University Startups

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الهيئة العامة للمنشآت الصغيرة والمتوسطة
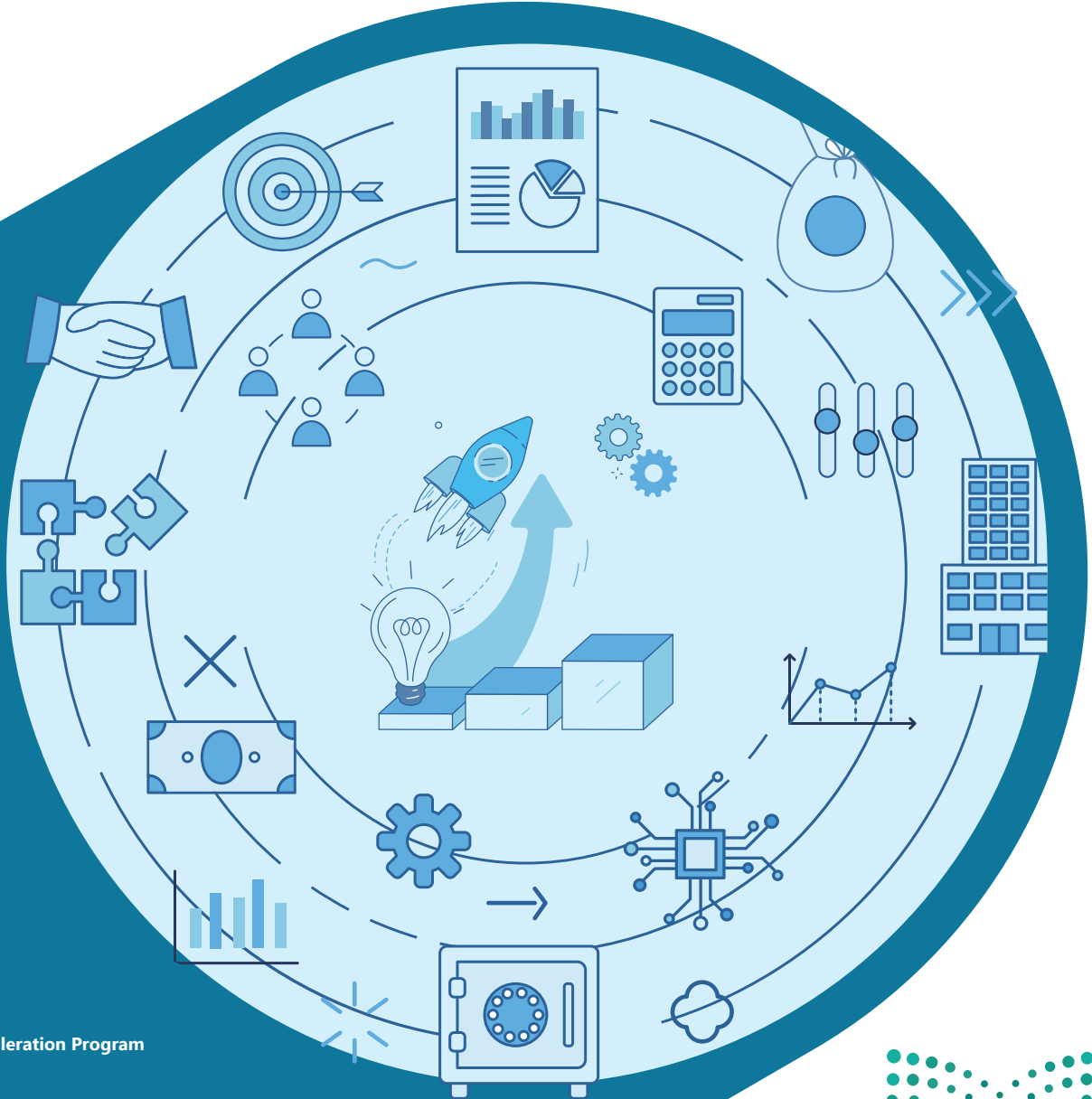Small & Medium Enterprises General Authority

Report on Global Best Practices for

Accelerating University Entrepreneurship

University Project Acceleration Program

Authors: Thia Chees and Jessie Baker Alexander

2021 Creeda Projects Ltd. April

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Ministry of Education

Introduction

The Small and Medium Enterprises General Authority "Monsha'at" has prepared this research specifically for the University Project Acceleration Program, which was launched in partnership with the Business Incubators and Accelerators Company "BIAC".

The information and recommendations provided in this research aim to provide important insights for developing an effective strategy for establishing business accelerators for universities in different environments and entrepreneurial ecosystems.

This research highlights the importance of comprehensive programs to promote early-stage entrepreneurship and improve deal flow for university accelerators.

In addition, several examples of successful programs and strategies are provided to illustrate a variety of approaches. Research on "Best Practices for Establishing and Developing University Accelerators" was conducted by Thia Chees and Jessie Baker Alexander, consultants for Creeda Projects. Special thanks are extended to Stephanie Ananian, Judy Mahan, and Julian Webb for their contributions to this research.

Executive Summary

Universities can be active hubs of innovation and creativity, and there are numerous tools to encourage innovation, entrepreneurship, and economic development within and beyond the university. Business accelerators are one of the prominent tools in this field.

> Broadly defined, an accelerator is "a fixed-term, cohort-based program for startups, including mentorship and/or educational components, that culminates in a graduation event"
>
> (Cohen & Hochberg, 2014)

To effectively launch startups, university accelerators must have a deep understanding of the startup ecosystem, the startup lifecycle, and the most challenging gaps founders face within their communities. Top accelerators prioritize entrepreneurs and provide tools to empower them to overcome barriers specific to their businesses and ecosystems.

Furthermore, successful accelerators are not standalone programs, but part of a comprehensive long-term strategy for any institution or community to support startup activities. This is also the case with universities, where accelerators are generally part of a broader effort, often referred to as an entrepreneurship center.

Entrepreneurship centers can include both programmatic and non-programmatic components,such as:
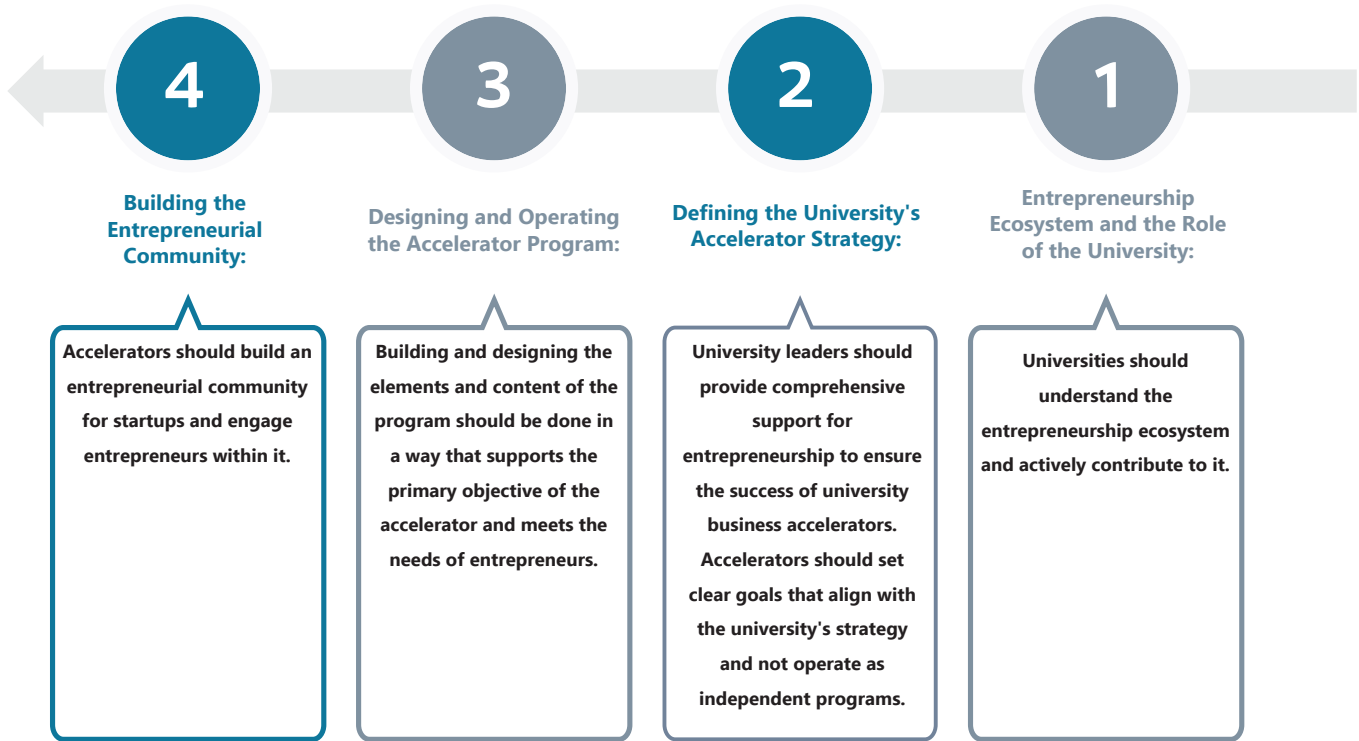
Mentoring and boot camps

