

Entrepreneurship Ecosystem Descriptive Model

Metrics and Indicators

Outline



Descriptive Model



EE Enablers

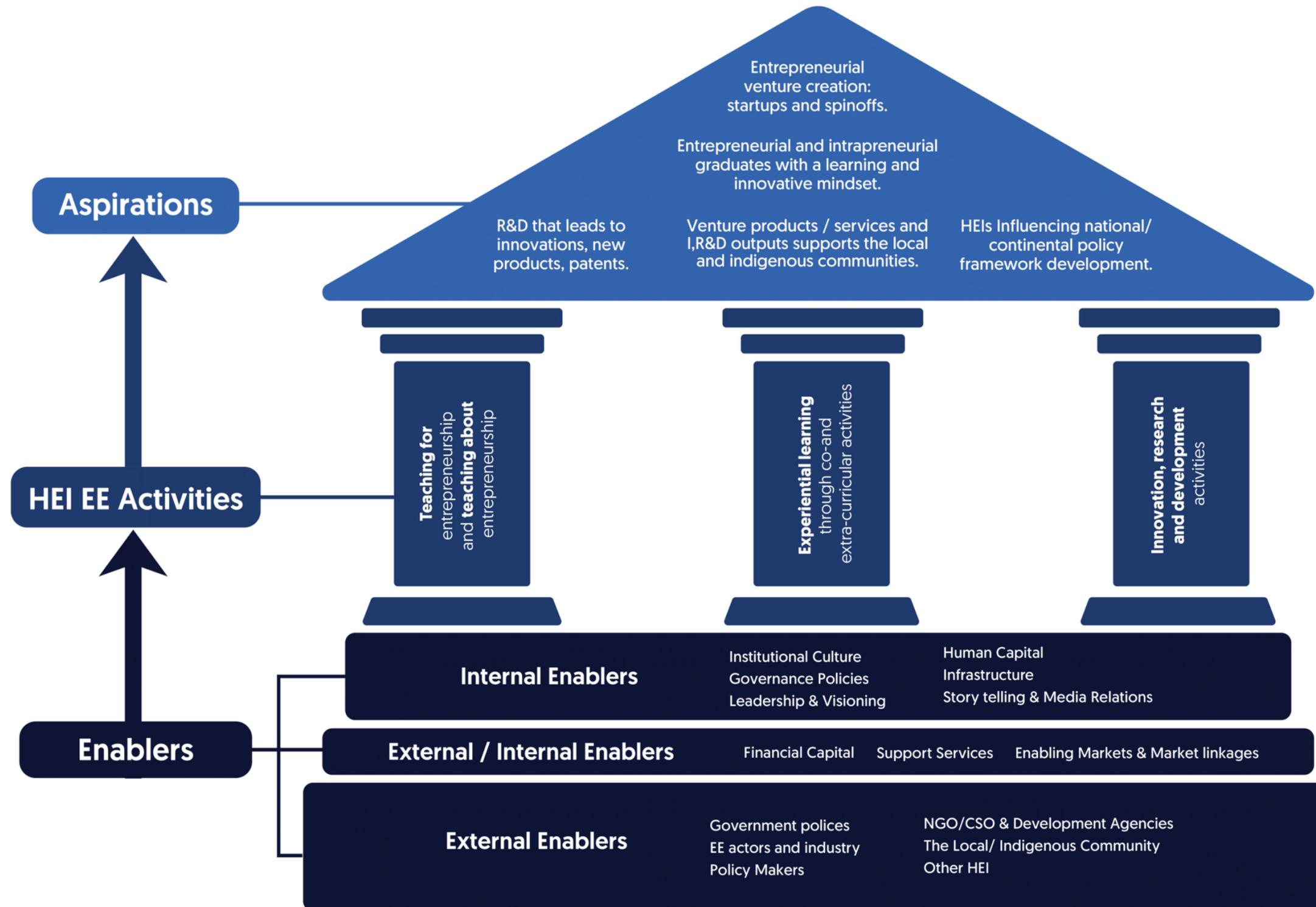


HEI Activities

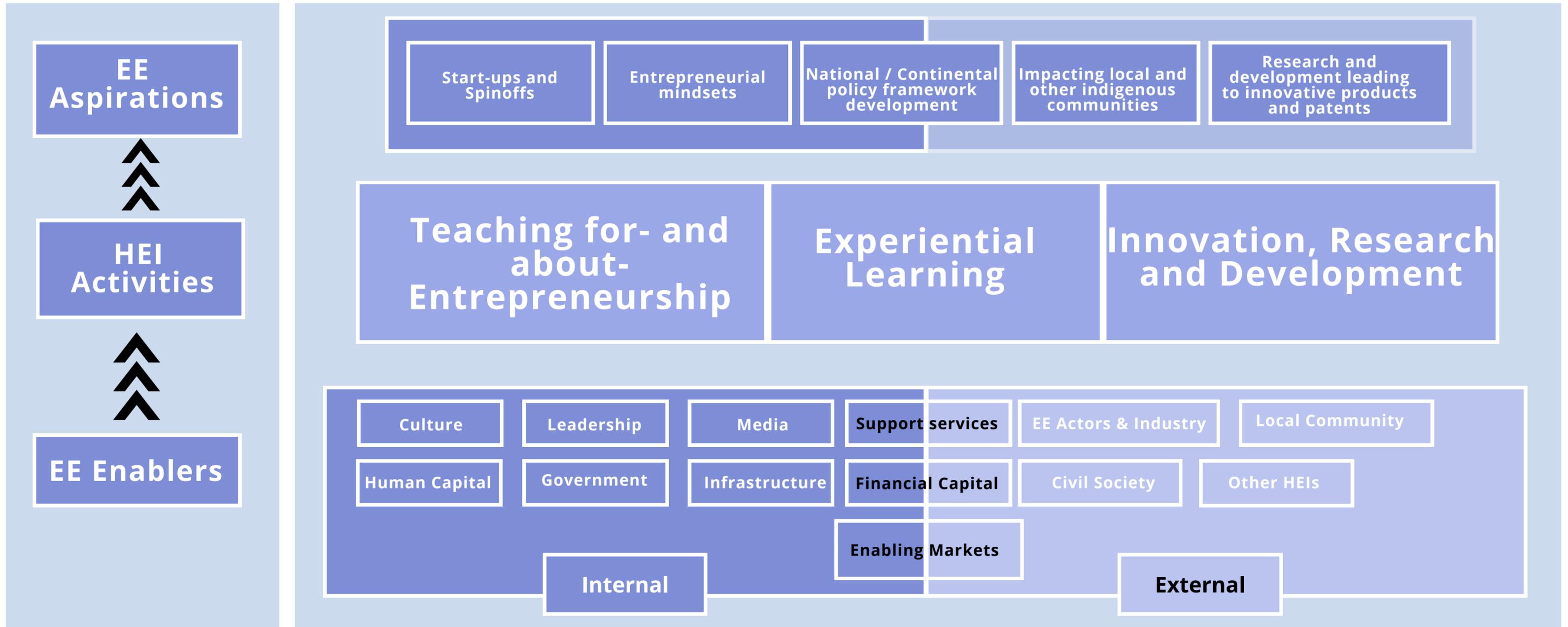


EE Aspirations

Descriptive Model



Interactive Descriptive Model Breakdown



HEI Enablers

Metrics and Indicators

Culture



Metrics	Indicators
Collaborative culture	HEI shows evidence of a collaborative culture, valuing teamwork, having systems that promote consensus, and stakeholders benefiting from a cordial working relationship.
Innovative culture	Evidence of a work environment that is creative, entrepreneurial, and innovative by itself, and allows the same to be nurtured among its stakeholders.
Supportive culture	Availability of and access to the essential help or support needs of HEIs the for benefits of EE stakeholders, and the achievement oof its aspirations.
Learning culture	<p>The promotion of lifelong learning through social practices including positions, dispositions, and actions of the individuals.</p> <p>Formal sharing and learning from others through institutionally based processes, management involvement, learning agility, resources, and development opportunities.</p>
Employee involvement culture	A friendly working environment where individuals are all focused on the common goals/ aspirations of the HEI's EE, and an atmosphere similar to that of a big family - care, support, and empathy for all stakeholders.
Bureaucratic culture	<p>Continuous monitoring, administering, coordinating, and enforcing defined rules, and policies in pursuit of effectiveness and efficiency in delivering a conducive EE environment within the institution.</p> <p>Procedures, rules, and policies are established to support the execution of activities and the accomplishment of aspirations.</p> <p>Satisfying legislative requirements.</p>

