

Successful entrepreneurial programs across educational institutions towards inculcating knowledge in software business

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ABSTRACT

An Entrepreneur is a person who has possession of an enterprise, or venture, and assumes significant accountability for the inherent risks and the outcome. It is an ambitious leader who combines land, labor, and capital to often create and market new goods or services. Entrepreneurship as a career option has emerged due to the cut-throat competition and lack of opportunities in the formal sectors. Individuals with a dream to do something on their own are even leaving their secure jobs to pursue a business venture. There are several institutes that offer entrepreneurship courses in India. It is always considered to be a better idea to join a formal training before setting your foot

forward as an entrepreneur. Entrepreneurial Programs across Educational Institutions in particular to Software Field helps to promote a high tech entrepreneur with the technical knowledge, entrepreneurial skills and also the business knowledge. It is widely accepted that adding business and entrepreneurial training to a technical curriculum improves the caliber of graduates, finding ways to effectively blend business skills into an education program has been a challenge for faculty. In an attempt to bridge the gap between technology education and entrepreneurial skill-set development, Microsoft has partnered with various university-level institutions across Europe as part of a pilot initiative to encourage usage of the Software Entrepreneurship for Students curriculum. There are tremendous benefits to the local software economy from teaching entrepreneurship and opening student's eyes and minds to the possibilities of commercializing ideas they develop, either during their time at university or during their working careers. The software product business is about selling licensed packages to customers. These products help solve a user pain and have potential for growth and profits. One advantage of starting up in this direction is the ability to attract stock market investors and venture capitalists for funding. This business also enjoys enormous economies of scale in selling multiple copies of the same software. The downside of creating products is that software sales are subject to fluctuations.

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Entrepreneurship

Entrepreneurship is often difficult and tricky, resulting in many new ventures failing. The word entrepreneur is often synonymous with founder. Most commonly, the term entrepreneur applies to someone who creates value by offering a product or service, by carving out a niche in the market that may not exist currently. Entrepreneurs tend to identify a market opportunity and exploit it by organizing their resources effectively to accomplish an outcome that changes existing interactions within a given sector.

Advantages of entrepreneurship

Every successful entrepreneur brings about benefits not only for himself/ herself but for the municipality, region or country as a whole. The benefits that can be derived from entrepreneurial activities are as follows:

1. Enormous personal financial gain
2. Self-employment, own bossing, offering more job satisfaction and flexibility of the work force
3. Employment for others, often in better jobs
4. Development of more industries, especially in rural areas or regions disadvantaged by economic changes, for example due to globalization effects
5. Encouragement of the processing of local materials into finished goods for domestic consumption as well as for export
6. Income generation and increased economic growth
7. Healthy competition thus encourages higher quality products
8. More goods and services available
9. Development of new markets
10. Promotion of the use of modern technology in small-scale manufacturing to enhance higher productivity
11. Encouragement of more researchers/studies and development of modern machines and equipment for domestic consumption
12. Development of entrepreneurial qualities and attitudes among potential entrepreneurs to bring about significant changes in the rural areas
13. Freedom from the dependency on the jobs offered by others
14. Ability to have great accomplishments
15. Reduction of the informal economy
16. Emigration of talent may be stopped by a better domestic entrepreneurship climate
17. Serious tax advantages

Scopes in India

The scope for entrepreneurship is limitless here in India. Entrepreneurship can be divided into three areas of work;

- Providing Service
- Selling Goods
- Manufacturing Goods

The first activity involves the least monetary investment and risk. The other two require higher investments, but a good foresight can make these ventures extremely successful.

Scopes Abroad

People who like to dream big can expand their business ventures beyond the boundaries of India. An understanding of international economy and business methods are required in this case.

Software entrepreneurship

Software entrepreneurship has a different set of developing strategies than other business start-ups. The development of software, a digital "soft" good, involves different business models, product strategy, people management, and development plan compared to the traditional manufacturing and service industries. For example in the software business, making one or ten million copies of a product cost about the same. Furthermore, the

productivity difference between a good and bad employee is ten to twenty fold. As well, software projects tolerate 80 percent lateness and ongoing design changes on a regular basis.

