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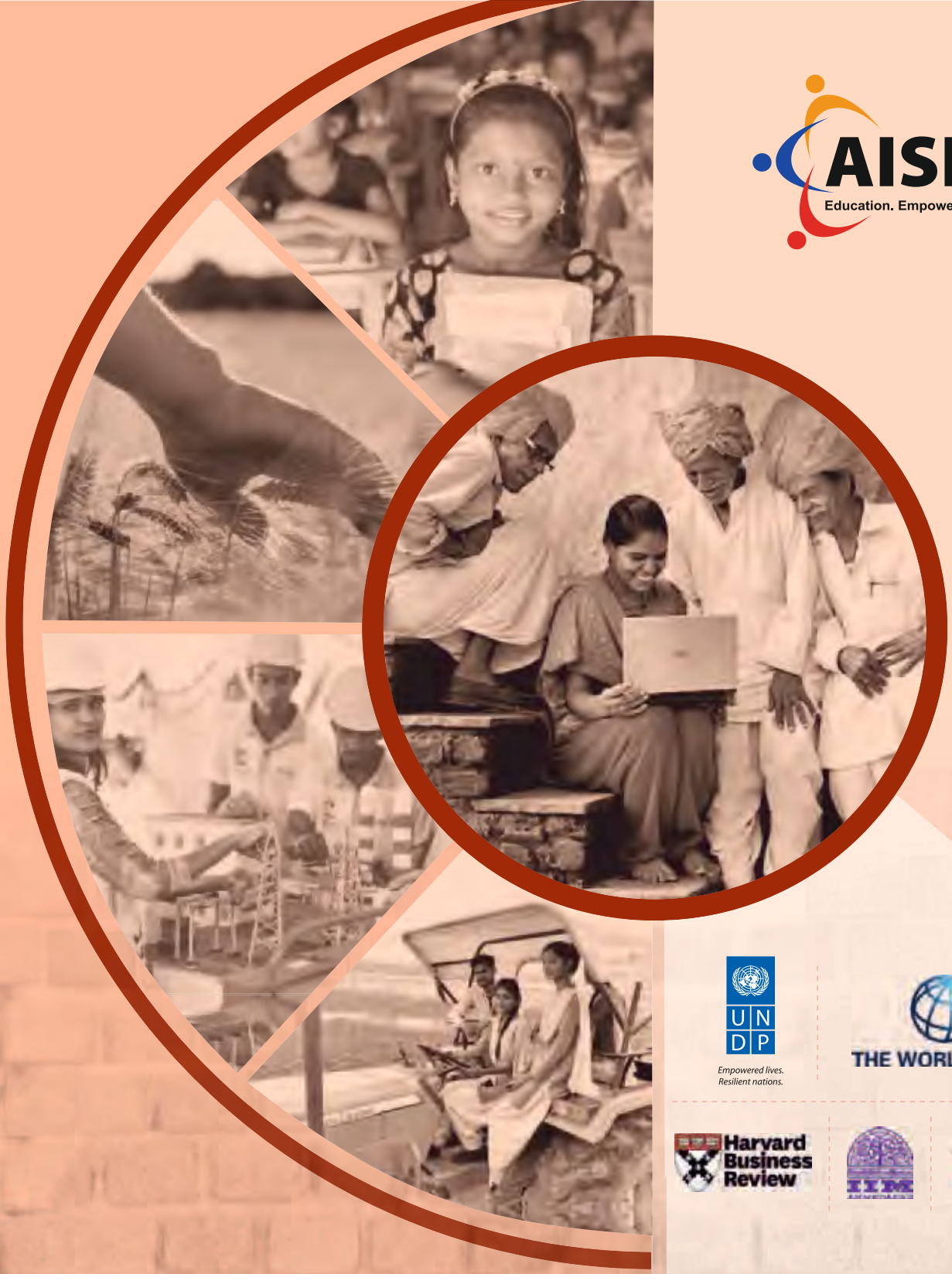

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Compiled By:
Dr. Aditi Chaturvedi


AISECT

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AISECT
THE JOURNEY SINCE 1985

The advent of Information and Communication Technology (ICT) in the 1980s raised hopes of complete transformation of society in terms of greater transparency, reduced drudgery, better employment opportunities and increased income levels. But it also increased fears and concerns about increasing Digital Divide which had several reflections in the form of Rural and Urban Divide, Gender Divide and Language Divide. It was feared that like many other technologies and inventions, it may only benefit the upper crest of Indian Society and would bypass the large Indian population living in rural areas of the country, untouched from its benefits.

Santosh Kumar Choubey, a young Electronics and Telecommunication Engineer at that time, who had already renounced jobs in Indian Engineering Services and Indian Civil Services to work for Science and Technology promotion coupled with literacy in Rural India, felt deeply concerned about this situation and decided to work for promotion of Digital Literacy and ICT based initiatives in the bottom of the Indian Pyramid. He realised that India lived in villages and it is there that the ICT could or should provide maximum benefits.

With this realisation he started searching for models which were suitable and could survive in the rural milieu. In the first decade of his work (between 1980-90) the contours of such models started emerging. It emerged that such a model should focus on Panchayats (cluster of villages) and Blocks (cluster of panchayats), should insist on capacity building of youth in Hindi and Indian languages to improve technology absorption and should be horizontally linked with other developmental activities of the area to make it economically viable. This was a completely different perspective from the prevailing scenario then, which was focusing on metro cities, software development and manpower exports and vertical integration in technology. Based on his innovative strategy, which came to be called as Multipurpose ICT centres, Santosh Choubey, established an innovative ICT enabled network at remote and rural locations across India named AISECT (All India Society for Electronics and Computer Technology) in 1985. AISECT's Multipurpose ICT centers provide a model and framework of ideas, which helped in large-scale replication of sustainable ICT centers in rural areas of the country. AISECT now has a network of over 28,000 centers across India in last 36 years, to show that if ICT interventions are properly executed and handholding is done in the initial period, it is technologically possible and is financially viable to improve quality of life of the people, generate employment and increase incomes of the rural youth.

The large scale replication of AISECT model was first taken up during the All India Coordinated Programme supported by the Department of Science & Technology (GoI) and Department of Electronics (now MCIT GoI) around 1995 and the case study was first presented in the joint IIM Ahmedabad World Bank workshop in 1999. It was first published by the World Bank as one of the most successful strategies for rural ICT promotion in India, has been awarded the Indian Innovation Award from the then President Dr. A. P. J. Abdul Kalam and has benefitted thousands of panchayats and villages in the country. Similar strategies are now being adopted by various Govt. departments, ministries and NGOs in the form of ICT enabled centres with different nomenclatures as Common Service Centres, E-Governance Kiosk, Banking Kiosk, Akshay Centres etc. to name a few.

The core area of work pioneered, replicated and scaled up by AISECT on a pan-India basis is the Multipurpose ICT enabled center Model, working predominantly in Rural areas and for the unorganized sector, while adopting Hindi and other Indian languages as their mode of communication.

The perspective governing AISECT's Multipurpose ICT centers is derived out of the basic structure of our country.A mere look at the Indian Pyramid would reveal that we are dealing with two different categories as follows:

Category I:

1. Major Cities : 70
2. Districts : 600

Category II:

3. Blocks / Talukas : 6000
4. Panchayats :250000
5. Villages :700000

As per the above hierarchy our Major Cities and Districts belong to Category-I while the Block/Talukas,Panchayats and Villages belong to Category-II.

The points of intervention as mentioned above, immediately threw up one problem in the 1980s. The major cities and district headquarters in Category-I and block/talukas, panchayat and villages cluster in Category-II, were very different from the point of view of technology dissemination and nature of demand. The first category had better access to power, connectivity, manpower and awareness, the second category lacked most of it. The nature of demand in the first category was vertical and high-end, that in the second was horizontal and low end. In summary the degree of technological and socio-economic convergence in urban areas was quite high in the 1990s (before Internet and Mobile revolution) as compared to the rural areas. Therefore it was decided that the nature of intervention had to be different for rural areas, as far as use of ICT was concerned.

CORE INNOVATIONS BROUGHT ABOUT:

The interventions and best practices evolved by AISECT over last 30 years can be summarized in the following innovations carried out by the organization:

• Setting up of Multipurpose ICT centers

The nature of intervention at the block and sub-block (panchayat) level were made multipurpose and flexible in nature on account of the multifaceted demands which exist there.

• Forging Developmental Linkages

The centers were used to effectively link the activities with ongoing developmental programs in the areas of literacy, education, watershed management and health.

• Adopting regional Languages

It was critical that the IT center communicated with people in their regional languages. AISECT was the pioneer of IT content creation in Hindi and other regional languages.

• Organising the first ever I.T Yatra in India

AISECT organised the first ever Information Technology Yatra of Rural India in the year 2001, with a view to initiating I.T awareness , creating structures for utilising I.T as a vehicle for promotion of Knowledge based enterprises and for generating curiosity in schools and colleges across rural locations. This practice has been continued for over two decades now. The yatras cover over 50 blocks and 200 panchayats every two years.

• Encouraging entrepreneurship

The sustainability and scalability aspect of this model comes from the fact that the network is set up by a host of individual village level entrepreneurs across the country and not by a single body. I.T.I, polytechnic graduates and other technically qualified youth were invited to attend an I.T based Entrepreneurship Orientation Program wherein they were exposed to various socio-economic aspects of multipurpose centres. Over 50 such camps were orgnised at Blocks and Panchayats every year.

• Enlisting Schools and Panchayats (village clusters) as carriers

Utilizing existing infrastructure became very important in order to maximise reach. Whether the emphasis was on teaching "computers" itself or on teaching through computers, schools and panchayats formed important carriers of I.T to far flung areas.

Creating Rural Knowledge Workers

Promoting a knowledge based society requires knowledge workers. In the rural context this implies identifying people who possess or can seek information so that the local demands can be met with.

• Setting up of Higher Education Institutions in Rural and Underserved Areas

AISECT recognized the fact that vertical mobility of students receiving shortterm training at its centers is in continuous demand in the society and hence went about setting up high quality Higher Education Centers (Universities) in rural and underserved areas of the country; e.g. in MP, Chhattisgarh, Jharkhand and Bihar.

• Collaborating with other service providing companies to increase employability

With a view to become a service aggregator for rural India, AISECT has partnered with companies in the Banking, Insurance, Telecom and Financial sectors to provide services through the existing centers thus generating employment opportunities for rural youth.

• Aligning Government Missions with Grassroot Communities

AISECT works in alignment with leading Govt. Missions and Initiatives and AISECT's infrastructure has become a trusted channel for delivery of several Govt. initiatives in the areas of skilling, education, digital literacy, financial inclusion and Aadhaar services, generating fresh opportunities for employment and self – employment in rural areas.

The organization now has a strong presence **in 605 Districts, 2100 Blocks and 8550 Panchayats across 28 States and 5 Union Territories through over 31000 Centres, 14 State Offices and 32 Regional Offices.** Till date, it has imparted skills-based training to over **26 lakh people, created employment opportunities within the network for more than 1,00,000 people and empowered the lives of over 50 lakh** people through various innovative products and services.

AISECT has created 15000 Rural and Semi-Urban Entrepreneurs with 20,00,000 Students trained by AISECT so far. Over 10 Lakh Students have been recruited, 5 Higher Education campuses established and 22 States covered under Skill Development Projects. AISECT has been giving skill-based education / vocational skills focused through short-term training or courses, not part of the formal education sector and which employs in informal sectors for rural and semi-urban India. Schemes such as Recognition of Prior Learning (RPL) are the primary focus of the AISECT Group of Universities students can receive both security and benefit, as it aids in an equivalent acknowledgement of both informal and formal learning. AISECTMOOCS.com is India's largest free online open learning platform while RojgarMantra.com addresses the entry-level manpower requirements of private and public sector enterprises at the small town, district and block levels. AISECTOnline.com is a one-stop window that makes various digital services accessible to the common man in the semi-urban and rural milieu. Major Verticals of AISECT Group are as follows:

AISECT Skill Academies

AISECT has been executing skill development programs through its various Academies. With a view to align its programs to National Skill Qualification Framework (NSQF), all the existing Academies have been mapped with 24 NSDC Skill Sectors. In addition, 5 market-oriented Academies have also been added keeping in view the need of future skills and other employment – oriented programs. The NSDC Sector-Based Academies include Agriculture, Automotive, Apparel, Beauty and Wellness, BFSI, Capital Goods, Construction, Electronics & Hardware, Food Processing, Furniture & Fittings, Green Jobs, Healthcare, IT-ITeS, Life Sciences, Logistics, Management, Media and Entertainment, Mining, Plumbing, Retail, Rubber & Plastic, Telecom, Textile & Handlooms and Tourism & Hospitality. Five other market-oriented Academies include Teacher's Training, Future Skills, Foreign Languages, Tally Programs and Competitive Examinations.

AISECT Skill Projects

AISECT has partnered with the National Skill Development Corporation (NSDC) to offer skills-based training to 13 lakh youth by 2022. Under this partnership, 14 vocational training academies have been set up that offer over 175 low-cost, high-quality University certified certificate and diploma courses. AISECT is affiliated partner agency of 11 Central Ministries and executing various National & State level schemes like Deen Dayal Grameen Kaushal Yojna (DDUGKY), Pradhan Mantri Kaushal VikasYojna (PMKVY) and has partnered with 15 State Skill Development Mission (SSDM), providing vocational education in 1400+ government schools of 14 states and has joined hands with 22 Sector Skill Councils (SSCs) to develop relevant training modules in association with industry experts and so for developed modules for 100+ Job Roles as per QP-NOS based curriculum.

AISECT has partnered with a number of leading corporations across the country to implement their CSR projects. AISECT'S portfolio on CSR domain includes skill development, skill up-gradation, digital literacy, financial literacy, vocational training, Migration support and sponsorship for higher education among others. AISECT has successfully implemented CSR projects benefitting more than 50,000 beneficiaries for leading corporations like UNDP, Microsoft, Tata Trusts, JSW, Saurya Urja, NALCO, NTPC, CREDAI, Powergrid, Cholamandalam, NHDC, MECL, Coal India, Schneider electric etc.

AISECT has also partnered with NIESBUD & UNDP for implementing EAP & EDP programs in the state of Madhya Pradesh.

Rojgar Mantra

A unique portal catering to talent requirements across demographics, AISECT's job portal, Rojgarmantra helps students gain relevant employment opportunities. Through this platform, AISECT aims to bridge the existing demand and supply gap in the job market in the semi-urban and rural India.

Rojgar Mantra provides employers access to lakhs of students trained in the fields of Retail, Textile, and Agriculture Allied sectors, as well as Education. Some of the areas of focus for Rojgarmantra are permanent staffing, outsourcing human capital, customised corporate training, skill enhancement and training as well as payroll processing. With dedicated pages for employers and employees, Rojgar Mantra works towards streamlining job opportunities and talent development. Currently, the Rojgar Mantra platform has more than 18 Lakh registered jobseekers and provided placements to 10,000 employees. The rojgarmantra also has 1000 registered employers on board. The platform has played a pivotal role in securing job opportunities through Rojgar Melas and recruitment drives. Rojgarmantra provides job opportunities in the sectors like IT & ITeS, E-Commerce, BFSI, Electronics, Automotive, Capital Goods, Apparel, Tourism and Hospitality, Healthcare and Logistics.

