

# Two birds with one programme: How business schools can support their entrepreneurial stakeholders and generate new revenue

Received (in revised form): 21st June, 2021



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## Abstract

*This paper examines how US colleges and universities currently support their entrepreneurial stakeholders and proposes an advisory initiative that extends these services in a way that benefits all involved. First, some of the most common support mechanisms provided by these schools to their entrepreneurial stakeholders are detailed. This discussion helps identify an important process that can be added to an already full menu of support that schools provide. Secondly, that process is presented to help schools determine how best to extend the variety of school resources to their school stakeholders engaged in various stages of running business ventures. The ultimate goal is to offer intermediate, advisory opportunities that fall between using independent mentors and coaches and a more formal board of directors. The firms get access to expert advice and counsel. Advisory board candidates have a new way to connect with the school and make meaningful contributions to both the venture and the school. The institution possibly receives a small equity stake in the firm that could bring some needed*

*relief to school's financial needs. Finally, this process fills an important gap in the services schools can provide their entrepreneurial stakeholders.*

## **Keywords**

*advisory, alumni relations, corporate relations, entrepreneurship, university advancement*

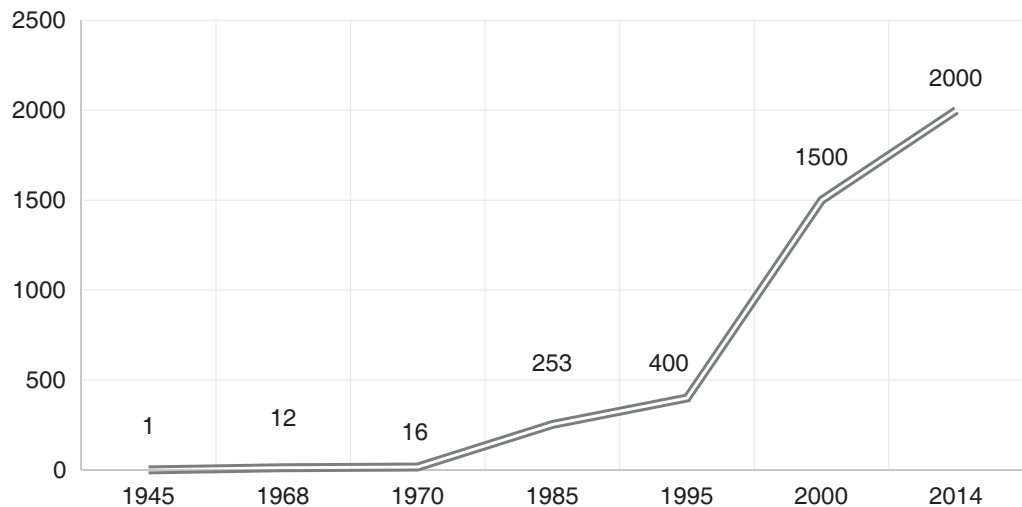
## **INTRODUCTION**

The last 70 years have witnessed prolific growth in entrepreneurial education across a wide variety of colleges and universities, both in the United States and abroad. A recent report from the Kauffman Foundation on entrepreneurship in higher education notes the growth in collegiate-level entrepreneurial courses from 250 in 1985 to more than 5000 courses now offered in two-year and four-year institutions.<sup>1</sup> A 1997 paper by Gartner and Vesper notes Harvard Business School's first course was offered in 1945, and the number of schools grew to 12 by 1968 and to 16 by 1970. Through the 1970s and into the 1980s, the number of US schools offering programmes in entrepreneurship (eg concentrations, majors or degrees) grew to 253 by 1985 and 400 by 1995, while more recent research indicates that number has grown to nearly 1500 institutions.<sup>2,3</sup> A paper in *entrepreneur.com* claims that the number exceeded 2000 in 2014.<sup>4</sup> A visual representation of this exponential growth in the number of schools can be seen in Figure 1.

While the growth in courses and programming is impressive, these same schools continue to work hard expanding the menu of curricular and cocurricular services and support that they can provide to the entrepreneurial community, particularly those entrepreneurs within their academic family and their local communities. These mechanisms can include facilities like academic centres

(eg in entrepreneurship or small business development), incubators and accelerators. They could also be investments in intellectual capital, such as hiring entrepreneur(s) in residence (EIR), endowing professorships or chairs in entrepreneurship and implementing fellow or visiting programmes.

The purpose of this paper is two-fold. First, some of the most common support mechanisms that these schools provide are highlighted. Secondly, a process by which these schools can leverage important relationships (eg students, faculty and staff, alumni and the local business community) is introduced. This mechanism connects key members of these networks as a potential pool of viable advisory board candidates for startup firms in their sphere of influence and is done in exchange for small equity positions in these young firms. The firms get access to expert advice and counsel at a critically important time in their life cycle, and most likely, one that is well before their need for a full-fledged board of directors. Advisory candidates are provided a new way to connect with the school and make a meaningful contribution to both the startup and the school. The institution receives a small equity stake in the firm that could bring some needed relief to the school endowments and operating budgets, if and when, there is a liquidity event. Finally, the addition of a mechanism of this type fills an important gap in the menu of support services that these schools can provide to their stakeholder community (eg the



**FIGURE 1** Growth in the number of US schools offering entrepreneurship courses

entrepreneurs, alumni, faculty, students and staff).

The paper proceeds as follows. In the next section, ‘University- and College-based Support Mechanisms’, a selection of the more common support services and mechanisms that US schools are providing to the startup community are presented. The section ‘Leveraging Networks to Provide Advisory Services’ outlines in more detail the assessment aspects that underlie the leveraging of university networks to help provide advisory support for entrepreneurs. The section ‘Concluding Remarks’ concludes the discussion.

## UNIVERSITY- AND COLLEGE-BASED SUPPORT MECHANISMS

Paralleling the rapid growth in entrepreneurial curricula, colleges and universities have made significant investments in support mechanisms and services. These investments fall into two broad categories: physical facilities/infrastructure

and intellectual capital.<sup>5</sup> Investments in physical facilities have typically been to create and launch business units that serve as an interface between the school and their internal and external stakeholders. These have included small business development centres, centres of entrepreneurship, business incubators and more recently business accelerators. Investments in infrastructure have been made to enhance the technological capabilities and have resulted more recently in an increase in virtual centres, incubators and accelerators. Key to the growth of strong educational programmes is the recruitment and retention of qualified faculty. To this end, many of the colleges and universities moving into the entrepreneurial space have invested in creating professorships or research chairs in the field. To complement the academic intellectual capital, many of these schools have also added executive-, or EIR positions to provide their students with access to experienced business leaders.

