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Management of Technology - A Political Process Approach

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The contribution argues for a reconceptualizing of Management of Technology in a more balanced social and technological direction. This is initially underpinned through a critical reading of mainstream management of technology (MOT) writings. It is argued that MOT fail to address central dynamics of the MOT-practitioners by largely leaving out the social side of MOT, especially the political processes. The basic concept of political processes is then presented. Finally a case study of the role of formal MOT-tools and the political processes is presented.

The reading of mainstream Management of Technology argues that the following are main characteristics: The literature recreates management positions and functions, it implies that better tools and more knowledge solve most problems of the enterprises. Moreover it consent to international convergence, MOT is to exerted in the same way anywhere on the globe. Technology is understood as given and so are its (positive) impacts. The enterprise is viewed as a harmonious and coherent system. In contrast to these characteristics the political process approach is introduced as a possible path to follow in order to inform MOT in a social direction. Political processes, is it argued, can be understood as a combination of a political program and a coalition building process. These two elements dynamically intertwine. Thus, when enrolling actors into the coalitions, it is likely that the political program change. Political programs emerges from intentions of the actors in the setting. The arena for the political process is likely to be different from the isolated organization. Furthermore the structured inequalities between actors, the societal embeddedness and the limited scope for voluntary decision making and agency within a specific extended organizational context are important features of a political process MOT-concept. Although the role of technology is slightly out of focus in this paper, it should be noted, that the full concept of MOT as social and technical includes a technology dimension. A recent study within sociology of technology is used to repair a major shortcoming of the "pure" political process approach: the deterministic view of technology. The conception of technology is that it contributes to a socio-technical ensemble, a seamless web, where technology has an explicit role in the political process (Koch 1998).

The case study is an ex ante process follow study made on the developing relations between a Danish manufacturing enterprise and a software supplier Ban-gemann and other suppliers. a palette of methods were used, thus making the case an ethnographically informed phenomological field work.

The discussion of the cases deals with the political program, developing the coalition, frozen-active politics, structures shaped by processes and shaping processes and finally the use of formal MOT tools. The use of formal tools are restricted, and the emergence of the process is demonstrated. Moreover political maneuvering by the technology management coalition (TMC) is described.

When Developing the Coalition the initial TMC exercises inclusion and exclusion of other enterprise actors. Examples given includes the owner corporation ,shopfloor workers and sales department representatives. Furthermore the technology management coalitions have asymmetrical internal relations. The enhanced control of the assembly shopfloor was kept a frozen issue related to the shopfloor workers. Actually the TMC search process for solutions were profound in a long period with no enrollment of representatives from the floor. The use of formal MOT-tools includes strategic planning, project management, market search and economic calculations. None of them play any important role in the change process. Technology managers thus needs -at least- to combine skills related to social issues such as coalition building and co-operation and skills related to features and capabilities of new technology.