AISECT Financial Inclusion

The Financial Inclusion model was included as a core wing of AISECT to meet the end objective of revolutionizing livelihood of low-income segments by providing financial services at an affordable cost. AISECT's initiatives in Financial Inclusion are predominantly available in rural and semi-urban areas, thereby meeting financial requirements through a comprehensive presence of administrative and field staff at state capital as well as district level. Banking services at the kiosks are available all through the year along with seamless technical support as required.

AISECT works as a National Business Correspondent for 6 Nationalized Banks - State Bank of India, Bank of India, Bank of Baroda, Central Bank, Canara Bank and Union Bank of India and also working as a National Business Correspondent of Airtel Payments Bank and Madhyanchal Grameen Bank, offering a host of services under notable Government schemes. Some of the key Government schemes include Pradhan Mantri MUDRA Yojana, Pradhan Mantri Suraksha Bima Yojana, Pradhan Mantri Jeevan Jyoti Bima Yojana, Atal Pension Yojana, etc. Key services offered at the kiosks include Recurring deposit account, Fixed Deposit account, Kisan Credit Card, Gold Loans, Term Deposits amongst others.

AISECT's innovative Financial Inclusion model enables hassle-free savings and loan facilities in addition to other banking services at cost-effective rates. Over the years, AISECT has built 6300 baking kiosks, 1800 bank branches linked to the kiosks, 98 lakh accounts have been opened under the Financial Inclusion wing.

AISECT Seva Kendra (ASK)

The organization's ongoing e-Governance initiatives include working as a UID Permanent Enrolment Centre, establishing 27 Lok Seva Kendras (LSKs) at block levels in Madhya Pradesh, managing 114 E-Mitras in 5 Districts of Rajasthan and working with the State Bank of India for rolling-out Electronic Toll Collection (ETC) Project across 537 Toll Plazas on the National Highway. B2C services like mobile and DTH recharge, examination form downloads and submission, railway ticket booking, ITR filing, water bill payment, data entry operations, Online VISA Application Services, etc. are also offered through the AISECT network.

AISECT Group of Universities

AISECT Group of Universities is India's leading names in the higher education space with a mission to establish world-class and affordable universities at locations that require quality higher education ecosystem. With over three decades of unparalleled experience in skill development and job placement, AISECT Group offers its students immense opportunities through its extensive industry linkages and expertise in the entrepreneurship sector. The 5 universities in the group are:

- **Rabindranath Tagore University, Bhopal:** RNTU is India's first skill-based university offering 117 programs at UG, PG, and doctoral level under 11 major faculties. The innovative courses offered by the University focuses on making students industry ready offers a plethora of benefits like earn while you work option, real time work environment for effective simulation training and flexible course selection.
- **CV Raman University, Bilaspur:** CVRU Bilaspur is a university set up in tribal area of Bilaspur providing quality education to target segment around the university. It offers short-term skill development courses to students in addition to their regular courses through its CVRU-NSDC Academy for Skill Development.

- **AISECT University, Jharkhand:** AISECT University was established in Hazaribag district of Jharkhand in 2016 as the district's first private University and the first Skills University of the State. It is a skill-based university with an aim to bridge the skill gap in the available workforce and the industry requirements.
- **CV Raman University, Bihar:** C.V. Raman University has been established in the year 2018 and is the first private university in the state of North Bihar, which is dedicated to achieve excellence in education and research in multi disciplines with its aim to develop the technical as well as professional skills of students. CVRU Bihar also focuses highly on fostering a research-based ecosystem and it has established two strong areas for meaningful research - Renewable Energy & Material Science and Chemistry & Earth Science. The University has 5 MoUs with international universities for research and education besides collaboration with several national laboratories.
- **CV Raman University, Khandwa:** CVRU Khandwa is a leading institute dedicated towards excellence in education and research to develop a holistic learning ecosystem. CVRU Khandwa focuses extensively on fostering a research-oriented environment and innovation and strongly works in the area of agriculture. With 15 skill-based courses and 10 ability enhancement programs offered, CVRU Khandwa instils students with the required skillsets to meet the growing demands of the ever-evolving industry.

AISECT Publication

AISECT Publication is an initiative by the AISECT Group. It is a national publication in the field of science and technology, skill development, art and literature for both Hindi and English and various Indian languages to publish books and magazines. The vision behind starting AISECT publication is to spread the creativity across various disciplines such as literature, education, science and technology.

The publication has monthly magazines based on different interests like science and technology and computer, "Electroniki Apke Liye" and one on art and literature called "Vishwarang" and "Rangsamvaad". They have also started publishing monthly magazine for Hindi literature, known as 'Vanmali'. These books can be purchased from e-portals like Amazon and aisectonline.com.

AISECT LEARN

AISECT Learn is a future-ready e-learning platform, designed for upskilling and knowledge building that enables learners to master in-demand, industry-ready skills, delivered in multiple languages. The platform offers a wide array of disciplines from recognized world-class universities. The learning modules offered at AISECT Learn are aligned with New Education Policy offering 1000+ courses, across 80+ categories, offering soft skills and placement-oriented training.

AISECT Learn has a blended model of learning wherein the students have access to vernacular courses, which will ensure that the content offered is not restricted to only the English language and it reaches a wider population of students in semi-urban and rural areas as well. The courses offered at AISECT Learn range from short term certifications, professional diplomas, advanced certifications and soft skills certifications.

This book is a compendium of case studies and citations about AISECT from International and National Organisations

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AISECT (PART A): LEADING INDIA'S SKILL DEVELOPMENT MISSION

INTRODUCTION

The evening of March 7, 2005 was memorable for the All India Society for Electronics and Computer Technology (AISECT). Its Chairman, Santosh Choubey, had just received the inaugural Indian Innovation Award from the then President of India, Dr. A. P. J. Abdul Kalam, to rousing applause from the distinguished audience assembled at the Vigyan Bhavan, a historic conference center in New Delhi. The award recognized AISECT's innovative model of multipurpose information and computer technology (ICT) kiosks, especially in the largely neglected rural and semi-urban regions of India. The full award citation read:

> "The AISECT model integrates ICT supported services, covering various social and economic development sectors, with education and training. It has provided new self-employment opportunities to local populations in the form of micro-enterprises for ICT-based services and electronic and electrical repair and maintenance work. AISECT has emerged as the largest all-India network of semi-urban and rural ICT centers. The widespread diffusion of AISECT model kiosks is a good indicator of its viability to spread even further, thereby contributing to lessening the digital divide in India." [1]

Choubey was overwhelmed by many emotions as he climbed down from the podium, award in hand. He thought back to the late 1970s when he first felt the urge to promote science and technology in rural areas. Since then, he and the organization he founded had come a long way towards bridging the ICT literacy gap between urban and rural India and providing better job opportunitie s for rural people.

[1] (2015). Santoshchoubey.com. http://www.santoshchoubey.com/Visitor/Personal.aspx

Dr. Murali Mantrala, Dr. S. Arunachalam and Lopamudra Roy prepared this case solely as a basis for class discussion. This case is not intended to serve as an endorsement, a source of primary data, or an illustration of effective or ineffective management. The authors would like to acknowledge the support provided by Santosh Choubey, Dr. Pallavi Rao Chaturvedi, Siddharth Chaturvedi, Shilpi and Abhishek Pandit, in the writing of this case. This case was developed under the aegis of the Centre for Learning and Management Practice, ISB.

As proud as he was of all that AISECT had achieved thus far, his thoughts turned to his current primary concern: How should AISECT's skill education enterprise be sustained in India over the next 20 years? What strategic changes would AISECT require in its business model to self-sustain in the future?

A LOOK BACK

Born in 1955 in Khandwa, a city in the central Indian state of Madhya Pradesh (MP), Choubey did his schooling at the Khandwa government school. He went on to earn a Bachelor's degree in Electronics and Telecommunication Engineering from Maulana Azad National Institute of Technology (MANIT) in Bhopal, the state capital of MP. He was selected to the Indian Engineering Services (IES) in 1976. However, his interest in basic science and technology innovation led him to quit the IES and join Bharat Electronics Limited (BEL), a public sector organization in New Delhi, in 1978. BEL's mission then was to manufacture advanced electronic products for the Indian Armed Forces. The same year, driven by a growing desire to contribute to rural development and science and technology (S&T) education in India, Choubey became a founder member of the Delhi Science Forum,[2] a policy planning non-governmental organization (NGO), whose main agenda was to promote and popularize S&T in rural India. In 1981, Choubey was recruited to the prestigious Indian Civil Services (ICS).

While a civil servant, Choubey continued his work with the Delhi Science Forum. Choubey was convinced that the fastest and most effective way to spread S&T know-how across India was to communicate in the local language on subjects such as general science, electronics, agriculture, environment, water, soil management, etc. However, at the time, there were very few publications in India that provided basic science content in a language other than English, and even those were rarely in tune with the rural Indian environment. In a bid to close this gap, Choubey created original S&T educational content in the local vernacular to be distributed in MP, his home state. Among the first of their kind, these learning materials proved to be very popular among rural folk, his target audience. They soon attracted the attention of Indian government officials who were leading an initiative to take S&T skill education to the masses via "science *yatras*"[3] or tours in different parts of the country. Impressed by Choubey's efforts, these officials selected him to coordinate several science *yatras* in MP.

The Premise behind AISECT

As coordinator of the science *yatras* in MP, Choubey was quite satisfied with his work, which allowed him to interact with and get to know the rural populace. However, the occurrence of a traumatic event near Bhopal led Choubey to quit his secure civil services career and devote himself full-time to spreading S&T awareness and education in the state's rural sector. This event, the world's worst industrial disaster, occurred on December 2, 1984. A Union Carbide pesticide plant in Bhopal accidentally released at least 30 tons of highly toxic methyl isocyanate and other poisonous gases into the atmosphere, killing 15,000 people in the surrounding districts.[4] The horrific toll of the disaster convinced Choubey that the only way to avert such calamities in the future was to educate and empower the residents of small towns and villages in rural India to make the right technology and

[2] Company sources

[3] Science *yatras* were part of a government of India outreach program to take science and technology to remote areas of the country, trigger the interest of the masses by imparting knowledge in regional languages, and promote the use of S&T among rural youth.

[4] Taylor, A. (2014, December 2). Bhopal: The world's worst industrial disaster, 30 years later. *The Atlantic*. https://www.theatlantic.com/photo/2014/12/bhopal-the-worlds-worst-industrial-disaster-30-years-later/100864/

industrial development choices for their communities. On quitting the civil services, Choubey and a group of like-minded individuals formed the Society for Electronics and Computer Technology (SECT) in 1985 in Bhopal. SECT was a non-profit NGO whose mission was to disseminate S&T knowledge, services, and solutions to the underserved rural areas in India's heartland. Twelve years later, in 1997, as SECT's purview of activities expanded beyond MP and across India, it was renamed the All India Society for Electronics and Computer Technology (AISECT). (Purely for expositional ease, the organization is hereafter referred to as AISECT, even when discussing its pre -1997 activities.)

Growth of Microcomputers: Industry Report

The period 1975-1984 witnessed a revolution in technology, with the first-ever personal computer (PC), the MITS Altair 8800, launched in 1975, followed by its clone, the IMSAI 8080.[5] A year later, Apple co-founders Steve Jobs and Steve Wozniak designed their introductory "kit" computer, Apple I, followed by its second and third versions in 1977 and 1980, respectively. However, it was not until 1981, when IBM launched the IBM PC, that PCs became widely popular. The PC industry boomed over the next couple of years, and by 1983, nearly 10 million PCs were estimated to have had been in use in the US alone. A more affordable version of Apple's Macintosh was introduced in the market in 1984.

The Advent of Microcomputers in India

Although the computer age in India began as early as 1955 with the installation of the UK's A.D. Booth-designed HEC-2M at the Indian Statistical Institute (ISI), Kolkata, it was not until 1978 that the country saw a sharp rise in the use of computers, from 1,000 in 1978 to 80,000 in 1990.[6] In 1998, the then Prime Minister, Atal Bihari Vajpayee, declared that IT stood for "India Tomorrow."[7] In the 1980s, British computer company Acorn Computers Ltd. designed and developed a series of microcomputers and associated equipment known as the British Broadcasting Corporation Microcomputer System (BBC Micro). Around 1987, India encouraged and promoted its computer literacy programs and brought BBC Micro[8] to the country.

During the mid-1980s, the Indian government introduced the Computer Literacy and Studies in Schools (CLASS) initiative to introduce digital literacy as part of the school curriculum. The advent of microcomputers in India and the government's initiative to include ICT in education coincided with AISECT's intention of taking science and technology to remote parts of the country. ICT and its potential to transform the lives of rural youth gripped Choubey's attention and imagination.

Santosh Choubey's Vision

Choubey was convinced that even basic ICT literacy and related skills could improve the lives of the masses in rural India. However, he was aware that more than 90% of India's rural population did not know about computers or the benefits that urban India and the developed world were deriving from them. He saw that India's rural youth were in dire need of basic ICT training. This knowledge was

[5] Knight. D. (2014, April 26). *Personal computer history: 1975-1984*. Low End Mac. https://lowendmac.com/2014/personal-computer-history-the-first-25-years/

[6] Rajaraman, V. (2012). *History of computing in India (1955-2010).* Indian Institute of Science. https://ethw.org/w/images/8/87/Rajaraman%2C_V._History_of_Computing_in_India%2C_1955-2010.pdf

[7] IANS. (2018, August 16). Vajpayee was in Bengaluru prison during emergency. *Business Standard.* https://www.business-standard.com/article/news-ians/vajpayee-was-in-bengaluru-prison-during-emergency-118081601491_1.html

[8] *BBC Micro.* (2021, July 16). In Wikipedia. https://en.wikipedia.org/wiki/BBC_Micro

critical for youth to qualify for a well-paying job in the burgeoning computer hardware and networking technologies industry and avail of digitized services that could enhance their lives and the lives of their families. Consequently, Choubey and AISECT joined a government initiative to introduce and provide basic computer education to high school students in government schools in Bhopal and the surrounding rural areas. Choubey recalled:

> "Initially, it was an idealistic decision. When I left the civil services, I thought I would pursue science and technology promotion for the upliftment of the people living in rural areas. The idea got more clearly defined when we realized that there were a lot of business opportunities that could be explored. And while the Indian market was focusing on software exports, we thought of the domestic use of software, domestic promotion of IT, and empowerment of people through IT." [9]

Thus, Choubey became one of India's first social entrepreneurs to recognize the potential of ICT in India's heartland, unlike much of the country's intelligentsia whose focus was on opportunities for employment and revenues from software programming, services, and exports outside India.

EARLY INITIATIVES AND CHALLENGES OF AISECT

One of the first steps Choubey took to fulfill this new mission was to write the first introductory book on computers in the Hindi language, *"Computer Ek Parichey,"* [10] and make it easily accessible to local people who did not know English. This book sold over a million copies between 1986 and 1990 and received the Dr. Shankar Dayal Sharma Presidential Award and the Meghnad Saha Award f or science content creation in Hindi. Urged by the MP State Education Secretary, who also made available about 1,000 microcomputers donated by the British government, Choubey developed a course based on his book to be taught in about 120 targeted government high schools in the state. The course covered computer theory, the importance of computers, and their usage. Village youth with ICT knowledge was encouraged to take on the role of training instructors in these schools. The course was structured to introduce computer knowledge to rural youth such that it would open new avenues for them. Students could use this knowledge to connect with opportunities in urban areas, access a wider range of jobs, and offer paid services requiring a basic knowledge of computers. This became AISECT's first big project, with the government also paying for each student trained.

