

Implementation of Startup Policy

NATIONAL INNOVATION AND STARTUP POLICY

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PREAMBLE

- In November 2016, the All India Council of Technical Education (AICTE) released a Startup Policy document for AICTE-approved institutions, to address the need for inculcation of innovation and entrepreneurial culture in Higher Education Institutions (HEIs). The policy primarily focused on guiding the AICTE-approved institutions in implementing the 'Startup Action Plan' of the Government of India. After the release of the Startup policy by AICTE and further interaction & feedback received from education institutions, a need was felt for a more elaborate and comprehensive policy guiding document, which could apply to all the HEIs in India.

- A fifteen-member committee was constituted by the Ministry of Human Resource Development to formulate detailed guidelines for various aspects related to innovation, Startup, and entrepreneurship management. This committee deliberated on various facets for nurturing the innovation and Startup culture in HEIs, which covered Intellectual Property ownership, revenue sharing mechanisms, norms for technology transfer and commercialization, equity sharing, etc. After multiple rounds of meetings, the National Innovation and Startup Policy 2019 for students and faculties of HEIs was prepared.

VISION

- India aspires to become a 5 trillion-dollar economy by 2024. To reach the mark, it needs to evolve systems and mechanisms to convert the present demographic dividend into high-quality technical human resources capable of doing cutting-edge research and innovation and deep-tech entrepreneurship.
- The 'National Student and Faculty Startup Policy 2019' for HEIs is a guiding framework to envision an educational system oriented towards start-ups and entrepreneurship opportunities for students and faculties. The guidelines provide ways for Indian HEIs to develop entrepreneurial agenda, manage Intellectual Property Rights (IPR) ownership, technology licensing, and equity sharing in Startups or enterprises established by faculty and students.
- In India, innovation is still not the epicenter of education. To achieve the cultural and attitudinal shift and to ensure that the 'Innovation and Startup' culture is the primary fulcrum of our higher education system a policy framework and guidelines are needed at this hour. These guidelines will enable institutions to actively support their faculty, staff, and students to participate in innovation and entrepreneurship (I&E) related activities, thus encouraging students and faculty to consider start-ups and entrepreneurship as career options. These recommendations and guiding principles will also help HEIs in creating their policy framework if required.
- Moreover, these guidelines will facilitate the Ministry of Human Resource Development in bringing uniformity across HEIs in terms of IPR ownership management, technology licensing, and institutional startup policy, thus enabling the creation of a robust innovation and Startup ecosystem across all HEIs. These guidelines will also help emphasize that entrepreneurship is all about creating a business, which is financially successful.

NATIONAL INNOVATION AND STARTUP POLICY 2019 FOR STUDENTS AND FACULTY

1. Strategies and Governance

- a) Entrepreneurship promotion and development should be one of the major dimensions of the HEIs strategy. To facilitate the development of an entrepreneurial ecosystem in the organization, specific objectives and associated performance indicators should be defined for assessment.
- b) Implementation of entrepreneurial vision at the institute should be achieved through mission statements rather than a stringent control system. The entrepreneurial agenda should be the responsibility of a senior person at the level of dean/ director/ equivalent position to bring in the required commitment and must be well understood by the higher authorities. However, one must understand that promoting entrepreneurship requires a different type of mindset as compared to other academic activities. Therefore, this person should be very carefully chosen from someone who understands the industry and above all business.
- c) A resource mobilization plan should be worked out at the institute for supporting pre-incubation, incubation infrastructure, and facilities. A sustainable financial strategy should be defined to reduce the organizational constraints to work on the entrepreneurial agenda.
 - i. Investment in entrepreneurial activities should be a part of the institutional financial strategy. A minimum of 1% fund of the total annual budget of the institution should be allocated for funding and supporting innovation and startup-related activities through the creation of a separate 'Innovation fund'.
 - ii. The strategy should also involve raising funds from diverse sources to reduce dependency on public funding. Bringing in external funding through government (state and central) such as DST, DBT, MHRD, AICTE, TDB, TIFAC, DSIR, CSIR, BIRAC, NSTEDB, NRDC, Startup India, Invest India, MeitY, MSDE, MSME, etc. and non-government sources should be encouraged.
 - iii. To support technology incubators, academic institutes may approach private and corporate sectors to generate funds, under Corporate Social Responsibility (CSR) as per Section 135 of the Company Act 2013.
 - iv. The institute may also raise funding through sponsorships and donations. Institute should actively engage alumni networks to promote Innovation & Entrepreneurship (I&E).