Software entrepreneurship involves infinitely broad range of businesses; from helping people plan daily events to controlling a space shuttle.

The first thing software entrepreneurs should understand is the difference and the interrelationship between products and services business. The software product business is about selling licensed packages to customers. These products help solve a user pain and have potential for growth and profits. One advantage of starting up in this direction is the ability to attract stock market investors and venture capitalists for funding. This business also enjoys enormous economies of scale in selling multiple copies of the same software. The downside of creating products is that software sales are subject to fluctuations. Sales will drop drastically in economic recessions.

The service business involves creating applications for clients that tailor to their business needs. This includes the maintenance of software products they have purchased before. One advantage of service business is that long-term customer contracts can allow the company to survive rough economic times. The downside is that the business needs to attract enough clients to keep developers and consultants busy.

Software companies can also develop a hybrid solution involving a mixture of products and services. In this case, solutions are sold to clients that require extensive customization. Approximately 20 to 50 percent of coding is required for each individual client. Customers purchasing this type of IT solution usually do not switch vendors for long periods of time

Promotion of entrepreneurship

Given entrepreneurship's potential to support economic growth, it is the policy goal of many governments to develop a culture of entrepreneurial thinking. This can be done in a number of ways: by integrating entrepreneurship into education systems, legislating to encourage risk-taking, and national campaigns.

The Software Entrepreneurship for Students curriculum gives technical faculty the tools to introduce students to real-world management skills and competencies needed to fuel innovation, support entrepreneurs and aid employability of the next generation. Microsoft has created the Software Entrepreneurship for Students to introduce business strategy and entrepreneurship content into technical curriculum. The curriculum provides technical students with additional knowledge and tools to develop successful and sustainable ventures.

The modules included discover:

- Creativity and Innovation
- The Environment and its Analysis

- Identifying Market Opportunities
- Value Creation and Customer Loyalty
- Screening Opportunities and Potential Markets
- Entrepreneurial Leadership and Management
- Developing and Implement Strategy (Software Business Management Planning)
- Raising Finance
- Harvest Options and Strategies

By introducing students to real world software business management, the hope is to connect faculty and graduating students with resources and foster partnerships locally to encourage entrepreneurship.

New Curriculum Helps Technology Students Become Young Software Entrepreneurs

Adding business and entrepreneurial training to a technical curriculum is known to improve the calibre of graduates. But combining business skills with education programmes has long been a challenge for faculties. Microsoft has formed partnerships with universities across Europe to bridge the gap between technology education and the development of entrepreneurial skills. To this end, it is running a pilot initiative to encourage the

use of a new course called “Software Entrepreneurship for Students.” Software Entrepreneurship for Students is a university-level training curriculum that is focused on developing the entrepreneurial skills of technology students. It can be adapted quickly for use across a variety of academic settings.

The software industry is a prime vehicle for innovative growth. Business success in the software sector typically requires a rare combination of technical skills and entrepreneurial know-how. Too often start-up software companies fail because, while their founders may have a brilliant technical idea, they lack the business experience required to bring it to market effectively. Microsoft is helping to alleviate this problem for budding software entrepreneurs through the sponsorship of a unique training program.

The curriculum aims to facilitate the skilling of students with basic business knowledge to increase the number of start-ups/ Small and Mid-Sized Enterprises for local economy and innovation. Specifically targeting Technical Universities and Colleges giving technical faculty the tools to introduce students to real world management skills and competencies needed to fuel innovation, support entrepreneurship and aid employability of the next generation.

Connecting Science and Business Education

In Denmark, delivery of the pilot Entrepreneurship

for Students program generated strong interest and a commitment from faculty to teach the type of curriculum put forward, says Microsoft Denmark Academic Relations Manager Henrik Westergaard Hansen. Hansen said he will use the curriculum to attempt to build bridges between second-tier technical and business educational institutions in Denmark which could form valuable partnerships through teaching the Entrepreneurship for Students program.