An immediate hurdle for the organization was raising the necessary resources for the initiative, including hiring instructors to provide ICT training at many government schools in a short time. With no family wealth or personal savings to draw upon, Choubey raised much of the initial funding through small grants to AISECT from the central and state governments' science and technology departments. The revenue from these small projects was plowed back into AISECT's activities. He addressed the challenge of recruiting course instructors by setting up a model training center in Bhopal and identifying and training unemployed but entrepreneurial young college graduates living in the surrounding area to become instructors themselves. The idea was to set up an ICT training center in each selected government school and deliver the *"Computer Ek Parichey"* course there. Each center was allocated three of the donated microcomputers and required an investment of about INR 75,000 to INR 100,000 from each entrepreneur-trainer, whose subsequent earnings would be derived from the bulk of the money the government paid for each student trained. The remaining portion of these

[9] Most of the information and quotes in the case have been derived from internal company records and personal interviews with AISECT executives by the case authors.

[10] *Computer Ek Parichay* roughly translates to "An Introduction to Computers" in the Hindi language.

funds went towards running AISECT's operations. This approach proved to be a success. Students received a government-issued certificate on passing the end-of-course examination, which was introduced in 1987. By 1990, about 300 government schools housed ICT centers operated by AISECT entrepreneur-trainers.

Notably, many young entrepreneurs recruited for the government school training centers came from the surrounding villages. This facilitated and strengthened the program's outreach and connection to the local people. Some of the entrepreneur-trainers were graduates with some knowledge of computers while others had none. AISECT trained and certified these youth and then provided them with the necessary teaching materials to join government schools as teachers and IT faculty in their local areas. By 1992, AISECT's Computer Literacy and Electronics Awareness programs had trained over 100,000 students in elementary computer education.

While AISECT's government school-based computer training programs were successful, it soon realized that these government-funded projects were of a relatively short duration (one to three years) and were constrained by each school's activities and calendar. The training sessions could not be held during school holidays and breaks and were only permitted when the schools were willing to accommodate them in their schedule. In 1987, Choubey thought of setting up AISECT franchised IT training centers outside of schools in rural and tribal areas to accelerate the spread of com puter literacy in India. This led him to create AISECT's network of franchised rural multipurpose ICT training centers, which fueled the organization's subsequent rapid penetration into India's interiors.

ESTABLISHING A FINANCIALLY SUSTAINABLE BUSINESS M ODEL

The Launch of Multipurpose Training Centers

After much deliberation on how AISECT could gain financial stability while pursuing its social mission, Choubey realized that the rural market could be penetrated via a franchised system of multipurpose training centers (MPTCs) and kiosks that imparted ICT-based skill education and other services to rural youth. In the early 1990s, AISECT decided to set up skill training centers for rural youth at the block level[11] in semi-urban and rural areas around Bhopal. Choubey chose not to focus on major cities and towns, which were more likely to take a "software development and export" path. Rather, he wanted to spread computer awareness and information technology within the domestic heartland. Therefore, he chose to concentrate on franchising one center in each block. This proposition would create a geographic "trading area" of the appropriate size to support an economically viable training center that would draw people from rural and semi-urban areas.[12]

[11] In India, there are five stages of multi-level planning recognized by the central government: (1) National-level planning (including inter-state and inter-regional planning), (2) state-level planning (including inter-district and inter-regional planning), (3) district- and metropolitan-level planning, (4) block-level area planning, and (5) Panchayat-level village planning. A block is an important unit of micro-level planning. Each district is divided into a number of blocks. In 2000, each block comprised about 100 villages, with a population of about 150,000-200,000.

[12] Each MPTC functions in a typical field area of about 100- sq. km. and is accessible to a population of about 75,000 people. It is located at a block headquarter or at an active hub of activities within the block.

The setting up of an MPTC had to be self-funded by the entrepreneur. An investment of approximately INR 500,000 was required to set up a block-level MPTC. When entrepreneurs could not produce these funds from their resources, AISECT stepped in to help them get loans from local banks. The one-time fixed costs of setting up a block-level MPTC, including installing computer systems, printers, modems, telephone connections, furniture, application software, a package for competitive examinations, games for children, and educational software in Hindi and local languages, was approximately INR 300,000. Further, running a center typically involved employing three or four people: (i) a center coordinator (usually the entrepreneur), (ii) a high-school-educated youth with a background in software, (iii) a multipurpose electrical/electronic hardware mechanic, and (iv) a general-purpose assistant. The annual recurring costs, including all employee salaries, rent, overheads, and travel, were estimated to be about INR 200,000. Even with these expenses, after earning about INR 50,000 as annual compensation, the entrepreneur could make an additional INR 30,000 to 40,000 per year to reinvest in the business.[13]

However, it was apparent to Choubey that a center primarily focused on IT training was not sustainable due to the relatively low demand for such focused training in a rural block. That gave rise to the idea of an MPTC that could also provide training in other subjects and offer day-to-day services that were in demand among the villagers, such as hand-pump repair, photocopying, motor repair, etc. Thus, the business model became one of franchising AISECT-certified IT and other vocational skill education programs to young village-level entrepreneurs (VLEs), many of whom had already worked as teachers in the organization's government school-based training centers. Under this model, about 30% of a center's earnings from IT and other vocational skills training would go to AISECT to cover its day-to-day operations while the VLE retained the rest. However, the entrepreneur retained earnings from all the local demand-based services offered by the center.

(**Exhibit 1** summarizes economic data on potential demand, costs, and revenues associated with a typical block-level MPTC. Examining the data, it should be evident that young entrepreneurs taking up these franchises could make a reasonable return within a year or two of setting up a center).

The prospects of a good return on investment were bright, especially because of the government's strong push and funding for digital literacy dissemination and ICT usage to meet its targets for numbers of employable skilled rural youth in the country. Consequently, many entrepreneurial rural youth and teachers became interested in joining AISECT's rural network and owning and operating an AISECT multipurpose training center. Supported by the organization's rural marketing efforts, the network grew rapidly. By the year 2000, the number of franchised centers had surpassed 1,000 and were spread all over India.

Factors Contributing to the Success of the MPTC Model

In an interview with the *Education World,*[14] Choubey spoke about how AISECT's business model had evolved:

[13] AISECT data.

[14] AISECT: India's pioneer skilling university. (2017, October 17). *Education World*. https://www.educationworld.in/aisect-indias-pioneer-skilling-university/

> "Skills development has always been our [AISECT's] focus. We have a clear understanding of grassroots realities and are aware that 90% of jobs in this country are in the unorganized industry and agriculture sector. We are also aware that large corporates, including Microsoft and Google, are looking for skilled workers. So, when the demand for skilled—and not merely white-collar—graduates warmed up after the liberalization of the economy in 1991, we were ready. By 2001-02, we had opened 1,000 skill education centers. We found that skills training centers in rural and semi-urban areas could also provide an array of services."

The success of the MPTC model was largely due to AISECT's flexibility. As the network grew, it became evident that a self-sustainable rural economy could be attained through practical and vocational skill development in other fields besides IT, such as metal fabrication, construction, retail, healthcare, etc. Beyond offering IT training, AISECT developed a menu of vocational courses and their curricula (all in the local language) and allowed franchisees to choose courses from the list that were in demand in their regions to encourage greater revenue generation. Choubey explained, "Each center's choice of activities is flexible and is based on local demand. Basically, a menu approach is followed, and depending on the competence, capability, and local demand, one or more activities are chosen from the menu."

A typical multipurpose center had three major parts: (i) an "information window" that provided information on government services to local villagers in need of such assistance, (ii) a skills training center, and (iii) a service center (see **Exhibit 2**). The entrepreneur could choose the mix of activities in each part of the MPTC. The additional services and training programs offered by an MPTC had to adhere to two basic principles: They had to be (i) *demand-led,* i.e., the centers had to provide different services and platforms that offered the highest utility to the local people in the unorganized sectors in their area; and (ii) *run by trained rural entrepreneurs* in a countrywide network of such entrepreneurs. For example, if a center was located in an agriculture-oriented area where the service and repair of farming equipment was a constant need, the center franchisee was advised to appoint a technician who could provide such services for a fee. However, AISECT's primary objective for its MPTCs was to provide computer and IT training even if people approached the centers for other services. The demand-based service offerings, in AISECT's view, served to bind these centers closer to the rural population in their communities and helped the rural entrepreneurs and the organization as a whole win people's confidence, trust, and support, which in turn bolstered youth enrollment in the skill education training programs offered by the centers. Upon completing these programs and courses, students would receive AISECT-stamped certificates issued by the franchisees to help them find vocational jobs and become gainfully employed in their communities or nearby semi-urban and urban areas. Local government offices employed many of the students trained at MPTCs to carry out ICT-based work such as digitization and documentation management across MP and other states.

Many AISECT students, their friends, spouses, and relatives were also encouraged to consider opening AISECT franchised MPTCs at other locations. In this manner, AISECT's MPTCs reached 4,500 in number by the end of 2004 and were spread across 29 states and three union territories, together comprising 388 districts of India. This made AISECT the largest network of semi-urban and rural ICT training centers in India, earning it the tag of India's "leading social enterprise working in the area of skill development" and recognition in the form of the 2005 Indian Innovation Award.

Emphasis on Private-public Partnerships (PPPs): Choubey's first-hand understanding of the requirements and sentiments of the rural populace had made him realize that the best strategy for penetrating the market was the public-private partnership model, i.e., tie-ups with government-sponsored skill development and vocational education initiatives. Rural youth preferred government-run programs over independent initiatives because of their credibility at the grassroots level. Indeed, most AISECT centers became sustainable almost immediately because of government funding for skill training programs.

For example, at the behest of the Indian government, AISECT conducted an All India Co-ordinated Program (AICP) to set up MPTCs in the country's rural, tribal, and underp rivileged areas between 1995 to 1999. The program, jointly funded by the government's electronics department (DoE, now MCIT) and the department of science and technology (DST), was implemented in ten states and registered significant results. Over 600 training, servicing, and information resource centers were set up during this project period. AISECT prepared a large variety of training and servicing modules with standard content in Indian languages and established a methodology for rural IT intervention. Indeed, one significant output of the AICP was an operating manual for franchisees that provided detailed guidance on operating successful ICT training and servicing centers or "electronic *dhabas* (kiosks)," where there was a convergence of electrical, electronic, and computer technologies. The program took Choubey's organization out of MP and transformed SECT into AISECT, with its first formal office opening in Bhopal in 1997.

***Franchisee Relations*:** Another strength of AISECT was its inclusion and enablement of franchisee participation in several central and state government-funded training, skill development, and capacity-building schemes and programs. These projects were first bagged by AISECT's head office, based on its long experience in skill-based training, vast network, and reliability. AISECT then handed over the projects to the franchisee network for implementation. Such inclusive behavior bound the franchisees closer to AISECT and increased their motivation to conceive, develop, and execute innovative rural skill training programs. Innovative program ideas that worked well for some centers were shared across the network. Additionally, the franchisees themselves served as AISECT's voluntary sales force when it could not afford one of its own. The leading block-level franchisees became AISECT's "district managers" who would effectively identify and initiate new MPTCs in the deep interiors of the rural countryside. Also, AISECT would periodically hold meetings of all the franchisees in a district or region that included creative brainstorming sessions[15] that went on well into the night to generate new ideas for greater revenue generation and further penetration of AISECT in rural India.

Not surprisingly, AISECT's activities were widely recognized during this period and became the subject of an IIMA-World Bank case study and presentation in 1999.[16]

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[15] It was at one of these sessions/meetings that a training program for handling the Y2K problem and opening of "1000 by 2000" centers was developed.

[16] Choubey, S. (1999). Multipurpose electronics and computer centers: Promoting IT-centered maintenance and employment in rural areas. In *information and communication technology in rural development* (pp. 146-151). IIMA-World Bank.
https://documents1.worldbank.org/curated/en/543321468338476969/pdf/389200Info0and1cation0200001PUBLIC1.pdf

Choubey's interest in empowering rural India helped him fulfill his dream of making a difference in this domain. He stated, "AISECT wants to reach out to the remotest corner of India and promote ICT-based training and services to empower people, generate employment for the youth, and unfold entrepreneurship-based initiatives to create an inclusive society."[17]

His journey had been neither easy nor smooth. Choubey and his organization had to overcome the enormous challenge of motivating and educating rural residents to use science and technology as a means of earning a livelihood in an environment characterized by severe constraints in terms of education levels, availability of electrical power, internet connectivity, and communications. However, they were heartened by the genuine curiosity of the rural youth about computers and their benefits, which provided an opportunity to propagate IT literacy. Therefore, they pressed on, and with some trial and error, evolved a sustainable model for propagating IT education to better the rural masses, beginning with the introduction of learning content in regional languages. Above all, Choubey felt that AISECT's model had been successful over time because of its bottom-up, non-exploitative, friendly, compassionate, and adaptive structure, as well as its long-term orientation. In contrast, many other enterprises that had gotten into the rural skill education game and started networks with short-term profit orientation had failed, primarily because their programs had been top-down and not well-aligned with their markets. AISECT, on the other hand, had accessible and dedicated personnel with whom rural people could identify, and it flexibly adapted to the needs of its franchisees and their customers. Indeed, many entrepreneurs from other networks were eager to apply to and join the AISECT network when center openings were advertised.

Thus, by motivating and empowering unemployed graduates in small towns and villages to become entrepreneurs and owners of their economic futures, AISECT had effectively brought about a quiet but powerful revolution in India's rural heartland and made a significant contribution to bridging the digital divide.

THE NEXT STEPS

As Choubey took his seat, certain hard facts intruded on his contemplation of AISECT's past. First, as the AISECT network expanded, it was evident that course content, examinations, and delivery quality were becoming more variable and harder to control across the large network. The course certification issued by various franchise operators, even with the AISECT stamp, did not mean the same thing in different locations. Potential employers in many areas were not convinced of AISECT franchisee-certified applicants' skills, and having good placements was critical to sustain funding from government sources. Moreover, the competition for government funding was intensifying as more companies and their networks entered the skill education space with new business models. The financial returns for AISECT and its franchisees from spreading the network across India were diminishing. More innovation and marketing efforts were needed for AISECT to remain at the leading edge of skill education. Finally, to stay viable and meet its long-term mission, the pressure was mounting on AISECT to raise revenues from non-governmental sources, become more profitable, and provide the resources and support required by its expanding MPTC network.

[17] Mitra, M. (2012, April 20). Pathbreakers: Santosh Kumar Choubey and how he bridged the IT literacy gap. *The Economic Times.* https://economictimes.indiatimes.com/pathbreakers-santosh-kumar-choubey-and-how-he-bridged-the-it-literacy-gap/articleshow/12732493.cms

One option for AISECT to sustain its franchisee network and expand its revenue sources was to go beyond simply educating rural youth for employment in government organizations, like the Indian Railways, or joining its franchisee network. More specifically, AISECT could perhaps promote entrepreneurial incubation cells for the graduates of its training programs. For instance, AISECT could become a seed partner of some entrepreneurial graduates interested in starting small business es in domains such as IT or other areas where they had become skilled, such as welding, tailoring, or equipment repair.