Co-working spaces

Executive Summary

Competitions

Weekend boot camps for startups

Incubators

Hackathons

A variety of programs in the early stages, such as hackathons, weekend boot camps for startups, and elevator pitch competitions, can help develop a pipeline of startups for university accelerators. This research will identify the best practices for universities in preparing successful acceleration programs and operating them, covering the following topics and recommendations:

4

Building the Entrepreneurial Community:

Accelerators should build an entrepreneurial community for startups and engage entrepreneurs within it.

3

Designing and Operating the Accelerator Program:

Building and designing the elements and content of the program should be done in a way that supports the primary objective of the accelerator and meets the needs of entrepreneurs.

2

Defining the University's Accelerator Strategy:

University leaders should provide comprehensive support for entrepreneurship to ensure the success of university business accelerators. Accelerators should set clear goals that align with the university's strategy and not operate as independent programs.

1

Entrepreneurship Ecosystem and the Role of the University:

Universities should understand the entrepreneurship ecosystem and actively contribute to it.
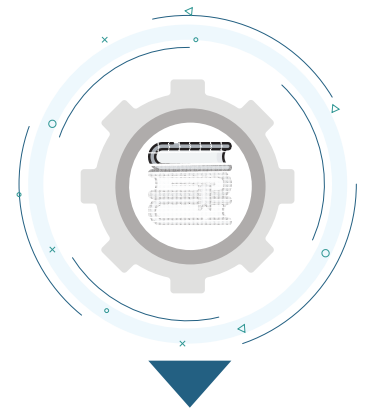
Executive Summary

University accelerators operate with a range of goals in mind, including:

| Serving as a platform for launching companies	Enabling technology transfer from university research	Providing practical learning opportunities for students

The design and structure of university accelerator programs vary based on their goals, as well as the stage of development in the entrepreneurial ecosystem in which the university operates. For example, in many American communities, universities joined the entrepreneurial scene relatively late compared to the entrepreneurship ecosystem itself. In contrast, universities such as the American University in Cairo and King Abdullah University of Science and Technology in Saudi Arabia are leading the development of entrepreneurship ecosystems.

In general, the investment size in university startups is much smaller than what is seen in private-sector accelerator programs. Additionally, funding for university startup accelerators is typically not in exchange for equity in the startups, as is common in private-sector models. Funding for university startup accelerators often takes the form of cash grants, awards, and in-kind support.

Executive Summary

The funding is usually directed towards assisting with living costs (as seen in summer programs at some American universities), covering incidental expenses, and supporting product development. The source of funding is often from university donors or the university's own entrepreneurship center, while the programs are operated by the centers themselves with extensive involvement from community partners and alumni.

The duration and design of university accelerator programs are similar to private-sector models, although private-sector accelerators generally have stricter requirements as they prioritize experiential learning as a primary objective. This can be attributed to the target market of university accelerators, whether they are employees or full-time university attendees.
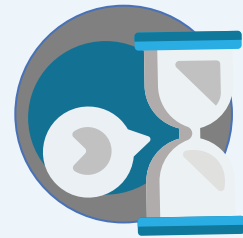
While many success stories have emerged from university accelerator programs, the transition from the launch phase to the growth stage generally takes longer, influenced by students' lack of practical experience and product-market fit.

University accelerators also serve as catalysts for regional entrepreneurship ecosystems, providing an opportunity to connect regional mentors, investors, and inspire entrepreneurs within the community.

University accelerators generally feature pitch presentations and initial funding rounds, providing a crucial funding bridge for startups to progress to the next stage

Support for startups after university accelerators transitions from university entrepreneurship centers to community partnerships, which may include private-sector accelerators.

Key features of university accelerators:

Funding bridge for startups	Initial funding rounds	Pitch presentations

Introduction

Universities can be active centers for innovation and creativity, and there are several tools to encourage innovation, entrepreneurship, and economic development within and outside the university. One of these tools is university accelerators. The essence of accelerators is to serve capable and innovative individuals, enabling them to launch companies. An accelerator is officially defined in the sector as "a fixed-term, cohort-based program for startups, including mentorship and/or educational components, that culminates in a graduation event" (Cohen & Hochberg, 2014).

> To effectively launch companies, university accelerators must have a deep understanding of the business ecosystem and prioritize entrepreneurs, providing them with the tools to overcome their business and system barriers.

In addition, successful accelerators are not standalone programs but part of a long-term comprehensive strategy for any institution or community to support startup activities. This is also the case with universities, where accelerators are generally part of a broader effort referred to as an entrepreneurship center.

Entrepreneurship centers can include methodological and non-methodological components such as co-working spaces, startup weekend camps, hackathons, mentoring, pre-acceleration programs, competitions, incubators, and more.

Accelerators can play various roles in the startup ecosystem, and it is necessary to determine the main objective of operating the accelerator before establishing it and gaining support from university leadership.

Introduction

There are several different objectives that university accelerators generally aim to achieve, including:

1

Providing practical experiential learning opportunities for students:

The main objective is to focus on students for learning, and launching a company is a secondary outcome.

Enabling technology transfer from university research:

2

The focus on technology transfer typically involves teams from inside and outside the university, often with intellectual property owned by the university.

3

Providing a platform and integrated tools for launching companies:

- Examples of these tools can be found in detail in the main components of the accelerator program
- The target audience can be students, a specific community, or both, to enrich the startup ecosystem in the community.

Understanding the strengths of the university and areas of growth, as well as the current startup ecosystem in the community and its gaps, is the first step in creating a successful accelerator.

In this regard, it is possible to develop a program that naturally attracts suitable participants and drives their success through a cohesive strategy adopted by the entire university and by defining specific goals for the university accelerator

Introduction

This research identifies the best practices and methods for universities to design and operate successful business accelerator programs, presents examples of different types of startup ecosystems, and provides case studies of successful accelerator programs.

The following is a summary of the best practice recommendations for designing university accelerators:

1

Startup ecosystem and the role of the university:

Universities must understand the entrepreneurship ecosystem within them and actively contribute to it.

2

Defining the university's accelerator strategy:

- University leaders should provide comprehensive support for entrepreneurship.
- To ensure the success of university accelerators, they should set clear goals aligned with the university's strategy, and the programs should be connected to it.