- d) For expediting the decision-making, hierarchical barriers should be minimized and individual autonomy and ownership of initiatives should be promoted.
- e) The importance of innovation and entrepreneurial agenda should be known across the institute and should be promoted and highlighted at institutional programs such as conferences, convocations, workshops, etc.
- f) Student and faculty startup Policy and action plan should be formulated at the university level, which is in line with the current document along with well-defined short-term and long-term goals. Micro action plan should also be developed by the affiliated institutes to accomplish the policy objectives.
- g) Institute should develop and implement an I & E strategy and policy for the entire institute to integrate the entrepreneurial activities across various centers, departments, and faculties, within the institutes, thus breaking the silos.
- h) Product-to-market strategy for startups should be developed by the institute on a case-to-case basis.
- i) The development of entrepreneurship culture should not be limited to the boundaries of the institution.
 - i. HEIs should be the driving force in developing entrepreneurship culture in its vicinity (regional, social, and community level). This shall include giving opportunities for regional startups, provision to extend facilities for outsiders, and active involvement of the institute in defining strategic direction for local development.
 - ii. Strategic international partnerships should be developed using bilateral and multilateral channels with international innovation clusters and other relevant organizations. Moreover, international exchange programs, internships, and engaging the international faculties in teaching and research should also be promoted.

2. Startups Enabling Institutional Infrastructure

Creation of pre-incubation and incubation facilities for nurturing innovations and startups in HEI institutions should be undertaken. Incubation and Innovation need to be organically interlinked. Without innovation, new enterprises are unlikely to succeed. The goal of the effort should be to link INNOVATION to ENTREPRISES to FINANCIAL SUCCESS.

- a) All HEIs are advised to create facilities within their institution for supporting pre-incubation (e.g. IICs as per the guidelines by MHRD's Innovation Cell, EDC, IEDC, New-Gen IEDC, Innovation Cell, Startup

Cell, Student Clubs, etc.) and Incubation/ acceleration by mobilizing resources from internal and external sources.

- b) This Pre-Incubation/Incubation facility should be accessible 24x7 to students, staff, and faculty of all disciplines and departments across the institution.
- c) Pre-incubation facilities may or may not be a separately registered entity or Special Purpose Vehicle (SPV), but we recommend that the 'Incubation cum Technology Commercialization Unit'(ITCU) should be a separate entity preferably registered under Section-8 of the Company Act 2013 or 'Society' registered under Society Registration Act with independent governance structure. This will allow more freedom to Incubators in decision-making with less administrative hassles for executing the programs related to innovation, IPR, and Startups. Moreover, they will have better accountability towards investors supporting the incubation facility.
- d) HEIs may offer mentoring and other relevant services through Pre-incubation/Incubation units in return for fees, equity sharing, and (or) zero payment basis. The modalities regarding Equity Sharing in Startups supported through these units will depend upon the nature of services offered by these units and are elaborately explained in Section 3.

