

DYNAMICS OF PUNCTUATED ORGANIZATIONAL CHANGE

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Punctuated problem solving and organization transformation have been widely observed in different organizations. We have developed a system dynamics model that endogenously and based on interaction between psychological factors creates such punctuated behavior. The model is driven by a constant rate of problem occurrence that is exogenous and could happen due to internal or environmental changes. As problems occur, they accumulate. Accumulated problems decrease productivity. As managers sense low productivity relative to their expectation, concerns and doubts about current technology and routines develop. Doubts increase forces for change. However, inertia and pressure from production create forces against change that prevent organizations to act for finding and solving the problems that create low productivity. Inertia is built up as organizations practice their current routines and technology. Punctuated problem solving and organizational change start when a large number of problems accumulate and forces for change become stronger than forces against change. When problem solving starts, it activates some reinforcing loops that strengthen problem finding and problem solving processes and deplete inertia and destroy forces against change. As a result problems solving accelerates and accumulated problems are solved through intensive efforts. When accumulated problems are solved, productivity rises and forces for change decline. Practice of new routines and technology build up new inertia and problems start to accumulate again and a new cycle for decline of productivity and subsequent punctuated problem solving begins. Through model simulation, different managerial policies to smooth out problem solving activities are discussed.