3

Program design and operation:

The program's components should be built to support the accelerator's main objective and the needs of entrepreneurs.

4

Building the entrepreneurial community:

Accelerators should build a community for startups and engage entrepreneurs in it.

The Startup Ecosystem and the Role of the University

Startup communities are complex systems, described by Brad Feld and Ian Hathaway in their recent book "The Startup Community Way" as a diverse collection of active entities and influential factors in any entrepreneurial ecosystem (Feld & Hathaway, 2020).

To create a successful university accelerator, it is essential to understand these active entities and influential factors within its specific ecosystem. This understanding allows for building from the ground up with the needs of entrepreneurs at the forefront.

Universities must participate and contribute to the entrepreneurial ecosystem in which entrepreneurs operate. Entrepreneurs rely on the entire ecosystem to build their companies, not just the university or a single accelerator program.
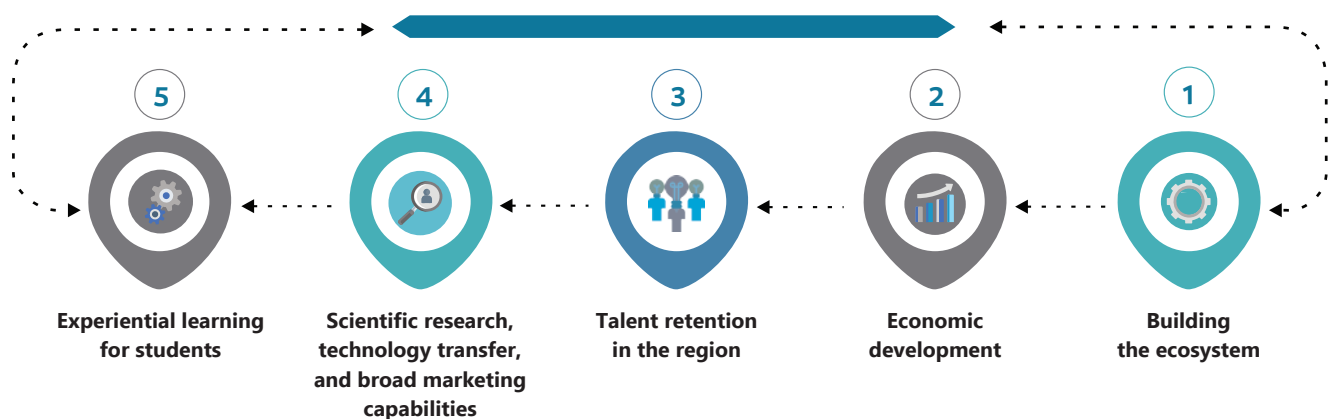
"The primary goal of the startup community is to help entrepreneurs succeed. Never forget the purpose of the startup community. There is no startup community without entrepreneurs."

The Startup Community Way, 2020.

The Startup Ecosystem and the Role of the University

Universities have the ability to enhance their strengths and contribute to the entrepreneurship ecosystem in various ways as an active entity. They should consider their strengths and how they can uniquely leverage them within the startup community. Here are some examples of university strengths and objectives:

5	4	3	2	1
Experiential learning for students	Scientific research, technology transfer, and broad marketing capabilities	Talent retention in the region	Economic development	Building the ecosystem

University accelerators play a crucial role in improving the entrepreneurship and startup ecosystem. Programs and accelerators like the American University in Cairo's School of Business seek to impact the entrepreneurship ecosystem in the Middle East and Africa. They achieve this by enhancing the quality and quantity of startups in Egypt. Additionally, the FinTech accelerator collaborates with major financial institutions in Egypt to stimulate innovation in the FinTech sector, contributing to the development of the financial ecosystem.

"The AUC Venture Lab at the American University is the first incubator and accelerator in Egypt. The lab enables startups to benefit from the university's intellectual capital, world-class facilities, and research capabilities. It also serves startups by connecting them with the university's database and network, which includes alumni, faculty members, mentors, and investors, fostering a thriving ecosystem of innovation and education."

The Startup Ecosystem and the Role of the University

The following provides detailed examples of how universities benefit from the contributing force in the entrepreneurial ecosystem in their region:
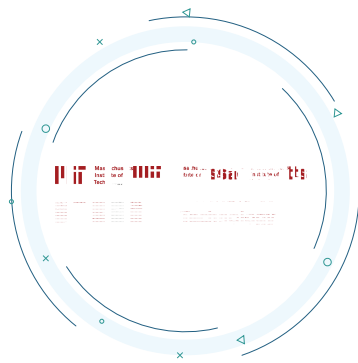
University of California, Davis: The Venture Catalyst

Supporting Technology Transfer Activities

California State University, Sacramento

Building the Ecosystem

Massachusetts Institute of Technology (MIT) System

Economic Growth

California Polytechnic State University

Experiential Learning and Talent Retention

California State University, Sacramento

Building the Ecosystem

The Carlson Center is a key component of Sacramento State University's established initiative. The center has become an active hub for the startup community in Sacramento, serving both entrepreneurs from the community and the university itself. It embraces diversity and inclusivity, establishes partnerships with the government, collaborates with other academic institutions, and creates mentoring networks

The partnership between the Carlson Center and the "FourthWave" accelerators is an excellent example of connecting and elevating the startup ecosystem in Sacramento. Encore University differs from the Ivory Tower by aiming to "connect its students, faculty, and staff to the community, thereby helping to build and address this community and achieve ongoing solutions and improvements through comprehensive civic engagement."- President Neilson, Sacramento Bee, August 2018.

Global Entrepreneurship Week: the Carlson Center was the fourth-ranked global partner. It hosted over 20 events to serve the Sacramento area and was honored in the Global Entrepreneurship Week Leaderboard, featuring global experts such as Ian Hathaway, David Blund, Ash Maurya, and others. MicroMentor

Mentor Sacramento: Leading a partnership with the local government and startups in Sacramento to provide free mentoring access to all entrepreneurs in the region.

FourthWave Accelerators: Partners in the entrepreneurial community workshops at the Carlson Center, providing a local platform for community partners with diverse expertise from experienced entrepreneurs.

University of California, Davis

Supporting Technology Transfer Activities

UC Davis is a premier research university that grants doctoral degrees, indicating its support for a high level of research activity. The UC Davis team recognized that leading research in fields such as agriculture, biology, and medicine needed support to enable these technologies to exist outside the academic world and in the industry.

Thus, they established a program called "Venture Catalysts" to support professors with impactful and pioneering research in identifying startup opportunities and connecting them with resources and experienced talent in the industry. For example, Jessie Baker Alexander serves as a mentor in this program, providing her expertise as a medical device founder and executive director. The program drives successful development of new ventures based on UC Davis intellectual property through its collaborations, programmatic activities, and outreach efforts. The essence of this program is empowering professors and their research to transition from academic environments to the industry. The program has created several comprehensive and ongoing initiatives to support different stages of technology transfer.

Collaboration: Building strong connections with other stakeholders at UC Davis

Research Grants: Translational Research Funding Program to demonstrate the commercial potential of technologies.

Economic Interaction: Strong connectivity with the industry sector and government.

Start program: Offers grants, workshops, legal services, reduced costs for intellectual property services, pitch training, market reports, low-cost access to laboratories, and more.

Biotechnology Innovation Showcase: An accelerator providing guidance, mentorship, and presentation opportunities at the JP Morgan Healthcare Conference.

California Polytechnic University

Experimental Learning and Talent Retention

There are two main organizations for entrepreneurship: California Polytechnic University, and San Luis Obispo University. They serve as centers for innovation, entrepreneurship, and small business development in San Luis Obispo, based in California Polytechnic University.

