

Promising Practice

The Readiness Inventory for Successful Entrepreneurship (RISE): A Tool for University Engagement in Entrepreneurial Learning

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Executive Summary: The Readiness Inventory for Successful Entrepreneurship (RISE) is a promising practice in entrepreneurial learning. RISE targets entrepreneurial skill-building over the creation of business plans or models as a pathway to entrepreneurship. RISE applies Communimetrics, an innovative theory of measurement, to clinically assess 30 entrepreneurial skills across four types of management. An entrepreneur's baseline skill level is established on a skill development ladder, and routine coach and entrepreneur assessments inform skill development needs. This paper outlines the RISE model and discusses how it fits into broader university engagement through Small Business Development Centers, centers for entrepreneurship, and other university programming to train entrepreneurs.

I. Introduction

This promising practice piece introduces the Readiness Inventory for Successful Entrepreneurship or RISE as a tool for assessing the existing skill level and then developing entrepreneurs. The paper discusses RISE's development in light of the extant literature on entrepreneurship and reviews its existing applications. Lastly, RISE's potential application is framed within broader university engagement through Small Business Development Centers, centers for entrepreneurship, and other university programming to train and develop entrepreneurs.

II. What is RISE?

RISE or the Readiness Inventory for Successful Entrepreneurship was developed by Dr. Thomas S. Lyons at the University of Tennessee at Chattanooga and Dr. John S. Lyons of Chapin Hall at the University of Chicago. The development was done in partnership with Advanced Metrics, a Baltimore-based software development company. RISE assesses entrepreneurial skills using the Communimetrics theory of measurement. Communimetrics is a widely used measurement system that targets the communication value of assessment theory.

In the case of RISE, this means communication between the entrepreneur and partners in the entrepreneurial ecosystem. Unlike commonly used psychometric theory, whose numbers do not easily translate into meaning (Blanton and Jaccard, 2006), each value in Communimetrics has an immediate and translatable meaning. For example, under RISE the action levels measure as follows:

- 0 Lack of Skill—requires intensive development
- 1 Inconsistent Skill—requires development
- 2 Entrepreneur has Skill
- 3 Entrepreneur’s Skill level is a strength—exceptional skill

Communimetrics frames the goal of measurement on communication, in this case communicating skill levels. As such, the RISE rating scale offers non-arbitrary ratings (Lyons, 2009) that have immediate value to the entrepreneur, the entrepreneur’s coach, and others in the ecosystem. This approach allows for the assessment of an entrepreneur’s skill level based on where s/he needs to be relative to their personal development plan and not on a bell curve relative to a sample, population or the universe of entrepreneurs. Skill development might be thought of as climbing a ladder (see Figure 1). The next rung on the ladder represents a transformation of the entrepreneur’s skills, as they ascend that ladder toward skill mastery (Lichtenstein and Lyons, 2010).

Figure 1. Entrepreneurship Skill Development Ladder



RISE is comprised of 30 individual entrepreneurship skills. These skills are not exhaustive but represent a minimum level of diverse skills for an entrepreneur to be successful—they are the essential skills of entrepreneurship. These 30 skills were identified based on extensive literature reviews and over a decade of field-testing the Entrepreneurial League System Assessment (ELSA), which was a precursor to RISE (Kutzhanova et al, 2009; Lyons, 2009). As noted in Table 1, these skills are grouped into four management domains: business management,

organizational process management, relationship management, and transformation management. Business management skills are those required for managing the structures of business. Relationship management requires skills in managing people, inside and outside of the enterprise, itself. Organizational process skills are needed to manage the processes of business. Transformation management skills are the skills essential to managing change.

Table 1. RISE Management Domains

Domain	Individual Skills
Business Management Skills	<ol style="list-style-type: none"> 1. Knowledge of field/industry 2. Knowledge of laws/regulations 3. Accounting/bookkeeping 4. Finance 5. Marketing/communication 6. Operations management 7. Technology-enabled business management
Relationship Management Skills	<ol style="list-style-type: none"> 8. Networking capacity 9. Leveraging existing partnerships 10. Resource leveraging 11. Building and maintaining reputation 12. Community involvement and influence 13. Accountability 14. Teaming
Organizational Process Management	<ol style="list-style-type: none"> 15. Internal communication 16. Process design 17. Decision making 18. Conflict management 19. Performance and disciplined action
Transformational Management Skills	<ol style="list-style-type: none"> 20. Problem solving 21. Persistence/relentlessness 22. Passion/charisma 23. Flexibility and adaptation 24. Knowledge as a resource 25. Creativity 26. Innovation 27. Leadership 28. Resilience 29. Resourcefulness 30. Self-awareness