3. Nurturing Innovations and Start-ups

- a) HEIs are expected to establish processes and mechanisms for the easy creation and nurturing of Startups/enterprises by students (UG, PG, Ph.D.), staff (including temporary or project staff), faculty, alumni, and potential start-up applicants even from outside the institutions.
- b) While defining their processes, institutions will ensure to achieve the following:
 - i. Incubation support: Offer access to pre-incubation & Incubation facilities to start-ups by students, staff, and faculty for a mutually acceptable time- frame.
In case an institute doesn't have a dedicated facility/ infrastructure of its own, then it may reach out to the nearest incubation facilities in other HEIs to facilitate access to their students, staff, and faculty.
 - ii. Will allow licensing of IPR from institute to start up: Ideally students and faculty members intending to initiate a start-up based on the technology developed or co-developed by them or the technology owned by the institute, should be allowed to take a license on the said technology on easy term, either in terms of

equity in the venture and/ or license fees and/ or royalty to obviate the early stage financial burden.

- iii. Will allow setting up a start-up (including social start-ups) and working part-time for the start-ups while studying/working: HEIs may allow their students/staff to work on their innovative projects and setting up start-ups (including Social Startups) or work as intern / part-time in start-ups (incubated in any recognized HEIs/Incubators) while studying/working. Student Entrepreneurs may earn credits for working on innovative prototypes/Business Models. Institute may need to develop clear guidelines to formalize this mechanism. Student inventors may also be allowed to opt for start-up in place of their mini project/ major project, seminars, and summer training. The area in which a student wants to initiate a start-up may be interdisciplinary or multi-disciplinary. However, the student must describe how they will separate and clearly distinguish their ongoing research activities as a student from the work being conducted at the start-up.
- c) Students who are under incubation, but are pursuing some entrepreneurial ventures while studying should be allowed to use their address in the institute to register their company with due permission from the institution.
- d) Student entrepreneurs should be allowed to sit for the examination, even if their attendance is less than the minimum permissible percentage, with due permission from the institute.
- e) HEIs should allow their students to take a semester/year break (or even more depending upon the decision of the review committee constituted by the institute) to work on their start-ups and re-join academics to complete the course. Student entrepreneurs may earn academic credits for their efforts while creating an enterprise. The institute should set up a review committee for the review of start-ups by students, and based on the progress made, it may consider giving appropriate credits for academics.
- f) The institute should explore the provision of accommodation to the entrepreneurs within the campus for some period of time. Allow faculty and staff to take off for a semester/year (or even more depending upon the decision of the review committee constituted by the institute) as sabbatical/ unpaid leave/ casual leave/ earned leave for working on startups and coming back. Institutions should consider allowing the use of its resources to faculty/students/staff wishing to establish start-up as a full-time effort. The seniority and other

academic benefits during such a period may be preserved for such staff or faculty.

- g) Start a part-time/full-time MS/ MBA/ PGDM (Innovation, entrepreneurship, and venture development) program where one can get a degree while incubating and nurturing a startup company. AICTE has already issued guidelines for a similar program.
- h) The institute will facilitate the startup activities/ technology development by allowing students/ faculty/ staff to use institute infrastructure and facilities, as per the choice of the potential entrepreneur in the following manners:
 - i. Short-term/ six-month/ one-year part-time entrepreneurship training.
 - ii. Mentorship support regularly.
 - iii. Facilitation in a variety of areas including technology development, ideation, creativity, design thinking, fundraising, financial management, cash-flow management, new venture planning, business development, product development, social entrepreneurship, product-costing, marketing, brand development, human resource management as well as law and regulations impacting a business.
 - iv. The institute may also link the startups to other seed-fund providers/ angel funds/ venture funds or itself may set up a seed fund once the incubation activities mature.
 - v. License institute IPR as discussed in section 4 below.
- i) In return for the services and facilities, the institute may take 2% to 9.5% equity/ stake in the startup/ company, based on brand used, faculty contribution, support provided, and use of the institute's IPR (a limit of 9.5% is suggested so that institute has no legal liability arising out of the startup. The institute should normally take a much lower equity share unless its full-time faculty/ staff have substantial shares). Other factors for consideration should be space, infrastructure, mentorship support, seed- funds, support for accounts, legal, patents, etc.
 - For staff and faculty, the institute can take no more than 20% of shares that staff / faculty take while drawing full salary from the institution; however, this share will be within the 9.5% cap of company shares, listed above.
 - No restriction on shares that faculty/staff can take, as long as they do not spend more than 20% of office time on the startup in an advisory or consultative role and do not compromise with

their existing academic and administrative work/duties. In case the faculty/ staff holds the executive or managerial position for more than three months in a startup, then they will go on sabbatical/ leave without pay/ earned leave.