The university leaders and the founding team of these organizations identified the capabilities and strengths of the university, as well as the needs of the region, to guide the strategy in launching the Center for Innovation and Entrepreneurship and the Small Business Development Center in San Luis Obispo. They have benefited from the strong culture at the university, which encourages students to delve into the field of entrepreneurship and think outside the box, as advocated by Steve Blank.

California Polytechnic University has graduated talented and highly sought-after graduates. However, job opportunities in the San Luis Obispo area were limited, leading many of these talents to leave the area for the Polytechnic or the nearby Los Angeles area. Through supporting new economic activity in the region, the programs initiated by this team have accomplished two important things: providing the necessary resources to start new businesses on the Central Coast, and retaining a demographic of peers in the area that has grown slowly, making staying in San Luis Obispo a more attractive option for graduates.

A set of programs was designed to engage students in learning entrepreneurship, support the creation of new businesses, and develop a unique community of startups:

Elevator Pitch Competitions: Programs that allow non-university students to participate.at UC Davis

Engaging with the Small Business Development Center Community: Meaningful communication and relationship-building to exchange knowledge.

Hatchery: Providing resources within the university campus and community for participating students.

Hot House Incubator: Offering ongoing support after launch for modern startups.

Massachusetts Institute of Technology (MIT) System

Economic Growth

The Massachusetts Institute of Technology (MIT) is a prime example of a university's ability to create economic opportunities within the startup ecosystem. MIT's focus on a hands-on, practical approach to education and learning through experience is integral to their innovation excellence. Additionally, the vast array of diverse programs available to students, graduates, and the community creates a strong entrepreneurial ecosystem capable of launching new businesses and providing ongoing support. A study conducted in 2015 found that as of 30,000 ,2014 companies founded by MIT alumni were active, employing 4.6 million people and generating annual revenues of $1.9 trillion, equivalent to the world's tenth-largest economy. MIT graduates establish hundreds of new companies each year, and approximately %40 of the institute's founders are serial entrepreneurs who establish multiple companies. (MIT Facts, n.d.)

There are over 200 sources for entrepreneurship and innovation at the Massachusetts Institute of Technology:

MIT Innovation Initiative: Provides opportunities for practical training in innovation and entrepreneurship within the campus.

Technology Licensing Office: Assists MIT inventors in protecting and licensing their intellectual property rights.

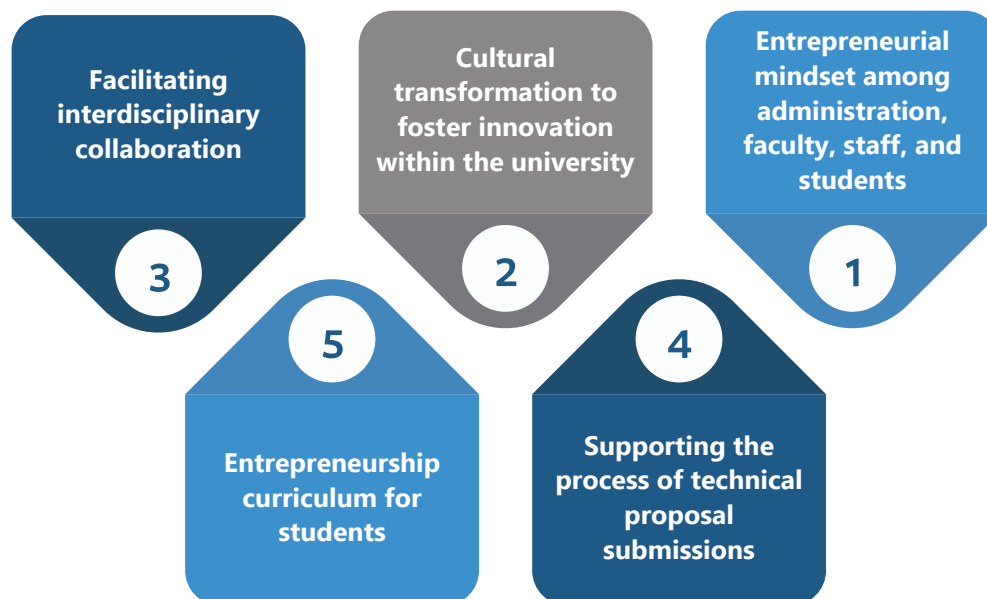**MIT Design Lab:** A global program providing practical solutions to poverty challenges.
- MIT Sandbox Innovation Fund Program: Provides initial funding and access to resources, including Maker Spaces (spaces where people with different interests in technology and engineering come together to share ideas and knowledge) for student innovators.

The Martin Trust Center for MIT Entrepreneurship: Supports student entrepreneurs with structured mentoring programs and engagement with wide-ranging entrepreneurship communities.

# Defining the University Accelerator Strategy

Economic Growth

University leaders should provide comprehensive support for entrepreneurship to ensure the success of university accelerators. Additionally, university leaders should embrace the idea of innovation and entrepreneurship at all levels within the institution. Accelerator programs rely heavily on a vast number of projects from student entrepreneurs and a multidisciplinary culture of innovation. Universities should consider the following factors to support the long-term viability of accelerator programs:

3 Facilitating interdisciplinary collaboration

2 Cultural transformation to foster innovation within the university

1 Entrepreneurial mindset among administration, faculty, staff, and students

5 Entrepreneurship curriculum for students

4 Supporting the process of technical proposal submissions

Facilitating collaboration across different disciplines is particularly important. For example, the Innovation and Entrepreneurship Center at the California Polytechnic State University established an advisory board with representatives from within the campus to foster a multidisciplinary entrepreneurial mindset. Furthermore, the Innovation and Entrepreneurship Center received $100,000 in funding from the School of Business and Research.

Defining the University Accelerator Strategy

All programs, especially the "Hot House" accelerator program, require diverse teams with various skills, including technology and creative experts. The relationship within the university campus of the Innovation and Entrepreneurship Center supports internal and external training, recruitment with startup companies, and engagement with stakeholders in the regional and state entrepreneurial ecosystem
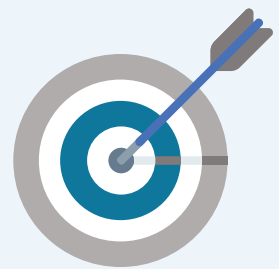
The American University in Cairo operates a business incubator from its business school, which is the top-ranked private institution in Egypt. Entrepreneurship is a core principle of the institution, and the business school is committed to shaping business leaders, entrepreneurs, and agents of change through leadership, integrity, ambition, and excellence.

Accelerators must set clear goals that align with the university's strategy and should not function as standalone programs. By understanding the context of the startup ecosystem and the role of the university within it, accelerator operators should shape and design their programs and roles well in advance of their launch.

There are various types of accelerators, which can be stage-specific, non-profit, industry-specific, individual-focused, virtual, for-profit, university-affiliated, or non-affiliated.

Defining the University Accelerator Strategy

For example, if the goal of a university accelerator is to retain talent and leverage technology, while the entrepreneurship ecosystem lacks experienced investors, the program should be designed with the following objectives in mind:

Teaching participants transferable skills sought by local technology companies.	Building and educating an investor community.	Providing opportunities for startups to engage with investors.

Some common characteristics of well-run accelerators are:

1

2 Operate within an intensive timeframe, typically ranging from 3 to 6 months.

3 Establish meaningful connections with the entrepreneurship ecosystem to facilitate ongoing support.

4 Align program goals and design with the accelerator's vision for impact on the entrepreneurship ecosystem and the needs of the entrepreneurs they serve.

