

Contents lists available at [ScienceDirect](#)

Journal of Engineering and Technology Management

journal homepage: www.elsevier.com/locate/jengtecman

Academics coping with business logic: A study at Indonesian universities

Firmansyah David^{a,*}, Peter van der Sijde^b, Peter van den Besselaar^b^a Department of Information Technology, Institut Teknologi Padang, Indonesia^b Department of Organization Sciences, VU University Amsterdam, The Netherlands

ARTICLE INFO

Keywords:

Hybrids
Institutional logic
Academics
University
Business
Indonesia
Coping

ABSTRACT

This paper presents coping mechanisms that address competing institutional logics in University-Business Co-operation (UBC). We examined academics at two Indonesian universities and in two science fields, computer science and electrical engineering. Our findings suggest that the level of the integration of business and science logic determines their coping strategies. Academics can act as a hybrid who bridges the two worlds by “compartmentalizing” them. This study infers that inexperienced academics must “learn” in advance about the logic of business before involving themselves in collaboration with business projects.

1. Introduction

Building a partnership with business communities has become a challenging task for universities worldwide (Etzkowitz, 1998; Siegel et al., 2001; Sauermann and Stephan, 2013). Many initiatives have aimed to investigate the inter-organizational issues, specifically with respect to how members of both types of organizations overcome the conflict of two institutional spheres, that is, between science and business practices (Cyert and Goodman, 1997; Elmuti et al., 2005; Jones, 2009; Bjerregaard, 2009; Lind et al., 2013). For instance, continuous learning and restructuring processes on both sides are the essential factors needed to narrow the chasm of cultures and norms between academic researchers and business professionals (Elmuti et al., 2005). Similarly, Bjerregaard (2010) suggests that both academic scientists and industrial researchers should use their (social) skills purposively to bridge these institutional gaps.

Based on these studies, examining the attitudes of academics dealing with these institutional demands is become crucial. This is due to that individual academics have been exposed with new societal pressures such as new public management in the science system, in general, and in the higher education, in particular (Ferlie et al., 2009). Such new policy relates to the attempt to increase the role of science in industries (Hoarau and Kline, 2014) and relates to the significant impact of industry fund that increases the number of academics to work with business (Bozeman and Gaughan, 2007). Moreover, academics will be exposed by two cultures and norms, science and business, as universities worldwide have endeavoured to ‘valorise’ and ‘transfer’ research to industrial applications (e.g., Mitev and Venters, 2009) of which scholars often label this as research commercialization (e.g., Lam, 2011). Academics may find this problematic because these values and practices are contradictory and divergent to each other (Jones, 2009; Bjerregaard, 2009; Evans, 2010; Murray, 2010). To successfully participate in UBC, individual academics should create hybridity in these (two) contradictive logics (Murray, 2010) which imply that they should able to diminish this institutional barrier (Bjerregaard,

* Corresponding author at: Department of Information Technology, Institut Teknologi Padang, Jalan Gajah Mada Kandis Nanggalo, Padang, 25143, Indonesia.

E-mail address: firmansyah@itp.ac.id (F. David).

<https://doi.org/10.1016/j.jengtecman.2018.07.002>

Received 16 February 2018; Accepted 2 July 2018

0923-4748/ © 2018 Elsevier B.V. All rights reserved.

2010). Additionally, the “Mode 2” of research may vary across scientific fields (Whitley, 2000) suggesting academics in different field may react differently for UBC.

UBC is a framework that represents a complex interaction among institutions – between science and business, organizations – between universities and firms, and among individuals – between academics and business professionals. Out of many variations for discussing the interrelationships among these entities, the discourse on the role of individuals in the transformation of organizations and institutions is among those variations that have received less attention from institutional scholars (Thornton et al., 2012; Pache and Santos, 2013). For example, Lee and Lounsbury (2015) emphasize the importance of organizational actors in which they can shape the organizational responses toward institutional complexity, both directly and indirectly. These authors suggest that organizational actors may indirectly respond to the first order of logics or field-level of logics e.g. state and market logic. Instead organizational actors may directly respond to the second order of the logics named community logics such as political conservative and pro-environmental.

