

The influence of academic entrepreneurship's outcome on brand equity in higher education institutions: Mediating role of brand equity's determinants

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Abstract

Despite the radical changes facing the Egyptian marketing environment coupled with global changes in higher education industry, which put pressure on universities to adopt a new perception of themselves as 'knowledge factories' (Lazzeroni and Piccaluga ,2003) in a knowledge based economy, and as a social contributor to economic growth in a local and global competitive market place, by engaging in aggressive research that leads to income generation (Altbach and Knight ,2006), as well as equipping students with personal entrepreneurial skills to think and act (Gibb, 2007) which labeled as academic entrepreneurship, the liberation of the higher education industry in Egypt combined with the harsh marketing environment and challenging competition had entered to the market the concept of brand (Mourad, Ennew, Kortam, 2011).Although the importance of academic entrepreneurship's outcome in strengthening the overall brand equity , until now there has been no study that investigate the influence of academic entrepreneurship's outcomes on brand equity.

Purpose of the Research

The purpose of this study is positioning the university brand as a hub for entrepreneurship and innovation , and to investigate the influence of academic entrepreneurship's outcomes on brand equity, to this end; this research's theoretical model considers brand equity determinants as a consequent phenomenon of academic entrepreneurship's outcomes and as antecedents of brand equity, that is resulting in interdisciplinary interfaces for both academic entrepreneurship and brand equity , in turn generating new insights as well as interdisciplinary breakthroughs in both branding and academic entrepreneurship phenomena , improves scientific credentials of both entrepreneurship and marketing that makes a novel contribution.

Research Methodology

The paper starts with a theoretical analysis of academic entrepreneurship from relevant literature addressing the concept development of the academic entrepreneurship and entrepreneurial university as well as academic entrepreneurship's outcome and brand equity following with a proposed conceptual model of the relationship between academic entrepreneurship's outcomes with brand equity through the mediating role of brand equity determinants.

Anticipated Findings and Managerial Implications

The proposed model is introduced to encourage higher education institutions in Egypt to adopt a new perception of themselves as 'knowledge factories' as well as achieving a 'global mindset' ,and building strong and favorable brands , by engaging in academic entrepreneurship ,that will change and leverage the society and the globe at large (Paul R. Sanberg and et al ,2014), by transferring knowledge and scientific discoveries into startup companies and improving the local industry as well as epistemological enterprise (Etzkowitz,2003). In turn helps in building strong and positive brand equity of higher education institutions in Egypt.

Note: Further quantitative research is needed to support the results of this conceptual paper.

Introduction

Post Revolution in Egypt has changed the Marketing Environment to become " knowledge hungry" that can be described by Complexity and uncertainty (Etzkowitz,2003) with the autonomy of crisis, transformation, sensitivity of time and opportunity, and information asymmetry (Kortam and Gad, 2014), On the other hand, liberation , harshly marketing environment and the challenging competition in higher education industry in Egypt combined with radical changes in consumer roles and the growing demand for educational services with a very high quality, has forced universities to modify many of their long-running trends and practices (Kehm and Teichler, 2007; Mahrous and Anis, 2010).and adopting the concept of brand ,which is used to communicate the universities investments to customers, to let them be sure that the service provided is on a high degree of quality (Mourad, Ennew, Kortam, , 2010).

The pervious changes in Egyptian marketing climate as well as in Egyptian higher education context are coupled with global changes in higher education environment such as pressure on public funding (Gibb et al.,2013), global downturn (Cranmer, 2006), increasing in competition in local and global labor market (Rajan et al., 1997) the need to equipping students with Entrepreneurial Mindset (Coaldrake ,2001) , the growth of student societies and voice, student unrest , fee increases, growth of demand of higher education, employability agenda (Gibb et al.,2013).

All these factors put pressure on universities to participate in robust and aggressive research activities driving to economic and social transition (Mcelroy, 2002) and adopting a new perception of themselves as 'knowledge factories' (Lazzeroni and Piccaluga, 2003), as well as social contributor to economic growth in a local and global competitive market place (Altbach and Knight, 2006), while equipping students with personal entrepreneurial skills to accordingly think and act in dealing with the environmental complexity and uncertainty in their personal life as well as their future career path (Gibb ,2007).

