intimately related to the technical subsystem of technologies, processes and operations, and cannot be separated from it.

For modern management, *nothing is given* or fixed, all is subjected to improvement and optimization, especially the infamous right-hand sides of linear programming, harking at us from the dark times of Stalinistic planning. Corporate processes, technological procedures, resources, assets, capacities – all are changing.

How poignant are today the well-meant STS characterizations of Emery and Trist of organizational environments as 'turbulent fields' in which uncertainty reigns. Only the technical system stands there, like a rock: given, objective, comfortable, there...

Prof. Katsioloudes has recognized that this cannot be so. Reengineering and other efforts are changing the very architecture of corporate processes and the technical system itself has become a strategic weapon. Tools, technologies and processes are as changeable, or even more so, as are attitudes, motivations and values.

Technical *systems* are not machines and widget-makers – they can be part of any technical system – but the processes connecting these components into meaningful and purposeful business endeavors.

The technical system represents the internalization of values of external constituents (owners, board members, etc.), the social system represents the values of internal constituents (managers and workers). There is a conflict of social system values at the boundary between external and internal constituents. This boundary conflict can be negotiated and simply displaced to an internal 'boundary' conflict of managers and employees.

Coman's 'Group conflict'

Group decision-making processes are coming to a forefront with the emergence of flat organizations and their autonomous, self-managing and increasingly empowered teams.

Process orientation of BPR (Business Process Reengineering) is the strongest driving force towards teamwork. Because production and service-delivery processes cut through many traditional functions, they require multifunctional cooperation by definition – that is teams.

Traditional hierarchies, by grouping functional specialities into departments, do not require such cooperation and teamwork and their 'teams' are not

multifunctional, except *ad hoc* and temporary task forces, but collections of single-functional individuals – 'work gangs' rather than teams.

The emergence of teams also creates new problems: learning the habits of cooperation, dealing with conflicts, taking the democratic process inside the factory gates, mastering group decision-making processes, etc. These are not easy tasks, especially compared to the 'do as told' of the good old days of intracorporate command economies.

Group decision-making support tools should view group decision-making as a process of production: from configuration and intelligence (information and knowledge) gathering, through design and choice, to action. Such view is necessary, because action is precisely the factor which distinguishes decision making from action-free and commitment-free judgement. Dr Coman reviews the literature on group decision making, voting and Electronic Meeting Systems (EMS). Then he focuses on IPVM, i.e., the Intensity-Polarity Voting Model.

Polarity describes the level of conflict while consensus is its complement. Interestingly, processes characterized by resolving high-polarity conflicts appear to lead to more effective, higher-quality solutions than the products of cohesive, homogeneous and consensus-bent 'work gangs'.

Coman seeks a simple inexpensive measure for intensity of group polarity and/or of group consensus. This is important because such techniques as Delphi or Nominal groups are crude and have been taken seriously only in the pre-team era of loose groupings in command structures.

The IPVM model aggregates individual-member stances into a group stance. Each individual takes a *position* on a given issue and assesses the *intensity*, the weight associated with his position in the group context. Members do vary in intensity due to differences in competence, power or commitment to the specific issue.

Conventional formal voting mechanisms do not deal with the intensity dimension although people intuitively understand and can effectively communicate intensity. Both experts and laymen, affected or non-affected, committed or non-committed receive equal weight in the voting process. Giving a voter not one vote, but a fixed number of votes which can be then distributed and 'spent' in order to reflect individual intensities of commitment, would be an obvious solution.

The IPVM approach of Coman is providing good metrics and thus forms a base for empirical testing and further support development. The model can measure polarity among pairs and thus can be instrumental in forming effective, non-adversary groups. It could also indicate redundant pairings or suggest creative, more effective pairings.