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**THE THIRD MISSION AND THE TRANSFORMATION
OF THE BUSINESS SCHOOL IN THE NEW ECONOMY**

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Background--To Be Read by Participants of the Professional Development Workshop

Introduction

Universities and their business schools are critical engines of the knowledge-based economy. Over the past twenty-five years a 'Third Mission' for universities has been articulated in addition to the traditional missions of teaching and research (Laredo, 2007; Loi & DiGuardo, 2015; Rubens, Spigarelli, Cavicchi & Rinaldi, 2017; Zheng, 2011). No longer are universities simply places of teaching and research—they are now increasingly expected, and often required, to engage formally with the local economy, government and more broadly with society. The commercial engagement of universities, in pursuit of the Third Mission, has become a cornerstone of national and regional innovation policies (Etzkowitz & Klofstein, 2005). Shifting policy imperatives towards increasing the scope and magnitude of externally-oriented engagement have served as a catalyst for institutional change that is markedly redefining the role of business schools in the US and elsewhere (Cash, Bhadury, & McCrickard, 2010; Thomas, Lorange, & Sheth, 2013).

The ‘entrepreneurial orientation’ that underscores the Third Mission for universities has deep roots. Clark Kerr’s (1963) reference to the ‘multiversity’ first articulated during the 1960s aptly demonstrates how universities have evolved to meet the changing demands of society, both economically as well as culturally. Kerr regarded these institutional changes as an imperative for universities to vigorously take up an entrepreneurial role and be a driving force for local, regional and national economic and social development (Trequatrinni, Lombardi, Lardo & Cuzzo, 2018). Adopting the Third Mission requires universities to make a sharp entrepreneurial turn, one that embraces the market and neo-liberal perspectives (Woollard, Zhang & Jones, 2007). Closely associated with the Third Mission is the concept of the entrepreneurial university (Fayolle & Redford, 2014). First introduced by Etzkowitz (1983) and expounded upon by Clark (1998), the entrepreneurial university marks the formation of a new ideological contract between universities, the state and with society. The Third Mission of the university underscores a ‘triple helix’ arrangement with ‘strong ties’ and a ‘shifting and fuzzy boundaries’ between the university, the private sector (industry), and government (Etzkowitz, 2004; 2008). Consistent with and extending the concept of the Third Mission, Aronowitz’s (2000) model of the ‘corporate university’ identifies profit as a motivating factor, whereby research that does not yield commercial value is given lower priority to research product that has a commercial market. Slaughter and Leslie’s notion of ‘academic capitalism’ builds upon the Third Mission in that it refers to the “institutional and professional market or market-like efforts [of universities] to secure external funds” through the exploitation (selling) of their knowledge capital (Slaughter & Leslie, 1997, p. 209). These external funds are usually under the categories of research grants, contracts, consultancies, as well as activities that produce commercial patents, startup and spin-off companies, new business incubations, involvement and sponsorship of research parks, and collaborative partnerships with industry and government. In order to succeed in the Third Mission, universities need to partner with industry and government in tightly coupled and deeply reflexive relationships (Kitagawa, 2005).

Slaughter and Rhoades (2004) contend that the emerging relationship between universities, industry and government are not the result of coercion or a ‘takeover’ by outside forces trying to corrupt the traditional academy. Indeed, academic entrepreneurs (faculty and university administrators) more often as not invite the corporate sector inside in such a way that academic constituents aggressively engage in, and sometimes initiate, the capitalization of knowledge, exploiting a variety of state resources to take advantage of opportunities opened up by the new knowledge economy (Mendoza, 2012). The impact of the Third Mission that underscores academic capitalism impacts markedly on the behaviour of the university and its faculty, administrators, and even students. As knowledge capitalization expands,