In a similar vein building a strong brand of higher education institution will provide a signaling of high quality, that reduce the perceived risk ,given that the difficulty of assessing quality before consumption ,In turn that will help in promoting the university as "top," "leading," or "world-class" organization (Va'zquez et al., 2002).

A. Entrepreneurial universities

The splendor of a university is how it changes and leverages the society and the globe at large (Paul R. Sanberg et al., 2014), Entrepreneurial universities such as Stanford University ,Massachusetts Institute of Technology (MIT), California Institute of Technology, Georgia Institute of Technology and others is playing its third role (Shiri and Maryann,2012) by transferring knowledge and scientific discoveries into startup companies and improving the local industry as well as

epistemological enterprise (Kinsella and McBrierty, 1997). Entrepreneurial universities is a potential great source of new industrial sectors and new interdisciplinary science (Etzkowitz, 2003) such as nanotechnology, as well as providing industry with highly qualified educated future entrepreneurs and employees (Carayannis et al., 1998).

For example : studies have shown that Stanford University impacted the USA economy by generating trillions of dollars as annual revenue from startup companies founded by university as well as helping in the social development by creating 5.4 million of jobs (<http://news.stanford.edu/news/2012/october/innovation-economic-impact-102412.html,28-1-2017>).

B. Academic Entrepreneurship (AE)

The entrepreneurial universities idea was more illustrated in academic entrepreneurship concept (Matthew S. Wood, 2011) which is a sub-field of Entrepreneurship (J. K. Osiri et al., 2014), it could be seen as an umbrella term (O'Shea, Allen, O'Gorman, and Roche, 2005) of continuous process contains a set of events (Friedman and Silberman, 2003) refers to endogenous and exogenous opportunities created into a university domain and imported to it from industry-government interactions (Etzkowitz, 2003), that is labeled as "triple helix" (Zhou, 2008; Etzkowitz, 2008), and resulting in commercialization (Markus Perkmanna et al., 2013) and academic engagement (Perkmann et al., 2011).

Academic entrepreneurship's outcome leads to positive customer experience quality, Higher level of customer perceived benefits, internationalization of the service, leadership image, positive social image of the university brand and strong positioning in the market, positive word of mouth, which can result in positive brand association and awareness that strengthen the overall brand equity (Zhang et al., 2016)

Literature review

A. Entrepreneurial university

The key of an appropriate level of shared understanding is the concept development which is somehow confused when it comes to define entrepreneurial university, The term 'entrepreneurial university' was used for the first time by Etzkowitz (1983) Although there is no unified definition of entrepreneurial university (Clark, 1998; Sporn, 2001; Etzkowitz, 2004; Guerrero Maribel and Urbano David, 2010) but some authors suggested that the definition of entrepreneurial university is a set of characteristics that is collected together to generate this phenomenon (Gibb, 2012).

We define 'Entrepreneurial University' as a regional innovation hub that is transferring knowledge and scientific discoveries into startup companies and academic engagement that improving the local industry as well as epistemological enterprise (Shiri and Maryann, 2012, Etzkowitz, 2003), by discovering and exploiting

IP ,establishing patent policies, licensing and academic spin-offs (Nicola Baldini et al,2012) that is the university formal mechanism to exploiting IP (commercialization), on the other hand university can launch informal mechanisms(academic engagement) by doing consultancy activities and research contracts (Shiri and Maryann,2012),

The Entrepreneurial University passes into three phases.

The first phase: “quasi-firms” (Latour and Woolgar, 1989) that is internal organization of research which is dedicated for setting the university's group of researchers as well as create the research base (Gibb et al., 2013).

The second phase: the knowledge capitalization that is the transitional process of research results into economic goods or service, in other words is the university mechanisms to commercialize research results beyond the university periphery (Gibb et al., 2013).

The third phase: the epistemology is to revoke the " limits to growth" laws or policies that hinder the IP growth (Etzkowitz, 2003).

A lot of theories behind the entrepreneurial university and Academic entrepreneurship phenomena such as resource based view, the dynamic capability view which is the updated versions of RBV (Morgan et al., 2009a), Institutional resources, process theory, life-cycle, teleological theory, Dialectic theory and Evolutionary theory.