Another option was to address the perceived need for greater centralized control of skill education/ training and examination quality by AISECT. Specifically, there appeared to be an opportunity for AISECT-issued rather than AISECT franchisee-issued certification that suggested an entirely new avenue for greater revenues beyond the government-funded skill education programs. AISECT could take advantage of the tremendous opportunities opening up in India's higher education space. The demand for seats in quality degree-issuing colleges and universities far outstripped the supply, especially in small towns and rural India. Starting an AISECT University system would help fill the demand-supply gap for higher quality formal education in small towns and rural area s and provide an opportunity for issuing an AISECT diploma certifying the training of rural youth by its franchisees across India. This could improve the employment prospects of AISECT franchisee-trained students and provide motivated rural youth with a path to higher education and better careers. However, while the AISECT University concept appealed to Choubey, he wondered whether it aligned with his social entrepreneurial goals and mission of educating India's rural youth. As he mulled over the organization's future course, Choubey realized that settling its strategic direction and business model had to be his topmost priority upon returning to Bhopal.

Exhibit 1 **ISB281**

Economics of Multipurpose Training Center (MPTC)

A. Data for estimation of potential annual demand (vocational training course enrollment) at a typical AISECT MPTC based on data for the year 2000

(1) The norm is one MPTC per "block." A block is an administrative, geographic unit in India of about 100 square km comprising about 150 villages and a population of 150,000 to 200,000. There were about 5,500 blocks in India in 2000 when the country's population then was about a billion people. https://www.statista.com/statistics/615532/number-of-blocks-india/

(2) The proportion of youth in the age group of 15-29 in India at the beginning of the new millennium was roughly 35%.

(3) An AISECT center located in a block headquarter town was assumed to be accessible to 40%-50% of the block's youth population.

(4) The proportion of these youth in Madhya Pradesh with a secondary level (Class 8-10) education necessary for a skills education course at MPTC was about 5%.

(5) The unemployed proportion of youth with secondary level education in the 15-29 age group was about 20% in 2000. That is, these youth could enroll in an MPTC training course if they were not self- or family-employed.

(6) Based on their experience, AISECT estimated that about 60% of eligible unemployed youth per year would consider taking a skill education course.

(7) It was estimated that, on average, one interested, eligible young person would take one 3- or 6-month course in a year.

B. Data for estimation of costs and contribution per student of an AISECT skill education center

(1) On average, the typical 3-6-month course fee per student (paid by the government to AISECT) was INR 1,500. (The MPTC VLE or franchise operator kept 70% of this fee while the remaining 30% went to AISECT)

(2) The recurring fixed costs per year for operating an MPTC were approx. INR 200,000. Also, to be part of the AISECT skill education network, the franchisee paid AISECT an annual "affiliation fee" of between INR 1,000 and 2,000.

(3) The variable cost per student (e.g., exam + materials) was approx. INR 500.

(4) It was estimated that 20% of block households (average size of five members) with access to an MPTC would use one other service of MPTC of about INR 50 per year.

Source: AISECT.

ISB281

Exhibit 2
AISECT's Multipurpose Center Model

Information Window Provides information on:	**Training Center** Conducts training and skill development programs on:	**Service Center** Acts as:
Government schemes	Computer operation, Internet, office automation	Internet and e-mail communication center
Agriculture commodities	Computer hardware and first-level installation and maintenance	DTP and screen-printing centers
Health	Electronics audio and video equipment	Video mixing, titling unit
Education and employment	Electrical and household appliances	Data processing center
	Supports Institutional Training in:	
Legal issues	Schools and colleges	Service center for computers and electronic and electrical items
Self-employment opportunities, technology and resources, information collection, periodic surveys	Rural banks, Scheduled Caste/Scheduled Tribes training schemes, Panchayats and elected bodies, women's programs, under-specified programs	
Insurance and related services		

Source: AISECT.

Exhibit 3
Major Milestones in AISECT's Journey: 1984-2005

Major Milestones in AISECT's Journey	Timeline
Society for Electronic and Computer Technology (SECT) founded	1984
Computer Ek Parichay first edition published	1986
Computer Literacy and Electronics Awareness programs in more than 100 schools	1985-1990
Electroniki, the first Hindi magazine on electronics and computers, launched	1989
First computer-based information center at the village-level established in Kotmi Sonar, Chhattisgarh	1993
All-India coordinated program for computer literacy in schools	1994-1999
All-India coordinated program for promoting multipurpose IT training centers in 10 states More than 40 training modules prepared Core support from DST	1995-1999
All-India coordinated program for establishing IT centers for women in 13 states Women EDPs conducted	1999-2002
More than 1,000 AISECT multipurpose training centers established	2000
Launch of IT *yatras* in Chhattisgarh, Maharashtra, and Madhya Pradesh	2000-2003
Centers cross 2,000-mark PLAN 5000 prepared to accelerate coverage in other states Massive entrepreneurship development efforts	2000-2005
More than 4,000 multipurpose training centers established Computer literacy program set up in up to 1,300 schools	2003
Indian Innovation Award and Golden Icon in National e-Governance Awards	2005

Note: In 2005, India's per capita income was approximately USD 800, about INR 36,000 per year, according to the USD-rupee exchange rate for that year. Thus, an MPTC entrepreneur's income was about 38% higher than the per capita income in 2005.

Source: AISECT.

Forbes India Mention About AISECT's Shortlisting in TOP 12 of WISE Awards

Published in 2021

WISE Awards

WISE, the global education initiative and sponsor of one of the largest education prizes, has released the list of 12 finalists for another prestigious award - the 2021 WISE Awards.

Since these prizes started in 2009, more than 3,000 leaders and organizations from 150 nations have applied or been nominated for the awards, which, in addition to their notoriety, bestow a $20,000 purse on the six winners. This year, the dozen selected finalists come from nine different countries and continue the foundation's interest in and commitment to the most fundamental issues of global education.

The prizes and the groups they honor are an important reminder that while we in the United States can be caught up in issues such as the digital divide, learning loss, and the effectiveness of online learning, much of the rest of the world is in a dramatically different place. Many of this year's finalists are confronting challenges such as access to basic education for girls, elementary literacy and education among refugee populations — all during the globally debilitating pandemic.

This year's named finalists are: Pehchan Project by CULP – Center for Unfolding Learning Potentials (India); Underprivileged Women Entrepreneurship and Skilling by AISECT (India); The Happiness Curriculum by Dream a Dream (India); Creating Social Emotional Learning (SEL) Programs for Children in Indian Public Schools by Labhya Foundation (India); Kinedu (Mexico); Onebillion by Onebillion children (United Kingdom); Trauma Informed Schools by Maya Vakfi Foundation (Turkey); Let's All Learn to Read by Fundacion Luker (Colombia); Kiwix (Switzerland); Taleemabad by Orenda Project (Pakistan); ProFuturo Digital Education Programme by Telefonica Foundation and "la Caixa" Foundation (Spain); Civic leadership fellowships for education equity by Anseye Pou Ayiti (Haiti).

Scanning those projects underscores that the work being done in places such as India and Colombia and Pakistan is different than what most of us tend to hear about. The work is crucial and our general lack of awareness about it is troubling. And given that the global reach of this pandemic has reinforced the realities of our collective connectiveness, education improvements in Turkey unquestionably matter in Tulsa.

That's does not, in any way, mitigate the more immediate challenges we read about most often. Or imply that global education projects only matter when they impact people here. To be clear, helping kids be better, wiser, smarter, more resourceful and capable adults is everyone's business and, for everyone's sake, it had better be. It's pretty important.

These awards, and the opportunity to raise visibility of the work itself, are important to the finalists too.

One of them, "The Happiness Curriculum" in India is on track to make social and emotional learning a part of the curriculum for more than four million young students over the next three years, according to Suchetha Baht, the CEO of Dream a Dream, which runs the program. "With the recognition that comes through the WISE Award, we would be able to further our intention to ensure every child can thrive by shifting mindsets around the purpose of education," she said. "For the first time in India," Baht said, "there is space in the school curricula to include social emotional learning which develops life skills like managing conflict, interacting with others and taking initiative."

India has 422 million people under the age of 18. The entire US population is 331 million.

WISE says the submissions and nominations for the prizes are not simply a recognition of good work or good intent. Instead, evaluations include assessments on scalability, sustainability and financial stability. That's the right approach as these projects need to not just succeed but grow.

It's reassuring and affirming that smart and dedicated people are out there, doing the hard work of building, preserving and expanding educational access and delivery systems. Journalists and editors need to give them more attention and donor organizations need to give them more money.

It's good too to know that, while we've been focused on other things, someone has been working to recognize and reward those efforts. We need more of that as well.

The winners of the WISE Awards will be announced in September 2021 and celebrated at the WISE Summit this December.

UNDP Publishes Case Study on AISECT

Published in 2017

AISECT: TRAINING RURAL YOUTH TO BRIDGE THE ICT GAP

Editing: Beyond Jargon LLC

Design: Greta Lusoli, UN Online Volunteer

SUMMARY

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SUMMARY	The All India Society for Electronics and Computer Technology (AISECT) was created to bridge the information and communications technology gap between India's urban and rural areas. AISECT empowers youth with skill training and digital know-how; it also uses the franchise model to build an entrepreneurship network. The focus is on the most marginalized and disadvanatged sections of the population. AISECT provides end-to-end services for skill development, including support for community mobilization, counseling, training, assessment, certification and placement. Recently, AISECT joined with the National Skill Development Corporation to train and skill 1.3 million students in the next 10 years.
KEY FEATURES	AISECT is recognized for its multi-purpose centres. This model is one of its most innovative features. The centres are run by rural youth and graduates from AISECT programmes and are utilized for providing B2C and G2C services along with training activities. The centres quickly become sustainable and bring communities closer to useful and relevant services that were otherwise missing. Placement support provided by the organization uses online and offline mediums such as the IT Yatra, RojgarMantra.com and Rojgar melas. AISECT has designed and developed high-quality content and used multimedia and other IT methods to deliver services to students, increasing both accessibility and affordability.
RESULTS	AISECT currently operates more than 12,000 centres across India, serving 27 states and three union territories. It has trained more than 1.7 million students and created an entrepreneurship network of 12,000 rural men and women. In addition to training programmes, AISECT provides a range of services to its rural customer base including e-governance, banking and insurance. AISECT has been recognized by the World Bank and National Association of Software and Services Companies (NASSCOM) and awarded the Skoch Corporate Leadership Award 2013 and the TiE Lumis Entreprenuerial Exellence Award for a sustainable and scalable business.

SUMMARY

Summary

The All India Society for Electronics and Computer Technology (AISECT) was born out of a massive demand for skilling in computer technology during the information technology (IT) boom in 1990s. AISECT's founders identified a need to impart skill-based knowledge and ICT penetration in rural areas. They launched AISECT in 1985 with a mission to impart technological knowledge to the rural, semi-urban and tribal areas of the country and promote ICT-based training and services to empower people, generate employment for youth and unfold entrepreneurship-based initiatives to create an inclusive society.[1] Its mission was also to impart skill-based vocational training to rural youth to close the country's huge skills gap between rural and urban youth.

Three decades later, AISECT operates 12,000 centres at district, block and *panchayat*[2] levels across 27 states and three union territories as well as offices in more than 30 cities. AISECT has a presence throughout India and a brand name of its own. With a variety of programmes and educational courses offered in each of its centres, AISECT has reported training more than 1.7 million people, generating more than 12,000 rural entrepreneurs, creating employment avenues for more than 75,000 people and empowering the lives of some 3 million people through innovative services. AISECT has joined NSDC with the aim of training 1.3 million individuals in the next 10 years, to contribute to the training requirements of the country.[3]

AISECT's business model is simple yet innovative. With huge mass appeal, its reputation is due to branding and marketing techniques such as the annual IT youth mobilization campaign (Kaushal Vikas Yatra) and e-learning teaching aids and content. AISECT's business model features a multi-purpose centre and a franchising system comprised of rural youth and graduates from the AISECT centres. This model has helped to create a network of more than 12,000 men and women entrepreneurs and has earned them several accolades including "the most sustainable and scalable form of IT penetration and popularization in India" by the Indian Institute of Management (IIM) and the World Bank. In order to make education and technology more inclusive and accessible, AISECT is now targeting schools and higher education institutions.

CONTEXT

Context

The 1990's in India saw revolutionary changes such as the IT boom and globalization of the economy. Cities experienced unprecedented growth due to IT development, industrial expansion and job opportunities; however, the rural poor had little or no access to education. The founders of AISECT comprehended this uneven growth and the opportunities in skilling the rural poor. A group of scientists and engineers formed a core group called the Society for Electronics and Computer Technology (SECT) to undertake computer literacy and electronic awareness programmes in the schools of Madhya Pradesh. Among them was Mr. Santosh Choubey, the Founder and Chairman of AISECT, who was fascinated by the revolutionary idea of computer technology. However, his work in rural India made him realize that more than 70 percent of the countries' population, which resides in these remote locations, knew nothing about this. His love for science and for empowering rural people inspired him to bridge this great 'IT divide' and, after leaving civil service in 1981, he founded AISECT in 1985.[4]

The positive results of computer education carried out by AISECT among rural populations attracted the attention of the Government of Madhya Pradesh, which partnered with AISECT to provide classes to 150 rural schools. Mr. Choubey realized that in order to reach the most disadvantaged populations, it is important to communicate in local languages. He wrote a book in Hindi on computers called *Computer ek Parichay* (Introduction to Computers) that sold 100,000 copies in the first year, thereby validating the demand for IT education in India. Determined to take computer education beyond schools, Mr. Choubey mobilized a group of volunteers from the literacy movement to demonstrate IT and run computer learning centres for villagers in the evenings. He set up a small centre in Bhopal, capital of the state of Madhya Pradesh, and started developing training content in an offline format (CDs and manuals) and in local languages.[5] By 1995, AISECT had approximately 1,000 centres in Madhya Pradesh.

