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Credentialing Entrepreneurs

How and Why

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REVERSING JOB-CREATOR LOSS

Start-ups drive job creation, and American start-up rates have declined for decades (Fikri, Lettieri, and Reyes 2017). A national credential for entrepreneurship could reverse this trend by reopening on-ramps to entrepreneurship and building bridges to other careers.

Every year, firms throughout the economy create and eliminate jobs, but new firms generate virtually all of the resulting *net* jobs (Wiens and Jackson 2015). From 1992 to 2014, start-ups created an average of 2.9 million net jobs annually, while established firms eliminated more jobs than they created.¹ Today, America's entrepreneurial job-creation engine is faltering: since the 1970s, start-up rates have *halved* (Fikri, Lettieri, and Reyes 2017). After the Great Recession of 2008–2010, the American economy entered unprecedented territory, as business deaths actually eclipsed business births. The ensuing recovery has created significantly fewer new businesses than have other recent recoveries (Haltiwanger, Miranda, and Jarmin 2013).

American entrepreneurship has not only diminished but also narrowed geographically. From 2010 to 2014, half of new firms came from just five metro areas: New York, Los Angeles, Houston, Dallas, and Miami.² Entrepreneurship remains demographically narrow as well. For example, although they represent almost half the workforce, women hold majority stakes in just over a third of small businesses and start fewer than 1 in 10 venture capital–financed, high-growth tech ventures (Raina 2016).³

The narrowness and decline of American entrepreneurship might seem counterintuitive. Nearly two-thirds of American adults see entre-

preneurship as a good career choice, and three-quarters accord entrepreneurs high status (Singer, Herrington, and Menipaz 2018). Moreover, today's aspiring entrepreneur can exploit breakthroughs that have lowered long-standing barriers. For example, new opportunities for fund-raising and prototyping, such as crowdfunding and 3D-printing hubs, abound.

At the same time, other trends may be driving talent away from entrepreneurship. For example, educational debt correlates negatively with small business formation, and both student debt and health-care costs have mushroomed in an era when incumbent firms offer attractive salaries, recruiting perks, and résumé-building experience (Ambrose, Cordell, and Ma 2015). Facing high opportunity costs, graduates may decide that entrepreneurship's risks outweigh its appeal. A recent graduate of a coding academy describes the barriers to entrepreneurship this way: "An emerging consensus amongst my generation [is] that millennials have some amazing ideas but feel hugely trapped by connected webs of constraint that reduce time for entrepreneurship. These webs of constraint include student loans and a need to be plugged into certain jobs for reliable income and access to necessities like health insurance."⁴

Starting a business has never been easy, but when the economy fails to replenish its ranks of entrepreneurs, overall job-creating capacity diminishes. Under such circumstances, would-be entrepreneurs need on-ramps and bridges. They require reasonable access to essential resources—the "entrepreneurial ecosystem" described later in this chapter—and they need passable crossings to less risky endeavors. More than half of start-ups fail after 5 years, and about two-thirds after 10 (BLS 2016). The entrepreneur faces likely failure even if she creates jobs along the way, and she may well emerge struggling to translate the value of her experience to the wider market.

In a few enclaves such as Silicon Valley, entrepreneurship carries such prestige that future investors and employers often recognize strengths built through launching a venture, even if that venture ends in failure. Beyond such enclaves, should an entrepreneur wish to demonstrate her qualifications—whether to investors or employers—what recourse does she have? She can take a college course, enter a business plan competition, pitch her ideas at meet-ups, create profiles on Gust and AngelList, earn certificates through MOOCs, enroll in General Assembly courses, or pursue a range of other fragmented activi-

ties. Many of these are valuable, but none cements her value the way a recognized credential would.

This chapter proposes a national entrepreneur's credential, building on the framework introduced in my recent report, *An Ecosystem Model for Credentialing Entrepreneurs* (Crawford 2017). A national credential could widen market recognition for entrepreneurial competencies and improve the risk calculus for entrepreneurship by serving as a kind of insurance for would-be entrepreneurs. From entry-level workers to midcareer professionals, more people could attempt ventures if, in the process, they established competencies that investors and employers recognize and value.

