

***Sharing Professional Viewpoint:***  
**Entrepreneurial University**

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### **1. Introduction**

Entrepreneurial universities are currently reshaping the conventional university paradigm by fostering interactions to stimulate innovation within a knowledge-driven society. As known, universities globally are mandated to engage in pedagogy, scholarly inquiry, and contribution to regional economic development within the framework of the triple helix model, which encompasses the interactions among the state, academia, and industry, and is particularly advantageous for fostering innovation (Etzkowitz, Andrew, Christian & Branca, 2000). Regardless of whether they are classified as public or private institutions, the triple helix model has consistently demonstrated its effectiveness in driving entrepreneurial success and accomplishments across various higher education institutions (Etzkowitz, Andrew, Christian & Branca, 2000).

From this viewpoint, such institutions actively promote the commercialization and utilization of knowledge through entrepreneurial initiatives. These entities are often referred to as entrepreneurial universities (Premus, Nada & Ravi, 2003), which emphasizes such aspects as leadership, governance structures, organizational capabilities, human resources and motivational strategies, pedagogical approaches, entrepreneurial pathways, external partnerships, international collaboration, and impact assessment (EDI, 2017; Karen, 2015).

Furthermore, the United Nations (2017) has observed that entrepreneurial universities are revolutionizing the conventional university model by fostering synergies among higher education, industry, and government, a crucial element for innovation within a knowledge-driven society.

### **2. Entrepreneurial University**

The concept of the "entrepreneurial university" was initially articulated by Etzkowitz (2003). Its implementation has been extensively adopted in various countries (Etzkowitz, 2014). To enhance the transfer of academic knowledge, premier entrepreneurial universities emerged as the pioneering generation advocating for new ventures, elucidating a comprehensive entrepreneurial framework, establishing forward-looking technology policies, and fostering collaborations between academia and industry.

Subsequently, a second generation emerged in Western Europe. Traditional universities evolved into entrepreneurial institutions, promoting the engagement of academic leaders. With the rise of nascent economies, a pronounced level of academic entrepreneurship was observed in this third generation (Dalmarcoa, Hulsinkb & Bloisa, 2018). Furthermore, the entrepreneurial university engages in social interactions, exercises autonomy, and navigates the dynamics between the state and industry (Kakouris & Liargovas, 2018). To accentuate the entrepreneurial mindset aligned with global transformations and the challenges

of the 21st century, it is imperative for universities to cultivate and adapt the notion of entrepreneurial universities and their associated practices (United Nations, 2017).

Numerous entrepreneurial universities have emerged from the initial to the third wave, reflecting the mechanisms of social transformation and economic progress. Entrepreneurial universities have acted as catalysts for social and economic development, particularly in the realms of entrepreneurship education, the transfer of entrepreneurial knowledge, the formation of new spin-off enterprises, and addressing both financial and cultural dimensions (Klofsten, Fayolle, Guerrero, Mian Urbano & Wright, 2019).

They also serve as pivotal forces in advancing technological innovation within an ambitious society, supported by both governmental and business sectors. They have generated new knowledge, fostered partnerships, and established strategic research frameworks (Guerrero, Cunningham & Urbano, 2015).

### **3. Entrepreneurial University and Triple Helix Model**

The concept of the entrepreneurial university is intrinsically linked to the Triple Helix framework. A fundamental condition of the Triple Helix model is that *the university's augmented significance* in technology transfer, business creation and regional rejuvenation, situates itself in a *pivotal role within a knowledge-driven society*, in contrast with its subordinate function in an industrial society (Cai & Etzkowitz, 2020).

Etzkowitz's reflections on the Triple Helix model originated from his formulation of the entrepreneurial university, which he initially termed entrepreneurial science (Etzkowitz, 1983). The notion of the entrepreneurial university was subsequently refined alongside the development of the Triple Helix model by Etzkowitz and Leydesdorff. In 2004, Etzkowitz articulated *five principles* or propositions of the entrepreneurial university, encompassing: capitalisation, interdependency, independence, hybridisation, and reflexivity.

Subsequently, Etzkowitz and Zhou (2017) updated these propositions to delineate *five normative aspects* of the entrepreneurial university model, specifically: knowledge spillover, hybridisation, units operating as quasi-firms, entrepreneurial culture, and reflexivity. It is noteworthy that Clark (1998) and Röpke (1998) also introduced the entrepreneurial university concept during this timeframe, presenting perspectives that align closely with Etzkowitz's delineation of the principal attributes of an entrepreneurial university (Etzkowitz, 2017).

### **4. Conclusion and Reflection**

This professional viewpoint shares the notion of entrepreneurial universities and their significance in promoting innovation and economic progress through the triple helix model, which underscores the importance of collaboration among universities, industry sectors, and governmental entities. Such transformation has evidently reshaped the conventional university paradigm and fostered interactions in stimulating innovation within a knowledge-driven society.

Particularly, the triple helix model contributes to entrepreneurial success in numerous universities worldwide. This framework facilitates the commercialization of academic research and promotes entrepreneurial initiatives within higher education

institutions. It bridges the newly designed curricula with prioritized community enterprises, which in turn determine innovative teaching methods, scholarly research, and the cultivation of university-industry synergies. Such development is critical for augmenting the entrepreneurial capabilities of these institutions, including effective leadership and governance, motivational incentives for personnel, educational pathways, external partnerships, international outreach, and metrics for assessing impact. Undeniably, the role of universities as facilitators for the so-called *commercialization research* via entrepreneurial endeavors, has led academia toward practical solutions that serve societal and economic needs.

## 5. The Author

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