fault lines across long existing relationships have begun to emerge requiring stakeholder response for adaptation or reconciliation. First, the Third Mission acts to blur the boundaries between the public and private realm, while individual faculty and institutions engaging in academic capitalism receive a substantial level of public support in the advancement of private and commercial interests (Larsen, 2011; Nelson, 2004). Slaughter and Leslie (1997) characterize faculty who operate in this bi-furcated realm as '*state-sponsored entrepreneurs*' requiring a high degree of ambidexterity to be able to function effectively in the dual worlds of the public academy and private markets. Second, the Third Mission and academic capitalism reshapes the public arena in such a way that it gives special prominence to market logic and behavior and public monies for a variety of for-profit (private) activities. This can be deeply problematic, in part because academic institutions are often not successful entrepreneurs. Undesirable outcomes of failed entrepreneurial initiatives affect students and the public who often have to shoulder much of the cost. Third, the values that underlie the traditional academy and those that animate academic capitalism are at odds and require faculty and university administrators to negotiate difficult and shifting boundaries replete with competing interests, incompatible value assertions, and inherent tensions and conflicts (Armbruster, 2008). Finally, as higher education institutions move to intersect the global information network and market in search of increased revenues, their distinctive commitment to the local community declines, ironically undermining any commitment they might have to a Third Mission.

As the Third Mission achieves greater legitimacy, academic capitalism becomes more deeply embedded in the structure, strategy and culture of institutions of higher education. Business schools which have traditionally had missed success at integrating their functions of teaching and research are increasingly adapting themselves to the new logic (Cash, Bhadury, & McCrickard, 2010). Capitalization of knowledge is the essence of academic capitalism (and the Third Mission) and naturally brings business school research closer to the users of knowledge and positions it as an economic player in its own right. Beyond its contribution to the production of a ready supply of graduates to assume positions of leadership within private industry, it is this capitalization of knowledge that is necessary for national prosperity and regional economic and social development.

The full adoption of the Third Mission by universities and their business schools provides significant rewards but also comes with great risks. Managing the tensions that exist between the traditional functions of teaching and research has historically preoccupied a variety of stakeholders both inside and outside the academy (Clauss & Moussa, 2018). The need to produce and disseminate '*research-that-matters*' speaks to a need for business school faculty to shift their traditional research focus to a renewed '*scholarship-for-practice*' in direct support of the Third Mission. While the adoption of the

Third Mission has the potential to dramatically increase the degree of complexity for business school faculty who are now required to successfully negotiate the shifting boundaries between the academic institution, industry, and government, the internal institutional environment in which they function must undergo an extreme makeover. For instance, this usually requires the design and presentation of appropriate rewards and incentives that have the potential to change highly entrenched faculty attitudes and behaviors—ones that have the ability to constrain or undermine the uptake of the Third Mission (Markman, Gianiodis, Phan & Balkin, 2004).

Business School Architecture in Support of the Third Mission

The Third Mission refers to the objective of stimulating and directing the creation, application and exploitation of knowledge developed within universities to the benefit of social, cultural and economic development of society. The Third Mission has been normalized within universities, yet its application in practice is highly uneven. Entrepreneurial engagement is entirely contingent on the capacities of universities to exploit the Third Mission. There are only a handful of studies that have considered the range of factors that influence institutional performance on the Third Mission (Etzkowitz, 2016). With the uptake and formalization of the Third Mission as a product of public policy intended to realize and promote entrepreneurialism in universities, there remains a central question of how universities (and their sub-units) can increase institutional capacity.

Drawing on the work of Burns (2005) on corporate entrepreneurialism, Vorley & Nelles (2009) introduce the concept of entrepreneurial architecture as an analytic tool for conceiving how universities can realize their Third Mission by increasing the intensity of their entrepreneurial activities. Nelles and Vorley (2010a; 2010b) contend that entrepreneurial architecture constitutes a conceptual framework for understanding entrepreneurship in a corporate context. The term can be defined generally as the institutional, communication, coordination, and cultural factors internal to an organization oriented towards innovation. Although the term was introduced in the corporate literature, the framework is highly appropriate for operationalizing the Third Mission within institutions of higher learning, including business schools. In justifying the appropriateness of EA to contribute to the theoretical development of university entrepreneurship and the Third Mission, Nelles and Vorley (2010b) contend that “entrepreneurial architecture assumes a grounded theory approach of inductively developing the theoretical model from a study of third stream activities in 40 universities in the UK, although in developing the architecture it has simultaneously been somewhat deductively established through the ongoing case studies which are now also being conducted across North America and Europe” (p. 288).