Examples and brief discussions about these types of investments follow.

## Physical facilities/business units

### Small Business Development Centers<sup>6</sup>

Currently, there are nearly 1000 Small Business Development Centers (SBDCs) located in the continental United States and their territories. These centres comprise the America's SBDC Network in partnership with the US Small Business Administration. Financial support is provided in part through federal funding and through matching cash and 'in-kind' donations from a variety of state and local governments, colleges and universities and other organisations in both the private and nonprofit sectors.

The first university-based programme was established at California State Polytechnic University in Pomona in late 1976. The next year seven more universities with business school initiatives tied to their local communities launched SBDCs. The basic charter for these centres was the provision of a variety of services designed to support the launching and development of small businesses. Services typically include business and management development, transference of technical information, product and marketing support and development, as well as the development of a better understanding of competitive markets, both domestically and abroad. For example, the centre website at the University of Southern Maine provides the following to potential clients, 'Whether you have an established business or are about to acquire or start a new one, you can obtain no-cost, confidential, business advising from the Maine SBDC'.<sup>7</sup>

### Academic centres

According to the Global Consortium of Entrepreneurship Centers (GCEC),

established in 1997, there are currently over 200 university-based entrepreneurship centre members. GCEC was formed to serve as a coordinating mechanism that would facilitate information transfer across academic partners. On their website, they state that they are an 'industry vehicle by which the top, established entrepreneurship centers, as well as emerging centers, can work together to share information, develop programmes and initiatives, and collaborate and assist each other in advancing, strengthening, and celebrating the contributions and impact of individual centers — as well as the overall role of university-based entrepreneurship center'.<sup>8</sup>

These centres often serve as a vital bridge between the academic institution (eg faculty, staff and students) and the local, sometimes broader, business community. This role serves to inform the academic programming by bringing to campus entrepreneurs who can share their experience and knowledge. Projects from startups or small/medium-sized growth companies can be embedded into course offerings to bring an experiential learning component to the curriculum. Finkle et al. (2006) claim that they often have the capacity to assist their home institutions in revenue generation.<sup>9</sup> This can be done through fund-raising activities targeting alumni and business leaders, external grants programmes, endowment creation and funding, as well as offering academic and executive education programming to a variety of external stakeholders.

In a recent interview roundtable posting on the NAC Architecture website, several reasons were provided for the creation and launch of such centres.<sup>10</sup> First, the centres can provide the means through which to teach students the necessary life and business skills they will

need to be successful. Increasingly, these include, but are not limited to, learning to make decisions in an ambiguous and uncertain environment, finding and solving extremely complex problems and managing business operations in a way that is optimal for a broad array of stakeholders. Secondly, the centres can serve as a mechanism for transferring information and research innovation in a way that expedites the move from the research lab to the marketplace. This linkage can also lead to interesting collaborations between the academic research community and their business counterparts. Finally, host institutions can leverage the ways they play a role in the economic and social development of the communities in which they reside. While most colleges and universities cite this as an important part of their mission, these centres can provide a direct means through which to do this.

### **Business incubators and accelerators**

The first business incubator was created in 1959 by Joe Mancuso in an old Massey-Harris farm machinery factory.<sup>11</sup> Mancuso rented small spaces to different businesses in an effort to offset the closing of the factory. Since that time, the idea of incubators as catalysts for young startups has grown, taking the form of both public and private organisations devoted to the support and nurturing of entrepreneurial efforts. Yet while the number of incubating organisations has grown, there is still a lot of variation in what an incubator is. Hausberg and Korreck (2020) present 17 different definitions in their Table 3.<sup>12</sup>

Even with slight disagreement about what incubators are, there is a similarity in what they do and provide. Jansen et al. (2015) analyse three university-based

incubators at Massachusetts Institute of Technology (USA), International Institute of Information Technology (India) and Utrecht University (Netherlands).<sup>13</sup> Their research suggests that these incubators and others like them provide a variety of support and services, including (i) common or shared working space with professional support services, (ii) mentoring opportunities with faculty, EIRs and accelerator programmes, (iii) networking services that facilitate connections with expertise in areas like the law, accounting, finance, strategy, marketing and funding and (iv) access to seed funding (in some cases).

Bone et al. (2017) in their report on the incubator landscape in the United Kingdom find many of the same services and support and note several other characteristics that are unique to incubators.<sup>14</sup> First, there is a selective process for consideration, application and admission, which is typically handled on a rolling or ad hoc basis. Secondly, client firms, when accepted may have to pay rent or fees for the space and services they use, but these are typically less than they would be outside of the incubator. Finally, the duration of residence is often open-ended and dependent on the stage of development the client firm has reached at the time they enter the incubator.

A more recent element in the entrepreneurial ecosystem is the business accelerator. While there is wide variation in a specific design, most accelerators have several common characteristics. They are usually of a fixed- or limited-duration, cohort-based, providing educational, mentoring and networking opportunities to entrepreneurial client teams.<sup>15-17</sup> The duration limitation allows for a graduation-type event at the end of the programme, at which client teams pitch or present to potential investors.

**TABLE 1** Characteristics of university-based incubators and accelerators

	<i>Incubators</i>	<i>Accelerators</i>
<b>Panel A. Distinctive characteristics</b>		
Admissions	Rolling or flexible	Cohort-based
Duration	Open-ended	Limited- or fixed-duration
Sponsorship	Client entrepreneurs	Corporate
Payments to	Fee-based	Fee- and equity-based
<b>Panel B. Common or shared characteristics</b>		
Educational/training programmes	Yes	Yes
Office space and support	Yes	Yes
Mentoring	Yes	Yes
Networking	Yes	Yes
Seed funding	Yes	Yes

While accelerators may take fees for space or certain services like incubators, they are also more likely to take an equity position in the client ventures and may make seed capital available in the form of small loans or investment in an equity position.<sup>18–20</sup>

While acknowledging and agreeing with these commonly held characteristics, Gonzalez-Uribe and Leatherbee (2017) contend that it is the access to entrepreneurial training and schooling that can develop ‘entrepreneurial capital’ that distinguishes accelerators from other support and funding mechanisms.<sup>21</sup> They claim to provide the first quasi-experimental evidence of how accelerator programmes can affect business startup performance. They work with a unique accelerator programme, Start-Up Chile, whose clients are recruited into the programme using very selective criteria. Once in the programme, these clients can also apply to participate in the educational programme. Entry into this programme is even more selective (only about 10 per cent are accepted from the base accelerator cohort). The authors cite their results as ‘entrepreneurship schooling

increases the probability of securing additional financing by 21.0% . . . [and] results in an increase of three times the capital raised (p. 1569)’.<sup>22</sup>

There is certainly some overlap in the roles of incubators and accelerators. Some universities may have one or the other, while other schools have both (eg MIT and Utrecht University). Table 1 compares some of the common and unique characteristics of these two mechanisms.