AISECT expanded by motivating its own graduates and other unemployed youth to join the AISECT network and spread IT training under a franchise model. The vision was to reach the remotest parts of India using innovative ICT tools adapted to local contexts. After growing gradually, AISECT became a robust IT training and educational services network. Also, AISECT recognized the importance of vocational education and worked with the National Institute of Open Schooling[6] to develop IT curriculum.[7]

The largest area of AISECT's work is skill development, divided into projects (backed by the central and state governments) and skill development (student-paid model). AISECT is also involved in financial inclusion through banking kiosks, e-governance services (through a unique identification or 'UID' for every Indian resident), schools and private institutions. AISECT aims to provide lifelong learning, enterprise development and contribute to empowerment of the communities that they work with.[8]

Today, the urban/rural divide recognized by AISECT's founders continues. Though the country is moving towards a modern tertiary and service sector job market, the rural poor (who consist of 69 percent of India's population) remain constrained by their socio-economic conditions and face substantial barriers to higher income and social mobility.[9] Educational interventions coupled with employment generation for the unskilled rural workers is imperative to address the skill deficit, which poses a huge challenge to economic growth.[10]

ORGANIZATIONAL SETTING

Organizational setting

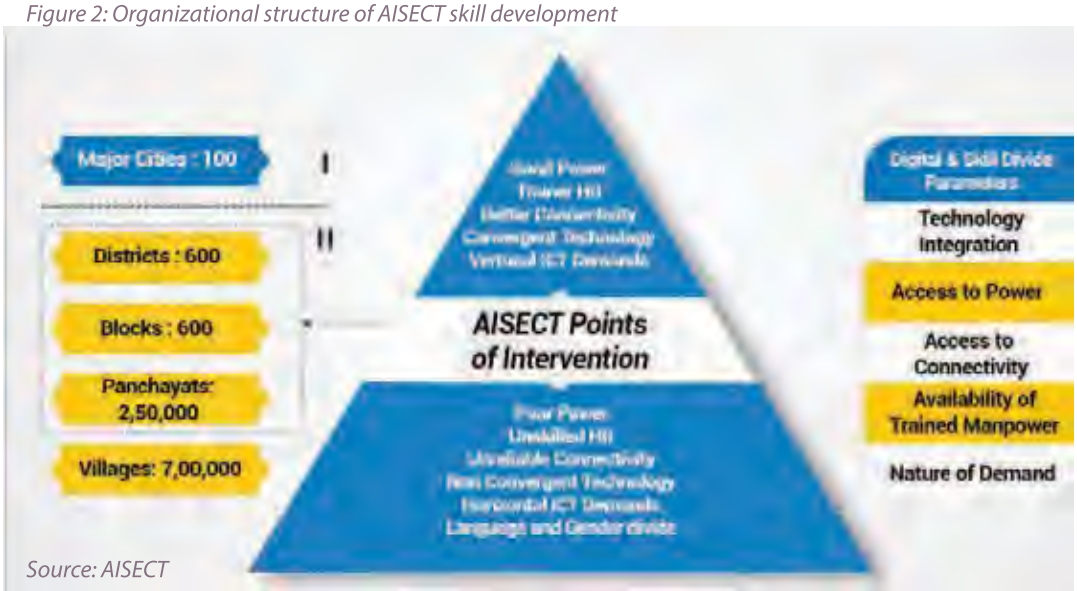
AISECT is an ISO 9001:2008 certified organization based out of Bhopal, Madhya Pradesh. AISECT has professionally-managed groups that coordinate activities related to education, skill development, content creation, financial inclusion, grievance redressal and placement. It has a parallel office in New Delhi and state and zonal offices in all its operating areas. In the area of skill development, AISECT has a well-designed and managed team as depicted in Figure 1.

Figure 1: Organizational structure of AISECT skill development

Source: AISECT

AISECT compares its reach within the country to a 'skilling pyramid' whereby the penetration is highest at the bottom level, as depicted in Figure 11. The AISECT initiative is an inclusive business model because its target segment is people from disadvantaged groups from rural and tribal areas – those at the bottom of the pyramid.

Figure 2: Organizational structure of AISECT skill development



Source: AISECT

ORGANIZATIONAL SETTING

In the figure showing AISECT's target segment, the pyramid represents the country of India. AISECT believes that most of the growth and development happens at the top level of the triangle, which includes the country's 100 major cities. These cities are endowed with better power, trained trainers, better connectivity, convergent technologies and a vertical demand for technology. If these 100 cities are removed, however, the bulk of the country, about 600 districts, 6,000 blocks and 700,000 villages have exactly the opposite conditions. This is the great digital divide. AISECT's interventions aim to integrate technology with education and skill development for communities in the lower part of the pyramid.[11]

To expand its reach, AISECT follows a franchise model by carefully selecting young entrepreneurs from their own graduates or rural youth who are further trained to set up AISECT centres, as described in the next section. Following this model, AISECT centres are now present in 27 states and three union territories as well as offices in more than 30 cities.

In 2012, AISECT formalized an agreement with NSDC to train and support 1.3 million students in 10 years across 11 sectors.[12] Courses offered by AISECT include short-term certificate courses, diplomas and postgraduate diplomas in approximately 350 sectors. Courses can be grouped in 11 overarching sectors:

- IT and management
- hardware and networking
- livelihood and vocational training
- banking, finance and insurance
- agriculture
- textile training
- fire safety and security
- auto skills
- telecom skills
- retail management
- teacher training

The Common Services Centres (CSC)[13] are a more recent addition to AISECT's operations. Common Services Centres are located in remote areas and provide electronic services to the rural population, towards achieving the Digital India vision of Government of India. AISECT has tied up with the CSC programme of the governments of Madhya Pradesh, Punjab and Chhattisgarh utilizing 6,000 Common Services Centres at the panchayat level. Under the CSC programme, small village-level service kiosks are run by local micro-entrepreneurs trained and supported by AISECT to set up service delivery channels and provide secure and safe Government-to-Citizen (G2C), Business-to-Citizen (B2C) and Citizen-to-Citizen (C2C) services. While some of these CSCs are given a set up fund (as in Madhya Pradesh) all the operational management is run by AISECT. In Punjab and Chhattishgarh no funding was provided to the CSC network.[14]

ORGANIZATIONAL SETTING

AISECT has also tied up with national banks to set up Banking Kiosks in rural areas. AISECT act as a Banking Correspondent and develops these kiosks as a Customer Service Point. AISECT sets up, trains, manages and provides handholding to the kiosk owners. In all, AISECT has opened 1,500 kiosks over its operational areas and opened 300 million bank accounts for rural poor households.[15]

Box 1: AISECT numbers at a glance

- Operating in 12 states and three union territories [16]
- 12,000 AISECT centres franchised
- 1.7 million students trained
- 12,000 entrepreneur/franchisees trained
- 6,000 Common Services Centres supported with training
- 1,500 banking kiosks established and 300 million bank accounts opened
- 75,000 people gained new avenues for employment
- 1.3 million candidates will be trained across 11 sectors in 10-year NSDC project
- 200,000 job seekers and 600 employeers use RojgarMantra.com
- 2 universities sponsored in Central India

BUSINESS/OPERATIONAL MODEL

Business/operational model

India's National Policy for Skill Development and Entrepreneurship 2015 highlights the importance of accelerating self-employment and social entrepreneurship to enhance employment generation and economic growth in the country.[17] The concept of franchising is closely connected to entrepreneurship, and a franchisee who obtains the rights to an established business model in a particular geographical area can also be termed an 'entrepreneur'. Franchise models have the advantages of lower financial risks, the power of a collective brand, and more security and stability in day-to-day operations.[18]

AISECT's core business model is made up of 'IT education centres' that are franchised to rural people who are responsible for taking the AISECT vision forward. These local entrepreneurs are young men and women who are granted a license by the organization to deliver computer-based education and train local students.[19] In the last 30 years, AISECT has developed a cadre of students and entrepreneurs for delivering low-cost quality services to the masses. AISECT's below line marketing (BLM) activities have boosted the network size and, with time, more and more entrepreneurs have become part of a reputable 'family'.

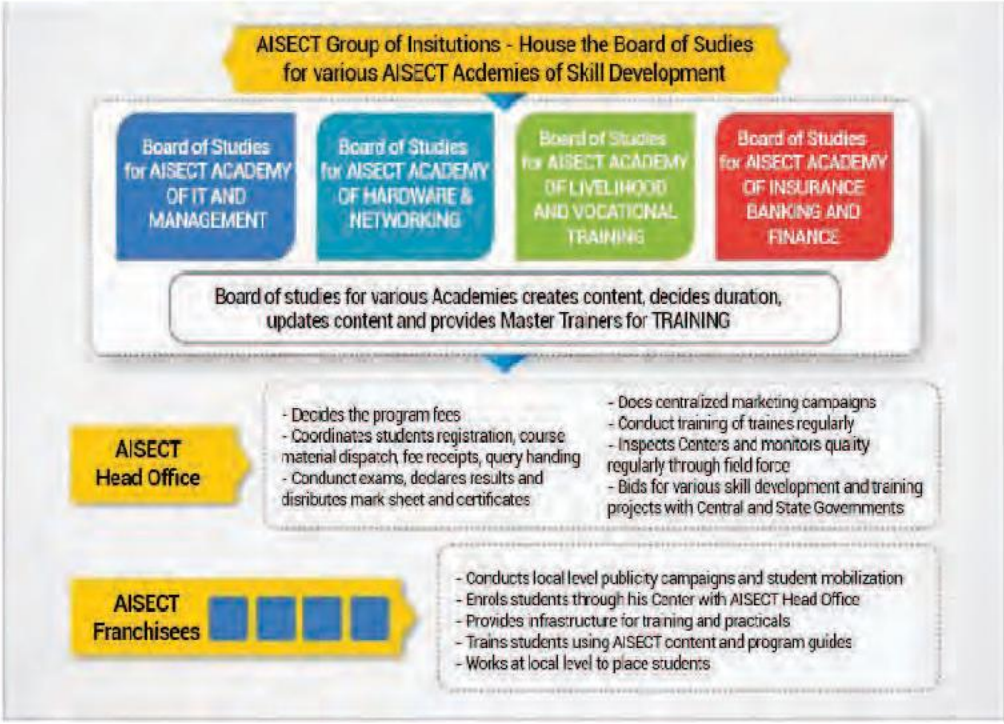
Setting up and sustaining a rural centre is a process based on these key ideas:

- Begin with training provision as the process of mobilizing and campaigning creates awareness regarding the centre and the inflow of students will begin to make the centre self- sustaining;
- Make the centre multi-purpose so that it is economically viable;
- Link up with rural and educational institutions, banks, schools and panchayats;
- Focus on innovative courses that appeal to the masses;
- Use regional language as far as possible;
- Drive towards attaining sustainability within two to three years. [20]

The AISECT Head Office has a role to play in supporting its franchisees. In the management of skill development and training activities, it will decide on programmeme fees, coordinate student registration, conduct exams, carry out regular training of trainers, and inspect and monitor the centres. Franchisees are expected to conduct local campaigns and student mobilization, enroll students in the local centres, provide infrastructure for training and coordinate local placements of students. The different roles are further elaborated in Figure 3

BUSINESS/OPERATIONAL MODEL

Figure 3: AISECT model of skill development and training



Source: AISECT

Franchisees are also responsible for providing five to ten computers, internet connectivity, a printer and a scanner – an investment in their centre of approximately $4,760.[21] The computers and internet connectivity are used to provide skill training modules and e-governance services. AISECT supports the entrepreneurs by centrally negotiating the rates for the retail arrangements and providing the courseware (educational material for teachers or trainers, packaged for use with a computer) and training material. AISECT has partnered with government agencies, telecom and insurance companies such as Airtel and Idea Cellular, and national banks such as the State Bank of India to facilitate this process.[22]

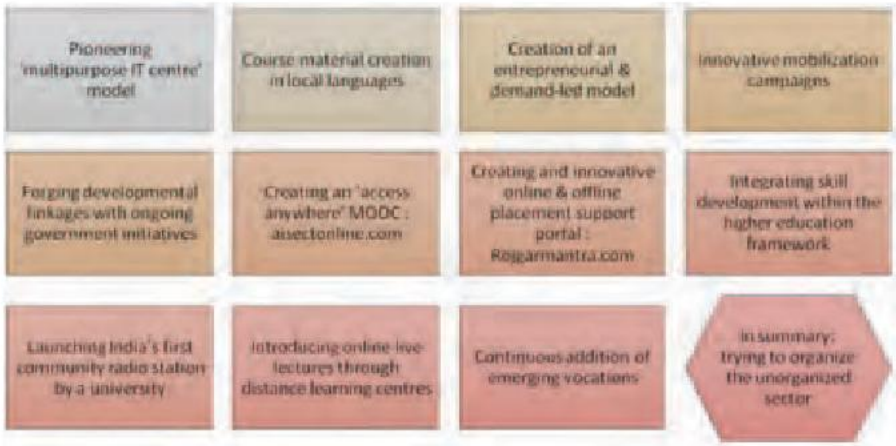
To enable the centres to attain sustainability, AISECT has pioneered the concept of a 'Multi-Purpose Centre Model'. While vocational training remains the mainstay of the centres, the infrastructure is also utilized for numerous other fee-based offerings. This includes Business-to-Citizen products and services such as the sale of mobile phones, SIM card and DTH recharge, printing and photocopying, e-governance services such as government forms and job applications, sale of railway tickets and data entry operations. It also includes Government-to-Citizen products and services such as the sale of insurance policies and banking facilities.[23] The centres are made multi-purpose, demand-led and flexible to address the multifaceted ICT and skill-based education and services requirements of rural people, and to generate additional revenues for the entrepreneur. AISECT's entrepreneurship model through franchising has helped it to integrate disadvantaged populations with markets and provide them with sustainable livelihood options.

SKILLING VALUE-CHAIN

Skilling value chain

Most of AISECT skill development and training activities follow a skilling value chain model that includes mobilization and campaign among rural masses, training of trainers, development of training modules and teaching methodologies, services dissemination and execution of large e-governance projects, assessment, certification and placement. All of these activities are aimed at addressing the skill gaps pertinent to the emerging needs of a rapidly growing economy.[24]

Figure 4: Innovations by AISECT in the skill development model



Source: AISECT

The training delivery mechanism in this model is typical of other skill providers in the country; however, certain innovations and tools used by AISECT are useful in reaching the rural and tribal population and have become good practices over the years. Innovations in the value chain approach have built brand recognition for AISECT and helped it to scale up its activities. Several innovations are described here in more detail:

1. Sourcing

AISECT interventions begin with a preliminary survey, data analysis and selection of a nodal point before proceeding to infrastructural development. Both household and market surveys are done in parallel to identify the youth aspirations of the area and what kind of services are needed in the target communities.

AISECT also identifies like-minded educated individuals who are looking for a sustainable source income and motivated to contribute in development of others for establishing the centres. Most of these entrepreneurs belong to middle- and low-income backgrounds and are often graduates from AISECT centres.

Selection of the franchisees is a process that begins with mobilizing and campaigning for like-minded people. The next step involves a screening process that involves a background check of the entrepreneur, operational feasibility of centre location, demand assessment of courses, etc. Once the franchisees are identified, an agreement is signed between the individual and AISECT and a ToT (Training of Teacher) is held on financial management, operational management and reporting techniques at the headquarters.

SKILLING VALUE-CHAIN

A dedicated Network Management & Franchisee Handholding team handles the agreements with the franchisee centres and helps in setting up the business unit, maintenance and daily operation. The team is also responsible for physical verification of the centres, providing support services and occasional training on updated course and current requirements in the market. AISECT developed a unique concept of conducting a tour or 'IT Yatra' in rural India with the aim of 'demystifying the aura around usage of computers'.[25] It was a simple strategy wherein two to three computers were tied to a van with a trainer who would go village to village talking about computers and enlisting candidates for courses at the same time. The concept has now evolved into a more regular and better-organized campain, the 'Kaushal Vikas Yatra', which is undertaken across states in small towns and villages for demand mobilization before the admission sessions begin. The Yatra is comprised of a three-day marketing campaign for reaching to local youth, panchayat leaders, teachers and community members. The campaign reaches out to schools and colleges to initiate awareness about IT and various IT-based skill development programmes and services offered by AISECT centres, distributing literature and registration forms. Interested candidates are then asked to come to the centre to join the programme.