- In the case of the compulsory equity model, startups may be given a cooling period of 3 months to use incubation services on a rental basis to make a final decision based on satisfaction of services offered by the institute/incubator. In that case, during the cooling period, the institute cannot force a startup to issue equity on the first day of granting incubation support.
- j) The institute should also provide services based on a mixture of equity, fee-based, and/ or zero payment models. So, a startup may choose to avail only the support, not seed funding, from the institute on a rental basis.
- k) The institute could extend this startup facility to alumni of the institute as well as outsiders.
- l) Participation in start-up-related activities needs to be considered as a legitimate activity of faculty in addition to teaching, R&D projects, industrial consultancy, and management duties and must be considered while evaluating the annual performance of the faculty. Every faculty may be encouraged to mentor at least one startup.
- m) Product development and commercialization as well as participating and nurturing of startups would now be added to a bucket of faculty duties and each faculty would choose a mix and match of these activities (in addition to the minimum required teaching and guidance) and then respective faculty are evaluated accordingly for their performance and promotion.
- n) Institutions might also need to update/change/revise performance evaluation policies for faculty and staff as stated above.
- o) The institute should ensure that at no stage any liability accrues to it because of any activity of any startup.
- p) Where a student/ faculty startup policy is pre-existing in an institute, then the institute may consider modifying its policy in the spirit of these guidelines.

4. Product Ownership Rights for Technologies Developed at the Institute

- a) When institute facilities/funds are used substantially or when IPR is developed as a part of curriculum/ academic activity, IPR is to be jointly owned by inventors and the institute.

- i. Inventors and institutes could together license the product / IPR to any commercial organization, with inventors having the primary say. License fees could be either/or a mix of
 1. Upfront fees or one-time technology transfer fees
 2. Royalty as a percentage of the sale price
 3. Shares in the company licensing the product
 - ii. An institute may not be allowed to hold the equity as per the current statute, so SPV may be requested to hold equity on its behalf.
 - iii. If one or more of the inventors wish to incubate a company and license the product to this company, the royalties would be no more than 4% of the sale price, preferably 1 to 2%, unless it is a pure software product. If it is shares in the company, shares will again be 1% to 4%. For pure software product licensing, there may be a revenue sharing to be mutually decided between the institute and the incubated company.
- b) On the other hand, if the product/ IPR is developed by innovators not using any institute facilities, outside office hours (for staff and faculty), or not as a part of the curriculum by the student, then the product/ IPR will be entirely owned by inventors in proportion to the contributions made by them. In this case, inventors can decide to license the technology to third parties or use the technology the way they deem fit.
- c) If there is a dispute in ownership, a minimum five-member committee consisting of two faculty members (having developed sufficient IPR and translated to commercialization), two of the institute's alumni/ industry experts (having experience in technology commercialization), and one legal advisor with experience in IPR, will examine the issue after meeting the inventors and help them settle this, hopefully to everybody's satisfaction. Institutes can use alumni/ faculty of other institutes as members if they cannot find sufficiently experienced alumni/faculty of their own.
- d) The Institute IPR cell or incubation center will only be a coordinator and facilitator for providing services to faculty, staff, and students. They will have no say in how the invention is carried out, how it is patented, or how it is to be licensed. If the institute is to pay for patent filing, it can have a committee that can examine whether the IPR is worth patenting. The committee should consist of faculty who have experience and excelled in technology translation. If inventors are

using their funds or non-institute funds, then they alone should have a say in patenting.