### Technology transfer offices

The notion of university-based technology transfer offices (TTOs) largely evolved in institutions that had scientific and/or technological research programmes. The role of the TTO was largely that of an intermediary responsible for bringing the research innovations out of the lab and into the marketplace. While O’Kane et al. (2015)<sup>23</sup> look at this role as coordinating across academic researchers and administration and industry, Markman et al. (2005) describe this as ‘catalysts of new venture formation and business venture development (p. 243)’.<sup>24</sup> One primary aspect of this connector role is to potentially benefit or



enrich the institution, the researcher and the business partner. The enriching primarily took the form of cash that resulted from managing the intellectual property (IP) (eg royalties and licensing fees) and the promise of future sponsored research opportunities.<sup>25–28</sup>

Weckowska (2015) acknowledges five key aspects of this role as finding the means to (i) encourage researchers to reveal innovations and research output that could be monetised or commercialised; (ii) oversee the handling of IP that might evolve from these research efforts; (iii) coordinate the legalities of licensing or developing the IP; (iv) identify and coordinate the arrangement of resources (eg human and financial) to support the effort; and (v) play the role of the connector between the various stakeholders in the venturing opportunity.<sup>29</sup>

More recently, TTOs have played a more active role in moving these efforts to include new business startups as part of their perceived responsibility for contributing to the economic development of their communities. Markham et al. (2005) find that TTOs that license in exchange for either an equity stake or future sponsored research are strongly correlated with the creation of new business ventures.<sup>30</sup> They go on to say that taking an equity position potentially produces greater returns than does trying to optimise shorter-term cash flows from fees and royalties. Other researchers have claimed that more mature TTOs with more experienced staff and a long history of steady fee and royalty streams are more likely to take an equity stake in the new venture or startup.<sup>31</sup>

Recent research on knowledge and IP management seem to confirm these efforts by university TTOs. Natalicchio et al.<sup>32</sup> suggest that schools should ‘adopt proper organisational and managerial practices

that effectively identify, manage, share, leverage and transfer the knowledge internally developed . . . to support their competitiveness’. They go on to say that organisations can use these as platforms for forming alliances, like joint ventures and startups as well as research-based networks and partnerships. The University of North Carolina at Chapel Hill created and implemented a new standard licensing agreement with the principal goal of streamlining the licensing of university-developed IP and expediting startup formation as a desirable outcome<sup>33</sup>. They advocate that forethought in the design of processes and procedures that focus on shortening the time from development to launch not only speed up the time to launch but help the community through potential job creation.

A more recent study proposes a utilisation approach that has as its major objective the maximisation of total stakeholder welfare rather than the personal gains to internal constituents.<sup>34</sup> They suggest that TTOs should ‘promote diffusion, support the use of research, and govern continued innovation processes’.<sup>35</sup> This approach requires a more expansive view of IP management that moves closer to innovation governance and would include (i) a more granular view of IP elements like patents, to include other pertinent types of protection, particularly in the age of digitalisation; (ii) a more comprehensive approach to licensing that extends beyond cash-based compensation and moves towards cross-licensing arrangements; (iii) balances the benefits of open innovation with the need for continued protections that can serve as incentives for researchers; and (iv) is looking for new ways of measuring TTO success.<sup>36</sup> Proving that there may be some merit to the approach above, a study looking at a sample of Canadian research

universities was interested in determining factors that affected the likelihood that academic researchers formally (eg patent and spinoff creation) or informally (eg consulting and commercial agreements) participate in commercially oriented activities.<sup>37</sup> Their findings indicate a lower likelihood of participation when the school retains higher levels of ownership claim, has a higher level of control (eg option to disclose and option to commercialise), or a higher share of income after commercialisation. Taken together, these findings are consistent with the benefits described above of promoting a more open, innovative and equitable regime for managing IP.

This current research on innovative and effective IP management confirms that university-based TTOs can play a significant role in contributing to the economic development strategy of their communities as well as adding to the needed alternative revenue streams for their institutions. Charney and Liecap (2000) state that '[e]ntrepreneurship programmes have demonstrated an ability to attract private funding both from large corporations and from successful entrepreneurs [which] . . . spills over beyond the entrepreneurship programme to the college as a whole and to the university' (p. 64).<sup>38</sup> In many cases, this funding is used to pay for or partially subsidise the school's investment in several types of intellectual capital to support their entrepreneurial efforts.

### **Intellectual capital** **Research chairs/professorships**

While the notion of endowed positions began in Europe, these positions had an early launch in the United States. As one might expect, the Ivy League schools had

the earliest start with these appointments with Harvard having at least two such appointments in the 1720s.<sup>39</sup> Katz (2004) in his survey of endowed positions in entrepreneurship found 406 endowed positions as of 2003, up from 237 in 1999. Notable schools like Harvard and Stanford Universities have multiple appointments in entrepreneurship or related fields (18 and 11 such positions, respectively). Babson College had 15 positions, while the University of Pennsylvania showed 14.<sup>40</sup>

Katz (2004) defines an endowed position as a special appointment with dedicated or endowed funding beyond the holder's traditional professorial salary and intended as an appointment of distinction beyond traditional professorial rank.<sup>41</sup> These positions have traditionally taken one of two forms, either as an endowed chair or endowed professorship. In academic circles, a chair appointment is typically viewed as representing a more significant contribution to the Academy than those with a traditional professorship appointment. Increasingly, these are more representative of the title structures within the college or university and are often used interchangeably.