Value for Aspiring Entrepreneurs

An attendee at the Portugal pilot workshop was Paulo Sousa, a faculty member of the School of Engineering at the Polytechnic Institute of Porto. Sousa said the institute recently added entrepreneurship curriculum to its study program, which is being taught by business professors, and he believed the availability of content in the form of the Software Entrepreneurship for Students curriculum would be of value to other institutions that were on the path to making a similar move. He said with processes to add new content to an institution’s curriculum often being complex and taking a long time, introducing Software Entrepreneurship for Students content in the form of summer schools or evening workshops may be the most practical approach for many institutions.

Curriculum Fits with Start-up Center

In Poland, the pilot Entrepreneurship for Students program was deployed by Microsoft in partnership with the Wielkopolska Province Center of Advanced

Information Technologies, a government-supported center focused on supporting the growth of early-stage innovative IT companies. The key program the center runs to encourage the commercialization of stand-out business ideas is *StartUp-IT* which consists of the workshops, seminars and technological support for students and young scientists inventing new high-tech solutions.

The basic aim of the program, explained StartUp-IT program manager Zbigniew Krzewinski, is not only to inspire young entrepreneurs in a technical and organizational way, but also to present new approaches for running their own businesses locally in Poland and on the global level. Hosting the pilot Entrepreneurship for Students workshop was a natural fit for the center, Krzewinski said, because of the program's focus on introducing attendees to real world business management skills and competencies needed to fuel innovation, support entrepreneurialism and improve employability options for the next generation of workers. Start Up-IT plans to add the Entrepreneurship for Students content as part of the free and open programming it runs over weekends. It also plans to use the content in two-day workshops targeting people interested in Entrepreneurship.

Launch of Software Entrepreneurship Curriculum helps students reach the next level

Lars Lindstedt, Software Economist, Microsoft UK, said; 'The software industry in the UK is growing

rapidly spurred in part by the great ideas and concepts students have. The Software Entrepreneurship Curriculum will help enable the talented people behind these innovations reach the next level. Initiatives like this drive further growth by making sure the best resources are available and helping people to develop the right skills for future success."

Agitavi Research, global provider of management consulting and corporate learning solutions company, and Microsoft developed the new Curriculum Materials to provide faculty and graduating students with resources to foster partnerships and encourage entrepreneurship. The Software Entrepreneurship materials may be used off-the-shelf or customized to fit the structure and requirements of individual institutions. The curriculum is flexible enough to be adopted wholly or partially for targeted business skills training such as creating value, understanding core competences or promotion and marketing.

Feedback from Students and Faculty

The pilot workshops – held at academic institutions in Portugal, Poland, Germany, Spain and Denmark – attracted a mix of faculty members and students. Attendees at the Portugal workshop included Miguel Vicente, a Microsoft Student Partner who is a student at the Faculdade de Engenharia (faculty of engineering) at Universidade do Porto.

Microsoft Student Partners will help create awareness for this curriculum at their university and can encourage the usage by faculty and student associations. Vicente believes the Software Entrepreneurship for Students curriculum is valuable not only for students aspiring to become entrepreneurs and business founders, but also provides “the kind of positive thinking” that is valuable for employees within existing businesses who want to make a difference in the market”. As a Microsoft Student Partner, Vicente is enthusiastic about being involved in a peer-to-peer evangelizing initiative to encourage up-take of the Software Entrepreneurship for Students curriculum, one of several initiatives planned during 2008 to grow support in Portugal for the program.