AISECT uses attractive posters with local movie themes and pictures to depict the aspirations of youth and draw them to the centres. Such innovative campaigns create awareness regarding skills and vocational training, mobilize trainee candidates and generate mass appeal for the brand. While the AISECT Head Office is responsible for the organization of centralized marketing campaigns, the franchisees create local publicity to mobilize candidates.[26]

2. Training standards and content

A Content Creation and Course Material team is responsible for creating relevant industry-linked course material in 13 different trades in various formats as per the requirement of the project execution agency. Course curriculum in various trades are aligned with the National Skills Qualification Framework (NSQF), the Modular Employable Skills (MES) and Sector Skills Council (SSC) standards.[27] A solid academic backing to the network is strengthened by ties to two universities run by AISECT, and by incorporating the industry perspective into the curriculum by inviting industry experts to enrich the courses.[28] Recognizing the fact that there are multitudes of skilling companies in the country, AISECT propagates the idea of 'standardization of skilling' that places all training content and techniques for all courses in a standardized format while providing flexibility to its franchisees only in terms of content delivery.[29]

To manage the standardization process, AISECT also uses an interactive learning management system through which a wide range of activities from registration to placement of students is managed. AISECT offers some 600 courses that are run for students at a distance, and many lectures for online courses are broadcast live to students. This includes use of the MOOC (Massive Open Online Course) mode of education, an online learning platform offering vocational courses free of charge.[30] The 'AISECT Online' portal (aisectonline.com) is a learning management system that can be accessed by students irrespective of any geographical barriers. Students can register for courses, access course material, take exams for some certificate courses, and communicate with the management teams about milestones in the curriculum.[31] AISECT Online has been developed keeping in mind the basic issues of accessibility and affordability in distance education, due to which a large number of youth still lack access to quality education infrastructure. This portal endeavours to bridge this gap by making quality education accessible to greater numbers of students.

SKILLING VALUE-CHAIN

The skill development content designed by AISECT is industry-relevant and consists of a multi-skilling approach. Along with core skill training, this includes provision of soft skill training, personality development and entrepreneurship development, all of which helps candidates to get placed and perform well in their jobs. AISECT students are also supported for skill upgrading and diversification trainings as they proceed in their careers.[32]

Trainings cover a range of topics such as computer literacy, vocational skills, livelihood development, management and entrepreneurship.[33] Training on domain content is facilitated by Master Trainers who are selected and trained by the centre as per the requirements of the chosen courses. AISECT also provides hands-on learning to its candidates through its network of local vendors and domestic industries. Through this unique blend of pedagogical learning, online easy access of material and practical training system, AISECT has been able to train and place over 100,000 students every year.[34]

3. Assessment and certification

All student assessments are conducted through AISECT's online portal and managed by a centralized team. AISECT conducts formative assessments (through an internal assessor) done at regular intervals during the course and a summative assessment (through an external assessor) at the end of the course. All AISECT courses are certified by either the National Council on Vocational Training, Sector Skill Council, the AISECT-sponsored Dr. C.V Raman University or other AISECT university certified programme.[35] Certification of any course depends of the terms and conditions provided by the sponsoring agency and is awarded to the students at the end of the course. All certificates have AISECT's name and logo as the awarding body, and partners are mentioned only when guided by the funding agency, e.g. in case of training under Schneider, joint certification of AISECT-Schneider is provided to the students.

4. Placement and post-placement

AISECT provides placement support to its trainees in a three-step process using both online and offline mechanisms. First, an Employment Exchange programme is conducted whereby registration drives are held for both non-AISECT and AISECT job seekers as a single point employment solution for the rural population across 818 AISECT-NSDC centres (under the Employment Exchange Pointsat programme).[36]

The second step is to conduct employment surveys at district and block levels to identify and locate employers, who may be at national, regional and local levels. In addition to preparing its students for employment in the organized sector, AISECT focuses on building an employment base around every centre by creating a network with the local markets. Some of these roles include computer operators, banking kiosk operators, sales agents, teachers and machine operators. This not only caters to the needs and demands of the informal economy of the rural poor; it also addresses the issue of migration whereby candidates who are not willing to move/travel out of their villages can find employment closer to home.[37]

The final step is to organize job fairs known as 'Rojgar Melas' at district and block levels. These events facilitate the interaction of students and companies at the ground level, thus creating better opportunities for the skilled workforce. AISECT organizes these job fairs across seven states (Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh, Maharashtra, Orissa and Uttar Pradesh) with several national companies including Bajaj Capital, Dominos India, Reliance and Sri Ram Life Insurance, among others, and regional companies such as Navbharat Fertilizer, Navkisan Bio Plantech and STI textile.[38]

SKILLING VALUE-CHAIN

One of the unique tools developed by AISECT to facilitate their placement and handholding processes is the 'Rojgar Mantra' (www.rojgarmantra.com), which is the largest online job portal for rural India. The organization has creatively utilized its understanding of the job market and its network with the industrial sector to link a rural trainee with relevant employment opportunities and related services. This interactive online portal is free for students and is open to current and past students of AISECT.

Rojgar Mantra's uniqueness lies in the real placement services that its offers to rural populations in such remote and undeveloped areas; services that would otherwise be unobtainable. The support includes helping a job seeker assess his or her qualifications, streamline job prospects according to his or her skill set and obtain communication and resumé-drafting advice from a panel of experts. Rojgar Mantra provides ease of accessibility and communication facilities for the more disadvantaged youth from remote areas.

Larger companies also benefit from Rojgar Mantra, because they often find it hard to recruit employees in semi-urban and rural India due to the fragmented and unorganized job markets. To cater to this need, the platform also offers job advertisement and online testing of candidates to these employers,[39] helping them tap into potential young candidates who suit their requirements yet live in distant locations. At present, 200,000 job seekers and over 600 employers are registered on this online portal.[40]

Source - AISECT

TRAINING FOR IMPACT

Financing

AISECT has two models for revenue generation. First, they rely on their student-paid model whereby the collect a fee for their training programmes depending on the duration and type of programme. Hence the fee could range from INR 2000 to INR 20,000. Secondly, AISECT also receives grants for implementing various central and state government programmes such as the Prime Minister's Kaushal Vikas Yojna (PMKVY), Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY), which they utilize to cover some of their expenses.

Training for impact

AISECT's mission is to 'reach out to the remotest corner of India and promote ICT-based training and services to empower people, generate employment for the youth and unfold entrepreneurship based initiatives to create an inclusive society'.[41] AISECT has been pioneering rural development through non-formal education and skill development initiatives and strengthening micro- entrepreneurship ventures to contribute to the economic growth of these areas.

AISECT works on several government projects to provide vocational and skill development training to vulnerable and marginalized segments of the society, including Scheduled Caste/Scheduled Tribe, Other Backward Classes, Women, Minorities, Below Poverty Line, Scavengers, etc. Training has been supported by the various Ministries of the Government of India and sState government departments. Minority groups have been the focus of AISECT's engagement with governments in multiple states to implement skill development projects and special training projects. Empowering women is another aspect of AISECT's work through various state and central programmes.

- AISECT participates in State Skill Development Missions in Gujart, Haryana, Madhya Pradesh and Uttar Pradesh. Among the important initiatives that AISECT is involved in are Swarnjayanti Gram SwarozgarYojana (SGSY), MoRD Skill Development initiatives (DDUGKY), District Poverty Alleviation Programme (DPIP) and Implementation of Vocational Education in Senior Secondary Schools. The vocational education effort encompasses 150 government schools in Delhi, Haryana, Madhya Pradesh, Punjab and Rajasthan. Under the SGSY, project training was provided to 13,000 youth living below the poverty line in Madhya Pradesh, yielding placement for over 76 per cent through job fairs.[42]

- Placement-linked skill development services have been provided at 11 locations to youth living below the poverty line, under the District Poverty Initiative Project (DPIP) of the Government of Madhya Pradesh (GoMP). Another 1,260 candidates have been trained and 792 placed through the Department of Backward Class and Minority Welfare, GoMP. In Rajasthan, 1,041 students have been trained and 549 placed through the Rajasthan Skill Livelihood Development Corporation, in an AISECT skill development programme for minorities and youth living below the poverty line. In Odhisa, 2,334 students have been trained in IT and retail management since 2012 as part of the NRLM ORMAS Project. AISECT has also been working with the Bhopal Gas Tragedy Relief and Rehabilitation Department (GoMP) to provide computer education to gas tragedy victims and their dependents.[43]

- The Indira Suchana Shakti Yojana (ISSY), one of the most prestigious programmes of AISECT, has trained more than 100,000 girls in ICT skills through 1,297 schools in Chhattisgarh. AISECT was selected as a 'facilitator NGO' for the Tejaswini Project, an extension of the Swashakti Project in Dindori district of Madhya Pradesh. The project envisages enhancing the skills of members of microfinance self-help

groups (SHGs) by linking them with markets. The project has helped form some 500 self-help groups for women, trained all SHG members on livelihood-based activities and is now linking them with various income generation activities. Also, AISECT has trained more than 2,500 women at Common Services Centres through the Women Digital Literacy Programme for Training and Empowerment of Women on Basic Computer Course.[44]

AISECT's work with women entrepreneurs has been featured as a best practice for its social impact, as in a 2012 study titled 'Connectivity: How mobile phones, computers and internet can catalyze women's entrepreneurship'. The organization has encouraged the participation of women in its franchisee network by providing financial incentives to women entrepreneurs (i.e. up to 15 percent discount or start up and renewal fees), negotiating rates for retail arrangements and linking women to financial support from the government (e.g. ex-national e-governance plans for women's empowerment). Women entrepreneurs operating AISECT centres have also played a critical role in supporting other women and girls to build their ICT skills and entrepreneurial skills, offering a 15 percent discount to selected girls.[45]

AISECT's financial inclusion initiative is another innovative solution supporting rural development. The initiative provides comprehensive financial services to the underprivileged, including savings, credit and other financial benefits particularly in unbanked areas. Banking kiosks are run by rural entrepreneurs who act as business correspondents for the bank to support their financial operations away from their branches.[46] Many customers are farmers, small shopkeepers, labourers, rural women and students working part-time who until this time had no access to a bank.[47]

Source - AISECT

CHALLENGES AND SOLUTIONS

Quality assurance

AISECT uses technology in innovative ways to manage daily operations and ensure quality in its franchisee network. Student registration and course dissemination are conducted through the AISECT central online portal. There are help lines and email communication channels between the franchisees and AISECT management teams to provide assistance, including SMS facilities to send information and updates to the network. An online log of student registration and transactions is maintained to keep track of the training volume. Each franchisee contract is renewed on the basis of performance, an approach that encourages each centre to function efficiently while maintaining quality.[48]

Challenges and solutions

Introducing ICT to rural areas is a challenge recognized by AISECT founder Santosh Choubey. "Technology can be very intimidating, more so to the rural folk. One of the biggest challenges we faced in rural India was to get people to use ICT and basic technology," he said.[49] The modern world is marked by an increasing need for information technology at all levels, both in the workplace and ordinary life. The digital divide is the difference between those who have access to information (the have's) and those who do not have access to information (the have nots). The digital divide remains a challenge especially for disadvantaged sections of the population. The low literacy rates in rural India and lack of English-language education create barriers to the age of information.[50]

AISECT understood the IT challenge in rural India very early on and began creating regional language content to breakdown the communication barriers. All AISECT educational courses and materials are now available in 11 regional languages.[51] The ground-level IT Yatra campaigns brought computers closer to the masses and mobilized youth to join IT courses. The effective awareness-generation and publicity of the Kaushal Vikas Yatras have won recognition for this initiative as a best practice by the Government of India's skill development programme.[52]

Mobilization and retention of youth for the training programmes is one of the most difficult tasks in skill provision. "Aspiration is a challenge," said a member of AISECT's senior management team."Youth in rural areas do not want to go for sectors such as construction and textiles… everyone wants to join electronics and service sector employment as they see more mobility in such jobs," the team member explained.[53] AISECT believes that trust and familiarity of the brand and providing simple knowledge about computers are important factors in mobilizing large-scale masses.[54] The training content and design is student-friendly and interactive. Studios on AISECT campus constantly deliver live online lectures and support classroom training. There are community radio stations that deliver news and updates to get a community buy-in for AISECT training programmes.[55] And, related to retention, the organization provides opportunities for horizontal mobility of its students by linking them to higher education programmes within its university network and engaging them in entrepreneurial activities.[56] This not only facilitates retention of students; the activities also build aspiration to aim for a better life and livelihood.

Power and connectivity pose ongoing challenges, according to Santosh Choubey: "Two of the other challenges which we continue to face while working on the grassroots level are that of power and connectivity, or the lack thereof. Availability of continuous power and broadband connectivity at panchayat level can revolutionize the role of technology in vocational training," he said.[57] The target segments of AISECT's intervention are the districts, blocks and panchayats in India, which usually suffer from lack

CHALLENGES AND SOLUTIONS

of power and unreliable connectivity. While the problem is large scale and difficult to address without government support, AISECT has been able to better equip its centres through various innovative ideas and delivery mechanisms.

Infrastructure expenditures including power back-up, computer installation and internet connection are high while setting up centres. Hence, AISECT believes that while the key focus of the centres should be to provide training to the rural masses, a single activity might not render a centre economically viable nor put t

he technology to its optimum use. A centre has to be a 'multi-purpose' facility with training plus service provision to achieve sustainability within a few years. Apart from these basic requirements, AISECT allows flexibility in centre training timings, usage of online and offline content and training delivery mechanisms, use of laptops and mobile devices, etc., to considerably ease the connectivity situation.[58]

Another way to reduce the operational expenditures that centre operators might initially incur is to use existing government or private infrastructure. AISECT focuses on leveraging existing infrastructure such as schools and *panchayats*.[59] Also, the Common Services Centres are government-owned kiosks given to AISECT to run e-governance services programmes for rural people, and thereby help in reducing infrastructural expenses. AISECT currently supports a network of 6,000 Common Services Centres bringing e-governance and e-business services to the doorsteps of rural people, linking them up to services and reducing the long chain of intermediaries.[60]

Source - AISECT

RESULTS

Results

Skills and knowledge are the driving force of economic growth and social development for any country. AISECT has been involved in the skilling business for 30 years, empowering youth with ICT and skill development, education, training and other services. Since its inception, the primary focus of AISECT has been to train and skill semi-urban and rural youth who are from the most vulnerable and marginalized segments of society. The organization has so far provided training for over 1.7 million students through various national- and state-level programmes.

AISECT's unique value proposition lies in its vast array of training and services that cater to the needs and requirements of the rural poor. Its range of initiatives – skill development, e-governance services and financial inclusion – comprise a multi-pronged approach to empower youth and uplift rural India that has been recognized by the World Bank, NASSCOM and TiE, among other leading bodies.

The organization is also one of the largest entrepreneurial-driven networks in India, enabling young entrepreneurs to operate IT centres or kiosks that sell diverse products and services to customers. This not only facilitates sustainability of the centre; it also provides useful and relevant services to the community. Through this innovative business model AISECT has created entrepreneurship opportunities for more than 12,000 persons, of which there are over 1,000 women entrepreneurs.

The Rojgar Mantra online job portal is designed to offer placement in local companies to skilled workers in rural areas. With the basic idea of accessibility and affordability, the portal has empowered students and employers alike to access the job market in an interactive manner. This is another unique feature of AISECT that has received a massive response from the rural population, with more than 200,000 job seekers and 60 employers currently registered on the platform.[61]

Source - AISECT

19 AISECT: Training Rural Youth to Bridge the ICT Gap

CONCLUSION

Conclusion

With an unmatched understanding of the rural population, AISCET is now trying to integrate skill development within the higher education framework. It has introduced two private universities in Central India, in areas that lack good infrastructure and high-quality content. AISECT is the sponsoring body of the Dr. C.V. Raman University in Chhattisgarh and AISECT University in Madhya Pradesh. The universities encourage skill training with two mandatory skill-based courses incorporated in every course curriculum of the undergraduate degree. These universities are privately run bodies with AISECT founder Mr. Santosh Choubey as the Chancellor.