Appointments of this stature bring with them certain expectations from both academic leadership and from donors who may be providing the funds through which these positions are supported. Frequently cited reasons for these appointments include the appointee will contribute to and encourage excellence in both the classroom and in their research domain; and the endowed portion of the position will bring some financial relief by freeing up a portion of the operating budget that might otherwise have been used to retain the appointee.<sup>42,43</sup> The leadership role suggests that the position



holder will work with and mentor both junior faculty and students. They will hopefully bring further acclaim to the school and their programmes through their published scholarship, involvement with professional academic organisations and their engagement with alumni and the business community.

### **Executives/entrepreneurs in residence**

One obvious irony about business education is that many of the professors teaching in US business schools have achieved their academic status without ever having a ‘real job’ per se. That is they have progressed through a purely academic career path and may not have spent any time working in a corporate or other organisational form. A recent paper in *Poets & Quants* asked and answered the following question: ‘So what’s a B-school to do when many teachers lack real-world experience in business? Increasingly, they’re bringing in ringers: experienced professionals — often alumni — who can provide to students what many professors cannot’.<sup>44</sup> In the case of entrepreneurial programmes, these professionals are most often entrepreneurs or other professionals with significant startup experience. Mandel and Noyes (2016) cite, ‘[e]ngagement with practicing entrepreneurs validates classroom learning and helps students to recognise their own developing business acumen (p 170)’.<sup>45</sup> This suggests that the EIR play a vital role as one of the principal intermediaries that help students bridge their academic learning and the possible practical applications of that knowledge to the development of their business idea or venture.

How these positions are managed, compensated and interact with the

academic community varies widely across schools. At Bentley University, these EIRs are appointed for a one-year term that can be renewed annually as long as the relationship is mutually agreeable. Much of the EIR’s time is donated to the school, however, if they teach in a course they are paid as an adjunct faculty member. The appointments can be located in a particular department or academic centre and often allow for cross-functional engagement with a variety of students and other faculty. EIRs can engage students in a variety of ways, including teaching, supervising or advising in-course projects, mentoring and introducing them to a variety of professional contacts that help the students begin to build their professional networks.

### **Research fellows programme**

In a general sense, a research fellow is an intermediate or transitional academic appointment through which the fellow agrees to perform some research agenda. Most have a limited term (eg one, two or three years) and are designed to serve as a bridge between doctoral work and a more permanent academic or professional appointment in the future. They are often designed to provide a continuation in the fellow’s academic and research development. In addition to agreeing to a research agenda, these appointments may also avail themselves of other academic resources (eg classes, seminars, research funds, collaboration with other faculty). As is the case with other mechanisms described in this paper, fellowships can take a variety of different forms.

Table 2 provides three distinct examples of fellowship programmes at two universities and with one consortium.

**TABLE 2** Examples of research fellows' programmes

<i>Fellows programme</i>	<i>Programme sponsor</i>	<i>Programme description</i>
CBC Entrepreneurial Fellows Award <sup>1</sup>	Chicago Biomedical Consortium	The programme identifies and supports the professional development of academic researchers who are keen to develop the skills and experiences needed to move translational projects from a university lab towards commercialisation and potentially into a Chicago-based biotech startup. Fellows will receive guidance from a wide range of mentors, including university faculty, staff and tech transfer, industry experts and other representatives of the biomedical community.
Stanford GSB Research Fellows <sup>2</sup>	Graduate School of Business, Stanford University	The programme offers a unique pre-doctoral educational opportunity for high-potential individuals to come to Stanford to participate in the intellectual life at Stanford GSB and the university. Fellows will have the opportunity to work closely with top faculty in the field on empirical research papers, take doctoral-level courses in business, economics, statistics, math or related fields, regularly attend field seminars and access a rich intellectual and cultural campus life.
Entrepreneurial Fellows Programme <sup>3</sup>	University of Colorado Boulder	The goal of the programme is to foster and promote entrepreneurship through successful technology translation and mentorship. Fellows will actively pursue entrepreneurial endeavours related to research translation and mentor other aspiring entrepreneurs. <ul style="list-style-type: none"> <li>• Benefits include discretionary funds (US\$5000) to invest in a venture, including training and travel funds; a teaching buyout (one course) to provide time to mature IP, perform technology transfer, gain patents and/or start a company; and collaboration opportunities with other entrepreneurial faculty. Beginning in the second year, these entrepreneurial fellows will be transitioned to a mentorship role as entrepreneurial mentors. Entrepreneurial mentors are expected to actively mentor other aspiring entrepreneurs and proactively share their experiences and lessons learned with broader audiences.</li> </ul>

Note: IP, intellectual property.

<sup>1</sup><https://chicagobiomedicalconsortium.org/awards/entrepreneurial-fellows/>

<sup>2</sup><https://www.gsb.stanford.edu/programs/research-fellows>

<sup>3</sup><https://www.colorado.edu/engineering/2018/09/26/new-entrepreneurial-fellows-program-offers-teaching-buyout-discretionary-funds>

## Coaching, mentoring and networking

Foo and Turner (2019) describe two important elements of intellectual capital as (i) human capital (eg coaching and training young entrepreneurs in starting their businesses) and (ii) social capital (the internal and external networks available to entrepreneurs).<sup>46</sup> This is consistent with the idea that most of the education process in entrepreneurial programmes

manifests through the relationships with the relevant programme stakeholders.<sup>47</sup> In their research, Haggard et al. (2011) cite three attributes that are critical to a successful mentor-mentee relationship.<sup>48</sup> First, it must be a mutual and reciprocal relationship (eg not unidirectional). Often, both parties benefit from the exchange. Secondly, it should go beyond the immediate skill and knowledge needs of the mentee and should

focus on developmental benefits. Finally, the interaction should be regular in frequency and consistent in format.

In the case of entrepreneurial studies, these roles are performed by a variety of people, many of whom are discussed earlier. This certainly includes faculty and staff, peers or other programme students and increasingly alumni and executive/EIR. Many of these latter individuals are also connected to students through either formal or informal mentoring programmes. There is a large body of literature that speaks to the mentoring function in entrepreneurial programmes. Here, the focus is on those that speak specifically to the roles a mentor can play in the lives and careers of young entrepreneurs.