Leadership



Metrics	Indicators
Entrepreneurship Strategy articulation	<p>Existence of a clear vision for the EE of the HEI.</p> <p>Existence of a strategy document for the EE of the HEI which factors in a self-reporting system, opportunities for visioning and re-visioning.</p>
Supportive policy	<p>HEIs willingness and ability to support, interpret and implement supportive policy within the institutions, where the institution itself is positioned to support and drive the growth and development of the EE.</p>
Social legitimacy	<p>Evidence of the HEI gaining (perceived) legitimacy in the sociological sense i. e. the public's acceptance of and support for that organization.</p>
Infrastructural and resource support	<p>Evidence of the provision of the needed infrastructure to guarantee the EE has the essentials to achieve its aspirations.</p> <p>Building infrastructure necessitates ongoing engagement with individuals in order to: (a) build and sustain relationships; (b) understand their needs as stakeholders and their community priorities; and (c) co-create compelling impact agendas that stakeholders are willing to devote their limited time and energy to support.</p>
Employee involvement culture	<p>A friendly working environment where individuals are all focused on the common goals/ aspirations of the HEI's EE, and an atmosphere similar to that of a big family - care, support, and empathy for all stakeholders.</p>
Bureaucratic culture	<p>Continuous monitoring, administering, coordinating, and enforcing defined rules, and policies in pursuit of effectiveness and efficiency in delivering a conducive EE environment within the institution.</p> <p>Procedure, rules, and policies are established to support the execution of activities and the accomplishment of aspirations.</p> <p>Satisfying legislative requirements.</p>



Media

Metrics	Indicators
Visible successes	<p>Evidence of personnel with the requisite experience to properly position stories that emanate from the EE to give activities, events, wins, learnings, failures, etc. the needed visibility in a form that reaches the desired target groups.</p> <p>The EE ecosystem actors develop a decent amount of tolerance for mistakes and the proper management of risks that could occur as a result of this visibility provided.</p> <p>Existence of avenues for entrepreneurs and other ecosystem actors to learn from the experimentation of visibility, its plusses, and minuses as well as the risks that they could be exposed to due to visibility.</p>
Reputation nationally, continentally and globally	<p>Evidence of the use of the appropriate channels to reach the desired audience in a way that makes the HEI and its EE visible enough and the audience aware of their existence and activities.</p> <p>Intentionality in the development of media engagements that foster the development of long-term relationships with first-timers.</p> <p>The availability of media engagements allows the actors external to the EE and to the HEI to interact with the EE in ways that allow for the mutual transfer of information.</p> <p>The perceived appropriate reputation is being promoted through these media engagements is based on the aspirations of the EE and the HEIs.</p>
Impact measurement	<p>Evidence of stories generated from the EE enhances the reputation aiding the building and nurturing of relationships/ collaborations.</p> <p>Awareness. improves interactions, and information sharing.</p>



Support Services

Metrics	Indicators
Professional services-skills	Availability, appropriateness, and adequacy of mentors, counselors, coaches, entrepreneurs, and peers. The quality of the available support services is adequate to drive growth and development within the HEI
Support from departments and other set-ups within the HEI	Support from my institution's academic and research departments to support our entrepreneurship ecosystem to achieve its aspirations. Effectiveness, availability, and quality of support provided by departments and other set-ups.
Business/ Enterprise development centers	The availability, adequacy, community member access to, and reliability of an enterprise development center in the form of a hub, incubator, center etc.



