

In search of the profit-maximizing actor: motivations and definitions of success from nascent academic entrepreneurs

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Published online: 25 September 2010
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Abstract Scholars have traditionally assumed the establishment and management of university spinoffs are guided by growth and the pursuit of profit. However, few studies have examined the motivations and post-establishment success definitions of entrepreneurs themselves. This paper seeks to contribute to our understanding of the mediating factors of academic entrepreneurship through an in-depth interview-based study of 74 nascent academic entrepreneurs. The results show that academic entrepreneurs define success in a number of complex, interrelated ways including technology diffusion, technology development, financial gain, public service and peer motivations, among others. Furthermore, a large percentage of the respondents have little immediate interest in growth and have instead established their firms to pursue other sources of development funding.

Keywords Entrepreneurship · Technology transfer · Economic development

JEL Classification 033 · Z13

1 Introduction

Following Solow (1956) and Romer (1986), new knowledge created in research universities is an increasingly important element of regional economic growth and innovation (Utterback 1994). As such, the role of the research university is appropriately conceptualized within the context of Academic Capitalism (Slaughter and Rhoades 2004) or Triple Helix (Etzkowitz 2003) paradigms that emphasizes its role in a knowledge-based economy.¹

¹ Furthermore, a burgeoning literature investigates the specific contributions of universities to innovation through a wide range of activities, including patenting, licensing, incubator facilities, science parks, and the creation of new firms (Rothaermel et al. 2007; Phan and Siegel 2006).

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The seed corn for innovation is research conducted by university faculty. Unlike most research conducted in the private sector, the primary goal of university research is the production of new knowledge, not necessarily the creation of new commercially viable technologies (Shane 2004). Furthermore, the traditional mission of the university is teaching, basic research, and knowledge dissemination; thus, there are many structural and cultural barriers within to inhibit technology commercialization (Bercovitz and Feldman 2008; Chiesa and Piccaluga 2000; Kenney and Goe 2003; Markman et al. 2004; Slaughter and Rhoades 2004; Siegel et al. 2003).

The choice of faculty to engage in technology transfer activities is the basic building block for university economic development efforts. Given the embryonic nature of many university technologies, university spinoffs offer these academic entrepreneurs an alternative pathway, among others, for disseminating and commercializing their research (Shane 2004; Lowe 2002, Audretsch 1995). Given that new knowledge tends to be bounded within the region where it was created (Audretsch and Feldman 1996), university spinoffs are often a local phenomenon and therefore possibly important to industry formation and regional economic development (Shane 2004; Lowe 2002; Pressman 2002; Tornatzky et al. 1995). Furthermore, once established, spinoffs generally have a high propensity for survival (Lowe 2002; Pressman 2002; Mustar 1997), have a high likelihood of attracting early-stage finance such as angel or venture capital (Shane 2004), and of going public (Goldfarb and Henrekson 2003). Policymakers have therefore sought to encourage the formation and growth of university spinoffs through numerous policies and programs (Lowe and Gonzalez-Brambila 2007).

The academic entrepreneur plays a critical role in the establishment of a company and its subsequent business performance (Cooper 1973; Kolvereid 1992; Sexton 1989). A robust literature examines the motivations for business start up, while scholarly research on post-establishment growth ambitions is less mature but emerging. Unfortunately, not only is empirical research on the growth and performance of university spinoffs virtually non-existent (Shane 2004), what does exist fails to examine how academic entrepreneurs define success (Rothaermel et al. 2007; Phan and Siegel 2006; Shane 2004).

This paper explores the motivations and post-establishment definitions of success among nascent academic entrepreneurs. Addressing these issues will help researchers and policymakers better understand the role of academic entrepreneurs within the spinoff process and implications for public policy.

The structure of this paper is as follows. Section 2 reviews the entrepreneurship motivations, growth aspirations and success literature, Sect. 3 sets forth the theoretical foundation for the collection of data, and Sect. 4 summarizes those data. The findings from the inductive exploration of how success is defined among academic entrepreneurs are presented in Sect. 5 along with concluding remarks.