- e) All institute's decision-making bodies for incubation / IPR / technology-licensing will consist of faculty and experts who have excelled in technology translation. Other faculty in the department/institute will have no say, including heads of department, heads of institutes, deans, or registrars.
- f) Interdisciplinary research and publication on startups and entrepreneurship should be promoted by the institutions.

5. Organizational Capacity, Human Resources and Incentives

- a) The institute should recruit staff that have strong innovation and entrepreneurial/ industrial experience, behavior, and attitude. This will help in fostering the Innovation & Entrepreneurship culture.
 - i. Some of the relevant faculty members with prior exposure and interest should be deputed for training to promote Innovation & Entrepreneurship.
 - ii. To achieve better engagement of staff in entrepreneurial activities, institutional policy on the career development of staff should be developed with constant upskilling.
- b) Faculty and departments of the institutes have to work in coherence and cross-departmental linkages should be strengthened through shared faculty, cross-faculty teaching, and research to gain maximum utilization of internal resources and knowledge.
- c) Periodically some external subject matter experts such as guest lecturers or alumni can be engaged for strategic advice and bringing in skills that are not available internally.
- d) Faculty and staff should be encouraged to do courses on innovation, entrepreneurship management, and venture development.
- e) To attract and retain the right people, the institute should develop academic and non-academic incentives and reward mechanisms for all staff and stakeholders that actively contribute and support entrepreneurship agenda and activities.
 - i. The reward system for the staff may include sabbaticals, office and lab space for entrepreneurial activities, reduced teaching loads, awards, training, etc.
 - ii. The recognition of the stakeholders may include offering the use of facilities and services, strategy for shared risk, as guest teachers, fellowships, associateships, etc.
 - iii. A performance matrix should be developed and used for the evaluation of annual performance.

6. Creating Innovation Pipeline and Pathways for Entrepreneurs at the Institute Level

- a) To ensure the exposure of maximum students to innovation and pre-incubation activities at their early stage and to support the pathway from ideation to innovation to market, mechanisms should be devised at the institution level.
 - i. Spreading awareness among students, faculty, and staff about the value of entrepreneurship and its role in career development or employability should be a part of the institutional entrepreneurial agenda.
 - ii. Students/ staff should be taught that innovation (technology, process, or business innovation) is a mechanism to solve the problems of society and consumers. Entrepreneurs should innovate with a focus on the market niche.
 - iii. Students should be encouraged to develop an entrepreneurial mindset through experiential learning by exposing them to training in cognitive skills (e.g. design thinking, critical thinking, etc.), and by inviting first-generation local entrepreneurs or experts to address young minds. Initiatives like idea and innovation competitions, hackathons, workshops, bootcamps, seminars, conferences, exhibitions, mentoring by academic and industry personnel, throwing real-life challenges, awards, and recognition should be routinely organized.
 - iv. To prepare the students for creating the start-up through education, integration of education activities with enterprise-related activities should be done.
- b) The institute should link their start-ups and companies with a wider entrepreneurial ecosystem and by providing support to students who show potential, in the pre-startup phase. Connecting student entrepreneurs with real-life entrepreneurs will help the students understand real challenges that may be faced by while going through the innovation funnel and will increase the probability of success.
- c) The institute should establish the Institution's Innovation Councils (IICs) as per the guidelines of MHRD's Innovation Cell and allocate an appropriate budget for its activities. IICs should guide institutions in conducting various activities related to innovation, startup, and entrepreneurship development. Collective and concentrated efforts should be undertaken to identify, scout, acknowledge, support, and reward proven student ideas and innovations and to further facilitate their entrepreneurial journey.