Collaboration with EE Actors

Metrics	Indicators
Relational capability	<p>Evidence of collaborations/ networks that possess dynamic capabilities and the capacity to purposefully create, extend, or modify the HEI and its EE's positioning and resources.</p> <p>Room for and ability to expand on these collaborations and networks to enhance the position and resources of the HEI and its EE.</p>
Relational strength	<p>Relevance of the collaboration/ network to the positioning and resources of the HEIs and its EE.</p> <p>Evidence of quantifiable property that characterize the relationship with collaborators and partners.</p> <p>The perceived trust among the actors in the collaboration or networking arrangement, and how that benefits the relationship.</p>



Local Community

Metrics	Indicators
<p>Networks</p> <p>Internal Relations among members</p> <p>External relations with the HEIs</p> <p>Density of networks</p>	<p>Evidence that allows the HEI's EE to support the economic development of the local and other indigenous communities.</p> <p>Supporting the identification of the needs of the local and other indigenous communities through research.</p> <p>Programs, systems and policies that support the development of entrepreneurs within the local and other indigenous community.</p>

Collaborations with other HEIs



Metrics	Indicators
Resource-based collaborations	<p>The EE of the HEI should show evidence of resources, including knowledge sharing, financial resources, capabilities, skills, and technological resources, and be clear on what they can share with potential collaborators.</p> <p>The EE actors should have the requisite skills backed by policy and procedure to evaluate what resources they can share.</p> <p>The EE of the HEI should have the ability and the resources to conduct due diligence of other educational institutions to help them make collaboration decisions.</p> <p>There should be evidence of a structure to sustain and grow the collaboration once it is formed so the institutions can leverage their strengths and resources.</p>
Relational collaborations	<p>The EE of the HEI should be able to position itself such that they are visible to other educational institutions through engagement in networking events, including conferences, round table conversations, policy papers, associations, and other networking opportunities.</p> <p>The EE of the HEI should be transparent in their operations by publishing information, being honest about their challenges and failures, and projecting their actual image as will be found if another institution conducts due diligence.</p> <p>The EE of the HEI should be intentional about institutions they build collaborations by ensuring they are willing to share and positioning themselves to leverage the collaboration to build synergistic relationships and networks.</p> <p>The EE of the HEI has a system to conduct due diligence to validate the ethical and value alignment of the educational institutions with the HEI before allowing a relationship to form.</p>
Cost based collaborations	<p>Evidence of collaborations allows the EE of the HEI to reduce their costs of operations, including technological costs, research and development costs, operational costs, and the transaction costs arising from the collaborations.</p> <p>Evidence of collaborations that allows the EE of the HEI to work with other institutions with expertise and resources in areas they lack expertise in to reduce the cost of innovations, research, and development.</p> <p>The existence of collaborations that allow ecosystem actors to raise funds together through grants and other funding sources for joint innovation, research, and developments.</p>

Human Capital



Metrics	Indicators
Knowledge	<p>Evidence of the management of explicit knowledge creation, accumulation, utilization, storage, internalization, and dissemination within and beyond the EE of the HEI.</p> <p>Evidence of the management of tacit knowledge creation, accumulation, utilization, storage, internalization, and dissemination within and beyond the EE of the HEI.</p>
Technical talent	<p>Availability of the appropriate expertise in technical, scientific and professional fields to support various actors in the EE of the HEI.</p>
Outsourcing	<p>Existence of a procurement system to identify needs, source for expertise, and go through equitable contracting.</p> <p>Availability of expertise within the market and reach of the HEI at affordable rates based on their financial leverage.</p> <p>The ability of the EE internal players to define tasks and scope of the expertise needed and generally manage outsourcing arrangements.</p>
Entrepreneurial company Experience	<p>An existing structure that guarantees entrepreneurs in the EE intern with other entrepreneurs to benefit from the rare learning opportunity this gives them.</p> <p>Evidence that these entrepreneurs have the opportunity to learn as is expected from these start-ups through established monitoring systems to measure the effectiveness and efficiency of these internships and entrepreneur's (both start-up and the intern) satisfaction.</p>
Wisdom	<p>A sound management system that guarantees a high level of reasoning along the cognitive, affective, and reflective dimensions by ecosystem actors, especially students.</p> <p>Evidence of the ability of the entrepreneurs and other ecosystem actors to apply this wisdom in decision-making where the HEI, the EE, and businesses are concerned.</p>
Health	<p>Evidence of support for good health and wellness among actors within the EE of the HEI.</p> <p>The existence of programs and other support systems intentionally designed to maintain and sustain good health while promoting wellness.</p>
Education	<p>Continuously training and developmental opportunities are present for instructors, mentors, coaches, and other ecosystem actors involved in the training of entrepreneurs within the ecosystem.</p> <p>Existence of processes and procedures to measure the perceived satisfaction of ecosystem actors where this continuous training and development is concerned.</p>