Perhaps the most often cited is that of being a role model<sup>49,50</sup> providing a living, real-world example of where the mentee may evolve themselves over time. They bring first-hand knowledge and experience to the problems and challenges that the mentee is currently addressing. St-Jean (2011) identifies eight additional functions a mentor can serve for novice entrepreneurs.<sup>51</sup> Based on a series of interviews with mentees and mentors, St-Jean uses factor analysis to identify two categories of four additional functions each. Psychological functions include (i) reflector, who provides feedback on the venture and strategy; (ii) provides reassurance during challenging or stressful times; (iii) motivation and (iv) confidant. Career-related functions include the following: (i) integration into the mentor's business connection network; (ii) information support in various business and regulatory areas; (iii) confrontation in questioning and validating the mentee's venture plans and ideas; and (iv) guidance in terms of advice and suggestions. Several of these functions are confirmed in

other studies. St-Jean and Audet (2009)<sup>52</sup> find that transferring important business knowledge is a primary benefit to mentees, while St-Jean and Tremblay (2011) claim that 'learning with a mentor may help novice entrepreneurs collect new information helping them bypass their lack of experience' (p. 45).<sup>53</sup>

When this research is considered in its totality, a couple of things are evident. There is no question about the value of mentoring and coaching, the richness of relationships and the expansion of one's network. Similarly, many schools are bringing valuable services and connections to their entrepreneurial stakeholders through their infrastructure investments in centres, incubators and accelerators. To get a better sense of these investment choices, Table 3 provides a summary of college- and university-based mechanisms and services previously discussed for seven of the larger and better-known schools with entrepreneurship curricula. Included in the table are Babson College, University of Chicago, Harvard University, University of Michigan, MIT, University of Pennsylvania and Stanford University.

Panel A presents which schools have which type(s) of physical facilities or business units, while Panel B categorises their investments in intellectual capital. Interestingly enough, all seven schools have one or more academic centres, as well as incubators and accelerators. Two house SBDCs and six (possibly seven) have formal technology transfer operations. Six of the schools have significant investment in endowed research positions that can be documented. The University of Chicago does have endowed faculty in many of their schools and colleges, although no specific faculty could be identified as being part of the Booth School of Business. All seven have

**TABLE 3** Summary of school-based support mechanisms and services for top US schools

	Babson	Chicago	Harvard	Michigan	MIT	U Penn	Stanford
<b>Panel A: Physical facilities/business units</b>							
Small business development centres <sup>1</sup>				✓		✓	
Academic centres <sup>2</sup> (#)	4	1	1	2	2	3	2
Incubators <sup>1</sup>	✓	✓	✓	✓	✓	✓	✓
Accelerators <sup>1</sup>	✓	✓	✓	✓	✓	✓	✓
Technology transfer offices <sup>1</sup>	n/a	✓	✓	✓	✓	✓	✓
<b>Panel B: Intellectual capital</b>							
Research chairs <sup>3</sup> (#)	8	n/a	1	1	0	3	1
Research professorships <sup>3</sup> (#)	7	n/a	17	1	10	11	11
Executives/entrepreneurs in residence <sup>1</sup>	✓	✓	✓	✓	✓	✓	✓
Research fellows programme(s) <sup>1</sup>	✓		✓		✓	✓	✓
Counselling/mentoring and networking Programmes <sup>1</sup>	✓	✓	✓	✓	✓	✓	✓

**Notes:**

<sup>1</sup>Includes explicit references to the facilities, programmes and mechanisms found on institution websites from 12th March, 2021 to 15th March, 2021.

<sup>2</sup>Includes centres and institutes in entrepreneurship or social innovation found on the institution websites from 12th March 2021 to 15th March 2021.

<sup>3</sup>Count is from Appendix 6, List of Endowed Positions, 2003 from Kaufman Foundation 2004 Survey of endowed positions in entrepreneurship and related fields in the United States.

n/a: Data not available and should not be interpreted as 'not having this resource'.

executives- or EIR programmes as well as access to counselling, mentoring and networking services and opportunities. Finally, five of the schools offer research fellowship programmes to faculty and entrepreneurs.

The findings demonstrated in Table 3 certainly confirm that the larger and well-known schools have made economically significant investments in both the physical infrastructure and the intellectual capital to provide a solid foundation of support for their entrepreneurial curricula. While the investments in both the physical and intellectual assets certainly provide valuable services and support, not all colleges and universities can necessarily generate or commit the resources to building incubators, accelerators or even distinct centres of entrepreneurship.

Some may even face challenges in being competitive when it comes to competing for entrepreneurial faculty. All schools, however, could create or form a working group of academics and university advancement and alumni/corporate relations staff members who could modify and adapt their efforts into viable support opportunities. One such programme that can be easily adapted to almost any college or university situation is introduced and described in the next section.

## LEVERAGING NETWORKS TO PROVIDE ADVISORY SERVICES

### Overview

The business advisory initiative described here is an opportunity for the college or

university to expand and leverage its network of stakeholders in a way that is a win-win for all participants. The way in which a particular school implements and manages an initiative like this will vary considerably depending on a variety of factors. These should minimally include the existing menu of support services they currently provide to their entrepreneurial community; the organisational structure of the school; which schools, centres and departments will be involved; and how a programme such as this fits the strategic direction and mission of the school. The process recommended here is one that can be used in a variety of colleges and universities that want to assist their entrepreneurial alumni and other stakeholders, regardless of their academic orientation (eg liberal arts, business, engineering, innovation and life sciences).

The initiative is a process that determines whether or not and how best to provide a variety of university/college resources to members of the school's stakeholder community who are engaged in some stage (eg startup, growth, maintenance or liquidation) of their business ventures. These resources might include access to faculty, staff and alumni; to physical space and facilities like office space, conference rooms, laboratories, focus group facilities; and to students through internships and class-based opportunities to serve as a guest speaker or as a potential client in class group projects. The initiative begins with an evaluation to determine the current status of the business. It proceeds with the development of a strategy for the next steps and a determination as to whether or not the business venture in question is a good candidate for the advisory portion of the programme. The ultimate goal of the programme is