5 Utilize dynamic business plans and milestone-driven objectives in collaboration with cohort members to progress towards goals

Defining the University Accelerator Strategy

There is a diverse range of goals that a university may seek to achieve through establishing an accelerator program, as discussed in the previous section. These goals can vary from providing experiential learning for their students to facilitating technology transfer and building the ecosystem for launching companies. Most successful accelerators start with clearly defined objectives that are aligned with the larger context of their entrepreneurship ecosystem, building specific resources and programming to meet those needs. Each accelerator should focus on its core goal when launching its initial program.

As an initial step in creating an accelerator, the planning committee is recommended to define the following concepts:

A. Vision and mission

B. Measurable, realistic, and tangible metrics, which may include:
  1. **Number of trained founders.**
  2. **Number of launched startups.**
  3. **Total funding raised for startups.**
  4. **Number of created jobs.**
  5. **Number of startup acquisitions.**

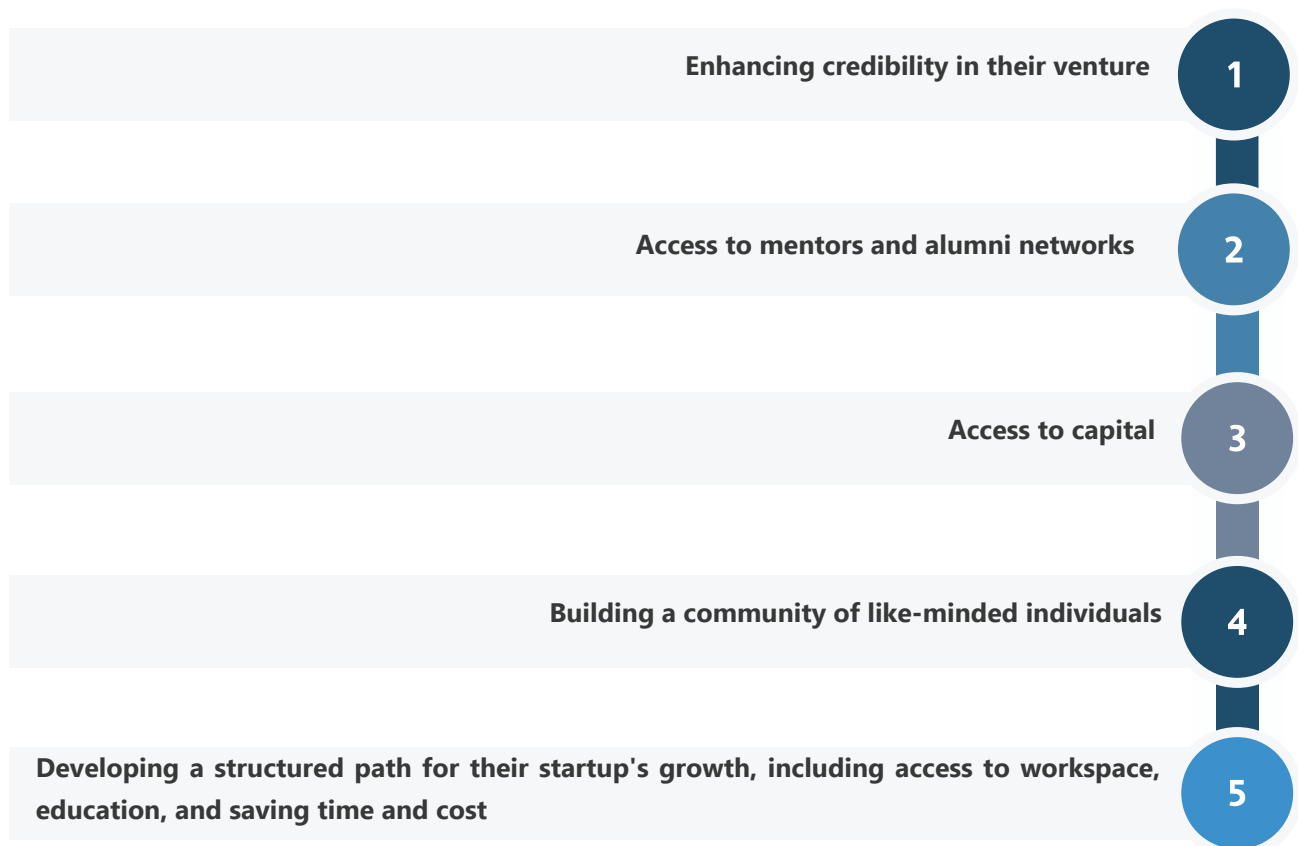**C. Desired outcomes for participants:**
  1. **Identifying the ideal participant profile.**
  2. **Recruitment and selection strategy.**

D. Develop a plan for continuous evaluation of the accelerator's success and growth.

Defining the University Accelerator Strategy

During the process of defining accelerator goals, the planning committee should remain closely connected to the needs of entrepreneurs in their ecosystem. Accelerators should deliver on their promises and listen to their customers (the entrepreneurs) while adopting user-centric design practices in their programs. A good approach to designing an accelerator program is to focus on the user, identify the ideal participant, and consider the key reasons why an entrepreneur would join the accelerator program.

Reasons for entrepreneurs to join accelerators include:

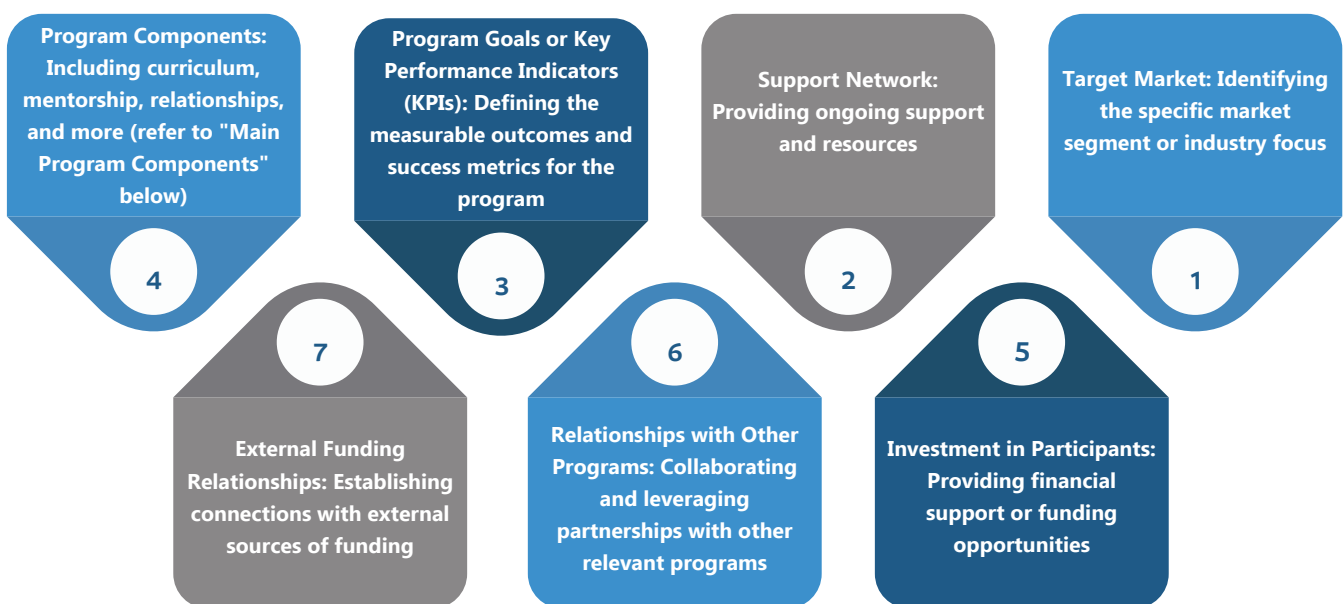|	
Enhancing credibility in their venture	**1**
Access to mentors and alumni networks	**2**
Access to capital	**3**
Building a community of like-minded individuals	**4**
Developing a structured path for their startup's growth, including access to workspace, education, and saving time and cost	**5**

Successful accelerators tailor their recruitment strategies, resources, and specialized programs for entrepreneurs based on the ideal participant and the most critical benefits for their success.