Government

Metrics	Indicators
Regulation framework incentives/ Extent of regulation	<p>Access to the indirect ecosystem actors within this space and how they can be leveraged to a better position, monitor, and grow the HEI's EE.</p> <p>Ability to monitor, certify and incentivize the adherence to existing regulatory frameworks and requirements.</p> <p>Ability to implement and enforce the frameworks and regulations.</p> <p>Access to the indirect ecosystem actors within this space and how they can be leveraged to a better position, monitor, and grow the HEI's EE.</p> <p>Existence of systems to collect feedback and input from users to update existing frameworks and regulations.</p>
Venture friendly legislations/Forms of regulation used/	<p>Access to, clear roadmap for compliance, adequacy of information, support for implementation for HEIs.</p>
Financial Support	<p>The existence of an Innovation, Research, and Development fund.</p> <p>The existence of a jump start fund to aid early-stage businesses become investor-ready and worthy.</p>



Infrastructure

Metrics	Indicators
Telecommunication	<p>Telecommunications is the suite of technologies, devices, equipment, facilities, networks, and applications that support communication at a distance and refers to all types of voice, data, and video transmission.</p> <p>The availability, ease of use, integration, and compatibility of telecoms infrastructure in the HEI for use by the internal ecosystem actors.</p>
Transportation	<p>The availability of a reliable, effective and convenient transportation network for human traffic, as well as for goods and services.</p>
Facilities	<p>Evidence of existing databases of the needed facilities supports enterprises' timely setup and decision-making to reduce their chances of failure while enhancing growth and viability.</p> <p>Availability of the requisite facilities which aid EE establishment, growth, and development and support venture creation and sustainability within the HEI.</p> <p>The ability of the various EE actors to access and utilize these facilities within the HEIs to achieve their aspirations.</p> <p>A sense of reliability in the facilities available in the HEI by EE actors.</p>

Financial Capital



Metrics	Indicators
Private equity	<p>The existence of, and access to capital investment (investments made into companies that are not publicly traded) to ventures built within the EE.</p> <p>Evidence of the adequacy and appropriateness in structure and form of these funds supports the kinds and nature of start-ups and spin-offs that come from the EE.</p> <p>Interested partners collaborate in accessing and making these capital investments available to the requisite ecosystem actors.</p>
Investors	<p>The evidence of investors (i.e. an individual) willing to put money into businesses and spin-offs that come out of the EE of the HEI for financial gain.</p> <p>The existence of processes and procedures to clearly show how the appropriate investor funding can be assessed within and out of the HEI's EE.</p> <p>Evidence of processes and procedures that allows ventures and spin-offs to conduct their due diligence and access the needed funds at the right time.</p>
Private Equity	<p>Availability of information to direct the entrepreneurs on the kinds of funding they need at the particular times along their development journey and how they can access these funds promptly from the right investors.</p> <p>Financial literacy training, coaching, and mentoring opportunities aid in making ventures and spin-offs investor-ready, as well as managing funds once received to protect the investor's interests while managing risks appropriately.</p> <p>The EE of the HEI has systems to conduct due diligence to validate the ethical and value alignment of investors with the HEI before allowing a relationship to form.</p>
Funding support from the HEI	<p>Evidence of the HEI itself making its own financial capital available to entrepreneurs in the form of an education fund that provides entrepreneurs with the needed early-stage capital which is not readily available in the larger entrepreneurial ecosystem.</p> <p>The EE of the HEI has the in-house skill and expertise to optimize the management of these funds.</p>