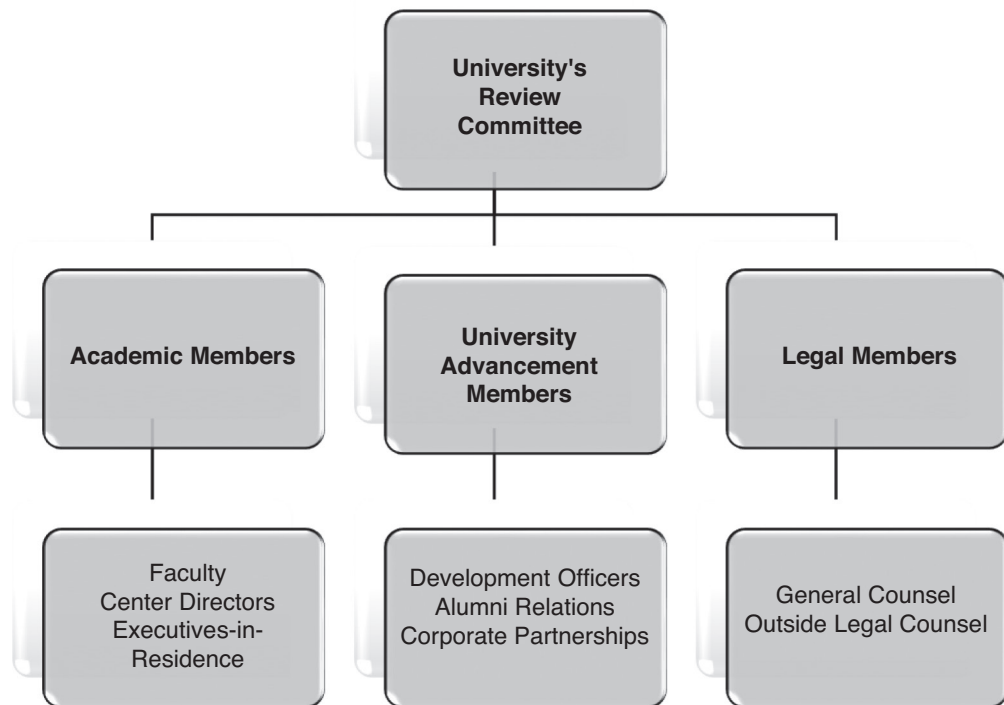
to offer intermediate, advisory opportunities that require a more formal structure than independent mentors and coaches, but not as formal or structured as a board of directors. The pool of candidates for these advisory roles would include members of the school's stakeholder network, like people from the local business community, alumni, advisory board members and faculty. The exact composition and skill set of these advisers would be identified during the evaluation phase based on the needs of the client business.

Each school should establish a review committee that would typically be comprised of faculty, staff or alumni who have knowledge and expertise in the specific industry of the candidate business; basic business disciplines like finance, marketing and operations; the law and higher education development/advancement. Figure 2 provides an example of this review committee.

In most cases, this results in a small committee with members from academics, the General Counsel's Office and University Advancement. The committee is charged with conducting the evaluation of the venture and the determination of the 'goodness of fit' as a candidate for the programme. It handles all of the internal and external communication for the programme. These activities will typically be handled by the academic and development members, while the General Counsel has responsibility for the legal documentation that might be required.

### **Benefits to initiative participants**

The initiative provides major potential benefits for all of the involved stakeholders in the school's network. Entrepreneurs get access to the resources of a major



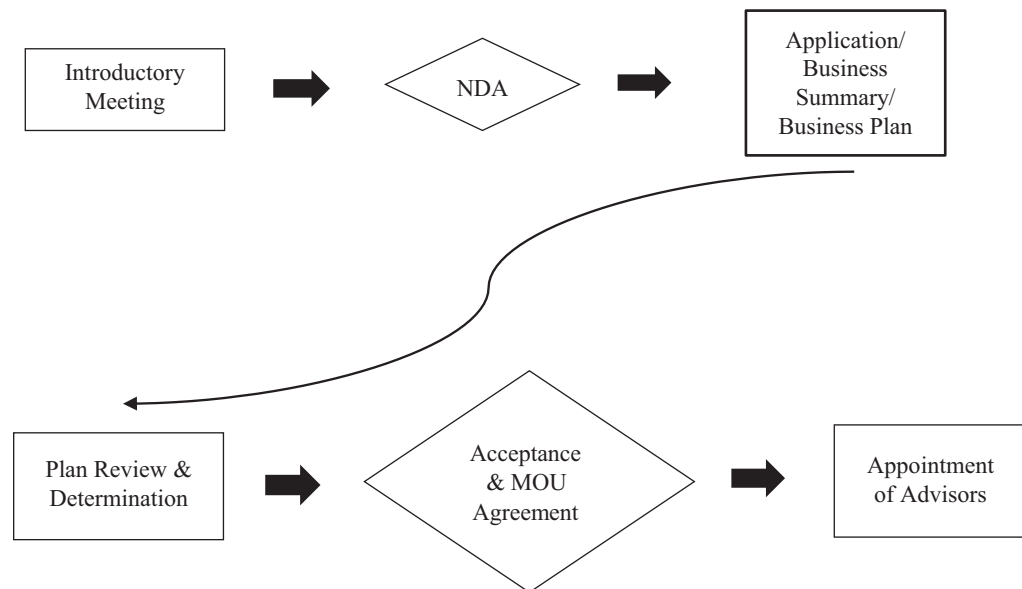
**FIGURE 2** University's review committee composition

college or university, as well as access to buildings, equipment and knowledge management professionals for minimal or no costs. Specifically, the programme would facilitate access to specific faculty, staff, alumni and other business leaders as advisers with the needed skill set or knowledge. The advice would be in areas particularly important to growing and sustaining business ventures, like development and implementation of viable business plans, soliciting funding, marketing and prototype development to name a few. Additionally, they could further engage with the students in a variety of ways. Their business plan could be used as an embedded class project where students work on an important problem or issue as part of their class work. The entrepreneur could participate in facilitating the project work or as

a guest speaker in the class. The students could also be part of a valuable candidate pool for internship and postgraduation employment.

The university also benefits in a variety of ways. The connection to the venture and its involvement in classes enhances the active or experiential component of the curriculum and provides the students with real-world connections to the material they are learning in their classes. The faculty benefit by adding a practical component to their syllabi, making it easier to blend the theoretical and the applied elements they are teaching. University advancement can extend the ways in which alumni and other business leaders can connect to the school in a meaningful way. Participation in this programme could translate into an economic return





**FIGURE 3** Process for a successful 'goodness-of-fit' determination  
Notes: MOU, memorandum of understanding; NDA, nondisclosure agreement.

in terms of equity and cash donations from their prospective alumni-based companies. For example, the school can negotiate an equity position (eg 1–2 per cent equity stake) in exchange for the assessment and advisory support that they are providing to the entrepreneur. In the event of a future liquidity event, the school stands to benefit by gaining important funds that could be used to offset operating budget and/or endowment needs. The development could also work with the entrepreneurs on additional ways to contribute to the school financially through a planned giving or current use donations assuming that they might have the financial means to do so.