Local Software Economy Benefits from Entrepreneurialism

Professor Peter Russo, Chief Executive of the Strascheg Center for Entrepreneurship and Professor for Entrepreneurship at the Munich University of Applied Sciences, said numerous studies had shown the positive economic impact of developing vibrant, entrepreneur-based local software industries. “There are tremendous benefits to the local software economy from teaching entrepreneurship and opening students’ eyes and minds to the possibilities of commercializing ideas they develop, either during

their time at university or during their working careers,” Russo said. He added that educational intuitions also benefit by embracing the teaching of such programs, because offering entrepreneurial teaching was an effective way to differentiate themselves from other places of learning.

When it comes to developing the LSE through entrepreneurial up-skilling, Germany’s challenge is to find flexible teaching content that can be implemented across a variety of academic structures to support the nation’s unique faculty and institutions. The Software Entrepreneurship for Students program is being delivered in partnership with Agitavi Research Corporation, a specialist provider of business research, corporate learning, and management consulting services targeted at the needs of the global ICT industry. Agitavi has partnered with Microsoft on research and training initiative, with a specific focus on LSE development, since 2003.

Funding

Bank Financing

This is practically an impossible method as the bank requires security and personal loan guarantees.

Government Aid

Governments usually give out non-repayable grants to encourage start-ups. There are also

investment tax credits that can be claimed. One thing to be careful about government aid is the lengthy procedures that may be required before obtaining the funds.

Venture Capital

Venture capital is risk capital invested into a start-up company at its early stages. Venture capitalists usually invest in start-ups that already have a relatively developed software product and some early sales. They look for products that have a large potential in a growing market with a competitive edge.

Entrepreneurship Development Institute of India (EDI)

EDI with the support of Bharti Foundation has set up the Bharti Centre for Entrepreneurial Initiatives. The Centre through its various activities has established that entrepreneurs are indispensable for the new age. However, the efforts need to be consistent to achieve permanent, noticeable change in the mindsets of people in society. A large brigade of youths at the threshold of making a career choice does inspire hope and towards this the Centre holds certain activities to achieve impact making results.

Entrepreneurial dynamism is what the society requires to be termed as progressive. In order to incline our youths towards giving entrepreneurship

a preference over other career choices, a constant reinforcement is what is required. Against the backdrop that projection of the achievements of EDP trained successful entrepreneurs would certainly help inculcate the spirit of entrepreneurship amongst the youths, the Centre has been successfully awarding the Bharti Entrepreneur of the Year Award to EDP trained first generation entrepreneurs.

NIIT to offer Software Entrepreneurship program along with University of Nigeria Nsukka

NIIT Ltd, leading Global Talent Development Corporation and Asia's largest IT trainer has entered into an alliance with 'University of Nigeria Nsukka' to offer Software Entrepreneurship program to its students.

Institute Without Boundaries: Teaching Expertise with Developing Countries

Indian Technical & Economic Cooperation, Ministry of External Affairs, Govt. of India endeavour to help developing countries by sharing Indian experiences and expertise assigned EDI to impart knowledge and develop skills of professionals from developing countries on Entrepreneurship and related issues.

The international programme on Business Development Service Providers for Micro Enterprise and Micro Finance had been chalked

out to sharpen knowledge and develop expertise in planning and implementation of Micro Enterprise & Micro Finance projects. Twenty eight professionals from government departments, non-government organisations, micro finance institutions, self help groups in addition to policy makers and independent consultants from 20 countries are attending this training programme. The duration of the programme is from January 07 to February 15, 2009.

Conclusion

Entrepreneurial dynamism is what the society requires to be termed as progressive. In order to incline our youths towards giving entrepreneurship a preference over other career choices, a constant reinforcement is what is required. Against the backdrop that projection of the achievements of EDP trained successful entrepreneurs would certainly help inculcate the spirit of entrepreneurship amongst the youths. Developing and sharing the best practices of successful educational models that intersect entrepreneurship and innovation/technology development through curricula, coursework, applied activities, mentoring, innovation labs, incubators, or wherever successes can be studied and measured. For entrepreneurs to succeed in the software sector it requires combination of technical skills and entrepreneurial know-how.

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