Dr. C.V. Raman University has launched a community radio station named 'Radio Raman' with an objective to broadcast educational and entertainment-based content that focuses on the basic rights of the local community in terms of education, health and law. Classroom lectures delivered by the faculty are also recorded and broadcast through online live radio stations as part of the Distance Learning Programme, benefitting students in rural and remote areas.

Beyond skills development activities, AISECT is also expanding its reach into schools at the small town, district and block levels. The organization has launched EduVantage PRO, which is a low cost and high quality interactive multimedia classroom solution for K-12 school students.[62] The product has been assembled in the form of a pen drive (a mobile USB storage device), making it affordable for both private as well as government-run schools.

AISECT has a market advantage given its brand recognition in the central and western parts of the country where it is presently operating. However, the southern areas have been left behind due to language barriers[63] The organization seeks to expand its geographical reach and its network of IT centre entrepreneurs in previously untapped markets by taking the number of AISECT centres from 12,000 to 20,000 over the next five years. Consistent with its mission, the expansion plan will prioritize students and entrepreneurs who belong to disadvantaged and marginalized population groups.[64]

[1] Singh, Jauhari and Tiwari, An Analytical Case Study on AISECT.
[2] Panchayat is the elected body of five senior members of the village, responsible for the effective functioning of the village.
[3] AISECT website, About us.
[4] Ashoka India.
[5] Ibid.
[6] Formerly known as National Open School (NOS), the National Institute of Open Schooling (NIOS) was established by India's Ministry of Human Resources Development (MHRD) to provide a number of vocational, life enrichment and community-oriented courses in addition to general and academic courses at the secondary and senior secondary level.
[7] Singh, Jauhari and Tiwari, An Analytical Case Study on AISECT.
[8] AISECT Case Writeshop (30 March 2015).
[9] Bartolome 2014.
[10] Ibid.
[11] AISECT Case Writeshop (30 March 2015).
[12] The sectors that AISECT is working in are IT and management; hardware and networking; livelihood and vocational training; banking, finance and insurance; agriculture; textile training; fire safety and security; auto skills; telecom skills; retail management; teacher training.
[13] For details see: https://www.csc.gov.in/

[14] AISECT website, Introduction to Training and Skill Development.
[15] AISECT One Pager. File provided by AISECT.
[16] AISECT presentation., "AISECT's Skill Development Initiatives".
[17] National Policy for Skill Development and Entrepreneurship 2015.
[18] Pallavi, Rao 2013.
[19] Malhotra, Kanesathasan and Patel 2012.
[20] Chaubey, IIM-World Bank publication.
[21] Ibid.
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World Bank Report on Information and Communication Technology in Rural Development - Case Study of AISECT

Published in 1999

Multipurpose Electronics and Computer Centers: Promoting IT-Centered Maintenance and Employment in Rural Areas

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Since 1995, the All India Society for Electronics and Computer Technology has been implementing an All India Coordinated Programme to set up multipurpose electronics and computer centers in rural and tribal areas of the country. The program, jointly funded by the Department of Electronics and the Department of Science and Technology, is being implemented in ten states. Today over 600 training, servicing and production centers have been set up under this program, and a large variety of training and servicing modules have been prepared in the vernacular languages. Entrepreneurship in the field of electronics and information technology has also been nurtured. Interesting new possibilities related to Village Information Centers, Village Communication Centers, agricultural electronics applications, Geographical Information Systems and medical electronics maintenance have come up. A national organizational structure is now in place. Ten regional centers have been set up with the support of the Department of Electronics in collaboration with the National Centre, which is being run by the All India Society for Electronics and Computer Technology. This paper reviews the impact of the All India Coordinated Programme, draws some conclusions regarding implementing the rural centers and finally suggests future directions for the centers.

Key Ideas

The focus has to be rural: The major thrust of the developmental programs has to be on the rural areas since that is where more than three-fourths of the Indian population resides. Of the 50 major cities, 500 districts, 5000 blocks, 3000 watersheds, 100,000 *panchayats* and 700,000 villages in India, the focus of the

All India Coordinated Programme (AICP) focus is at the block, watershed and *panchayat* levels.

The rural centers have to be multipurpose: The rural intervention in electronics and information technology has to be multipurpose in order to yield optimum results. As far as possible it should undertake training and servicing of technologies such as computers (hardware and software), consumer electronics, electrical items, telecommunications and other support services like institutional and programmatic linkages.

Table 15.1 Application Areas for Multipurpose Centers

Computers	Hardware: maintenance, installation, support
Computers	Software: development, installation, maintenance, support, marketing
Consumer electronics	Audio, video, household appliances, servicing, marketing support
Communications	Telephone instruments, STD-PCO, battery chargers, exchanges, MARR equipment servicing, installation, maintenance
Electrical items	Power supply items, pumps and motors, household appliances, electrical wing
Support services	Software development, training, institutional and programmatic linkages

While establishing a center the following should be kept in mind.

Start with training: Starting with training has several advantages. It creates awareness about the center and also about the technology, and makes the center self-sustaining from the very beginning.

Multipurpose: A single activity like production may neither render a rural center economically viable nor put the technology to optimum use. Therefore the centers have to be multipurpose. "Training-cum-Servicing" coupled with "Production" can produce optimum results.

Effective linkages: The center has to link up with rural institutions, such as educational institutions, banks, development departments, *panchayats*[1] and health centers.

Innovative: The center should be innovative in its choices of courses, training methodology and marketing peculiar to the circumstances of the area.

Sustainable: The center should be sustainable within a short (2-3 years) time period.

Language: As far as possible all the training material has to be in the regional language.

1. *Panchayat* is the elected body of five senior members of the village, responsible for the effective functioning of the village

Methodology for Setting Up a Multipurpose Electronics and Information Technology Center

Setting up a center requires initial financial support and linkages with other institutions.

Cost, on an average, of setting up a center has been around $4,760 (Rs 2 lacs), which includes a computer laboratory, an electronics and electrical laboratory, software, and furniture. Recurring costs the first year are around $3100 (Rs 1.33 lacs). This includes manpower, rent, and consumable items.

Steps to Set Up a Center

This begins with a preliminary survey, data analysis and selection of a nodal point, and then proceeds to procuring and installing equipment. Household and market surveys are conducted typically in parallel with setting up the servicing and production functions of the center. Centers then diversify into other areas and institutional activities. They become viable in their second year of operation.

Interlinkages with Institutions

Various organizations/departments are now linked to the centers providing support services. These include, to name a few, the state Electronics Development Corporations, the National Open School, the Indira Gandhi National Open University, NABARD, Departments of Rural Development, and voluntary organizations like the Society for Rural Industrialization, the Center for Quantitative Research, and the Institute of Vocational Training.

Experience in Block-Level Centers

The AICP was funded by the Department of Electronics and the Department of Science and Technology. The program was designed to set up ten block level multipurpose centers as nodal points in ten states. In addition, a large number of 'entrepreneurial' centers were to be set up on a self-financing basis. Supporting course-ware and training material were produced for the centers, and 10 percent of the total funds were provided by government.

Of the 633 centers established under the AICP, over 420 are in rural areas. The largest number of centers are in Madhya Pradesh (495) followed by Maharashtra (44), Uttar Pradesh (36), Rajasthan (20), Bihar (11), Orissa (9), Gujarat (9), Andhra Pradesh (3), Tamil Nadu/Pondicherry (4), and Kerala and Delhi (one each). Each center provides direct employment to 4 to 5 persons (as trainers and technicians) and indirect employment to another 2 to 3 persons.

For this, the center has to invest about $3,570 to $4,760 (Rs 1.5 to Rs 2.05 lacs). The centers generate employment for over 2,000 persons. The annual turnover per center on the average is about $2,380 (Rs 1.02 lacs). The total network turnover is around $1,428,571 (Rs 614 lacs).

To enable the centers to be multipurpose, most of the technical material for training, servicing and production has been developed in local languages. The training modules include training material on computers and electronics in Hindi as well as in the regional languages. Service manuals in Hindi include literature on servicing audio-video and telecommunications equipment. Production "profiles" include the production of audio-video equipment, electronic hobby kits and project plans to set up small scale electronic and electrical production units.

Various activities are conducted at the centers including training, services, and production. Training includes audio-video repair, electric/electronic repair and use of computer applications. Certificates and diplomas are offered in electronics and computer applications. Training (the use of computers) is provided to bank employees, members of *panchayats* and other elected bodies, women involved in specified programs and schools in. About 60 percent of the students are based in rural areas, of which, 3,490 are males and 1,425 are females.

The production unit of a center includes the production of power supply items, entertainment electronic items, Desk Top Publishing and screen printing, and word and data processing. Services offered are in software development, hardware maintenance, communication centers, information technology (IT) applications, artisan development and consultancy.

In addition to employment opportunities, the centers have shown to be beneficial in other ways as well. For instance:

- Over 20,000 school children are being trained under the computer literacy program.
- A *panchayat* planning information system for 20 *panchayats* of one watershed is under development.
- Maintenance centers have been set up to provide telecommunications services.
- Core groups on agriculture and medical electronics have been formed.
- Various new roles, such as becoming employment bureaus and community libraries are emerging to enhance the effectiveness of rural centers.
- Centers act as retail outlets for electronic consumables.

Conclusions

The following conclusions are offered resulting from implementing these centers:

- A multipurpose approach with regard to block/sub-block level electrical-electronics-computer centers turned out to be an important and appropriate concept. Besides training, the centers have to take up servicing and production activities. Within the training segment too, there is a demand in areas other than electrical-electronics and computer fields.
- It is difficult to organize production in rural centers without a continuous support system.
- There is demand for designing short term courses directly related to various vocations. An example is training programs for the repair and maintenance of the STD/PCO telecommunications equipment.
- There is a demand for certifying existing skills.
- Production work can be facilitated by preparing production profiles, production and testing documents, and providing sourcing for small entrepreneurs.
- Instructions in Hindi or the regional language play a vital role in teaching technical subjects.
- The training package on electronics entrepreneurship was helpful in orienting prospective entrepreneurs and in setting up new multipurpose centers.
- Networking of the centers is required to share information and resources.
- Greater participation of women in the centers should be encouraged.
- Some centers have found new roles for themselves as Village Information Centers.
- Maintenance of specialized computer and communications items require strengthening support systems and a higher training input.

Linkages with Other Voluntary Groups, Government and Public Bodies

The All India Society for Electronics and Computer Technology (AISECT) has linked the centers with voluntary groups, government departments of science and technology, electronics, telecommunications, non-conventional energy sources, state electronics corporations, industries, education, *panchayat*, women and child, and health, as well as with agro-industries, banks, schools and colleges.

Rural Electronics Entrepreneurship Development Programme

The AISECT has been conducting an Electronics Entrepreneurship Development Programme to motivate and mobilize rural youth to set up their own training

and service centers. It also guides youth in methods and means to obtain financial support from various institutions.

Spread over ten days, the program includes sessions on the world and the Indian scenario of electronics and information technology, entrepreneurship, identification of local needs, market surveys, procedures involved in obtaining assistance, management, accounts, roles of a center, establishing a center, and linking it with various organizations.

Future Directions

The multipurpose electronics and IT centers described here provide a possible model for replication in all 5,000 blocks of the country. It is more useful at the block and sub-block level where IT is not widely diffused. The center's financial viability and utility have been shown in over 600 centers. Further expansion would require institutional support and strengthening of the national as well as regional centers. The AISECT is developing a model for IT based *Panchayat* Resource Centers, which can act as a basis for knowledge based planning and management in rural areas. Plans are underway to double the number of centers, many of which will become Internet Service Providers.

SKILLING ASIA
Equipping Youth for Employment - Case Study on AISECT

Published in 2015

AISECT's Endeavors to Empower Semi-urban and Rural India through Placement Linked Skill Development Initiatives

Pallavi Rao Chaturvedi & Siddharth Chaturvedi

This case study aims to showcase the exemplary work that has been done over the last three decades by Bhopal-headquartered AISECT to bridge the skills gap that exists between urban and rural India. In a country where 80% of the population resides in semi-urban and rural areas, it is impossible to have a Skilled India unless the skilling initiatives are executed at the grassroots. This fact was realized by AISECT's Founder Mr. Santosh Kumar Choubey way back in 1980s and he took the pioneering initiative of empowering the semi-urban and rural masses through quality ICT-based vocational education. The journey of the organization to become the country's largest skills and ICT based education group, the challenges faced along the way, the innovations that were introduced to overcome the challenges and the impact that the initiative has had on the society are encapsulated in this case study.

1. Introduction

Skills and knowledge are considered the driving forces of economic growth and social development for any country. As India moves progressively towards becoming a 'knowledge economy', it becomes increasingly crucial that the country should focus on advancement of skills. The institutes of higher education in India have been largely focusing on formal degrees rather than on the vast mass of people outside the formal system requiring some or the other skills training in order to contribute to the bulk of employment at the entry level of each industry. Be it technicians, sales officers, retail staff, banking operations staff, data entry operators or office assistants, the infrastructure required for training such a huge mass is currently not available. Here is where AISECT came as a blessing in disguise.

A brainchild of Mr. Santosh Kumar Choubey, this entrepreneurial pioneer of skill development was established in 1985. Ever since its inception, AISECT has been untiringly reaching out to the remotest corners of the country to empower people, generate employment for the youth and unfold entrepreneurship based initiatives to create an inclusive society. It is a self-sustainable, demand led model which reflects the demand side of

curriculum. The courses include Renewable Energy, Mobile Communication and Automobile Energy and various engineering as well as non-engineering subjects. Entrepreneurship Development Programme have also been introduced for students who want to set up their own enterprise; this has helped in generating number of entrepreneurs in various fields.

2. Impact

The organization has so far trained over 17 lakh people through its widespread network of over 20,000 Centres which are spread across 388 districts, 1070 blocks and 6000 panchayat in 27 States and 3 Union Territories. Its skill development initiatives are targeted towards all categories of people from the community – school students, graduate program students, office goers and job holders, working women, housewives, Below Poverty Line Youth, Panchayati Raj Institutions, Parent Teacher Associations and Government Departments. Over 10 lakh people, i.e. about 60% of the students trained so far, have secured gainful employment. Moreover, about 45 lakh people in semi-urban and rural India have been impacted through the various skilling, vocational training, financial inclusion, e-governance and other developmental initiatives of the organization.