2 Literature review

According to Shane et al. (2003), entrepreneurial motivations are an individual's a priori reasons for establishing a business (see Table 3 in the appendix). The entrepreneurial motivations research was undertaken in direct response to the failure of researchers to identify and validate the specific individual traits or characteristics responsible for entrepreneurial propensity (Hessels et al. 2008; Gartner 1988). Shane et al. (2003) posit that motivations will affect the decisions of entrepreneurs to positively evaluate opportunities,

pursue resources, and to design mechanisms of exploitation, therefore playing a critical role in the start up process. Furthermore, emerging research suggests a relationship between motivations and post-establishment definitions of success (Hessels et al. 2008; Cassar 2007).

For decades, economics research assumed that entrepreneurs were solely motivated to maximize profit. The role of economic incentives—the so-called profit motive—is a long-held maxim of neoclassical economics and has been observed in numerous studies. Specific to entrepreneurship, it is fundamental to modeling entrepreneurial entry and self-employment (Cassar 2007; Moskowitz and Vissing-Jorgensen 2002; Gimeno et al. 1997; Davidsson 1989).

In the early 1970s, researchers found increasing evidence of other, non-pecuniary entrepreneurial motivations, such as the need for independence (Hofstede 1980; Friberg 1976), desire to escape or avoid a negative situation (Friberg 1976, Cooper 1973), need for social approval (Friberg 1976, Maslow 1943), and a drive to fulfill personal values or norms (Friberg 1976). The emerging research not only questioned the singularity and primacy of the profit motive, it showed that entrepreneurial rationales were multiple, interrelated, and complex (Cassar 2007; Locke 2000; Kolvereid 1996; Birley and Westhead 1994; Shane et al. 1991; Scheinburg and MacMillan 1988).

Recent research finds, in addition to the profit motive, other motivations among specific subgroups of entrepreneurs. For example, surveys of high-technology entrepreneurs concludes that entrepreneurs are motivated by independence, challenge, and the dissemination of their work through technical literature (Hessels et al. 2008, Wiklund et al. 2003; Roberts 1991; Corman et al. 1988). Researchers also report that, among survey samples of female entrepreneurs, respondents were motivated by personal fulfillment and helping others (Brush 1992), flexibility to spend more time with family (Gundry and Welsch 2001; Starr and Yudkin 1996), and the ability to meet family obligations (Morris et al. 2006). Bercovitz and Feldman (2008) and Stuart and Ding (2006) find that role models provide a great deal of motivation for academic entrepreneurs.

While investigating how and to what extent financial gain is a motivation, scholars have created explanatory dichotomies. For example, since 2001, the Global Entrepreneurship Monitor (GEM) has differentiated between opportunity and necessity entrepreneurship (Reynolds et al. 2001). Opportunity entrepreneurs voluntarily establish their business to pursue a specific market opportunity, while necessity entrepreneurship is based on the absence of other employment opportunities. Morris et al. (2006) group female entrepreneurs into “high-growth” and “modest” categories mirroring the perceived tension between financial and non-financial goals, respectively.

Similar to the motivations literature, scholars have also long assumed that the primary post-establishment focus of entrepreneurs is firm growth (Hessels et al. 2008; Gundry and Welsch 2001). While few in number, recent studies also question this assumption and instead suppose that firm growth is determined by, among other factors, the post-establishment decision—the choice—of the individual entrepreneur. This is otherwise termed entrepreneurial *growth aspirations* in the literature (Hessels et al. 2008; Cassar 2007; Kolvereid 1992; Ginn and Sexton 1989).

Many entrepreneurs choose not to grow their business and these negative growth aspirations are not related to experience, sex, location, or size of the firm (Wiklund et al. 2003; Gundry and Welsch 2001; Storey 1994; Kolvereid 1992; Davidsson 1989). Similar to entrepreneurial motivations, the growth aspirations literature also parses entrepreneurs into non-high-growth and high-growth (Gundry and Welsch 2001), latent and actual entrepreneurs (Grillo and Thurik 2005); or traditional and modern entrepreneurs with the

former being small and slow-growing, the latter prioritizing profits and growth, respectively (Moore and Buttner 1997).

In a third thread of literature (see Table 4 in the appendix), definitions of success for university spinoffs are based on the assumptions of scholars; little empirical research exists surveying academic entrepreneurs directly. These studies define success in terms of whether or not a firm continues to exist (Rothaermel and Thursby 2005; Leitch and Harrison 2005; Shane 2004; Shane and Stuart 2002) productivity measures (Blair and Hitchens 1998), a firm's ability to attract early-stage finance, specifically venture capital (Wright et al. 2006; Lockett and Wright 2005; Zucker et al. 2002; Lockett et al. 2002; Shane and Stuart 2002), whether or not a firm had an initial public offering (IPO) (Shane 2004; Goldfarb and Henrekson 2003) and number of patents and scientific papers (Zucker et al. 2002).