According to surveys, venture capitalists value managerial competence at least as much as idea generation, product development, or technology savvy (Gompers et al. 2016). Employers, for their part, rely on soft skills like problem solving, adaptability, collaboration, and communication, but struggle to select for such skills when hiring (Vozza 2018). An effective entrepreneur's credential would enable entrepreneurs to show they had demonstrated such skills. In other words, a national credential could serve as a market signal, conveying the value of entrepreneurial competencies to investors in new ventures, and to the wider market for talent. If a credential could deliver such a market signal, would it replenish the ranks of entrepreneurs? The possibility merits testing, since narrow and declining entrepreneurship chokes the economy's capacity to generate jobs.

ENTREPRENEUR AND ECOSYSTEM

Harvard's Howard Stevenson famously defined entrepreneurship as the "pursuit of opportunity beyond resources controlled" (Eisenmann 2013). To establish and scale their ventures, entrepreneurs draw resources from a rich "ecosystem." This ecosystem features both financial investors and those who provide the knowledge, resources, and opportunities on which ventures depend (Foster and Shimizu 2013). The strategy consulting firm Acceleration Group (for which I serve as managing director) organizes the entrepreneurial ecosystem into seven "CAPTURE" categories, which it calls the CAPTURE Framework:

- Cash and capital
- Access to market
- Prototyping and production capacity
- Talent and training
- Users for testing and early adoption
- Regulatory licenses and permissions
- Economic guidance for developing a scalable business model

Entrepreneurs “CAPTURE” resources from the ecosystem as they *build* their ventures, *showcase* these ventures’ potential, and *connect* to investors in each category. Each step requires a reciprocal interaction between entrepreneur and ecosystem, as Table 23.1 shows. Entrepreneurs make the case for investing in their ventures, and investors across the CAPTURE categories (we will follow the practice of Acceleration Group and call them “CAPTURE investors”) evaluate that case before making their knowledge, resources, and opportunities available.

If a national entrepreneur’s credential could improve the basis for CAPTURE investors to identify capable early-stage entrepreneurs, it could expand market participation on both sides.⁵ To develop such a credential in practice requires three major building blocks: 1) recognized standards and competencies, 2) accreditable demonstration opportunities, and 3) a common platform for establishing and assessing competencies. The following sections expand upon these requirements.

Recognized Standards and Competencies

First, a national entrepreneur’s credential requires an entrepreneurial competency framework. Well-developed frameworks exist, including the National Content Standards for Entrepreneurship Education

Table 23.1 Assessable Ecosystem Interactions

Process	Entrepreneur	Ecosystem
Build	Model venture and make case	Vet solution
Showcase	Prove concept and validate market	Perform due diligence
Connect	Recruit resources and execute	Invest resources

SOURCE: Acceleration Group Inc.

(EntreEd),⁶ the European Entrepreneurship Competence Framework (EntreComp),⁷ and the Entrepreneurial Mindset Index (EMI).⁸ Each of these frameworks emphasizes distinct competency types, including hard skills, soft skills, mindset attributes, and mobilization capabilities, as Table 23.2 illustrates. These competency types merit attention when designing a national credential, because the competencies required for entrepreneurship depart in important ways from those signaled by traditional business credentials.⁹

Table 23.2 Types of Entrepreneurial Competencies, with Examples

1. Hard skills	2. Soft skills	3. Mindset attributes	4. Mobilization capabilities
Business model	Critical thinking	Innovation and creativity	Recruiting talent and support
Market analysis	Communication	Adaptability and flexibility	Putting ideas into action
Product development	Collaboration	Initiative and resourcefulness	Accessing/mobilizing resources

SOURCE: Acceleration Group Inc.

Each framework emphasizes one or more of the four competency types:

- The EntreEd framework divides entrepreneurial competencies into three types: 1) *entrepreneurial skills* (concept development and resourcing, as well as leadership and personal management), 2) *ready skills* (communication, digital, and financial literacies), and 3) *business functions* (comparable to the MBA tool kit in finance, operations, marketing, and strategy).¹⁰
- The EntreComp framework also divides entrepreneurial competencies into three types, but it moves beyond traditional categories of knowledge, skills, and ability. EntreComp emphasizes competencies built and demonstrated through ecosystem interaction: accessing and mobilizing resources, putting ideas into action, finding new opportunities, leveraging resources, and persuading others to support or join the venture.