Accounting for individual actors in our study is important because they may shape or reshape the micro-foundation of institutional logics (Thornton et al., 2012); they play crucial roles in the forming of hybrid organizations (e.g., Pache and Santos, 2013; Murray, 2010); and they contribute significantly to institutional changes and praxis (Friedland and Alford, 1991; Townley, 1997; Seo and Creed, 2002; Battilana, 2006; Binder, 2007; Montgomery and Oliver, 2009; Reay and Hinings, 2009). Several studies of UBC have attempted to explain the role of individual academics in the on-going ‘production’ or ‘reproduction’ of new values and practices. Shane (2004) and Lam (2011), for instances, argue that the commercialization of research results has become the main ‘business logic’ for academics to collaborate with industries and to create spin-offs. Following this direction, Greenwood et al., (2011) argue that academics may recognize ‘business logic’ as “commercial logic” and the authors describe “business logic” as the ‘propriety retention and commercial exploitation of research results’ (p. 318). These studies suggest an interesting insight in which individual academics are varied in their respond to business logic, suggesting some may cope working with business successfully and others may be not (e.g. Sauermann and Stephan, 2013). Nevertheless, few studies have aimed to expose the strategies and response of individual academics towards the contradiction between business and science logics.

Our current study aims to respond to this dearth of research by providing empirical evidence on how macro-actions influence micro-actions (Coleman, 1990), particularly in a case in which individual academics are exposed to business logic, resulting in a competing institutional logic (Pache and Santos, 2013). The long term and the structured UBC programs in Indonesian universities provide us with an empirical site to study and advance this knowledge. Under a framework of the “third mission” of universities and the industrial research collaboration, a growing number of UBC projects have been initiated in recent decades by government agencies (and stakeholders) and universities to stimulate the academics’ engagement. Given this point, Indonesian universities and their academics have been ‘exposed’ to the logic of business for decades, and they simultaneously attempt to ‘develop’ such logic. Thus, this paper seeks to answer the following research questions: How do academics cope with competing institutional logics as being exposed or participated in UBC? And what are the academics’ roles and responses under the complexity of UBC? We structure the remainder of the paper into four sections. The first section is a conceptual framework that describes the concept of the institutional logics and the operationalization of the science and business logics. The second part presents the data collection and method consisting of the selection of research sites and cases. The third part is the results’ section and describes the data collected. The last part constitutes discussion and an implication for future studies.

2. Conceptual framework

Thornton and Ocasio define institutional logics as the ‘socially constructed, historical patterns of cultural symbols and material practices, including assumptions, values, [and] beliefs, by which individuals and organizations provide meaning to their daily activity, organize time and space, and reproduce their lives and experiences’ (Thornton and Ocasio, 1999, p. 804). Departing from this premise, we adopt the Mertonian norms (Merton, 1973) and the Intellectual and Social Organization of Sciences (Whitley, 2000) to operationalize the core elements of the science logic. As the counterpart, we adopt the counter-norms of Merton to operationalize the core elements of business logic (Mitroff, 1974), showing the values and practices of business used in university-industry strategic alliances (e.g., Cyert and Goodman, 1997; Elmuti et al., 2005; Lind et al., 2013).

2.1. Institutional logic of science

Merton (1973) proposes the general elements of how academics ‘practice’ science. He argues that academics produce and reproduce their research and teaching materials under the norms of (i) universalism – all academics can contribute to science, (ii) communalisms – an equal access to scientific goods and collective collaboration, (iii) organized scepticism – critical scrutiny of scientific claims before being accepted, (iv) disinterestedness – academics aim for a common scientific goal, rather than for personal gain. These Mertonian norms have been considered the first systematic approach to sketch out the normative isomorphism of science practiced by academics worldwide (Mulkay, 1980; Collins, 1982). Moreover, Whitley (2000) specified these norms and proposed that, in knowledge production, academics are mutually dependent upon one another and are doing research under uncertainty. The mutual dependence guides academics in recognizing their colleagues or peers which embodied as functional and strategic dependence. The functional dependence relates to a situation in which academics must use methods, procedures, and results corresponding to their peers’ results and procedures. This dependence can be high in fields that have highly standardized procedures, such as several Sciences, Technology, and Engineering fields but also in Economics and Psychology. In other fields, such as several general Social Sciences and Humanities, this dependence can be low because these fields have only a limited number of shared procedures.

Download English Version:

<https://daneshyari.com/en/article/10153923>

Download Persian Version:

<https://daneshyari.com/article/10153923>

[Daneshyari.com](https://daneshyari.com)