Limited empirical research suggests that academic entrepreneurs have their own, unique motivations and growth aspirations. Meyer (2003) suggests that "entrepreneurial academics" in public sector organizations may not define success by spinoff growth or profits but rather by the prospect of finding other avenues to pursue their academic research agenda, especially if they remain a university faculty member. O'Gorman et al. (2008) finds that university faculty members in their sample are interested in spinoff and commercialization not for financial reasons but in so much as it garners recognition by their peers and advances their academic career.

3 Theory and methodology

It follows from the literature that if an entrepreneur establishes a company with no intentions for growth, reinforced by his operational management decisions, this may have a negative impact on company performance. Given the R&D intensity of university spinoffs, the fledgling Knowledge Spillover Theory of Entrepreneurship (KSTE) offers a useful theoretical lens to examine academic entrepreneurship (Audretsch et al. 2006; Acs et al. 2004). While KSTE embraces Romer's (1986) assumption that new knowledge is the source of innovation, productivity, and economic growth, it does not assume that not all knowledge is necessarily economically useful or automatically spills over. Knowledge is instead subject to institutional, geographic, and cost constraints (Almeida and Kogut 1999; Jaffe 1989; Jaffe et al. 1993) known collectively as the "knowledge filter" (Audretsch et al. 2006; Acs et al. 2004).

Important to the knowledge filter is the notion that tacit knowledge, often referred to as know-how; it is not easily codified and is typically embodied in individuals, organizations, and processes (Audretsch and Feldman 1996). In addition to affecting spinoff success, understanding the motivations and growth aspirations of academic entrepreneurs may therefore provide a deeper understanding of the diffusion and commercialization of new knowledge generated in universities.

Previous studies of entrepreneurial motivations and growth aspirations are criticized for their reliance on structured surveys, predefined measures, and working assumptions that exclude more inductive responses (Shane et al. 2003; Cliff 1998; Brush 1992). Conventional quantitative research approaches are not appropriate for unique phenomenon like university spinoffs, a series of events that are infrequent, unanticipated, and/or extraordinary, especially when no comprehensive database exists (Davidsson 2004; Shane 2004; Baumol 1983). Therefore, inductive, qualitative approaches are recommended while building and informing a broader theory (Phan and Siegel 2006; Shane 2004; Gartner and Carter 2003; Cooper 2003; Patton 2002).

Cliff (1998), for example, included in her research a series of open-ended questions to tap the goals, definitions of success, and growth intentions to understand the ambitions of female entrepreneurs. For this paper, similar open-ended questions are posed to a theoretically-relevant sample of academic entrepreneurs in an effort to elicit a greater range of responses relating to success. They are:

Q1: Why did you establish your company?

Q2: What were your main motivations to do so?

Q3: Now that your business is established, how do you define success?

This paper also seeks to address previous methodological concerns of the existing literature such as recall bias among entrepreneurs (Carter et al. 2003; Shane et al. 2003; Gundry and Welsch 2001; Amit et al. 2000) and the inherently static approach taken to examine entrepreneurial motivations and success (Shane et al. 2003; Gundry and Welsch 2001). Absent cross-sectional data, spinoffs are observed no more than 6 years after their establishment in a similar stage of development or critical juncture (Vohora et al. 2004). Furthermore, asking the academic entrepreneur about both their motivations and post-establishment growth ambitions will provide a more evolutionary perspective on spinoff development.

4 The database

Given the paucity of empirical data on academic entrepreneurs, a contact database was constructed. Davidsson (2004) recommends that researchers obtain data from a sample of cases that are theoretically relevant, reflecting the critical unit of analysis, the relevant variance in the characteristics of the phenomenon, and are “workable” from a practical point of view. Therefore, the database is populated with university spinoffs of diverse institutions from different states, emphasizing a substantial degree of variance including different stages of development, technological focus, with varying locational and environmental factors.