- d) To strengthen the innovation funnel of the institute, access to financing must be opened for potential entrepreneurs.
 - i. Networking events must be organized to create a platform for budding entrepreneurs to meet investors and pitch their ideas.
 - ii. Provide business incubation facilities: premises at a subsidized cost.
 - iii. Laboratories, research facilities, IT services, training, mentoring, etc. should be accessible to the new startups.
 - iv. A culture needs to be promoted to understand that money is not FREE and is risk capital. The entrepreneur must utilize these funds and return them. While funding is taking a risk on the entrepreneur, the entrepreneur must make every effort possible to prove that the funding agency did right in funding him/ her.
- e) The institute must develop a ready reckoner of the Innovation Tool Kit, which must be kept on the homepage of the institute's website to answer the doubts and queries of the innovators and enlist the facilities available at the institute.

7. Norms for Faculty Startups

- a) For better coordination of entrepreneurial activities, norms for faculty to do startups should be created by the institutes. Only those technologies/Non- technologies should be taken for faculty startups that originate from within the same institute.
 - i. The role of faculty may vary from being an owner/ direct promoter, mentor, consultant, or on-board member of the startup.
 - ii. Institutes should work on developing a policy on 'conflict of interests' to ensure that the regular duties of the faculty don't suffer owing to his/her involvement in the startup activities.
 - iii. Faculty startup may consist of faculty members alone or with students or with faculty of other institutes or with alumni or with other entrepreneurs.
- b) In case the faculty/ staff holds the executive or managerial position for more than three months in a startup, they will go on sabbatical/ leave without pay/ utilize existing leave.
- c) Faculty must separate and distinguish ongoing research at the institute from the work conducted at the startup/ company.
- d) In case of selection of a faculty start-up by an outside national or international accelerator, a maximum leave (as sabbatical/ existing leave/ unpaid leave/ casual leave/ earned leave) of one semester/ year

(or even more depending upon the decision of review committee constituted by the institute) may be permitted to the faculty.

- e) Faculty must not accept gifts from the startup.
- f) Faculty must not involve research staff or other staff of the institute in activities at the startup and vice-versa.
- g) Human subject-related research in startups should get clearance from the ethics committee of the institution.

8. Pedagogy and Learning Interventions for Entrepreneurship Development

- a) A diversified approach should be adopted to produce desirable learning outcomes, which should include cross-disciplinary learning using mentors, labs, case studies, games, etc. in place of traditional lecture-based delivery.
 - i. Student clubs/bodies/ departments must be created for organizing competitions, bootcamps, workshops, awards, etc. These bodies should be involved in institutional strategy planning to ensure the enhancement of the student's thinking and responding ability.
 - ii. Institutes should start the annual 'INNOVATION & ENTREPRENEURSHIP AWARD' to recognize outstanding ideas, successful enterprises, and contributors for promoting innovation and enterprise ecosystem within the institute.
 - iii. For creating awareness among the students, the teaching methods should include case studies on business failure and real-life experience reports by startups.
 - iv. Tolerating and encouraging failures: Our systems are not designed for tolerating and encouraging failure. Failures need to be elaborately discussed and debated to imbibe that failure is a part of life, thus helping to reduce the social stigma associated with it. Very importantly, this should be a part of the institute's philosophy and culture.
 - v. Innovation champions should be nominated from within the students/
 - vi. faculty/ staff for each department/ stream of study.
- b) Entrepreneurship education should be imparted to students at the curricular/co-curricular/extra-curricular level through elective/short-term or long-term courses on innovation, entrepreneurship, and venture development. Validated learning outcomes should be made available to the students.