B. Academic entrepreneurship

On the other hand Entrepreneurial University is coined with the term academic entrepreneurship (AE), which is a set of complex events and continued process (Friedman and Silberman, 2003) ,that has different level of analysis to describing from different angles , this produces valuable insights leads to substantial understanding of the AE (Matthew and Cecilia , 2010). AE is a sub-field of Entrepreneurship (J. K. Osiri et al., 2014), Adam et al (2011) asserted that there is no unified definition of Entrepreneurship due to the fragmentation of the concept into two sides of corporate and individual perspectives.

Although previous studies have shown that it is difficult to build integrative AE process model due to the borders between variables that shape the phenomena are not always clear (Matthew S. Wood, 2011). In a similar vein some authors argue that inconsistencies in the research of AE have been noted in literature which eliminated the creation of AE framework (J. K. Osiri et al.,2014), on the other hand Matthew and Cecilia (2010) articulated that the level of analysis of academic entrepreneurship in higher education literature concerned with three perspectives namely the macro levels , micro levels and organizations and individual characteristics ,while ignoring entrepreneurial processes.

We define AE as a complex and continuous process (Friedman and Silberman, 2003), of dealing with uncertainty and complexity (Casson, 1982, Chap. 5) for seizing opportunities (J. K. Osiri et al., 2014) that is created into a university domain and imported to it from industry–government interactions (Etzkowitz, 2003) in order to create knowledge related activities or innovations that has economic or social values (Gibb et al., 2013), that starts with input units of three levels of micro, macro and organization and entrepreneurs characteristics' (Matthew and Cecilia, 2010) that generate AE outcome (J. K. Osiri et al., 2014) that is divided into two parts commercialization and academic engagement (Markus Perkmanna et al., 2013) also known as formal and informal mechanisms (Shiri and Maryann, 2012). This definition does not restrict AE to just start up firms but stretches to include any innovative or knowledge based outcome that has economic or social value, This study is concerned with AE outcome namely commercialization and academic engagement.

We define **academic engagement** or informal technology transfer (Link et al., 2007), as an old and multi level phenomenon determined by individual, institutional and organizational characteristics, which established by interaction of person to person (Cohen et al., 2002) that links university with nonacademic organization for knowledge -related transfer activities (Markus Perkmann et al., 2013) for financial and nonfinancial benefits such as learning, data access and materials (Perkmann and Walsh, 2009).

Academic engagement activities divided into formal and informal, while formal activities involved with consulting, contract research and venture research, the informal activities extend to networking with practitioners and ad-hoc advice (Markus Perkmanna et al., 2014), This study is concerned with **consulting and contract research** as a means of formal activities and networking with practitioners of academic engagement activities.

Consulting can be defined as Academics who pursue consulting on College facilities or via personal basis for certain economic value on contractual basis (Markus Perkmanna et al., 2014) or project-basis (Colyvas, 2007) Consulting can inspire academics with new ideas and basic research questions by learning about industry applications and problems (Pablo D'Este et al., 2010), On the other hand, **Contract research** can be defined as an applied research funded by industry and carried out by academic researchers of the university (Perkmann and Walsh, 2008).

Academic engagement is an input factor for **commercialization** (Meyer, 2003), where academics engaged with industrial collaborations inspired with new ideas, new research directions and insights that could have social or economic values for patent, licensing or spin off (Markus Perkmanna et al., 2013), we define **commercialization** as a process of IP exploitation activities that ranging from patent, licensing and spin off (O'Shea et al., 2008).

The first step of commercialization activities is **patenting** that we define as a legal form to generate IP protection (Carlsson and Fridh, 2002). The second step is **licensing**, that is an effective and preferred commercialization mechanism for innovations held by university (Agrawal, 2006; Thursby and Thursby, 2007). by transfer knowledge to outside parties for fixed payment or continuous royalty fees. (Matthew S. Wood, 2011). **Spin off** is the last stage in commercialization activities, we define as a new company or firm that is created around innovations held by university, that could be completely or partially owned by university (Einar Rasmussen, 2011).

C. Brand equity

Marcelo and Ute (2016) asserted that brand equity is the value of the brand in the consumer's mind, this value is the result of differential effect of brand assets and liabilities that is attached to a brand in the consumer mind Aaker's (1991, p. 15), on a similar vein Keller (2001) stressed that Brand equity can be determined by the core elements that reside in customer's mind about the brand resulted from what the customer has felt, learned, heard and seen over time about the brand. on the other hand De Chernatony and McDonald (1998, p. 396) suggested that "brand equity is a multi-dimensional concept" that can be seen from different angles such as firm, employees, customers, communication channels and financial market (Kim et al., 2003).