RISE can provide skill measurements at the individual skill level, domain level, and an overall skill level. This permits the establishment of a skill baseline – where the entrepreneur’s skillset stands, in terms of strengths and weaknesses, as s/he begins the development process. It also allows for tracking changes in skill level over time. A coach or counselor can use this information to help the entrepreneur to create a skill development plan, match the entrepreneur to resources that are appropriate to her/his skill level, and track and report skill-building outcomes.

The conceptual model underlying all of this holds that entrepreneurs are successful to the degree that they master a skillset (Lyons et al., 2007; Lichtenstein & Lyons, 2010). These skills can be defined. Essential entrepreneurship skills reflect a melding of agency and the context within

which the entrepreneurial activity takes place. “That is, the total skill set should include the skills of the what, how, why and the ‘know why’ (i.e., meta-cognition) of entrepreneurship (Middleton & Donnellon, 2014) and the skills of the “with whom” (i.e. interacting with others, both inside and outside the business, in a variety of productive ways).” (Lyons & Lyons, 2015, p. 7). It also postulates that these skills can be measured in a clinical manner, as opposed to a predictive one. That is, the ultimate goal of skill measurement ought to be understanding the entrepreneur’s current skill status, not predicting it (Lyons & Lyons, 2002; Lyons, 2009).

III. RISE in Higher Education

RISE's application is also relevant to US educational institutions. In their study of university campuses as entrepreneurial ecosystems, Miller and Acs (2017) noted the importance of "the centrality of the entrepreneur in name and operational definition" to these ecosystems (76). RISE places the entrepreneur and his/her skill level at the center of this training. We envision RISE's application to both internally and externally facing entrepreneurial education programming. Here, we draw a distinction between 1) entrepreneurial education and 2) entrepreneurial outreach and learning. Other scholars have characterized entrepreneurial education as the set of programs targeted toward university students (Hahn, Minola, Gils, and Huybrechts, 2017). We broaden that definition for discussion purposes here. We consider entrepreneurial education as those internally focused activities, such as formal educational programming, tech transfer, and business start-ups among university students, staff, and faculty. Such activities are common among university degree offerings and efforts to patent and

transfer basic research and other intellectual property generated by universities. We distinguish those internally focused activities (e.g. entrepreneurial education) from entrepreneurial outreach and learning, which we contrast as externally focused on training of entrepreneurs through economic development, workforce training, and business development centers. Other scholars have drawn similar distinctions on internally versus externally facing entrepreneurial activities (Zamani & Mohammadi, 2018).

IV. Entrepreneurial Education: Internal Higher Education Focus

A strong environment exists for implementing RISE to support internal entrepreneurship activities. As shown in Figure 2, The Global Consortium for Entrepreneurship Centers counts 142 university-based entrepreneurship centers among its membership. While the focus among these centers varies, a number of them focus heavily on student education, pitch competitions, tech transfer and other internally-oriented activities.

Figure 2. Entrepreneurship Centers



Note: Created by authors using Global Consortium of Entrepreneurship Centers data [retrieved from <http://www.globalentrepreneurshipconsortium.org/members/>]

For illustrative purposes, we highlight three areas 1) pitch competitions, 2) tech transfer/commercialization, and 3) student education where RISE's implementation builds on existing entrepreneurship education activities. First, pitch competitions are an increasingly common approach to quickly vetting the viability of new ideas and products. Spinuzzi et al (2018), identified "four avenues" "argument, application, design, and financial model" for student entrepreneurs seeking to iterate their value propositions (405). While Spinuzzi et al.'s (2018) work focused on communicating these value propositions, RISE could play a role in either the pre or post pitch areas across all four avenues. Pre-pitch assessments would identify the base levels of the entrepreneurs and target areas of improvement prior to the competition. If resource constraints exist, a more limited post-pitch application of RISE to the most promising entrepreneurs would assist them in identifying and building the skills necessary to shepherd their value proposition/product to the next stage in market development

