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# The softening bureaucracy: Accommodating new research opportunities in the entrepreneurial university

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## KEYWORDS

Entrepreneurial university;  
Soft bureaucracy;  
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**Summary** In the growing literature on the entrepreneurial university, the divergent attitudes between industry and academy are often put forth as a major obstacle to more fruitful collaborations. This paper presents a study of a major Scandinavian technical university (referred to with the pseudonym UniTech), suggesting that the organization of such collaborations is perhaps a more substantial challenge for the entrepreneurial university. Drawing on a body of literature that addresses bureaucratic and post-bureaucratic organization forms, it is suggested that the entrepreneurial university could emerge as a *soft bureaucracy*, that is, a hybrid organization form comprising both bureaucratic and post-bureaucratic elements. While the soft bureaucracy organization form offers distinct opportunities, it also demands the sacrificing of some bureaucratic features such as full transparency and the predictability of operations. As a consequence, the entrepreneurial university needs to institute a number of mechanisms and procedures that structure and guide its day-to-day work, and nourish an attitude whereby a certain degree of ambiguity can be tolerated.

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## Introduction

In what has been called, since the early 1970s, the post-industrial society (Bell, 1973; Touraine, 1971), characterized by an increased emphasis on systematic and scientific knowledge as a principal production factor, the role of the university is becoming a source of substantial debate and discussion. Rather than solely being a provider of teaching and research, that is, research within formal or theoretical

domains of interest, the university is being portrayed as a repository of know-how which should preferably be tapped more effectively. For some commentators, the university needs to be capable of bridging the gap between theoretical and practical interests (Starkey & Madan, 2001, Special Issue, S3–S26), preferably under what Gibbons et al. (1994) refer to as “Mode 2 research” (Harvey, Pettigrew, & Ferlie, 2002; MacLean, MacIntosh, & Grant, 2002), while others are reconceptualizing the entire university as an entrepreneurial hotbed where new and productive relationships between researchers and industry may be forged (Bartunek, 2007; Bercovitz & Feldman, 2008; Croissant & Smith-Doerr, 2008; Etzkowitz, 1998, 2003; Hessels & van Lente, 2008; Lam, 2007;

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Louis, Blumenthal, Gluck, & Stoto, 1989; Murray, 2002, 2004; Nerkar & Shane, 2007; Powell & Grodal, 2005; Vestergaard, 2007; Zucker, Darby, & Armstrong, 2002). In either perspective, the university is no longer solely thought of in terms of a site dedicated to basic and formal research activities and instead becomes a node in a complex network of relations across organizational and institutional boundaries (Augier & Teece, 2007; Powell & Grodal, 2005). Conceived in such terms, the university qua organization can no longer be thought of in terms of a strictly hierarchical organization conforming to the bureaucratic ideal-type, first formalized by Weber (1948). Instead, the university is gradually adopting mechanisms and organization forms capable of accommodating new industry–university initiatives.

Drawing on the bureaucracy studies literature (Courpasson, 2000; Jermier, Slocum, Fry, & Gaines, 1992), the conventional university structure, modelled on the bureaucratic organization form, is gradually becoming *softer*, that is, organized less strictly in accordance with bureaucratic principles and incorporating more network-like mechanisms and forms. Using the term *soft bureaucracies*, the university structure is enacting a hybrid organization form that includes the conventional functional and hierarchical organization, as well as less strict and compartmentalized elements. While this hybrid form is capable of accommodating new forms of entrepreneurial initiatives, it is also putting pressure on university researchers and executives to develop what has been called *ambidextrous skills*, that is, the skill to think in two complementary ways in terms of both exploration and exploitation (Gibson & Birkinshaw, 2004; Markides, 2007; Tushman & O'Reilly, 1996). Firstly, in terms of mastering conventional research activities aimed at producing formal academic knowledge, primarily published in academic journals and hosted by the bureaucratic university structure. Secondly, university researchers need to be capable of engaging in entrepreneurial extramural activities, aimed at producing new patents, products, services, joint ventures, and firms, within the network organization developed jointly with industry. This ambidextrous capacity is a highly praised skill among what Lam (2007) calls “entrepreneurial professors”. This skill did not, however, form part of the researcher training curriculum until quite recently and thus many university professors, the literature would suggest, are facing substantial challenges when “on their way to the market” (Anderson, 2008). While much of the literature suggests that there are substantial differences in cultures and attitudes between industry and university, this paper aims to show that, while such attitudes may at times serve as an impediment to fruitful collaborations, it is primarily the internal organization of the collaborative domains that concerns these entrepreneurial activities. The principal challenge for the entrepreneurial university, thus, is to create an effective organization capable of operating in-between the regular departments/school structure and the external market.

This paper presents a case study of how a Scandinavian technical university is organizing its research centers (Boardman & Corley, 2008; Boardman & Ponomarev, 2007; Bozeman & Boardman, 2004; Toker & Gray, 2008), joint research initiatives between university and industry, in a soft bureaucratic, hybrid form. Rather than being able to handle all kinds of complementary or contradictory demands placed on these research organizations from the outset, researchers and practitioners are learning to mutually adjust objectives, goals, and

work procedures to be able to accomplish shared goals. The study suggests that universities engaging in entrepreneurial activities need to be able to develop a whole range of new skills and control mechanisms, both within research centers and on university executive teams. Becoming an “entrepreneurial university” is not only a matter of attitude and having the will to bring scientific work to market, but also a matter of managerial skills and organizational structures and procedures. Therefore, the emerging entrepreneurial university is ultimately a matter of creating new organizational structures and forms that are capable of handling and accommodating diverging, or even conflicting, interests and practices. More specifically, such activities are taking place in what will be called the *trading zones* (Galison, 1997, 1999) provided by the softening university bureaucracy. The objective of this paper is thus to show that the regime of the entrepreneurial university is creating new organizational forms within the institutional domain of higher education and research.

This paper is structured thus: Firstly, the concepts of the entrepreneurial university and soft bureaucracy are examined. Secondly, the methodology of the study is accounted for. Thirdly, the empirical study is presented. Finally, some implications are discussed.

## The entrepreneurial university as a softening bureaucracy

### The concept of the entrepreneurial university

The modern university is one of the oldest social institutions, having its roots in the monasteries and early universities founded in the tenth century in cities such as Bologna and Padua (Le Goff, 1985). The early universities primarily addressed theological and philosophical issues and served as a training ground for the European clergy. The universities were also internationally oriented from the outset and were only associated with the emerging national states in due course. Today, universities are important hubs of the international “knowledge economies” (Powell & Snellman, 2004), serving to provide systematic and formal knowledge in a range of disciplines, teaching an increasingly qualified workforce, and collaborating with industry in a variety of joint ventures (Frank & Meyer, 2007). Several researchers emphasize this latter role whereby the university is increasingly regarded not as an isolated or privileged site of knowledge-production but as a part of an advanced knowledge-producing network consisting of a variety of organizations and domains of expertise. For instance, Powell and Grodal (2005: 57) report: “A National Research Council assessment of eleven US-based industries, purposefully diverse in character and technology but all resurgent in the 1990s, observes in every sector an increased reliance on external sources of R&D, notably universities, consortia, and government labs, and greater collaboration with domestic and foreign competitors, as well as customers in the development of new products and processes”. This organization of innovation work in the network form is more prevalent in industries characterized by rapid technological progress, e.g., in the computer semiconductor, pharmaceutical, and biotechnology industries. In order to effectively exploit the intellectual resources of the universities, a new conceptualization of their role and purpose is gradually taking form.

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