The database was constructed in late-2008 from 231 academic entrepreneurs from 18 different states in all regions of the country. A total of 148 individuals responded to the author’s request for interview with 74 meeting the firm establishment age requirement for this paper. Academic entrepreneurs were interviewed in person or over the phone and asked to respond to the open questions above. All answers were recorded and subjected to attributional coding as described by Harvey et al. (1980) in Gatewood et al. (1995) where each answer is separated into a number of separate explanations.

Academic entrepreneurs in the sample define success in a variety of complex ways as summarized in Table 1. While the majority of these responses fit both the motivations and post-establishment definitions of success categories, technology diffusion and peer motivations, in particular, were limited to the former (Table 2). Table 4 reviews these responses in greater depth, presented in order of plurality.

5 Findings and discussion

This paper examines motivations and definitions of success among academic entrepreneurs through a KSTE lens under the assumption that these factors may also impact knowledge spillover from universities, firm performance, and the resultant potential for economic

Table 1 Reported measures of entrepreneurial success

Definition of entrepreneurial success	<i>n</i>	Mean	Std. Error	95% Conf. interval	
Technology diffusion	70	.9459	1.9584	66.0968	73.9032
Technology development	56	.7568	3.7159	48.5941	63.4059
Personal financial gain	44	.5946	4.2523	35.5251	52.4749
Public service	22	.2973	3.9587	14.1103	29.8897
Peer effects	19	.2568	3.7835	11.4594	26.5406
Career enrichment	13	.1757	3.2959	6.4313	19.5687
Job creation	10	.1351	2.9609	4.0989	15.9011
Skill enhancement	8	.1081	2.6894	2.6400	13.3600

Table 2 Motivations and success definitions among academic entrepreneurs

Definition of entrepreneurial success	Explanation
Technology diffusion	Respondents view their spinoff as a way to disseminate the results of their research and get new technologies out of the university. Some see their spinoff as the best method for working with the commercial world while others were unhappy with their technology transfer office (TTO)
Technology development	Establishing a spinoff is a way for respondents to develop their technologies with resources not available within the university. These resources include early stage finance such as angel and venture capital funding and government grants. Respondents differed with regard to their development timeline: most favored immediate commercialization while some felt little urgency and were content with obtaining funding with few outcome requirements, especially the Small Business Innovation Research (SBIR) program
Personal financial gain	Most respondents articulated modest financial goals and saw money as a beneficial (potential) result of their work. Several spoke of how their financial ambitions had become more modest over time, given the difficulty of commercialization
Public service	A large number of respondents see entrepreneurship as an important part of their faculty responsibilities, closely tied to the public service mission of their institution. In particular, they viewed their spinoff as a way to develop technologies that could positive impact society, for example, by creating and releasing a new drug
Peer effects	More of a motivation than definition of success, respondents were influenced by relationships with other entrepreneurs at their university, other universities, or within their region. They spoke of these peer leaders as important sources of experience, guidance, and—in a few cases—management talent for their company. Conversely, several respondents see their peers negatively, as an obstacle to their efforts
Career enrichment	A few respondents, as accomplished academic researchers, see establishing a company as a natural progression for their career. Some were seeking excitement while others wanted to be their own boss
Job creation	A subset of their public service duties (mentioned above) a few respondents see entrepreneurial success as providing interesting, well-paying jobs to individuals in the region
Skill enhancement	A few respondents defined success in terms of enhancing the relevance and quality of their university teaching and research

growth. While a few studies point to the importance of knowledge dissemination and commercialization, this paper is among the first to empirically examine motivations and post-establishment definitions of success among a theoretically relevant sample of nascent academic entrepreneurs (Krabel and Mueller 2009; Hessels et al. 2008; Wiklund et al. 2003; Roberts 1991; Corman et al. 1988).

University spinoffs are a well-accepted vehicle for the dissemination and commercialization of new knowledge and a wide range of policies have been recommended and implemented to encourage their formation in hopes of spurring innovation and regional economic development (Shane 2004). This paper finds that the motivations and growth aspirations of nascent academic entrepreneurs are myriad and not necessarily focused on short-term commercialization or profit maximization.

Before reviewing these findings in detail, several words of caution are offered. First, the sample is small with 231 academic entrepreneurs in the contact database whose spinoffs were established over the past 24 years; only 149 responses were received, 74 of which were used for this paper. By some estimates, over 3,000 university spinoffs (as defined in this paper) have been established since 1980, including those from private universities. Furthermore, the sample only includes spinoffs that have formal IP agreements with their universities overlooking other types of spinoffs (Link et al. 2007) or other forms of commercialization (Phan and Siegel 2006). The contact database is not a probability sample, remains painfully small, and is thus subject to sampling error.