- The Entrepreneurial Mindset Index emphasizes “mindset,” breaking the entrepreneurial mindset down into “domains.” These include communication and collaboration, critical thinking and problem solving, creativity and innovation, flexibility and adaptability, initiative and self-reliance, and opportunity recognition. These domains designate attitudes and soft skills critical not only for entrepreneurship but also more broadly for the “heuristic” work on which most job growth depends, work in which one must experiment to find the path to success (Gold and Rodríguez 2018).¹¹

As this brief profile of distinct frameworks suggests, an entrepreneur’s credential must reflect competencies beyond the situation analysis typically emphasized by MBA programs. The process for awarding this credential must assess entrepreneurs’ capacity to recognize opportunities, mobilize resources, and adapt as they interact with the CAPTURE ecosystem. For evaluators to assess these kinds of dynamic entrepreneurial competencies, aspiring entrepreneurs need robust demonstration opportunities. Such demonstration opportunities constitute the second building block for a national entrepreneur’s credential.

Accreditable Demonstration Opportunities

An entrepreneur’s credential need not reflect extensive experience launching ventures, any more than a law degree attests to experience practicing law. Instead, the credential should open doors to further experience, based on focused demonstrations of entrepreneurial competency.

Entrepreneurial demonstration opportunities abound at colleges and other educational institutions, companies, community organizations, and capital providers (see the appendix for examples).¹² These opportunities allow entrepreneurs to build, showcase, and connect their ideas, while demonstrating their qualifications under pressure. Organizers of existing demonstration opportunities typically recruit judges to evaluate how well entrepreneurs perform. Some organizers develop demonstration opportunities within a given school or company, while others, such as the Network for Teaching Entrepreneurship (NFTE), Venture for America, and the National Science Foundation, offer forums across schools, companies, and regions.

Common demonstration opportunities include pitch competitions, accelerator selection processes, bottom-up-innovation programs, and entrepreneurial fellowships, as illustrated in the appendix. Even when participants exhibit valuable competencies, they typically emerge without standardized evidence of these competencies. A system for accrediting institutions that apply standardized criteria for submissions, evaluations, and awards could transform these demonstrations into “qualifying events.” Entrepreneurs who succeed in these events would receive an entrepreneur’s credential. Such tangible evidence, of competencies built and demonstrated through entrepreneurship, could lead more talent to view launching a start-up as a reasonable career move.

The credential should take the form of a professional certification, audited by a third party. Over time, the credential could encompass subcertifications by level, function (entrepreneurial marketing, finance, etc.), and stage. Accredited institutions should award the credential to entrepreneurs who demonstrate standardized competencies. An international credentialing body, such as the American National Standards Institute (ANSI), should oversee the standardization of entrepreneurs’ challenges at qualifying events. This credentialing body should accredit institutions to award or deny official credentials on its behalf. To ensure inter-rater reliability, assessors from the credentialing body should review evaluator qualifications and assessment processes at awarding institutions.¹³ This full-fledged accreditation process will take time to come to fruition. In the short term, therefore, foundations and relevant associations could endorse credential-awarding institutions as a starting point for quality assurance.

Accreditation should also require balanced, representative evaluator panels, in view of the correlation between evaluator homogeneity and success disparities for entrepreneurs. A 25-point gap separates the success rates (as measured by exits) of male- and female-founded start-ups, but “when startups are financed by VCs [venture capitalists] with female partners, that difference disappears” (Raina 2016, p. 3). This striking outcome underscores the importance of applying clear standards not only to the entrepreneur but also to the evaluator (Cutler 2015).

By standardizing existing demonstrations of entrepreneurial competency, accreditation could make such competency intelligible to the wider market. While this presents a major opportunity, it also intro-

duces the logistical challenge of standardizing submission requirements and scoring across decentralized events. A shared library of entrepreneurs' challenges and scoring rubrics, available on a digital platform, could help address this challenge. Such a platform represents the third essential building block for a national entrepreneur's credential.

