Towards a unified model of organization design: Applying the principle of decomposability to design organization knowledge and structures

Pierre Barbaroux

Research Center of the French Air Force
Defense and Knowledge Management Laboratory

pierre.barbaroux@inet.air.defense.gouv.fr

ABSTRACT. The purpose of this article is to elaborate upon the concept of decomposability to provide an organization design model which connects the ‘structural’ with the ‘cognitive’ views. First, we present how to link the properties of a system’s architecture and interfaces with the two categories of (component and architectural) knowledge. We then exemplify how to use our framework by studying the design properties of three types of organizational forms: the integrated organization (bureaucracy), the decentralized organization and the modular organization. A case study illustrates how the principle of decomposability is brought into play by the U.S. military and its Allies (NATO) to grapple with the transformation of the traditional functionally integrated military organizational form. We conclude this article by discussing the implications of our framework and findings for organization design and future research.