Program Design and Activities:
Working Towards Achieving the Accelerator's Goals

By understanding the entrepreneurship ecosystem and defining the program's objectives and identifying the ideal participants, it is now time to build the core components of the program. Below, we discuss the fundamental pillars that often form the basis of accelerator programs, emphasizing these core pillars in alignment with the accelerator's goals and how to support entrepreneurs in the most effective way within the larger supporting ecosystem.

The core components for building accelerator programs are consistent across all programs, but the key to the program's success lies in how these components are integrated and delivered. These core components include:

Program Components: Including curriculum, mentorship, relationships, and more (refer to "Main Program Components" below)

4

Program Goals or Key Performance Indicators (KPIs): Defining the measurable outcomes and success metrics for the program

3

Support Network: Providing ongoing support and resources

2

Target Market: Identifying the specific market segment or industry focus

1

7

External Funding Relationships: Establishing connections with external sources of funding

6

Relationships with Other Programs: Collaborating and leveraging partnerships with other relevant programs

5

Investment in Participants: Providing financial support or funding opportunities

The aforementioned core program components should be built upon the following:

- **The primary goal of the accelerator**

- **The needs of the entrepreneurs**

- **A deep understanding of entrepreneurs' motivations**

Working Towards Achieving the Accelerator's Goals

The university can design and coordinate the accelerator program in a way that aligns with the core objectives of the accelerator. This can be achieved by employing program structure, timelines, and participant engagement mechanisms that encourage the desired behaviors, based on the understanding of the three points mentioned above.

The program can be designed at both the structural and interactive levels to incentivize active participation from the entrepreneurs involved, through effective planning. Additionally, one of the key components of a successful program is ensuring that the participants are highly competent to engage in the program. To achieve this, the accelerator should:

Contribute and actively engage within the entrepreneurship ecosystem	**1**
Attract applicants through recognized entrepreneur programs	**2**
Establish an application process and evaluate and select committed and dedicated entrepreneurial applicants	**3**
Set strong criteria for evaluating applications that align with the program's objectives	**4**
Provide agreements to support entrepreneurs in exchange for their commitment and achievement of expected goals	**5**

Main Components of an Accelerator Program

Business Relationships	Mentoring and Training	Content
Access to Capital	Operations	Space

Content:

A. Core business and project management curriculum:
- Objective: Introduce participants to the fundamental pillars of creating new entrepreneurial ventures and provide opportunities for interaction and engagement with experts in the field

B. Guest speakers:
- Objective: Inspire with important lessons they have learned, contribute to networking with stakeholders in the field.

C. Accountability for work:
- Responsibility can be reinforced and enforced through participation agreements signed by entrepreneurs in the accelerator. Peer accountability and/or competition can be encouraged, as well as providing rewards and/or imposing penalties

Main Components of an Accelerator Program

Mentoring and Training:

A. Mentor relationships:
- Train participants on how to build a strong relationship with mentors.
- Define role expectations and responsibilities with mentors and sign agreements with them.
B. Access to experts:
C. Education and support in building advisory boards, official meetings, etc.
D. Facilitate acquired relationships to access further in-depth assistance.

Business Relationships:

A. Hosting community events.
B. Providing non-intrusive and scheduled visits and tours.
C. Facilitating access to relevant resources within the larger business community.

Space:

A. Incubator or accelerator workspace.
B. Providing necessary equipment and supplies for startups.
C. Cultivating an entrepreneurial culture within the workspace.
D. Encouraging collaborative work for shared creativity and strengthening community ties.

Main Components of an Accelerator Program

Operations:

A.Integration of technological tools for managing space, mentors, and startups.

Access to Capital:

A.Identify capital needs and different funding models:

- Angel investors and venture capital funding
- Bank financing
- Crowd funding

- Loans and debt instruments
- Grants

B. The accelerator program should foster effective relationships with local funders:
- One way to strengthen relationships with funders and investors is by connecting participating startups in the accelerator program with stakeholders in the entrepreneurial community.
- Examples include California Polytechnic State University - San Luis Obispo Small Business Development Center and the San Luis Obispo Angel Conference, Seed Angel Investors Group, the American University Based Entrepreneur Investor Network, the Stanford Biodesign Programs, Silicon Valley Investors, and the Fogarty Innovation (2020, setting).

Examples of Successful Accelerator Programs Around the World

"TAQADAM" Accelerator for Startups: It is a six-month accelerator program supported by King Abdullah University of Science and Technology (KAUST) in collaboration with Saudi British Bank (SABB). It provides funding, tools, and practical resources to identify, improve, and launch entrepreneurs' important ideas and projects into the market. Their mission is to support founders in establishing impactful startups.

AUC Venture Lab: It houses any startup and accelerator for advanced technologies. Each accelerator operates for four months, twice a year. The participants are Egyptian startups, and the purpose of the accelerator is to create sustainable and scalable economic impact in the region.

Startup Research Institute at the Business School of Korea University: It is a "platform for inspiring innovation and entrepreneurship." It is a space where future entrepreneurs from diverse backgrounds come together. Their common interest lies in establishing and operating innovative startups through participation and collaboration.

HotHouse Accelerator at the California Polytechnic State University: It is a summer program designed to provide participants with everything they need to launch and develop scalable projects.

New Venture Challenge Accelerator: It is a pre-accelerator program designed to assist the next generation of entrepreneurs on the University of Colorado Boulder campus. The New Venture Challenge accelerator connects with the leading entrepreneurship and competition program at the University of Colorado Boulder, along with the Boulder community for developing and funding innovative ideas. Participants attend events throughout the year and engage and collaborate with mentors to refine their ideas and form startup teams to pitch for funding (up to...2 million dollars) in the New Venture Challenge competitions.

MIT DesignX: It is an accelerator affiliated with the School of Engineering and the School of Architecture and Planning at the Massachusetts Institute of Technology (MIT). Its aim is to transform cities and build them.

MIT "Delta V": It is an accelerator for student projects at the Massachusetts Institute of Technology (MIT). It provides a consecutive educational opportunity for entrepreneurs from MIT students, preparing them for the real world.

Examples of Successful Accelerator Programs Around the World

Organization Name	Target Market	Objectives	Stage	Connections with Private Financing Companies	Support and Follow-up
Accelerator for Startups	Local or international startups with the ability to expand, especially in the Kingdom of Saudi Arabia	Launch startups, achieve sales, and create jobs	Early-stage and established startups Connections with private financing	Guidance and investment	Funding for the most successful startups, goal development, and continued work
American University in Cairo - Virtual Platform	Egyptian startups focused on growth and innovation	Developing sustainable and scalable economic impact in Egypt, the Middle East, and Africa	Prototypes and minimum viable products	Industry-specific guidance, investment opportunities, access to global investors	One-year incubation program, contribution to integration into the startup community
Startup Station at Korea University Business School	Any team with at least one registered student from Korea University Business School (Graduate School)	Develop entrepreneurship skills to enhance innovation and digital service in the next generation	Post-market validation stage	Graduates and the private sector	Government funded private accelerators and incubators
HotHouse Accelerator at California Polytechnic State University	Students and recent graduates of California Polytechnic State University, seeking diversity in their founding teams, including business, technology, and creative leadership	Launch startups, achieve sales, create jobs, and educate entrepreneurs	Post-market validation stage	Guidance and investment	University-based incubator or private sector accelerator

Examples of Successful Accelerator Programs Around the World

Organization Name	Target Market	Objectives	Stage	Connections with Private Financing Companies	Support and Follow-up
New Venture Challenge Pre-Accelerator at the University of Colorado Boulder	**Startups with at least one team member who is a student, faculty member, or staff at the University of Colorado Boulder**	**Organize projects or bridge to private sector accelerator programs in Boulder**	**Post-market validation stage**	**Guidance and investment**	**Private sector accelerator**
American University in Cairo - Virtual Platform	**Multidisciplinary teams of students, faculty members, and researchers**	**At the end of the program, all teams will have developed a prototype, a pitch deck for investors, and a "master plan" for their project**	**After ideation stage and before full validation**	**Guidance and investment**	**University program group**
Startup Station at Korea University Business School	**Students at the Massachusetts Institute of Technology (MIT)**	**Experiential learning, launch startups, create jobs, and secure investments**	**Post-market validation stage**	**Guidance and investment**	**University program group**

"TAQADAM" Accelerator for Startups, Kingdom of Saudi Arabia

Description: An accelerator program supported by King Abdullah University of Science and Technology and Saudi British Bank. Their mission is to support entrepreneurs in establishing impactful startups. It was launched in 2016 and has recently experienced tremendous growth with 7,000 online applicants in the latest edition.