Alumni and members of the business community are often looking for ways to reconnect with their alma mater or a local university in their community. An initiative such as this provides a means through which they can easily do this in a meaningful way that allows them

to assist young businesses and schools by sharing their knowledge and skills.

### The assessment and qualification process

While the goal of the initiative is to extend the ways in which colleges and universities might support their entrepreneurial stakeholders, not every product, service or business idea can or should be supported through this advisory mechanism. No school has the ability or desire to support every venture presented as a potential candidate. The following is a discussion of the steps that can be followed to qualify the candidates and to determine which ventures have the highest potential for success as depicted in Figure 3.

Critically important to that success is aligning the needs of the business with advisers who are experienced in the life cycle stage of the business. A startup seeking seed or angel funding should be matched with an adviser who has

that type of experience, while a more mature business with similar funding needs may be better served by an adviser with venture capital or private equity experience and connections. The real benefit of doing a thorough assessment of the candidate company should be an improved ability to match the company with the best advice, as well as improved access to resources and strategic planning. Finally, the more experienced the advisers in the needed areas, the better the entrepreneur's chances of success.

### **Introductory meeting with entrepreneur**

The introductory meeting allows the school's review committee and the entrepreneur an opportunity to get to know each other, or in some cases, re-establish former student–professor relationships. The discussion should focus on the vision for the company with particular attention to plans for future growth, as well as future funding and resource needs (eg timing and potential sources of these needs). One important issue is the type of organisational form (eg sole proprietorship, partnership, limited-liability corporation etc). The entrepreneur should understand why he or she chose a particular organisational form for their company because the selection of a noncompatible organisational form can cause significant time delays with respect to future funding conversations. Issues, concerns and other problems are hopefully identified and addressed in this meeting. Additionally, the school can offer other appropriate assistance and resources to help the entrepreneur fix these issues, concerns or problems and with any business plan modifications.

### **Signing of nondisclosure agreement**

Following the introductory meeting and assuming that there is continued mutual interest forwards, both parties should sign a nondisclosure agreement (NDA). Under no circumstance should the review committee continue discussions with an entrepreneur without an NDA. If the entrepreneur does not have an NDA, they can retain counsel to have them develop one. Alternatively, the university may have a standard NDA that would be suitable to modify and use. The purpose of this document is to protect both the entrepreneur and the university. It details very clearly and in writing what information can and cannot be disclosed and what penalties apply for failing to comply with the specified requirements.

Signing NDA signals to the entrepreneur that the university will be taking a disciplined approach to the relationship and will have a consistent approach with all its alumni or other people affiliated with the school. It should also convey that they will be professionally protective of the entrepreneur's IP and other proprietary information and that they expect the same courtesy and behaviour from the entrepreneur and any of his or her representatives.

### **Application, business summary and business plan**

After the execution of the NDA, the entrepreneur should prepare and present a formal application to the initiative. This could be a formal application form developed by the school. Alternatively, it could be something as simple as a short summary of their business (eg two to three pages plus exhibits). Whatever format is used, this should be considered as an admission application. In addition

to the summary or application, the package should include a copy of the business plan. The quality of the business plan will be an important consideration in the committee's deliberations. Refinement, or in some cases, a more complete development of a plan may be identified as a possible area of concern. In the worst case, it may contribute to a negative decision. In others, it may simply be an area where the university can provide some badly needed assistance.

Analysing how the application documents are prepared, how well written and what the entrepreneur chooses to share will give excellent insight into the company and its owner. Generally, this application process will not have a standard, 'one-size-fits-all' framework for people who apply. The form and structure that this ultimately takes will depend upon how the school is organised, the structure of the review committee and the types of entrepreneurial businesses the university's stakeholders start. All of these and any other relevant elements should be considered when establishing the application, the process for submission and review and any subsequent communications around the decisions made.

At this point in the process, the review committee evaluates the application and all relevant accompanying documentation. They engage in a thorough and comprehensive discussion of the pros and cons of the proposed deal and then decide as to whether to accept or reject the deal. This evaluation of the application is the first place in the assessment process where applicants may actually exit the process. The review leads to one of two decisions: (i) acceptance into the programme or (ii) rejection.

If an application is rejected, the conversation with the entrepreneur should be

handled professionally and respectfully. Rejecting a valued alumnus/alumna or any other member of the university's stakeholder network is risky with the possibility of alienating the candidate. It is important that they ultimately view this as part of a learning process rather than an indictment on their business model or ability. The objective is to assist them in maintaining their enthusiasm for their project and for the university while letting them know their ongoing participation in this advisory initiative is not a good fit.

As with any difficult conversation, the response should be handled face-to-face. The first step is to discuss the positive aspects of their project. Next, there should be some discussion about what challenges or issues were identified and why the concerns contributed to the decision to not accept. In some cases, it may be appropriate to explain how the challenges might be corrected not just that corrections need to be made. Finally, suggestions about alternative sources of assistance (eg other people, including alumni, books, white papers and organisations) that might assist them in further refining their strategy would be appropriate. The weight of this news can also be softened by allowing the venture to add or continue using additional appropriate resources and services that the school provides their entrepreneurial stakeholders.

If an entrepreneur is accepted, many aspects of the follow-up conversation will follow the same lines. The conversation should be conducted in a professional and respectful manner. It will identify any issues and concerns that need to be addressed through the relationship as it moves forwards. A strategy for how best to progress should be mutually developed by university staff and the entrepreneur.

Regardless of whether a plan is approved or rejected, a summary review of their business plan will be written by a member of the review committee. The summary should be short (eg no more than two or three pages in length plus appropriate exhibits). The summary should contain the following information: description of the business; its location; the product or services that it provides its customers; a brief overview of the competitive market in which it competes, the management team and staff personnel and any financial documentation relevant to the candidate's business operations (eg pro forma financials, breakeven analysis, cash burn rates etc).

The committee's summary becomes the cover for the candidates file, which includes the application materials and the business plan. Minimally, that file should be retained by the university representative who is responsible for managing the relationship. If the application is rejected, the involvement in this initiative will end, although the venture and its owner may continue to access other elements in the school's portfolio that are designed to assist entrepreneurs. If the application is accepted, the parties will move onto the signing of the documents as a next step.