Entrepreneurial architecture (EA) consists of five institutional elements: structures, strategies, systems, leadership and culture. Vorley & Nelles (2009) contend that the successful implementation of the Third Mission demands a synthesis of all five factors that, when taken together, inform management practices and support public policy. They suggest that the five elements are mutually supportive, and that the absence of any one aspect contributes to weakness in the expression and implementation of the Third Mission. No one element is more (or less) important than any other. Nevertheless, the prioritization or over-emphasis of one aspect of the EA at the expense of others may create an imbalance that has the potential to undermine the effectiveness of the Third Mission. According to Vorley and Nelles (2009), “a coherent entrepreneurial architecture is imperative if universities are to realize their third-stream goals since the architecture defines the entrepreneurial capacity of the institution” (p. 169).

A review of the research on the entrepreneurial university can be usefully classified under one or more of the five elements of EA (See Rothaermel, Agung & Jiang, 2007 for a review of the academic literature on the entrepreneurial university). Regardless of how business schools influence the uptake of the Third Mission, the EA framework provides a powerful conceptual tool for delineating the factors that predict success and failure. Institutional entrepreneurial capacity that is a prerequisite for the Third Mission is a product of individual and group-level innovation, encouraged through the positive interplay among all of the institutional elements of entrepreneurial architecture. Each of the five elements of entrepreneurial architecture can be elaborated in turn:

EA Structures: Structures refer to the formal functions that are created to facilitate the Third Mission and include the internal offices or departments involved in knowledge exchange from university to industry. Many accounts detailing the entrepreneurial transformation of universities tend to over-emphasize the development of structures as central to developing a Third Mission. EA structures include the university technology transfer office, and a variety of other forms that are important and relevant to business schools such as science/technology parks, business incubators, industrial liaison offices, as well as departments of continuing education and professional development. In relation to the interplay of other EA elements, the effectiveness of EA structures is somewhat conditioned by other internal factors such as leadership and culture. While the Third Mission requires the presence of effective structural elements, Nelles and Vorley (2010b) suggest that these must be “embedded in coordinated systems guided by visionary leaders as agents of a coherent entrepreneurial strategy and within an environment that supports and sustains innovation” (p. 170).

EA Systems: While university structures are essential to knowledge exchange, their effectiveness in terms of the promulgation of the Third Mission is in part determined by their capacity to relate to, and engage with, other structures both inside and outside the entrepreneurial university. Systems are comprised of networks of communication and coordination that depict norms of interaction between the university, industry and government, as well as the relationships between teaching, research, and entrepreneurial activities. Structures such as the university technology transfer office, research parks, university-based research groups, and industrial partners need to operate in a deeply reflexive ways rather than as isolated and administratively separate organizations. Nelles and Vorley (2010b) contend that EA systems need to be decentralized and ‘loosely coupled’ in order to be effective, and that EA structure may be “secondary to the embeddedness and dense networks of those engaged in the Third Mission” (p. 171).

EA Leadership: Structures and systems are crafted and implemented by persons in leadership positions, fitted to the predominant organizational culture, and aligned with institutional goals and objectives. The concept of leadership is extended to encompass those who formulate strategic goals within individual academic units (ie. business schools) which, to use the language of Burton Clark (1998), is often conceptualized as a “strengthened steering core.” The Third Mission requires significant coordination that is dependent on the initiative and agency of talented individuals and strong leaders on boards, departments, and agencies. Effective leaders of Third Mission agendas can be found within academic faculty, with star researchers leading new forms of third-stream engagement. The leadership for EA is a function of the entrepreneurial orientation of institutional leaders with a variety of roles and functions in the business school and university.