Civil Society



Metrics	Indicators
Business associations	<p>Evidence of collaborations with development organizations.</p> <p>Evidence of HEI engagement in social development towards community, national and continental impact, sustainable community development, protection of the underserved, etc.</p> <p>Evidence of two-way support to aid alignment with continental goals: Agenda 2063.</p>
Conferences, Entrepreneurship promotions	<p>Existence of avenues for customer feedback, negotiations and goal formulation.</p>
Social-Cultural	<p>The HEI having personal trust, trust in social groups, societal tolerance, inclination to join collective action and solidarity.</p>
Social-Economic Mechanism	<p>Evidence of the HEI collaborating with the NGO/Civil Society organizations to provide tailored education that promotes equity, gender equality, and other issues and communicating these to the relevant communities to ensure that these underserved communities are economically empowered through enterprise.</p>
Institutional capacity	<p>Both HEI, its EE, and the NGO/CSO have human resources with the requisite skills and competencies needed for enhanced collaborations to achieve desired outcomes.</p> <p>Evidence of a large enough network to allow for references that grow the HEIs EE.</p> <p>The existence of the needed capacity to create, store and disseminate information while granting access to this information for a competitive advantage.</p>
Governance environment	<p>Evidence of collaborative work between HEIs and NGOs/CSOs to operationalize laws and policies to aid EE development within the HEIs and collaborations across stakeholders.</p> <p>Collaborative advocacy efforts to promote the political, association, and personal rights, media, and political freedom and the general rule of law within and related to enterprise development ecosystem building.</p> <p>Creating the platform for "beneficiaries" of interventions of HEIs and NGO/CSOs to dialogue where policy and issues related to community development are concerned.</p>

Enabling Markets



Metrics	Indicators
Local/ business networks	<p>Market share; customer base, distribution, and volume that ventures in the ecosystem will have.</p> <p>Market positioning guarantees a competitive advantage for both the institution and the businesses that come out of the institutions.</p> <p>Entrepreneurs are able to segment the existing markets and their characteristics for a competitive advantage, while the ecosystems themselves are able to attract the right market segments to partner and collaborate with, as well as serve.</p> <p>The businesses being developed have access to their target markets, and they are able to develop communication and distribution channels to enhance their business models.</p> <p>The institutions create pipelines for customer feedback and opportunity to monitor the impact of their ecosystem and the businesses, as well as provide same for the entrepreneurs.</p>
Multinational corporations as customers	<p>The perceived reputation of the HEI.</p> <p>Existence of activities that promote reliability of the corporations and allows for the stakeholders to believe in and rely on information from the HEI.</p> <p>Existence of appropriate policies along with clear implementation processes to allow for adoption and the adherence to legal requirements.</p> <p>The existence of pipelines for customer feedback and allowing the ecosystem actors to monitor impact of the EE activities.</p>
Availability of early adopters	<p>Evidence of, access to and potential growth opportunities for early adopters for products and services coming out of the EEs of the HEIs.</p>
Reference Customers	<p>Availability of a system to allow reference customers in, allows for feedback and allows for growth of these collaborations.</p>

HEI Activities

Metrics and Indicators



Core-Curriculum activities

Metrics	Indicators
Courses being thought for and about entrepreneurship	Courses and programs that students will enroll in for a degree.
Self-confidence, communication skills	Evidence of entrepreneurship-related courses that are being taught to help students to create new business ventures, and understand different aspects of the business models of their business ventures
Intelligence/Knowledge	Evidence of administering courses that take students experientially through the innovation process, so that at the end, they would have innovated solutions.
Funding Intelligence	Evidence of funding support to courses that are entrepreneurially inclined



Co and Extra-Curriculum activities

Metrics	Indicators
Culture Intelligence	<p>Co-activities are closely related to core curriculum activities but in themselves are not grade awarding courses. In contrast, Extra curriculum activities are not related to the core curriculum offerings of an institution.</p> <p>Evidence of community development projects, entrepreneur peers' programs.</p>
Communication skills	<p>Evidence of entrepreneurship mentorship programs.</p> <p>Evidence of sporting activities.</p>



Innovation, research and development

Metrics	Indicators
Number of collaborative research	Evidence of collaborative research, seminars, and conferences to learn and develop practical skills to coach them on teaching skills.
Quality of publications	Evidence of partnered with several journals to publish or support work done by students and staff.
Product developed and implemented	Evidence of innovations generated projects within the institutions.