### Acceptance and signing of documents

While it is appropriate to inform candidates of their acceptance verbally, the committee should follow this up with a written letter of acceptance. The letter will contain other important pieces of information, like a possible list of other benefits and services they might be eligible to use. It may also stipulate and describe any financial expectations

that the school has in exchange for the advisory services (eg an equity position or other forms of contribution to the school). It should also list relevant university contacts and how best to get in touch with them. It may or may not make reference to a forthcoming document that will outline the terms of the agreement between the parties.

This referenced 'terms of agreement' should be memorialised in a memorandum of understanding (MOU). The MOU is a legal document prepared or minimally approved by the university's General Counsel. It is designed to provide a clear understanding of the terms and expectations of the partnership. Examples of both the Letter of Acceptance and the Terms of Agreement described in this section can be found in Sims and Wiggins (2021).<sup>54</sup>

Examples of the types of provisions that should be included in this document are a description of the services to be provided to the entrepreneur by the school; any financial benefit or compensation that the school might expect in exchange for those services; the terms that oversee the duration and management of that financial agreement; confidentiality; the relevant handling of materials; relationship (prior and current); conflicts of interest; length of time (term) or duration of the agreement; process for termination of the agreement; any special treatments or conditions related to a future liquidation event; dispute resolution; and statements regarding the limitations of liability.

Once the parties have agreed to the terms and the agreement has been signed, a copy of the document should be given to the entrepreneur, the legal counsel for the university, the development office if there is an equity position and the individual who will be responsible

for overseeing the advisory appointments and monitoring.

### Appointment of advisers

Once the documents have been signed, the real relationship can begin. The school should designate the committee that will be responsible for managing the relationship. This will vary by school and programme. For smaller schools or programmes, this may be a single standing committee comprising members from the faculty and advancement staff that oversees all relationships. In larger schools, there may be several committees drawn from a pool of members each of which start to build a portfolio of client firms. In either case, there should be one designated contact person for each client firm that serves as the liaison between the client and the committee/school. Their role is to be the intermediary introducing the firm to the variety of resources that are available and making sure that appropriate connections are made and access to those resources is granted.

Perhaps the most valuable resource will be the recruiting of members for and the creation of the advisory board. Working closely with the liaison, the client firm will consider candidates that bring the needed knowledge and expertise to bear to assist in moving the firm forwards along its trajectory. Candidates for these roles will come from a variety of the university's stakeholders. Certainly, faculty and staff who have both entrepreneurial and business discipline-specific knowledge and experience will be critically important. Alumni and even their parents who have started their own ventures or who have worked in startup and early-stage ventures bring valuable knowledge to the firm and worthwhile (re)connections to their alma maters.

Business and community partners can also be invaluable contributors. They have the opportunity to share what they have learned and provide important links to the local community through their relationship to the school. The liaison and the management of the firm will need to work together closely to identify the critical skills and knowledge that needs to be included in the makeup of the advisory board. With that understanding as a starting point, they can begin to match appropriate candidates to the needs, selecting candidates in order of their priority needs.

Related to this, the liaison can serve an important role in helping the client venture preserve their equity. There are countless stories of new ventures using their early-stage equity to recruit the business acumen they need on their early boards. In later stages, when looking to raise money, the firm and their early advisers face unpleasant dilution outcomes as venture capital and private equity firms make such events conditions of providing their capital. The liaison can make sure that only the equity distribution for board seats are to the school as compensation for access to the school's stakeholder community. The advisory members contribute their time and knowledge to the firm for free. This should help mitigate future dilution unpleasantness.

Finally, the composition of the advisory board can change over time as the needs of the client evolve. As the firm matures, they will face a variety of financial, strategic and operational challenges in bringing their product or service to market. The model proposed here offers the flexibility to move board candidates onto and off of the board as these needs change over time. Some of these appointments may be very short term

and even project-based, working on a single problem need for the firm. Other board connections will last for the duration of the advisory board and may even extend into positions on a full-fledged board of directors when that need manifests. In any case, colleges and universities can provide their entrepreneurial stakeholders with much-needed access to the knowledge and skills they need through these valuable advisory connections that can evolve along with client firms as they grow and evolve.

### CONCLUDING REMARKS

For nearly 70 years, entrepreneurial education has evolved as an important curricular offering in a wide variety of colleges and universities, both domestically and abroad. Recent indications place the number of institutions at more than 2000 schools. Over this period of time, these same schools continue to work hard expanding the menu of curricular and cocurricular services and support that they can provide to the entrepreneurial community, particularly those entrepreneurs within their academic family and their local communities. In the first part of this paper, these efforts are described as financial investments into one or both of two broad categories: (i) investments in facilities like academic centres (eg in entrepreneurship or small business development, incubators and accelerators) and (ii) investments in intellectual capital (eg EIRs, endowing professorships or chairs in entrepreneurship and implementing fellow or visiting programmes). While all of these efforts bring important value and opportunity to the entrepreneurs being served, not all of the schools offering entrepreneurial programming necessarily have access to the physical assets or funding of this nature or level. What all schools

do have is a network comprised of alumni and local business professionals who have the needed expertise and knowledge and often a willingness to be connected to the school in some meaningful way.

Building on this premise, this paper outlines a process that determines how best to connect this network to school stakeholders engaged in various stages of running business ventures. The ultimate goal is to offer intermediate, advisory opportunities that fall between using independent mentors and coaches and a more formal board of directors that relies on members of the above-mentioned network.

This proposed initiative can be a win-win for all stakeholders involved. The firms get access to expert advice and counsel at a time they can most benefit from it. Advisory candidates have a new way to connect with the school and make meaningful contributions by donating their time as advisers. The institution continues to build a strong connected network between students, faculty, staff, alumni and the community; enriches curricular offerings through the addition of real-world projects and problems; and possibly receives a small equity stake in the firm that could bring some needed relief to school financial needs if there is a future liquidity event. This is an initiative that can be offered through any school, of any size and nearly any level of funding because it is dependent on the relationships and not the real assets of the institution. Finally, this process fills an important gap in the services schools can provide their entrepreneurial stakeholders.

### ACKNOWLEDGMENTS

We acknowledge the excellent research assistance of Jiao Jiang. Professor Wiggins acknowledges financial support from



a Bentley University summer research grant. The authors would like to thank the editor and an anonymous reviewer for their helpful and insightful comments and assume responsibility for any errors.

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