A Common Platform for Establishing and Assessing Competencies

As the aforementioned competency frameworks make clear, entrepreneurial competency goes beyond the mastery of learned content and the performance of algorithmic tasks. A meaningful credential must reflect entrepreneurs' performance in an array of dynamic challenges that test their capacity to recruit resources and adapt to market feedback.¹⁴ An online library of challenges, for use in existing demonstration opportunities, could make it feasible to map performance to established entrepreneurial competencies.

Performance assessment should combine the kind of digital badging used in MOOC certifications, with awards from judges who rate performance in designated challenges.¹⁵ As entrepreneurs undergo the challenges required to build, connect, and showcase their ventures, the digital platform should do the following:

- Capture the skills entrepreneurs build as they tackle specific challenges, from business model to brand positioning
- Rate performance based on business-case due diligence as entrepreneurs showcase their ventures in qualifying events
- Assign badges for resources recruited, adaptations made, and assumptions validated, as entrepreneurs connect with the ecosystem

Credentials should reflect these respective elements, as illustrated in Table 23.3, on the following page.

In this model, accredited institutions select from a library of standardized challenges, available through the platform, to use in qualified demonstration opportunities. These institutions—colleges (and other educational establishments), corporations, community organizations, and capital providers—select challenges relevant to their programs, goals, and events. Evaluators at accredited institutions assess entrepreneurs based on how well they perform in designated challenges.

Table 23.3 Forms of Assessment

Performance	Assessment
1 BUILD: Assessment of Competencies Demonstrated Through Challenges	Skills: Entrepreneurs demonstrate competencies through digital challenges such as: <ul style="list-style-type: none"> • Product design • Market validation • Brand development • User testing
2 SHOWCASE: “Due Diligence” Evaluation of Ventures	Ratings: Judges score entrepreneurs’ demonstrations of respective competencies based on business-case due diligence criteria applied to ventures, which submit responses to challenges such as: <ul style="list-style-type: none"> • Business model • Market research • Go-to-market strategy • Operations • Financials
3 CONNECT: Resources Mobilized Through Successful Interactions	Badges: Entrepreneurs earn badges based on recruiting resources to the project from the CAPTURE ecosystem, including: <ul style="list-style-type: none"> • Capital from seed funders • Access through market gatekeepers • Production capacity through strategic partners • Talent through team members and supporters

SOURCE: RebelBase Inc.

Since ventures develop iteratively based on market feedback, challenges include robust mechanisms that enable entrepreneurs to elicit feedback from potential customers and stakeholders, as well as coaches, mentors, and evaluators. Evaluators assess the extent to which entrepreneurs incorporate market and community feedback into their venture strategies. Since successful ventures also depend upon collaboration between entrepreneurial team members who lead various functional areas of the venture, collaborators earn credit for their work commen-

surate with their contributions, based on models common for business school projects.¹⁶

The digital platform provides rubrics for evaluating entrepreneurs' performance as they complete the challenges, based on established entrepreneurial competency frameworks. This increases the legitimacy not only of participating entrepreneurs but also of the demonstration events themselves. These rubrics could include, for example, the following: viability of the business model, validation of the market opportunity, strategies for rolling out the product and taking it to market, preliminary operational demonstrations, and financial modeling. Criteria derive from real-world standards for business case due diligence. An international accreditation body reviews evaluator responses for accuracy in vetting solutions, valuing opportunities, and performing business case due diligence.¹⁷

CASE STUDY EXAMPLES

RebelBase Beta

The software-as-a-service (SaaS) platform RebelBase (developed by a team I lead) is testing the viability of providing standardized challenges, through a digital platform, to a range of organizations.¹⁸ Students, employees, community members, and other potential innovators develop business models, validate markets, and make the case for new solutions, as they complete challenges with the help of dynamic hints and examples.

These users have the opportunity to showcase their capacities in a game-like format, in which they build recognition for their solutions as they undergo challenges such as designing solutions, creating brands, modeling cash flows, and pitching to investors. Entrepreneurs establish their competencies as they undergo each challenge, collaborate with team members, interface with stakeholders, and elicit feedback from a community of peers and advisors.