Another challenge is that the data rely on a point-in-time snapshot among academic entrepreneurs and subsequent spinoff outcomes are not available without extensive follow-on research. While previous research suggests that motivations and growth ambitions may influence firm success, it is unclear as to the strength of this influence. A point in time approach, especially one that examines relatively new firms, may also overlook more dynamic aspects of firm development such as the impact of external investors or managers, emerging market opportunities, or shifting priorities, capabilities, or outlooks of academic entrepreneurs.

Academic entrepreneurs in the sample established their companies for varying and typically multiple reasons, including technology development, personal financial gain, public service, career enrichment, job creation, and skill enhancement, all factors that carry through in operative terms to entrepreneurs' respective definition of success. For example, if an entrepreneur was motivated to establish her company to benefit financially, she defines success by whether or not she is currently making money.

Unique to their motivations, yet primary in response, academic entrepreneurs in the sample started their companies to disseminate technology out of their respective university. This response would seem to support the well-documented notion that spinoffs are vehicles for technology diffusion (Audretsch et al. 2006; Acs et al. 2004). However, while all entrepreneurs in the sample have license agreements with their home university, most have yet to commercialize their technologies. In most cases, their technology requires extensive development. Therefore, with KSTE, just because a technology has been licensed to a company—including a spinoff—does not necessarily signify penetration of the knowledge filter. While the IP is no longer owned by the university, it remains embedded in the individual faculty entrepreneur until it is commercialized, a point explored below (Audretsch et al. 2006).

Also unique to motivations is the influence of peers on academic entrepreneurs supporting the findings of Bercovitz and Feldman (2008) and Stuart and Ding (2006). For academic entrepreneurs in the sample, however, these “motivating peers” were often outside the university, within the region, or included others within the university who

themselves are seen as “rebels” by the larger university community. Many of these influential individuals are professional managers or provide funding, technical assistance, or advice, factors important to commercialization success (Martinelli et al. 2008; Degroof and Roberts 2004; Heirman and Clarysse 2004; Franklin et al. 2001). Respondents also spoke about de-motivating peers and “obstructionist” policies that created a negative environment for academic entrepreneurship—though this did not seem to prevent the respondents from establishing their company (Bekkers et al. 2006; Renault and Searle 2006; Kenney and Goe 2003).

Academic entrepreneurs in the sample are certainly interested in financial gain but, unlike profit-maximizing actors, money is not their primary goal. They often see financial gain as compensation for the time they spend away from their academic jobs as opposed to an end in itself. Several academic entrepreneurs described money as a beneficial side affect of entrepreneurial activity. Respondents also discuss the fact that they work in a university environment where commercialization is looked down upon by colleagues, if not discouraged.

It is from their views on technology development that a dichotomy emerges, presaging the respective entrepreneur’s outlook on growth. Respondents define technology development as an immediate emphasis on technology commercialization and the resources needed to do so—or, distinctly, a pursuit of funding not available within the university. To be sure, building business systems and commercializing technology are complex endeavors subject to multiple internal and external factors (Hayter 2010). But related to the ambitions of academic entrepreneurs, it is important for policymakers to understand that many of these individuals (at least among those within this sample) have little interest in commercializing their technology in the near-term. Instead many see their spinoff as a platform for consulting and access to government grants, especially SBIR awards.

In general, these findings seem to support the aforementioned entrepreneurship literature which questions the primacy of the neo-classical economic profit motive by exploring non-pecuniary motivations and definitions of success, especially among various subsets of entrepreneurs (Morris et al. 2006; Gundry and Welsch 2001; Kolvereid 1992; Sexton 1989; Cliff 1998). Non-pecuniary factors among academic entrepreneurs clearly include public service, peer factors, and career enrichment. Furthermore, given their differing views of technology development, these findings may help explain the “living dead” phenomenon where firms have very high survival rates but show no indication of growth or profitability—and certainly have implications for public policy (Columbo et al. 2010; Reitan 1997; Roberts 1991). In short, all spinoffs are not created to maximize profit.