EA Strategies: In relation to entrepreneurial architecture, strategy refers to “the blueprint for action, typically outlined in corporate plans and other mission statements, to realize Third Mission success and wider institutional development more broadly” (Nelles & Vorley 2010a; p. 161). Mechanisms such as internally determined incentives for faculty members and departments engaged in third stream activities are part of the entrepreneurial strategy of universities pursuing the Third Mission. Institutional strategies are instrumental in shaping structures and systems that need to be self-reinforcing, while leadership informs the development of Third Mission strategies where outcomes are closely tied to the vision of leaders and their capacity to achieve Third Mission goals and objectives.

EA Culture: The fifth element of EA, and potentially the most abstract and intangible, is institutional culture. According to Nelles and Vorley (2010b), “organizational culture is a critical determinant of third-stream activities [as] it informs institutional design and strategic orientation and

determines collective attitudes towards the Third Mission” (p. 172). A strong entrepreneurial culture, crafted and nurtured over time by institutional leaders, has been shown to be salient in achieving the Third Mission (see Bramwell & Wolfe, 2008). Dominant cultures that are evident within disciplines, in work and research groups, have the potential to propel or counteract strategic and structural attempts to advance the Third Mission. The actions and attitudes of peers have a strong impact on the entrepreneurial intentions and actions of others and can either advance or retard institutional progress on achieving the Third Mission. Evolving attitudes and norms of institutional stakeholders impact entrepreneurial strategies that in turn shape the goals and objectives of university and business school leaders.

Approach to the Professional Development Workshop

While many and varied forms of interaction between the business school and industry forms already exist, this workshop will explore the factors that explain why many business schools have made progress while others have been slow to adopt or implement the Third Mission. While exploring the notion of the Third Mission as it relates to the contemporary business school using Nelles and Vorley’s (2010a; 2010b) entrepreneurial architecture framework, this workshop will explore the institutional, economic, and political forces that prevent business schools and their academic faculty from embracing it. For instance, if business schools are to adopt the Third Mission, how does this impact faculty behavior with respect to their research and with respect to their teaching pedagogy? This workshop will focus on identifying ways that business school faculty attitudes and behavior might be shifted in support of the Third Mission, while examining the many inherent tensions and contradictions that exist that deeply problematize this shift.

We approach the issue of the Third Mission from several perspectives, including that of the researcher, educator, practitioner, and consultant working in the public and private sectors. The invited PDW participants and other participants are experts from universities, from business schools, from industry and government who will interactively explore the potential of business schools to adopt the Third Mission while delineating strategies for strengthening its uptake. This exploration will be accomplished using a modified Action-Oriented Strategy Mapping technique to identify strategic issues and formulate effective strategies (Bryson, Ackerman, Edan, and Finn, p. 469), which is a structured conversational process created to help participants to identify and organize possible issues, options, and assertions with the intention of creating goals, strategies, and actions to move forward. Participants will discuss the results of several previous Academy of Management Professional Development Workshop conducted by the organizers. They will be given the opportunity to reflect on this previous work. Participants will frame and reframe the theory-practice discussion with a *table host* for about 20 minutes.

Participants will work in small teams using MIRO to create an Conceptual Map that frames the possible options, issues, and goals for resolving or dissolving the theory-practice gap. At the end of the allotted time period, each participant will move to a new table, with a new table host, and an Oval Map created by a previous team. Table hosts will provide each new team of participants with a short review of the work accomplished by the prior teams and ask each new team to build on this prior work.

Several results are expected through the use of the modified Action-Oriented Strategy Mapping technique: (1) help to explore assumptions, unresolved issues and *sticking points* related to the gap between theory and practice; (2) foster innovative ideas and suggestions; (3) learn and share people's ideas; (4) provide an interactive platform for participants to engage and share the ideas; (5) build a sense of community, participation and ownership; (6) start a two-way dialogue between scholars and practitioners; (7) create and grow internal networks for continued conversation between scholars and practitioners; and, (8) offer a professional development experience in the use of this modified Action-Oriented Strategy Mapping technique. The product of this exercise will be collected and collated with the intent to publish summary of findings in a peer-reviewed, open-source outlet. Academics and practitioners will help to provide validation of results.

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