During beta testing, a variety of users, including executives at a nonprofit, students in entrepreneurship and innovation courses, and participants in a professional hackathon, tested the challenges selected for

their purposes. Although the sample size was small, the beta test suggested that a library of entrepreneurial challenges available via a common digital platform can standardize criteria for assessment of entrepreneurial demonstration opportunities.¹⁹

Erasmus+

As this chapter has argued, a robust national entrepreneur's credential requires three elements: 1) an established entrepreneur's credentialing framework, 2) entrepreneurial demonstration opportunities, and 3) a library of standardized entrepreneurs' challenges for use in these demonstration opportunities. To illustrate how these three components could come together across institutions and even countries, it merits looking abroad at the European Union and affiliated countries' Erasmus+ network.²⁰ In February 2018, a consortium of 11 Erasmus+ national agencies, representing both EU and non-EU countries, launched the Youth@Work initiative, focused on youth employability and entrepreneurship (Diroescu 2018).²¹ This partnership explores uses of the EntreComp framework, mentioned above, to expand access to entrepreneurship and "make advancements in assessing entrepreneurial learning. . . . On this basis, guidelines can be developed on how to assess entrepreneurship as a competence" (Rebeccaw 2017).

Erasmus+ is assessing the feasibility of making a digital library of entrepreneurs' challenges and simulations accessible by means of a common platform, as outlined here. This initiative would apply a scoring system for performance in these challenges and map performance to competencies in the EntreComp framework. National agencies and partner universities would convene panels of judges for qualifying events, and Erasmus+ would accredit national agencies and their local partners to award an EU entrepreneur's credential.

An EU credential could foster opportunities for entrepreneurs to collaborate across borders to address unmet needs in the market and solve common problems. Armed with such a credential, young people would have high credibility when they approached CAPTURE investors in entrepreneurial ecosystems. Earning a credential while they try out entrepreneurship would allow them to build their employability in the process. An EU credential could play a crucial role in replenishing the ranks of job creators in countries facing both double-digit

youth unemployment (Eurostat 2018) and overwhelming “skills gaps,” where large percentages of employers see young hires as lacking the skills they require (European Centre for the Development of Vocational Training 2015).

CONCLUSION

Faced with declining entrepreneurship, the United States urgently needs to reallocate human capital to the new business start-ups that create virtually all net new jobs. A national entrepreneur’s credential could stimulate entrepreneurial activity by enabling entrepreneurs to communicate their capabilities to the market.

Existing competency frameworks and demonstration opportunities constitute useful building blocks for such a credential. To convert these building blocks into a national credentialing system requires a common digital platform. Through a library of challenges, such a platform could standardize the assessment of entrepreneurial performance. An accreditation body could authorize organizations that offer entrepreneurial demonstration opportunities to award credentials based on performance in these challenges.

Such a platform would provide aspiring entrepreneurs crucial opportunities to build, showcase, and connect their ventures and innovations. It would also enable them to establish recognized competencies in the process. This would equip entrepreneurs to convey their capabilities to the market. If the market were to recognize this signal, it could change the risk calculus for attempting start-ups.

The U.S. economy cannot afford to wait for existing institutions to build market recognition for entrepreneurial competencies through a process of gradual evolution. Indeed, many institutions may prove too siloed, stratified, and slow moving to achieve the needed overhaul. It is time to connect innovation ecosystems across existing colleges, companies, community organizations, and capital providers, enabling a range of resource providers to identify, champion, and invest in talented entrepreneurs.

In an increasingly globalized economy, entrepreneurs need to work with team members and resource providers beyond their local ecosys-

tems. Consequently, the longer-term solution must connect ecosystems across regions, industries, and even countries. Regional accreditation bodies should make their standards interoperable and recognize each other's credentials. Globally compatible entrepreneurs' credentials could provide a potent mechanism for broadening access to entrepreneurial experience, thus connecting entrepreneurs to a worldwide ecosystem of opportunities and resources.