Brand equity consists of two dimensions, brand image and brand awareness (Keller, 1993), Keller (1993) had defined brand awareness as the customer ability to recall the brand (Brandi A and William, 2013), The concept of brand image was first introduced by Gardner and Levy (1955) as cited in Levy (1973), as the perceptions, attitudes feelings and beliefs towards a brand, Ries and Trout (1993) have suggested that brand image is the perception of consumer's mind about the brand, hence the overall mental image that consumer developing about the brand and its unique characteristics that distinguish it from other competitors brand are known as brand image (Faircloth, 2005). Keller (1993) has stated that brand image is what comes to consumer's mind when a brand is mentioned, Brand image mainly presented by brand association which is "anything 'linked' in memory to a brand" (Aaker, 1991a, p. 109), brand association may have several dimensions such as product attributes, brand name, and perceived quality (Mourad, Ennew, Kortam, 2011)

This model builds on Keller (1993), Aaker (1996) and Mourad et al. (2011), while Keller (1993) suggested that there are two main dimensions of brand equity namely brand image and brand awareness, Mourad et al. (2011) argued that brand equity model should focus on the determinants of brand equity directly, which consist of three determinants namely, consumer attributes, brand image attributes and brand awareness attributes, although the two models of Keller (1993) and Mourad et al. (2011) had treated brand loyalty as an outcome of brand equity, the results of Mourad et al. (2011) indicated that the consumer attributes do not impact brand

equity and brand image is more significant than brand awareness in its impact on brand equity, accordingly this study will exclude the consumer attributes.

This model of brand equity consists of two determinants namely brand image and brand awareness, while brand image consists of three attributes namely: service attributes (price, perceived quality, benefits from consuming the service), provider attributes (relationship between the provider and the staff, internationalization of the service, staff, historical image) and symbolic attributes (brand personality, social image of the brand and positioning in the market, leadership (market size, popularity, and innovation)), promotion activities and word of mouth are the two attributes of brand awareness.

D. The influence of academic entrepreneurship on brand equity and The importance of brand equity to entrepreneurial university

Brand equity of higher education institutions can be seen as a corner stone of marketing goals that create the institution's competitive advantages (Marcelo and Ute, 2016). The competitive advantage gained from repositioning the university as a hub for entrepreneurial and innovation is considered as the organization reputation, organization performance, societal benefits, new financial market position, links with industry, network and relationships (Marcelo and Ute, 2016), customer loyalty and superior students values, superior faculty research quality as well as Entrepreneurs and business leaders value (Adam, Mahrous, Kortam, 2011; Matthew S. Wood, 2011; Kim et al., 2003, Va'zquez et al., 2002).

The importance of brand equity to entrepreneurial university will take several dimensions, brand equity will determine the core of what the university will be, what it will stand for and what it will be known for, which need a precise and symmetry in formulating and presenting the brand to internal and external stakeholders (Marcelo and Ute, 2016), that result in superior adding value to 1-students: that is coming from the brand supporting role in emotional commitment as well as a signaling of the charming attributes of the university (Teas and Grapentine, 1996) such as the quality and the performance of educational process, the availability of information in lower cost, positive image of the education quality (Mourad, Ennew, Kortam, 2011) risk reducer by promising to equipping students with entrepreneurial and critical thinking skills in dealing with the environmental complexity and uncertainty in their personal life as well as their future career path (Gibb 2007), 2- university adding value that divided to financial and non financial values, the financial value is determined by the key role played by brand in gaining future earnings by increasing the university future cash flow, reducing financial risk (Mourad, Ennew, Kortam, 2011), and securing public and private funding to university which is the core component of establishing entrepreneurial university, on the other side the nonfinancial values represented by securing from copying by patent, license and trade marks (De Mooij, 1993), increasing barriers for competitors to enter the market, gaining customer loyalty that result in lowering price elasticity, increasing the capabilities to exploiting new

opportunities that results in increasing the numbers of spinoff, patent and licensing (Keller, 2001), so that the university brand equity represent an asset to the organization (De Chernatony and McDonald, 1998; Kim et al., 2003) 3-academics and non academics employees value added represented by departmental coordination, brand communication (Hankinson ,2009) as well as brand associations, and brand creditability (Supornpraditchai et al., 2007).