- i. Integration of expertise of the external stakeholders should be done in entrepreneurship education to evolve a culture of collaboration and engagement with the external environment.
 - ii. At the beginning of every academic session, the institute should conduct an induction program about the importance of I&E so that freshly inducted students are made aware of the entrepreneurial agenda of the institute and available support systems. Curriculum for the entrepreneurship education should be continuously updated based on entrepreneurship research outcomes. This should also include case studies on failures.
 - iii. Industry linkages should be leveraged for conducting research and surveys on trends in technology, research, innovation, and market intelligence.
 - iv. Sensitization of students should be done for their understanding of expected learning outcomes.
 - v. Student innovators, startups, and experts must be engaged in the dialogue process while developing the strategy so that it becomes need-based.
 - vi. Customized teaching and training materials should be developed for startups.
 - vii. It must be noted that not everyone can become an entrepreneur. The entrepreneur is a leader, who would convert an innovation successfully into a product, others may join the leader and work for the startup. It is important to understand that entrepreneurship is about risk-taking. One must carefully evaluate whether a student is capable and willing to take risks.
- c) Pedagogical changes need to be made to ensure that the maximum number of student projects and innovations are based on real-life challenges. Learning interventions developed by the institutes for inculcating entrepreneurial culture should be constantly reviewed and updated.

9. Collaboration, Co-creation, Business Relationships and Knowledge Exchange

- a) Stakeholder engagement should be given prime importance in the entrepreneurial agenda of the institute. Institutes should find potential partners, resource organizations, micro, small, and medium-sized enterprises (MSMEs), social enterprises, schools, alumni, professional bodies, and entrepreneurs to support entrepreneurship and co-design the programs.

- i. To encourage co-creation, bi-directional flow/ exchange of knowledge and people should be ensured between institutes such as incubators, science parks, etc.
 - ii. The institute should organize networking events for better engagement of collaborators and should open up opportunities for staff, faculty, and students to allow a constant flow of ideas and knowledge through meetings, workshops, space for collaboration, lectures, etc.
 - iii. Mechanisms should be developed by the institute to capitalize on the knowledge gained through these collaborations.
 - iv. Care must be taken to ensure that events DON'T BECOME an end goal. The first focus of the incubator should be to create successful ventures.
- b) The institute should develop policies and guidelines for forming and managing relationships with external stakeholders including private industries.
- c) Knowledge exchange through collaboration and partnership should be made a part of institutional policy and institutes must provide support mechanisms and guidance for creating, managing, and coordinating these relationships.
 - i. Through formal and informal mechanisms such as internships, teaching and research exchange programs, clubs, social gatherings, etc., faculty, staff, and students of the institutes should be given the opportunities to connect with their external environment.
 - ii. The connection of the institute with the external environment must be leveraged in the form of absorbing information and experience from the external ecosystem into the institute's environment.
 - iii. A Single Point of Contact (SPOC) mechanism should be created in the institute for the students, faculty, collaborators, partners, and other stakeholders to ensure access to information.
 - iv. Mechanisms should be devised by the institutions to ensure maximum exploitation of entrepreneurial opportunities with industrial and commercial collaborators.
 - v. Knowledge management should be done by the institute through the development of an innovative knowledge platform using in-house Information & Communication Technology (ICT) capabilities.

10. Entrepreneurial Impact Assessment

- a) Impact assessment of the institute's entrepreneurial initiatives such as pre-incubation, incubation, and entrepreneurship education should be performed regularly using well-defined evaluation parameters.
 - i. Monitoring and evaluation of knowledge exchange initiatives, and engagement of all departments and faculty in entrepreneurial teaching and learning should be assessed.
 - ii. The number of start-ups created, the support system provided at the institutional level, and satisfaction of participants, and new business relationships created by the institutes should be recorded and used for impact assessment.
 - iii. Impact should also be measured for the support system provided by the institute to the student entrepreneurs, faculty, and staff for pre-incubation, incubation, IPR protection, industry linkages, exposure to the entrepreneurial ecosystem, etc.
- b) Formulation of strategy and impact assessment should go hand in hand. The information on the impact of the activities should be actively used while developing and reviewing the entrepreneurial strategy.
- c) Impact assessment for measuring the success should be in terms of sustainable social, financial, and technological impact in the market. For innovations at the pre-commercial stage, the development of a sustainable enterprise model is critical. COMMERCIAL success is the ONLY measure in the long run.