

## **Reorganization and divestiture: using system dynamics to navigate perilous waters.**

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Large-scale re-organizations are poorly understood yet widely executed. Reorganization and divestiture are often among the least well-prepared actions that organizations take. Executive hesitate to start widespread discussion and analysis for fear of impacting current performance. Many of the issues are both intangible and involve indirect consequences. Given these challenges, it should not be surprising that reorganizations (and mergers) seldom produce the expected performance improvements. The challenges in understanding reorganizations correspond to strengths of system dynamics modeling. In fact, the London Underground subway system is in the process of being split apart and partially privatized, and has used system dynamics modeling for guidance.

It is not noteworthy that unexpected and useful results came out of the modeling. There are several noteworthy aspects to the case, however:

- Even though the eventual aim of the work was a realistically complex simulation model, there was extensive use of causal loop diagramming and group learning, to the point of deriving policy recommendations from that qualitative model.
- In contrast to the more academic forms of organizational modeling (small- to medium-sized models based on abstract organizational properties such as core competencies), the basis for the analysis was a realistically complex model of London Underground's operations, assets, people, and markets. Changes to that model can reflect impacts of organizational structure on ongoing operations, and therefore on future performance.
- Assessing impacts of reorganization also creates a more thorough understanding of what reorganization implies for individual operating units. That understanding was sufficiently interesting to Management that they asked for a model-based training tool for middle managers, to understand how their roles would change under the impending reorganization.
- Even though the initial modeling effort focused on specific organizational questions, the model and its conceptual viewpoints have been embraced at the Board level for more general strategic questions, and model use will likely extend outside the organization to other key stakeholders.