- **Target Market:** Local or international startups with the ability to expand, particularly in the Kingdom of Saudi Arabia.

- **Objectives or Key Performance Indicators:** Launching companies, achieving sales, and creating jobs.

- **Program:** The accelerator program lasts for six months and is supported by King Abdullah University of Science and Technology and Saudi British Bank. It provides cash grants, tools, and practical resources to refine and enhance their impactful ideas and bring their businesses to the market. It begins with a two-week training camp followed by weekly and monthly meetings. Progress is monitored and measured through a dashboard.

- **Program Benefits:** Training, pitch presentations, specialized services, guidance from industry leaders, and access to co-working space.

- **Investment:** SAR 150,000 per team during the program.

- **Support and Follow-up:** The most successful startups receive additional investments worth SAR 100,000 and continuous support through the program based on agreed-upon objectives.

- **Other Advantages:** Access to the entrepreneurship ecosystem and startup community in the Kingdom of Saudi Arabia. Support for international startups to establish themselves in the Kingdom of Saudi Arabia, including legal, design, and financial services, among others.

- **Relationships with Private Financial Companies and Angel Investors:** Coordinated meetings with investors during the project presentation day at the end of the program.

- **Success Stories:** Faheem Educational Project, Faseeh Educational Game, Hadiya Gift and Occasions Website, Qusoor Reservation Application, Salaf Financial Loans Platform, Jaleesah Childcare Application, PhysioHome Patient Care Service Application, and other projects.

The American University in Cairo: Venture Lab

Description: The Company Accelerator, operating outside the School of Business since 2013, focuses on supporting startup companies and financial technology. It runs two cycles per year, with nearly 10 companies in each cycle. The program includes other compatible offerings such as the startup platform, angel investors at the American University in Cairo, online seminars, and hackathons. The Fintech Accelerator (launched in 2016) operates in partnership with the Commercial International Bank and the International Finance Corporation to facilitate innovation in finance in Egypt. Both accelerators receive support from various private sector sponsors.

- **Target Market:** Egyptian startups based on innovation and growth, seeking early-stage prototypes or minimum viable products (MVPs), with strong teams ready to commit to a 4-month program. The Company Accelerator accepts companies from all sectors but targets e-commerce, energy, sustainability, healthcare innovations, creative industries, artificial intelligence, and logistics services. The Fintech Accelerator focuses on new innovations in financial technology.

- **Key Objectives or Performance Indicators:** To generate sustainable and scalable economic impact throughout Egypt, the Middle East, and Africa. To provide jobs and foster an entrepreneurial culture through educational and research support for the American University in Cairo community to engage with entrepreneurs.

- **Program:** The accelerator program lasts for 4 months. Mentors primarily come from the university (faculty members and alumni), and startups are granted access to facilities, resources, and technical expertise throughout the university. The programs conclude with an exhibition.

- **Program Benefits:** It offers a 3-day boot camp for intensive training and provides enhanced exposure for startups through training, performance testing, specialized services, mentorship from industry leaders, and access to co-working space.

- **Investment:** Each team receives an investment ranging from 20,000 to 50,000 Egyptian pounds during the program, depending on the sponsor.

- **Support and Follow-up:** One-year incubation and follow-up support. Graduates engage in the long-term entrepreneurship ecosystem at the American University in Cairo.

- **Other Advantages:** Access to the GUST LAUNCH platform.

- **Relationships with Private Financial Companies or Angel Investors:** Angel investors at the American University in Cairo invest in early-stage projects with growth potential. Access to international investors is also facilitated through the GUST LAUNCH platform.

- **Success Stories:** Since 2013, the American University in Cairo has accelerated over 200 startup companies.

Startup Research Institute at the College of Business Administration, Korea University

- **Startup Station at the College of Business Administration, Korea University:** Established as part of the Startup Research Institute at the College of Business Administration, Korea University, it serves as a "Startup Platform at the College of Business Administration, Korea University" and a "Platform for Inspirational Innovation and Entrepreneurship." It provides a space for future entrepreneurs from diverse backgrounds interested in startup businesses to achieve innovation through participation and collaboration. The Startup Station at the College of Business Administration in Korea University consists of the "Elgin Center for Startup Incubation" and "Myungho SONG Center" for entrepreneurship education, providing an incubation space and systematic education to foster entrepreneurship, innovation, and support services that assist startup activities.

- **Target Market:** Any working team that includes a student from the College of Business Administration, Korea University (graduate school), and meets the criteria for accepting startups, such as creativity, feasibility, analysis, or research projects.

- **Key Objectives or Performance Indicators:** Developing entrepreneurial skills that will help the next generation enhance innovation and digital expertise. They can continue their traditional education alongside learning about the overall and detailed aspects of business development and startup goals in Korea. Through this program, students will be empowered to take more risks because they will be in a learning-oriented environment rather than focusing on achieving profits.

- **Program:** "Startup Express" is a startup competition held twice a year and serves as an entry point. Winners of the competition are granted a space in the incubator for a period of 6 months to one year, along with marketing, accounting, tax, legal, patent services, technological services, entrepreneurship education, and mentoring networks. The accelerator concludes with an annual project exhibition day.

- **Investment:** Space is provided in the incubator for teams of 4 to 8 individuals, along with tangible support from accounting and legal companies, as well as Amazon Web Services and crowdfunding services.

- **Outputs:** 71 companies have been launched. The total investment and grants reached 80 billion, and the total valuation of startups reached 450 billion.

- **Support and Follow-up:** Provided through government-supported accelerators and incubators.

- **Community Engagement:** Targeted and hands-on services from professional service companies and community participation in events.

- **Other Benefits:** The Startup Station at the College of Commerce in Korea University (KUBS STARTUP STATION) focuses significantly on increasing student participation and improving their future work. These entrepreneurial skills also benefit Korean youth who choose traditional employment as they teach problem-solving skills. This helps develop future employees in Korea.

  Relationships with Private Financial Companies and Angel Investors: Graduates of Korea University, private sector accelerators.

HotHouse Accelerator at California Polytechnic State University

It is a summer program designed to provide participants with everything they need to launch a real and scalable company.