Finally, researchers who study jobs and growth need to deepen their understanding of the "job-creator loss" that occurs when talent is diverted from entrepreneurship, and how to reverse this trend. A linked platform for entrepreneurial demonstrations could generate critical insights about the attributes and interactions that lead talent to launch ventures, and so could induce resource providers to invest in these ventures. Such data could in turn guide further efforts to expand access to entrepreneurship.

Notes

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1. Within the first five years, as new ventures fail, they destroy about 40 percent of the jobs they have created. However, those that survive grow faster than mature firms (Haltiwanger, Jarmin, and Miranda 2013).
2. This is a measure of the number of firms generated, not their rate of growth. The highest per-capita density of fast-growing firms on the 2017 Inc. 5000 list per capita can be found in Boulder, Colorado; Provo, Utah; Huntsville, Alabama; and Washington, D.C. (Hathaway 2018).

3. With entrepreneurship already concentrated by gender, restrictive immigration policy risks further limiting job creation. Immigrants are disproportionately entrepreneurial (Kauffman Foundation 2018), and without immigrants and their children, the Fortune 500 would dwindle to the “Fortune 284” (Florida 2017).
4. Brendan Hamill, e-mail message to author, February 20, 2018. Used with permission and edited for clarity.
5. In a two-sided market, better matching can facilitate market expansion (see Crawford [2017]).
6. Competencies represent illustrative examples, rather than an exhaustive list. For more information, see the web page <http://www.entre-ed.org/natstandards/national-entrepreneurship-standards/standards-summary/> (accessed August 23, 2018), which lists the entrepreneurial skills, ready skills, and business functions that make up the National Consortium for Entrepreneurship Education’s national content standards for entrepreneurial education and related tool kit.
7. As above, competencies represent illustrative examples rather than an exhaustive list. For more information, see McCallum et al. (2018).
8. Here again, domains represent illustrative examples rather than an exhaustive list. For more information, see World Economic Forum (2018).
9. Successful entrepreneurs think differently from the way conventional managers do. Managers are trained to apply “causal reasoning” by choosing the optimal path to a given end using established means. By contrast, entrepreneurs employ “effectuation,” which “begins with a given set of means, and allows goals to emerge contingently over time from the varied imagination and diverse aspirations of the founders and the people they interact with” (Sarasvathy 2018).
10. See, for example, Goodstein and Richmond (2017).
11. As opposed to “algorithmic” activities, which entail following an established set of steps, heuristic activities constitute most job growth, writes Daniel Pink (2009): “The consulting firm McKinsey & Co. estimates that in the United States, only 30 percent of job growth now comes from algorithmic work, while 70 percent comes from heuristic work” (p. 30).
12. In practice, these institutional categories frequently overlap, through various forms of collaboration. A *New York Times* article called the growth of various forums at universities an “innovation arms race” (Singer 2015), and many corporations are engaged in similar opportunities.
13. “Inter-rater reliability” means that distinct panels of judges assign equivalent ratings to comparable demonstrations. Given the uncertainty of early-stage ventures, investors often disagree strenuously about the potential of a business but concur when it comes to the competencies and relative strengths demonstrated by members of respective start-up teams.
14. Psychologist Donald Schön (1983) calls such dynamic adaptation to feedback “reflection in action,” citing the example of jazz performers, for whom “improvisation consists of varying, combining and recombining a set of figures within the schema which bounds and gives coherence to the performance” (p. 55).
15. For example, to award badges and certificates for its Massive Open Online Courses, or MOOCs, MIT partners with the learning platform GetSmarter. At the