E. The relationship between academic entrepreneurship outcome and brand equity determinants

Academic entrepreneurship outcomes leads universities to establishing **different internal mechanisms** (such as internal supportive procedures and rules (Thursby et al., 2001), the creation of Technology Transfer Offices (TTOs) (Nicola Baldini et al,2012), science parks, and incubators (Clarysse et al., 2005)...etc), **as well as generating several results** (such as more publications than its counterpart (Gulbrandsen and Smeby, 2005), new, academically insights and ideas (Perkmann and Walsh, 2009), collaborative culture (Matthew S. Wood,2011)...etc) . In this section the relationship between the mechanisms and results that creates ,supports and results from academic entrepreneurship's outcomes, namely academic engagement and commercialization , will be explored with the brand equity determinants namely brand image attributes and brand awareness attributes , while brand image consist of service attribute (price, perceived quality, after sales service, benefits from consuming the service),provider attributes (relationship between the provider and the staff, location of the service organization, internationalization of the service, staff, historical image), and symbolic attributes (brand personality, social image of the brand and positioning in the market ,leadership(market size, popularity, and innovation)) , brand awareness attributes consist of promotion activities and word of mouth.

Exhibit 1 provides an overview of relationship framework of academic engagement mechanisms and results with brand equity determinants, the left hand side represents academic engagement mechanisms and results, the top of the figure represents brand equity determinants which is brand image attributes and brand awareness attributes, the frame work highlights the insights of the relationships between the two constructs as an example :academic engagement leads to more scientific publication (Gulbrandsen and Smeby, 2005), which results in positive reputation, positive perceived quality of researchers as well as university staff, internationalization of the teaching and research service, in turn will result in favorable brand personality and positive word of mouth also the scientific publication will help in promoting the university along scientific journals and conferences around the world. In a similar vein we can apply the same logic on the rest of exhibit items.

1. Relationship between academic engagement and brand equity determinants

Academic engagement	Brand image	Brand awareness
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Relationship between academic engagement and brand equity's determinants	Service attribute	Provider attribute	Symbolic attribute	promotion	Word of mouth
1- Faculty with industrial ties publishes more than its counterpart (Gulbrandsen and Smeby, 2005).	perceived quality, benefits from consuming the service	internationalization of the service	brand personality, , leadership	promotion	word of mouth
2-Collaborative projects often yield new, academically valuable insights and ideas (Perkmann and Walsh, 2009).	perceived quality-benefits from consuming the service	internationalization of the service	brand personality, , leadership	promotion	word of mouth
3-engagement with industry shifts researchers' agendas towards more applied topics (Markus Perkmanna et al.,2013)	perceived quality-benefits from consuming the service	internationalization of the service	positioning in the market, , leadership	promotion	word of mouth
4- partnerships opportunities increased between industry and university and sustained for long time (Paul R. Sanberg et al ,2014)	perceived quality-benefits from consuming the service	relationship between the provider and the staff	positioning in the market	promotion	word of mouth
5-increasing international collaborations. (Paul R. Sanberg et al ,2014)	perceived quality-benefits from consuming the service	internationalization of the service	positioning in the market, , leadership	promotion	word of mouth
6-high income generated from academic engagement (Markus Perkmanna et al.,2013)	price	relationship between the provider and the staff	positioning in the market	promotion	word of mouth
8-collaborative culture	perceived	relationship	positioning		word of

	quality- benefits from consuming the service	between the provider and the staff	in the market		mouth
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(Exhibit 1, self produced)

Therefore:

H1a: academic engagement is related to service attributes of brand image.

H1b: academic engagement is related to provider attributes of brand image.

H1c: academic engagement is related to symbolic attributes of brand image.

H2a: academic engagement is related to promotion attributes of brand awareness.

H2b: academic engagement is related to word of mouth attributes of brand awareness.

Therefore:

H1: academic engagement is related to brand image.

H2: academic engagement is related to brand awareness.