Tech transfer and commercialization represents another internal application of RISE, especially for those university inventors with products and ideas that they wish to commercialize themselves. Such activities are consistent with the expanded mission of universities as societal innovators and partners with industry and government (e.g. the 'Triple Helix' literature, Etzkowitz and Leydesdorff, 1997). For example, Klofsten and Jones-Evans (2000) identified training programs for prospective university entrepreneurs as one activity for generating university entrepreneurship. The application of RISE to these promising entrepreneurs would not only prepare these university researchers, whom we presume might have core competencies in STEM fields rather than management, for a higher probability of success, but it would also target university support toward a documented and verified mechanism to support commercialization efforts. A growing area of interest at many universities is social innovation – the creation of enterprises that pursue a mission to solve a wicked social problem. This activity often attracts researchers from the social sciences. The newer version of RISE that assesses social entrepreneurship skills could be of value to preparing this particular set of university entrepreneurs.

Lastly, entrepreneurial education is often focused on the general student population. RISE serves a tangible second step in this process to target those students with specific entrepreneurial aspirations as a result of more general efforts to establish an entrepreneurial culture within the university. Student-entrepreneurs using RISE would receive individualized and customized assessments

of their current skill level, which may not exist in a more generalized entrepreneurial curriculum.

V. Entrepreneurial Learning and Outreach: External Higher Education Focus

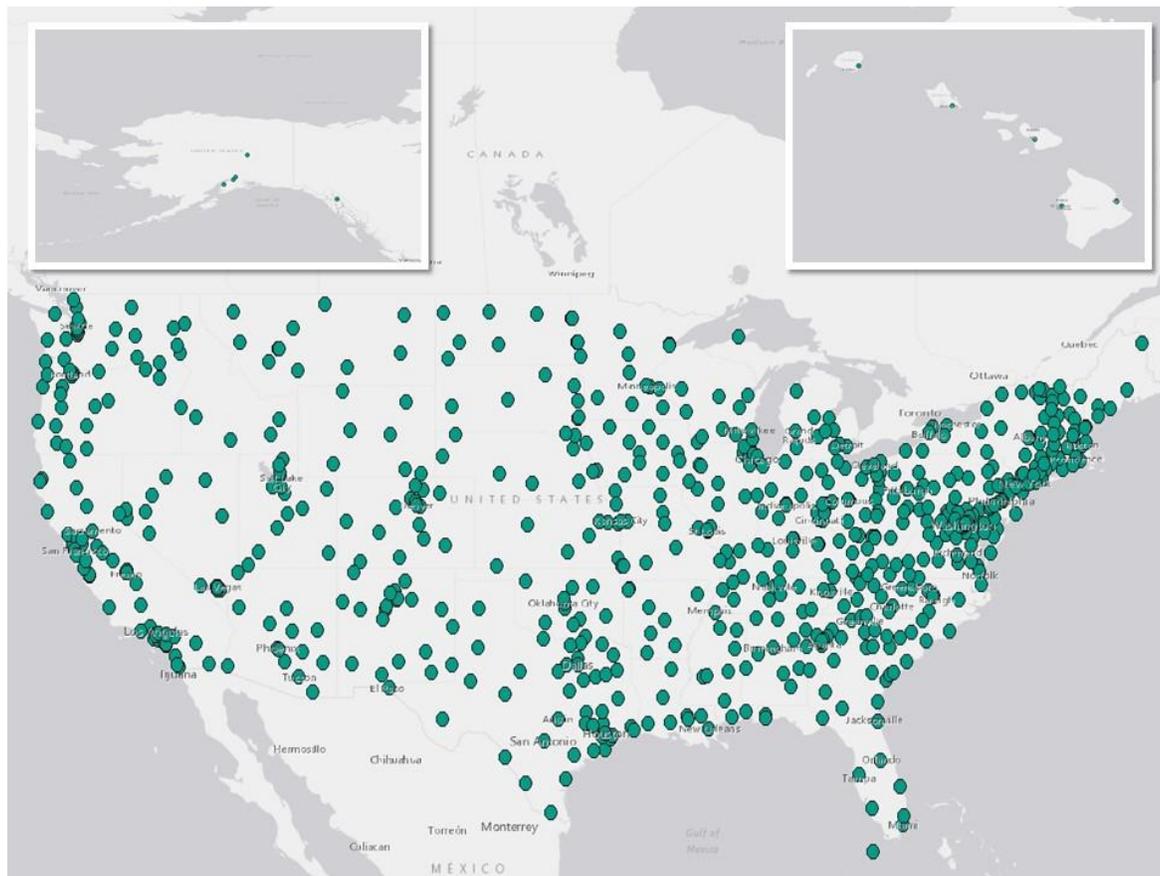
RISE has been utilized by EntruBiz, a pilot program that was created and managed by Marcus Oldham College in Victoria, Australia. EntruBiz's mission was to stimulate regional economic development in two rural sub-regions in Victoria through entrepreneurship. A Rural Enterprise Developer (RED) was located in each sub-region. The RED utilized RISE to assess the skills of client entrepreneurs and then build their skills through coaching interventions and strategic matches with local entrepreneurial support organizations. This 18-month pilot resulted in measurable improvements for the clients and REDs expressed satisfaction with the results (Markley et al., 2015).