These findings may also support a “latent/actual” (Grillo and Thurik 2005) or growth/non-growth (Gundry and Welsch 2001) entrepreneurship dichotomy. A specific difference among academic entrepreneurs, however, may be their more technology-centric, “push” view of entrepreneurship, arguably at the expense of a market response or opportunity recognition paradigm (Shane et al. 2003; Venkataraman 1997). Therefore, a commercialization/non-commercialization dichotomy may be a more useful framework by which to view the economic development potential of academic entrepreneurs (Hayter 2010).

While recent policy discussions highlight the challenges faced by spinoffs with attracting seed and venture capital, recruiting experienced, competent managers, and commercializing their technology, perhaps the most basic consideration are the motivations and ambitions of the academic entrepreneurs themselves. It may be nearly impossible to identify the a priori motivations of academic entrepreneurs but for policymakers interested in the success and economic impact of university spinoffs, technology commercialization offers an attractive proxy—and a noble policy goal.

Acknowledgments I am grateful to the Ewing Marion Kauffman Foundation for their financial support of this research.

Appendix

See Tables 3 and 4.

Table 3 Summary of the entrepreneurial motivations literature

Author	Motivations
Cassar (2007), Moskowitz and Vissing-Jorgensen (2002), Locke (2000), Gimeno et al. (1997), Birley and Westhead (1994), Shane et al. (1991), Davidsson (1989), Scheinburg and MacMillan (1988), Friberg (1976)	Entrepreneurs are primarily motivated by profit; the prevalence of economic incentives; economic opportunity; material gain
Cassar (2007), Locke (2000), Kolvereid (1996), Birley and Westhead (1994), Shane et al. (1991), Scheinburg and MacMillan (1988), Bowen and Hisrich (1986), Hofstede (1980), Friberg (1976)	Independence
Bercovitz and Feldman (2008), Stuart and Ding (2006), Kolvereid (1996), Birley and Westhead (1994), Shane et al. (1991), Scheinburg and MacMillan (1988), Friberg (1976), Maslow (1943)	Need for social approval; peer recognition; peer effects; authority
Cassar (2007), Locke (2000), Kolvereid (1996), Bowen and Hisrich (1986), Friberg (1976), Maslow (1943)	Drive to fulfill personal values or norms; need for achievement; egotistic passion; self-realization
Kuratko et al. (1997), Kolvereid (1996), Monroy and Folger (1993)	Challenge
Scheinburg and MacMillan (1988), Friberg (1976), Cooper (1973)	Desire to escape a negative situation
Morris et al. (2006), Gundry and Welsch (2001), Starr and Yudkin (1996)	Flexibility, time with family
Shane et al. (1991), Scheinburg and MacMillan (1988)	Need for personal development; learning
Birley and Westhead (1994), Brush (1992), Scheinburg and MacMillan (1988)	Contribute to the community; communitarianism
Reynolds et al. (2001), Kolvereid (1996)	Economic opportunity
Roberts (1991), Corman et al. (1988)	Opportunity to disseminate their work, publish
Birley and Westhead (1994)	Tax reduction
Kolvereid (1996)	Security
Reynolds et al. (2001)	Economic necessity
Corman et al. (1988)	Bring new ideas to market

Table 4 Summary of literature: definitions of spinoff success

Author	Success measure
Rothaermel and Thursby (2005), Leitch and Harrison (2005), Shane (2004), Shane and Stuart (2002)	Whether or not the spinoff continues to exist.
Blair and Hitchens (1998)	Productivity measures: sales per employee
Samson and Gurdon (1993)	View of the entrepreneur and spinoff profitability
Wright et al. (2006), Lockett and Wright (2005), Zucker et al. (2002), Lockett et al. (2002), Shane and Stuart (2002)	Whether or not the spinoff attract early-stage finance, especially venture capital funding
Shane (2004), Goldfarb and Henrekson (2003)	Whether or not the spinoff has an initial public offering (IPO)
Zucker et al. (2002)	Number of patents and scientific papers
Roberts (1991)	Index based on average sales growth and projections, how long the company has been in business, and its profitability
Vohora et al. (2004)	Achieved by passing through a series of iterative, non-linear “critical junctures”; specific resources and capabilities they must be acquire in order to pass to the subsequent phase
Meyer (2003)	Defined in terms of the prospect to pursue their academic agenda through their entrepreneurial activities, not spinoff growth or profits
O’Gorman et al. (2008)	Defined in terms of how well entrepreneurial activities bolsters their academic career through peer recognition and traditional university rewards

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