2. Relationship between commercialization and brand equity determinants

Exhibit 2 provides an overview of the relationship framework of commercialization's mechanisms and results with brand equity determinants, the left hand side represents commercialization's mechanisms and results, the top of the figure represents brand equity determinants which is brand image's attributes and brand awareness's attributes, the framework highlights the insights of the relationships between the two constructs as an example: universities should create new institutional configuration, to support the commercialization of its owned IP (Guerrero Maribel and Urbano David, 2010), which results in new collaborative culture, networking with industry as well as government, new physical infrastructure (science parks, liaison offices, technology transfer offices, incubators), encouraging entrepreneurial culture, securing public and private capital needed for startup companies as well as more R and D expenditures, all of these configuration in turn will generate greater perceived quality in consumer minds as well as expanding the benefits of consuming the services, decreasing price sensitivity, enhancing the relationship between the university and staff, Internationalization of the service, favorable brand personality, positive social image, stronger positioning in the market, positive word of mouth. In a similar vein we can apply the same logic on the rest of items in the next table.

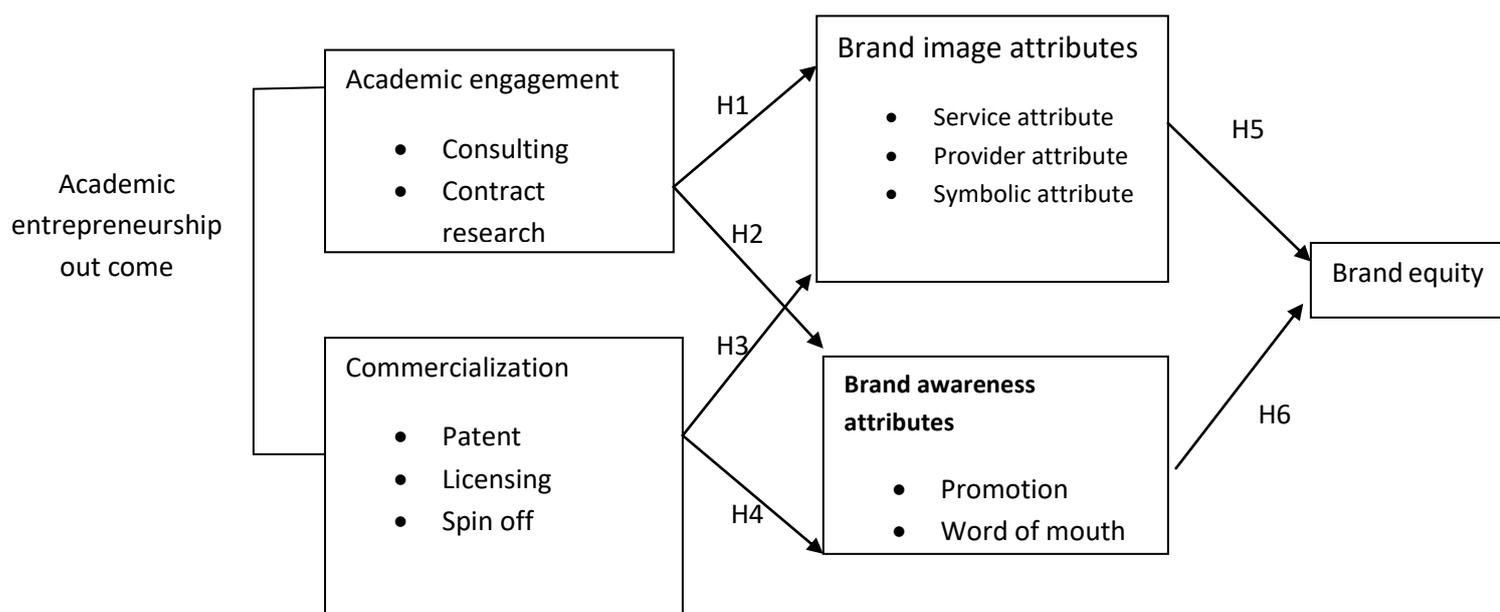
Commercialization	Brand image	Brand awareness
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Relationship between Commercialization and brand equity's determinants	Service attribute	Provider attribute	Symbolic attribute	promotion	Word of mouth
1- creating new institutional configuration (Guerrero Maribel and Urbano David, 2010) technology transfer policies and activities (Geuna and Muscio, 2008) and developing physical infrastructure (Albert and Gaynor ,2001)	perceived quality, after sales service, benefits from consuming the service	relationship between the provider and the staff	brand personality, , leadership	promotion	word of mouth
2- collaborate with the government and industries , establishing key networks (Guerrero Maribel and Urbano David, 2010), social and community issues (Bloom, 2006),and securing industry partners (Matthew S. Wood,2011)	perceived quality, benefits from consuming the service,	relationship between the provider and the staff, internationalization of the service	positioning in the market - social image, leadership	promotion	word of mouth
3- venture programs, interdisciplinary centers, international activities and relationships (Gibb et al.,2013)	perceived quality, benefits from consuming the service	relationship between the provider and the staff, internationalization of the service	brand personality, positioning in the market , leadership	promotion	word of mouth
4- student society activity and alumni policies and programs (Gibb et al.,2013)	perceived quality, benefits from consuming the service	internationalization of the service	positioning in the market	promotion	word of mouth
5- establishing entrepreneurial culture , encouraging different working mindset (Paul R. Sanberg et al.,2014)and collaborative culture (Matthew S. Wood,2011)	perceived quality, benefits from consuming the service	relationship between the provider and the staff - internationalization of the service	positioning in the market - social image , leadership		word of mouth
6-positioning the university	perceived	internationalization	brand	(promotion	word of