- end of a given program, assessments determine whether participants have completed module exercises. If so, they are awarded a digital certificate administered by the digital credential and badging platform Accredible. For more information on digital certificates and badging, see the company’s website.
16. This could be supported by assessments emphasizing team interaction. For example, Andrea Bennardo of the human resource consulting firm RisorSe has developed innovative psychometric approaches that emphasize the *interaction* of various mindsets and competencies within entrepreneurial teams.
 17. Such criteria can be made systematic and applied. For example, Acceleration Group has developed due diligence frameworks for angel investors and taught them to investors on behalf of an angel group.
 18. For more information, see the company homepage, <https://rebelbase.co/>.
 19. One of the test users, the Bard MBA in Sustainability’s 2017 venture competition, serves to illustrate the use of the challenges. Participants performed the following assessable tasks, corresponding to digital challenges in the respective categories. Teams competed in one or more categories according to their preparation level, and judges reviewed posted challenge entries to score team performance.
 1. Innovation
 Solution: Define a product, service, or initiative that solves a critical problem.
 Business model: Lay out a viable business model.
 Impact model: Make the case that their innovation will have significant impact.
 2. Route to market
 Market: Identify an addressable market and understand its size and shape.
 Strategy: Lay out a persuasive go-to-market strategy.
 Scale: Show whether it can scale and how.
 3. Resources
 Rollout: Present a feasible model for going from minimum viable product to scale.
 Team: Clarify whom the team should include and why this team can pull it off.
 Resources: Identify resources in the ecosystem they’ll need and how they’ll access them.
 4. Financials
 Cash: Present a plausible cash-flow model, showing where the money will come from.
 Impact metrics: Lay out a way to prove this to stakeholders.
 Capital: Model scenarios for capital required, with plausible returns for investors.
- See “Disrupt to Sustain Competition Highlights,” Acceleration Group (2017).
20. For information about Erasmus+, see European Commission (2018).
 21. Youth@Work is an initiative of the Erasmus+ national agencies of Turkey, the United Kingdom, France, Italy, Spain, Poland, Hungary, Malta, the Republic of Macedonia, Greece, and Cyprus. See Diroescu (2018).

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Appendix 23A

Examples of Existing Demonstration Opportunities

Institutional category	User type	Purpose	Award
College/educational			
1. NYU/D-Prize Social Venture Competition ¹	1. Competition or hack 2. Cofounder, adviser, or service provider	1. Filter entrants or structure challenges 2. Find collaborators or pitch services	1. Award / funding 2. Contract 3. Grade / assessment
2. Cornell + CofoundersLab ²	3. Educator	3. Give and grade challenges	
3. SUNY (FIT) Entrepreneurship Practicum ³			
Corporate			
1. Barclays: Social Innovation Facility ⁴	1. Corporate 2. Partner / acquiring firm	1. Stimulate intrapreneurial innovation ⁷ 2. Source innovation	1. Recognition / funding 2. Partnering / acquisition
2. Google: Acquisition Database ⁵	3. Employer	3. Hire potential leaders	3. Job
3. Neoway ⁶			
Community			
1. RiseBoro Community Partnership ⁸	1. Nonprofit 2. Grant maker	1. Seed initiative 2. Replace traditional application	1. Funding 2. Investment / funding
2. SBIR/SSTR Seed Fund Opportunities ⁹			
Capital providing			
1. Quake Capital ¹⁰	1. Accelerator	1. Assess applicants	1. Acceptance
2. Arbor Bros. ¹¹	2. Engaged philanthropist	2. Assess applicants	2. Investment / funding
3. Golden Seeds ¹²	3. Angel group	3. Standardize deal flow	3. Investment / funding

SOURCE: Acceleration Group Inc.

Appendix Table Notes

1. New York University (2018).
2. Cornell University (2018).
3. Fashion Institute of Technology (FIT), Entrepreneurship Program capstone course: EP 452—Entrepreneurship Practicum.
4. Barclays (2018).
5. See “Acquisitions” web page for Crunchbase at <https://www.crunchbase.com/search/acquisitions/b167e0cce9ab4b6f29442f90a5a77f22bb373a60> (accessed August 23, 2018).
6. An entrepreneur’s project profile on the RebelBase beta was used by me in a recent employment reference. For a discussion of how employers can select for entrepreneurial competencies when hiring, see Butler (2017).
7. The term *intrapreneurial*, used in the chart, refers to “internal” entrepreneurs who launch new initiatives within or spun off by existing organizations.
8. From an Acceleration Group internal document, *RiseBoro Due Diligence*, dated January 26, 2018.
9. SBIR (2018).
10. Quake Capital (2018).
11. Arbor Brothers (2018).
12. Golden Seeds (2018).