U.S. universities have a long history of externally facing small business development and support services, especially through the U.S. Small Business Development Centers. As shown in Figure 3, nearly 1,000 Small Business Development Centers exist in the U.S. and many are located within universities (America's SBDC, 2018).

U.S. universities host other support services for entrepreneurs, such as U.S. Economic Development Administration University Centers (Jolley & Taimur, 2016) and even house public venture capital funds (Jolley, Uzuegbunam, & Glazer, 2018). Land grant universities play a particularly important role through extension partnerships in supporting new business development through activities such as microenterprise development programs (Bowen-Elizey, 2014). Other scholars have called for land grant universities to assume a central role in creating rural innovation systems through entrepreneurial activities (Lyons, Miller, & Mann, 2017). RISE has a ripe market for application to these external facing activities to support entrepreneurs. Again, here, we posit three examples of RISE's applicability.

First, SBDC's no-cost services could be supplemented by the addition of RISE for the most promising entrepreneurs. For example, pre-vetted, growth-oriented entrepreneurs in regional traded industries or industry clusters could receive RISE services. This application would support the expanded role of universities in supporting regional growth, integrate entrepreneurship with existing agglomeration of industries, and ensure advanced services support growth-oriented rather than lifestyle-oriented entrepreneurs.

Figure 3. Small Business Development Centers



Note: Created by authors using U.S. Small Business Administration data [retrieved from <https://www.sba.gov/tools/local-assistance/sbdc>]

Second, participation in the RISE program may provide distinct advantages to entrepreneurs in seeking venture capital funding. Inherently, the RISE program will identify a base level of skills important to securing funding and place the entrepreneur on a path to improving on that skill set. However, other benefits may be received if an entrepreneur participates in a formal RISE program. Some studies have found the educational attainment of the entrepreneur plays an important role in securing government venture capital (GVC) and overcoming information asymmetries (Uzuegbunam et al., 2017). Participation in a university sponsored RISE program may position and signal the entrepreneur’s qualifications for GVC.

Third, RISE helps in leveling the playing field in thin, underserved markets such as inner cities and rural areas. Entrepreneurial coaching, vetting, and assistance from universities has been linked to generating qualified demand for venture capital and preparing rural entrepreneurs to qualify for venture funding (Jolley, Uzuegbunam, & Glazer,

2018). The integration of RISE into university programming to meet the needs of entrepreneurs in underserved markets would further bolster these efforts and formalize many of these training mechanisms.

RISE is an evolving assessment tool. The 30 “essential” skills of entrepreneurship that it measures are still a work in progress. To date, these skills have performed well in guiding entrepreneurship training, counseling and coaching in field pilots; however, as more is learned through testing and analysis of outcomes, new skills may be added to the assessment.

Because of its roots in the Communimetrics theory of measurement, RISE is best used by entrepreneurs in collaboration with others in the entrepreneurial ecosystem. It is not intended for use by individual entrepreneurs acting on their own. The latter scenario can lead to frustration and disillusionment on the part of the entrepreneur, sometimes causing them to abandon their entrepreneurial endeavors. A counselor, coach or mentor is needed to help interpret the results into positive action.

To date, RISE has had limited use in university settings. This is both a weakness and an opportunity. Universities can play a role in carrying forward the development of this promising tool through its use and accompanying research on its outcomes and impact.

VI. Conclusion

RISE represents an emerging best practice in meeting entrepreneurs where they are, assessing their specific skills

along a continuum, and preparing customized training to help them skill build in crucial areas. The approach is well grounded in the Communimetrics theory of measurement and early pilot testing yielded positive results. RISE warrants further consideration by universities to support both internally and externally facing entrepreneurship efforts.

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