as a world high class entrepreneurial university	quality	zation of the service	personality , leadership)	mouth
7-developing incentive structures , securing capital; (Matthew S. Wood,2011)	perceived quality	relationship between the provider and the staff	brand personality	promotion	word of mouth
8- developing research and development, establishing market research and marketing activities(Matthew S. Wood,2011)	perceived quality	Internationalization of the service and image	brand personality	(promotion)	word of mouth

(Exhibit ,2 ,self produced)

6. Research model



Research Importance

Contributions come to light as follows:

- The first contribution is theoretical one :
 1. Integrating theories that explain academic entrepreneurship (Resource based view, Institutional resources, process theory and Dynamic capabilities) with the theories that explain brand equity (consumer behavior , signaling theory ,and associative network memory theory) to explain the influence of academic entrepreneurship's outcome on brand equity, that is resulting in interdisciplinary interfaces for both academic

entrepreneurship and brand equity, in turn generating new insights as well as interdisciplinary breakthroughs in both branding and academic entrepreneurship phenomena, improves scientific credentials of both entrepreneurship and marketing, that makes a novel contribution.

2. The distinctive contribution of this research comes from Investigating the influence of academic entrepreneurship's outcomes on brand equity through the mediating role of brand equity determinants, by integrating the academic entrepreneurship's outcomes model with brand equity model.
 3. addressing the gaps in the academic entrepreneurship literature by developing a clear concept of entrepreneurial university as well as academic entrepreneurship which produces valuable insights leads to substantial understanding of the AE (Matthew and Cecilia, 2010), taking in consideration that there is no unified definition of entrepreneurial university (Clark, 1998; Sporn, 2001; Etzkowitz, 2004; Guerrero Maribel and Urbano David, 2010) as well as academic entrepreneurship, but some authors suggested that the definition of entrepreneurial university is a set of characteristics that is collected together to generate this phenomenon (Gibb, 2012), and until now there is no clear picture describing whether academic entrepreneurship is expanded along higher education institutions in Egypt or not (Abou-Warda, 2015).
 4. Developing a conceptualization model in higher education context in Egypt which is considered as an undeveloped country and literature emphasized the need to apply academic entrepreneurship in emerging countries due to difference in culture, economic and social conditions between developing and developed countries (Sepideh, 2016).
1. Despite the importance of brand equity in HE, There is a lack in the empirical research concentrating on the nature of brand equity in Higher Education institutions in an emerging market (Mourad, Ennew, Kortam, 2010)
- The second contribution is practical implications:
 1. Identifying how to develop strong brand in higher education context by positioning the institution as a hub of entrepreneurship and innovation.
 2. encouraging higher education institutions in Egypt to adopt a new perception of themselves as 'knowledge factories' as well as achieving a 'global mindset', and building strong brands of themselves by engaging in academic entrepreneurship, that will change and leverage the society and the globe at large (Paul R. Sanberg et al, 2014), by transferring knowledge and scientific discoveries into startup companies and improving the local industry as well as epistemological enterprise (Shiri and Maryann, 2012, Etzkowitz, 2003). in turn help in building strong, positive, favorable brand equity of higher education institutions in Egypt.

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