- **Target Market: Students at California Polytechnic State University and recent graduates. Founders of startups are required to have diverse team experiences, including technical, leadership, and creative expertise.**

- **Key Objectives or Performance Indicators: Launching companies, achieving sales, creating jobs, and graduating innovative entrepreneurs.**

- **Program: The accelerator relies on a diverse set of mentors and speakers in the startup world, in addition to practical guidance and weekly workshops.**

- **Investment: Projects are funded or granted $10,000 for building and establishing their ventures.**

- **Outputs: Throughout the program, companies will develop their business models, learn how to manage and operate their businesses, and receive training on pitching their projects.**

- **Support and Follow-up: Support is provided by the Small Business Development Center at California Polytechnic State University for up to two years or less, depending on their needs.**

- **Other Benefits: Joining the entrepreneurship community, collaborating within the campus, and showcasing student talents.**

- **Relationships with Private Financial Companies and Angel Investors: Various organizations such as SLO SEEDS, TECH COAST ANGELS, GOLDEN SEEDS, BOOST ACCELERATOR, Y COMBINATOR, AND CENTRAL COAST ANGELCON.**

- **Success Stories: Several projects, including FAVOR DELIVERY, SYNCRO MSP, ALYDIA HEALTH, DE ORO DEVICES, FLUME WATER, and PASHION FOOTWEAR.**

New Venture Challenge at the University of Colorado, Boulder

The New Venture Challenge program is a pre-accelerator program designed to assist the next generation of entrepreneurs at the University of Colorado, Boulder campus. The program is linked to the university's main entrepreneurship and competition program within the campus, connecting with the Boulder community to develop and fund innovative ideas. Participants attend events throughout the year, engage and collaborate with mentors to develop their ideas and form their teams, and compete for funding of up to $200,000 in accelerator competitions.

- **Target Market:** Startups that have moved beyond the idea stage, with at least one team member being a student or affiliated with the university and the Office of Research and Innovation.

- **Key Objectives or Performance Indicators:** Introduce entrepreneurship and connect with private sector accelerators in Boulder, continue existing programs within the university, build and expand the entrepreneurial community across disciplines, and help break down barriers.

- **Program:** Held during the fall and spring semesters, the program provides an introduction to campus resources, team formation assistance, and workshops to help participating startups test and develop their ideas. They also receive support in refining their pitch decks, which are presented on the final day of the program.

- **Investment:** $200,000 in prizes awarded in the New Venture Challenge competition.

- **Outputs:** After completing the program, startups transition to stronger accelerators and programs such as Techstars Boulder and iCorps.

- **Support and Follow-up:** Provided through partnerships.

- **Community Engagement:** Over 75 entrepreneurs, investors, and service providers volunteer as mentors in the New Venture Challenge program.

- **Other Benefits:** Gain more industry connections for the university and employ local students in startups. The New Venture Challenge program is considered a regional event for the entrepreneurship community.

- **Relationships with Private Financial Companies and Angel Investors:** Various organizations such as Foundry Group, Techstars, Unreasonable Institute, Boomtown Accelerator, and Rockies Venture Club.

Accelerator Programs at the Massachusetts Institute of Technology, Boston

The Massachusetts Institute of Technology (MIT) offers numerous programs and support for entrepreneurs and innovators, with two different accelerators and programs mentioned below.

DesignX Accelerator:

DesignX is an accelerator affiliated with the School of Engineering, Architecture, and Planning, aiming to transform cities and their construction.

- Target Market: Interested students, faculty members, and researchers from various disciplines.

  Key Objectives or Performance Indicators: At the end of the program, all teams will have developed their initial prototypes, presented their pitch decks for their startups, and made future plans for their projects.

- Program: It offers a range of services, including project-specific designs, facilitation of academic credits, funding opportunities, experiential learning, workspace and mentorship, and engagement with entrepreneurial communities.

- Outputs: Building new businesses and providing design solutions to address future challenges of cities, environment, and humanity.

- Community Support and Funding: MIT has been supporting the program since 1960, along with private companies including Google and Autodesk, as well as family foundations, individual donors, a wide network of specialized mentors, business leaders, institutions, government, and civilians.

- Relationships with Private Financial Companies and Angel Investors: Culminates in a final pitch day attended by hundreds of investors, stakeholders, civic and industrial partners, with connections and linkages to other initiatives including the MIT China Future City Lab in partnership with Tsinghua University, workshops in Reykjavik University, and collaborations with OGS and MISTI to work with Palestinian and Israeli entrepreneurs.

MIT Delta V Accelerator:

Delta V is an accelerator program for students at the Massachusetts Institute of Technology, providing a competitive educational opportunity for promising student entrepreneurs at the institute.

- Target Market: Students at the Massachusetts Institute of Technology.

- Key Objectives or Performance Indicators: Experiential learning, launching companies, creating jobs, and increasing financial investments.

- Program: It is a full-time summer program that runs from June to early September. The program includes learning from individuals and mentors, training, board meeting simulations, guest talks, seminars, and culminates in a final pitch day for the projects.

- Investment: Monthly stipends of $2,000. Additional milestone-based funding of up to $29,000, all of which do not include equity stakes in the startup.

- Relationships with Private Financial Companies and Angel Investors: Presence at the final pitch days in Boston, New York, and San Francisco/Silicon Valley.

Building Entrepreneurial Communities

Accelerators have the responsibility to build entrepreneurial communities and engage entrepreneurs to provide the following support:

Accelerators are great tools for the success of participants. However, startups will continue to need support even after an intensive period of developing their projects during the accelerator program. Connecting them to the entrepreneurship ecosystem and contributing to the startup community is the best way to prepare them for success. The ideal scenario for a project is to join an incubator after completing the accelerator, where they receive continuous support for 3 to 4 years.

When designing your accelerator program, make an extra effort to encourage the building of relationships among entrepreneurs, aiming to create a strong entrepreneurial community for participants. As a first-time entrepreneur, one is often alone. Therefore, integrating into the entrepreneur community will alleviate the pressures and challenges faced during the project's development.

"Always remember that it takes everyone. You won't be able to do something that changes your life on your own or moves or disrupts a sector. No one can. There is no such thing as 'self-made'... There were so many people along the way. And that applies to every entrepreneur and every startup community." - Arlan Hamilton, Founder and Managing Partner, author of "Backstage Capital" and "It's About Damn Time" (Hamilton & Nelson, 2020).

Encouraging founders to help each other, some of the greatest lessons entrepreneurs learn come from fellow entrepreneurs who have just faced a common challenge. The value of learning from entrepreneur to entrepreneur is widely recognized as a valuable asset. Therefore, entrepreneurs should be encouraged to interact formally and informally. Formal examples include group presentations and collaborative work sessions. Examples of informal interaction include working alongside other entrepreneurs, attending or hosting evening events that over time turn into informal social relationships, and creating a culture of deep friendship and overall interaction. In addition to these benefits, when a participant finds this value in the accelerator, they will attract similar entrepreneurs to the accelerator, thus forming and nurturing entrepreneurial communities. Successful entrepreneurial communities maintain their connections even after the program ends.

Strong emphasis on community building and establishing ongoing programs that support entrepreneurs' discovery, learning, thinking, launching, and growth is crucial for the success of the Hot House Accelerator program at Polytechnic University of California. This success was not achieved on the first attempt but rather through a decade of experience. While the accelerator program itself lasted only three months, there was continuous work through internal dissemination and education within the campus, curriculum development, and programs supporting creativity and innovation. Equally important, the accelerator program is followed by continuous support from the Small Business Development Center, the Hot House Incubator, shared workspace, and engagement with the entrepreneur community.

Conclusion

1. Universities should actively recognize and contribute to the entrepreneurship ecosystem.
2. Comprehensive support from university leaders for entrepreneurship is a foundation for accelerator success.
3. The success of university accelerators depends on setting clear goals that align with the university's strategy and objectives, rather than operating as independent programs.
4. Building accelerator program components should align with the core goal of the accelerator and meet the needs of entrepreneurs.
5. Accelerators should actively build entrepreneurial communities and engage entrepreneurs to provide follow-up support.

Each entrepreneurship ecosystem is unique, and university accelerators are an excellent addition to any ecosystem when designed with a focus on entrepreneurs and full support for the development of entrepreneurial communities in the region.

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