EE's Aspirations

Metrics and Indicators



Start-ups and Spinoffs

Metrics	Indicators
Revenue generated	<p>Ability of the EE of the HEI to measure the impact and survival rates of the ventures that come out of them, along with the spiff-offs that they produce clearly showing its characterization to aid in the development of stories for media visibility, record-keeping, and for decision making.</p> <p>Evidence of measuring criteria that shows the investor readiness and worthiness of these spin-offs to be able to match them to investors whom themselves should have been assessed.</p> <p>Intentionality in the development of spin-offs such that they are aligned with the value systems and contributes significantly to the revenue generated by the ventures to guarantee sustainability of the triple bottom line.</p>
External investment raised	<p>Ability to measure perceived customer satisfaction based on the spin-offs to ensure that ventures are not harming their customer loyalty and business models by venturing into these spin-offs.</p> <p>Intentionality in the developing processes and systems to guarantee continuous growth of businesses and their spin-offs within the EE.</p> <p>Intentionality about the contributions and alignment of the spin-offs with the aspirations of the EE and that of the HEI where entrepreneurship is concerned.</p> <p>The general alignment of the spin-offs with the external stakeholders of the EE and the HEI.</p>
Support for Spin-off	<p>Evidence of intentionality within the EE's structuring and programming to allow and support the creation and development of spiff-off products, services, and ventures within the ecosystem.</p>
Count/numbers	<p>Evidence of numbers or counts of start-ups and spin-offs generated within the EE.</p>



Entrepreneurial mindset

Metrics	Indicators
Skills and knowledge	<p>Evidence of development and honing of the inert talents.</p> <p>Evidence of and knowledge in innovative business model development and business networks.</p> <p>Evidence of developed skillsets required to be able to engage and network with the investment community.</p>
Wisdom Economic transformation	<p>Evidence of institutions graduates exhibiting the entrepreneurial-minded is successful and ambitious as well as faculty and staff members who have an high level of reasoning to develop these students.</p> <p>Evidence of economic transformations brought about by skillsets acquired through innovative business models.</p>



National/continental policy framework development

Metrics	Indicators
Supportive policy	HEIs willingness and ability to support, interpret and implement a supportive policy nationally/continentally.
Social legitimacy	Evidence of the HEI gaining (perceived) legitimacy in the sociological sense, i. e the public's acceptance of and support for that organization.



Impacting Local and other Indigenous Communities

Metrics	Indicators
Relation Collaborations	Evidence of institutions prioritizes interventions that promote the economic development of the local and other indigenous communities.
Resource based Collaborations	Evidence of institutions' transfer of knowledge generated with the local and other indigenous communities.



Research and development leading to innovative products and patents

Metrics	Indicators
System design parameter	<p>Evidence of the development of environmentally friendly products and materials, as well as waste management techniques</p> <p>Evidence of new production technologies</p>
Foster knowledge	<p>Evidence of making informal contacts, membership in international networks, and mechanisms for knowledge transfer</p> <p>Evidence of knowledge and best practices from research workshops and seminars to strengthen their own companies' processes</p> <p>Evidence of knowledge transfer that has enabled organizations to change their processes, and strategies, and rethink their existing processes in order to reduce waste, cost, and time</p> <p>Evidence of creating a patent culture</p>
Fostering wealth in society	<p>Evidence of public policy development or implementation support, such as public health, safety, environmental, or consumer protection policies</p> <p>Evidence of recruiting outstanding researchers</p>