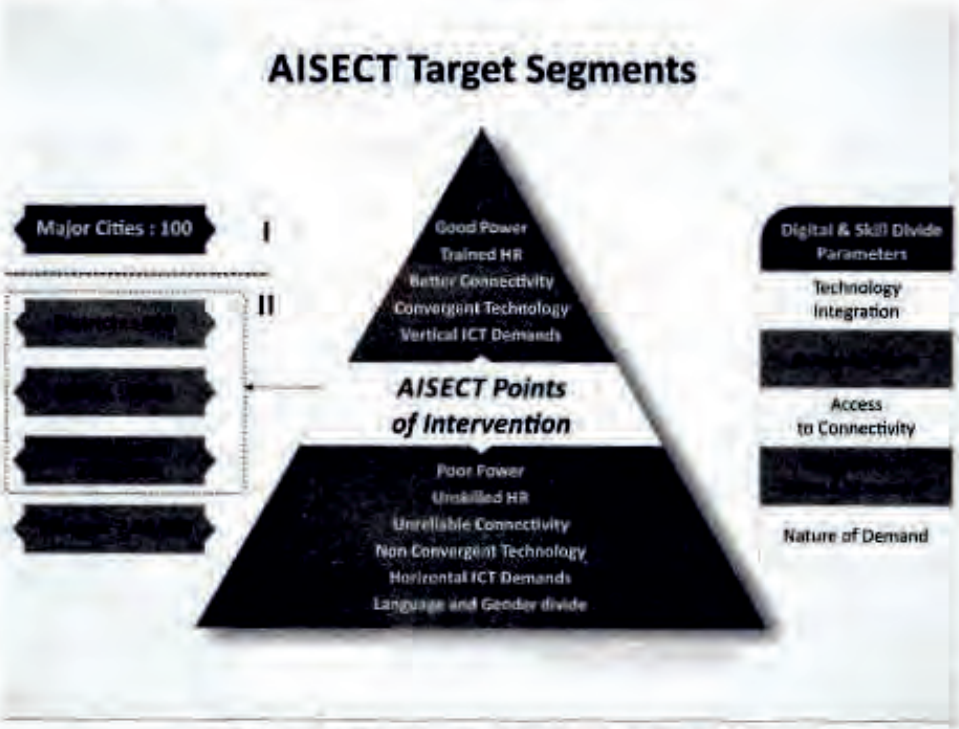

Figure 1: The Indian Pyramid and its Digital and Skill Divide

3. Major Challenges Faced

As the pioneering organization in the country to work towards empowerment of semi-urban and rural masses through ICT and skills based education and services, AISECT had to face a number of challenges along the way. Some of them include:

- **Lack of Power & Connectivity:** Rural areas are typically characterized by the lack of continuous power supply and connectivity. Since AISECT programs were IT based and required working on the computer, this posed a challenge. The organization overcame this hurdle by switching to a flexible schedule of centres' timings. They were opened whenever there was electricity. In some cases solar power was tried. With the availability of laptops and mobiles, the power and connectivity situation has considerably eased.
- **Language Barrier:** The founding team at AISECT realized quite early that in order to demystify Information Technology, it was essential to communicate to people in their language of comfort. Since most available books were in English, Mr. Choubey and his peers set themselves the task of coming up with good Hindi content (a language spoken by most of India). AISECT became a pioneer in it and developed over 100 modules in Hindi on Computer Science for students of all ages. AISECT also developed the course material in various regional languages which helped in the scalability of the model across centres. This gave the organization a huge leap within a short span of time.
- **Mindset of people towards skills:** In India, formal degree is still given a lot more importance as compared to skill enhancement and vocational courses. The organization addressed this issue by increasing the respectability for an AISECT Academy course. This was done by providing courses which were certified by AISECT University and Dr. C.V. Raman University.
- **Fee paying capacity of students:** In rural India, a large section of people are daily wage earners with very little money to spare for education. Such people can't afford to pay the yearly fees for the courses. Hence, low fee structure was adopted and the option was given to the target groups to pay the fee in installments.
- **Lack of funds for marketing:** The AISECT model was a creative yet robust solution for aiding the penetration of IT & skills based education in rural India. The AISECT team had to go down to a district or a block to demonstrate how the centre could be run, how training was to be given to students and how financial stability had to be achieved. Since the organization did not have adequate marketing funds to build the brand

across India, it had to rely on word of mouth, referrals and direct contact to open centres. This considerably slowed down the organization's growth. However, over the years AISECT was able to apportion funds and slowly but surely marketed the brand, geography by geography.

- **Lack of funds for adequate training:** In a mass entrepreneurship model such as AISECT's, maintaining standards and quality poses a major challenge. Training of 50,000 faculty members across 20,000 centres is a herculean task. For a long time AISECT was unable to fund trainers who could go and train all of these faculty members. The organization again overcame this challenge by investing in a studio at its Headquarters. This studio created audio visual content which was put onto CDs and dispatched to the entrepreneurs for them to train faculty through the AV content. Through effective use of technology, AISECT has been able to now improve standards and quality of delivery of the various vocational courses across its centres.

4. Solutions Deployed

The skill development and capacity building requirements of the rural population is vastly different from those living in cities. Over the years, the AISECT Management Team has come to an unparalleled understanding of the needs of the target groups and has deployed a number of innovative solutions to aid the process of skilling the masses. These innovative solutions include:

- **Pioneering a 'Multipurpose IT Centre' Model:** A self-sustainable, demand-led and flexible model was developed to address the multifaceted ICT & skills-based education and services requirements of rural India. While vocational education remains the mainstay of the centres, a host of other products and services, including placement assistance, banking facilities, mobile recharge, internet access and G2C services, were also mounted over the years to the AISECT Centre's offerings.
- **Adopting regional languages:** It was important that the organization communicated with people in their regional languages. Thus, AISECT became the pioneer of IT content creation in Hindi and other regional languages. This required innovative courseware and software research and development. This, coupled with the requisite awareness drives, raised the level of utilization and understanding of technology.
- **Developing an Entrepreneurial Model:** For achieving scale and sustainability, a franchise model has been adopted where the centre owner is responsible for the day to day running of the centre and for creating awareness in his area about the various offerings. Constant handholding

in terms of provision of course material, faculty training etc. is done by the Head Office. State offices have been set up which guide and monitor the centres in their areas. Annual franchise renewal ensures regular quality checks.

- **Designing the first ever IT Yatra in India:** AISECT organized the first ever Information Technology Yatra of rural India with a view to initiate awareness in schools and colleges about IT and various IT based skill development programmes and services offered by AISECT Centres.
- **Forging developmental linkages:** The organization partnered with Government Agencies and Departments for executing ongoing developmental programs in the areas of literacy, education, ICT proliferation, watershed management and health.
- **Launching a portal 'aisectonline.com':** This portal empowers students with anywhere, anytime access to education, thereby fostering a collaborative and interactive approach to learning. AISECT Online has been developed keeping in mind the basic issues of accessibility and affordability in distance education, due to which a large number of youth still don't have access to quality education infrastructure. This portal endeavors to bridge this gap by making quality education accessible to greater number of students.accessible to greater number of students.
- **Introducing India's biggest rural job portal 'rojgarmantra com':**
  Realizing that offering skills training only will not lead to the empowerment of the rural masses, AISECT took the initiative of assisting the trained youth in placement. The organization has launched a rural job portal 'rojgarmantra.com' which is focusing on fulfilling the entry level job requirements of private and public sector enterprises at the small town, district and block levels. With over 4 lakh job seekers already registered with the portal, Rojgar Mantra is poised to be the biggest rural job placement initiative of India.
- **Launching the most cost-effective multimedia content solution 'Eduvantage PRO':** AISECT recently launched Eduvantage PRO Interactive Multimedia Content with the objective of bringing in a low cost, high quality multimedia classroom solution for K-12 school students at the small town, district and block levels. The product has been assembled in the form of a pen drive thereby making it affordable for both private as well as Government schools.

- **Integrating skill development within the higher education framework:** Skill development has been introduced at the two universities of the Group - Dr. C.V. Raman University and AISECT University in Madhya Pradesh - right from entry level with two mandatory skill based courses incorporated in every course curriculum of undergraduate degree.
- **Launching India's first ever community radio station by a university:** Dr. C.V. Raman University has launched a community radio station named 'Radio Raman' with an objective to broadcast necessary educational and entertainment based content which focuses on the basic rights of the local community in terms of education, health and law. The classroom lectures that are delivered by the University's faculty are also recorded and broadcasted through the radio station thus benefitting students in rural and far flung areas.
- **Introducing online live lectures through Distance Learning Centres:** This initiative provides great opportunity for students of Dr. C.V. Raman University to learn in a live interactive mode and increases the University's reach to various geographical locations across India.

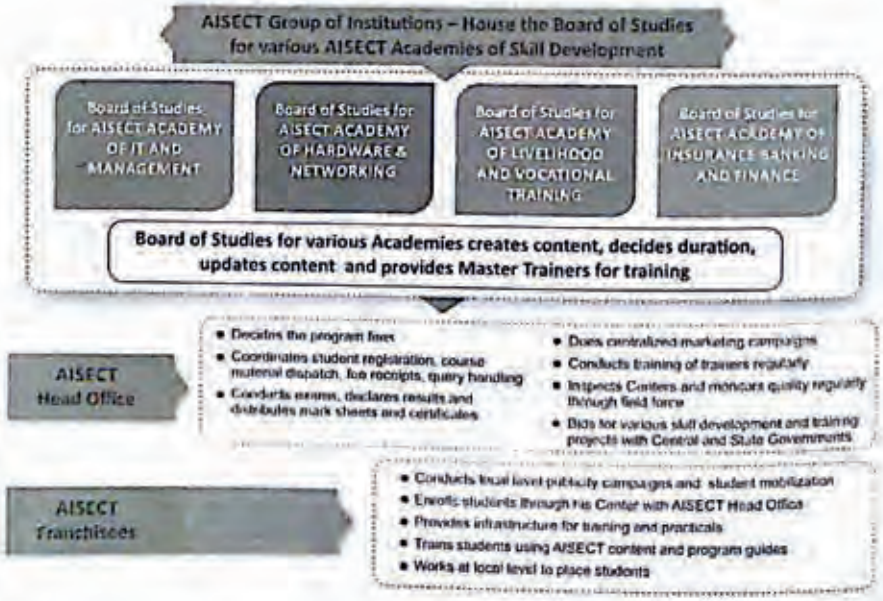

Figure 2: AISECT Model of Skill Development and Training

5. Placement Linked Skill Development

Placement linked skill development has been a key focus area of AISECT. Over the years, the organization has built strong industry links owing to its ability to provide good quality skilled people who meet the entry-level recruitment needs of the national and local companies working in the semi-urban and rural areas of the country. With an extensive experience of providing skilled workforce in semi-urban and rural India and an unmatched understanding of the recruitment needs of the unorganized sector at the grassroots level, AISECT follows a unique online/offline methodology for placement.

In the offline methodology, the organization has been conducting Rojgar Melas (rural job fairs) for a number of years so as to provide placement assistance to the trained youth. Under the AISECT-NSDC partnership, Rojgar Melas have been conducted over the last two years across 10 major states. The AISECT-NSDC Rojgar Mela 2015 was organized across 33 locations in 10 states and saw a footfall of over 16,000 job seekers. Approximately 230 companies participated in the Rojgar Mela across the 33 locations and over 5,000 candidates were shortlisted. The jobs offered by the companies included that of Business Development Executive, Sales Officer, Marketing Executive, Assistant Branch Manager, Web Developer, Customer Care Executive, Tally Operator, Machine Operator, Security Guard, Technician and many more. Depending on the profiles for which they were being recruited, the offered salary varied from 5,000/- to 20,000/-. The organization's objective is not merely to provide placement assistance to the trained people. A placement tracker process is also in place where the AISECT Centres follow the progress of the students in their areas for a year after they have graduated. This follow-up is done through emails, phone calls and SMSs.

In the online methodology, AISECT has launched a rural job portal 'rojgarmantra.com' with the aim of assisting the placement of the skilled candidates. The portal is focusing on fulfilling the entry level job requirements of private and public sector enterprises at the small town, district and block levels. With over 4 lakh job seekers already registered with the portal, Rojgar Mantra is poised to be the biggest rural job placement initiative of India.

Hundreds of national and local level organizations are empaneled with AISECT for their recruitment needs. Some of them include ICICI Prudential Life Insurance, SBI Life Insurance, Nav Kisan Bio Plantech, Jeevansathi, YKS Hotel, Eureka Forbes, Dish TV, India Infoline, HDFC Bank, Dhiraj Son's The Mega Store, Randstad, JBG Group, Welspun, Drupar Chemicals, Vardhman, Future Retail, Shivshakti Bio Fertilizer, Reliance Communication, Idea and many more.

6. Major Skill Development Projects Executed

AISECT has implemented various skill building training programme across the county. Most of these initiatives were for beneficiaries belonging to weaker and underprivileged sections of the society like SC/ST, OBC, Women, minorities, BPL, Scavengers etc. These trainings have been supported by the various Ministries of Government of India and the State Government Departments. AISECT is empaneled with State Skill Development Missions in new project states like Uttar Pradesh Skill Development Mission (UPSDM), Gujarat Livelihood Promotion Company Ltd. (GLPC), Haryana State Rural Livelihoods Mission (HRSRLM), Rajasthan Skill and Livelihoods Development Corporation (RSLDC), Odisha Livelihoods Mission (OLM) along with Madhya Pradesh Rural Livelihoods Mission (MPSRLM). Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) erstwhile Aajeevika Skills Projects of Ministry of Rural Development, Government of India have been initiated in multiple states like Madhya Pradesh, Haryana, Gujarat, and Uttar Pradesh. Over the years, AISECT has been associated with the Central and State Governments for a number of skill development and capacity building projects including.

- **Swarnjayanti Gram SwarozgarYojana (SGSY):** AISECT has conducted this project in Madhya Pradesh wherein it provided skill development training to 13,000 rural BPL youth for employment and self-employment opportunities. The project was successfully implemented where the beneficiaries were trained in various skill based programmes and most of them are now placed through Rojgar Melas to earn their livelihood owing to their newly acquired skills.
- **Implementation of vocational Education in Senior Secondary Schools:** AISECT implemented NSQF in more than 150 Government schools of Haryana, Rajasthan, Madhya Pradesh, Punjab & Delhi in IT/ITES & Retail sectors. Activities undertaken during implementation of project include vocational teacher deployment and management, weekly reports, guest lectures, industry visits, practical training, E-learning and hobby classes, salary disbursement, replacements, student counseling for placement and placement tie-ups,
- **Bhopal Gas Tragedy Relief and Rehabilitation:** AISECT is working with the Bhopal Gas Tragedy Relief and Rehabilitation Department of the Madhya Pradesh Government to provide computer education to Gas Tragedy affected victims or their dependents.
- **Employment Based Training for BPL Youth across MP:** AISECT is working under District Poverty Initiative Project (DPIP), Government of Madhya Pradesh, to provide placement linked skill development training.

7. Sustainability and Scalability of the Initiative

- To ensure sustainability, a model was established which is not dependent on Government grants or donor support. An entrepreneurial model was established wherein Industrial Training Institute (ITI), polytechnic graduates and other technically qualified youth were invited to attend an IT based Entrepreneurship Orientation Program followed by quick disbursal of loans. All the 20,000 AISECT Centres are run by people from the local community.
- The centres were set-up with basic infrastructure so that students would not get intimidated and could relate to the set-up.
- AISECT has developed course material in various local languages which helps in the sustainability of the model across centres.
- Industry-based programmes were introduced to increase the demand for AISECT students in the jobs market.
- The course fee was kept very low in order to make them affordable for the target audience.
- Periodical training of Rural Entrepreneurs ensures sustainability of AISECT's model. At AISECT, training is a constant and continuous process. Rural Entrepreneurs are continuously exposed to several workshops and training modules at various levels - central level workshops at the head office, state level workshops and if he is at a district town, the organization conducts meetings and demos there as well. Faculty training is more subject-oriented and various groups are formed who are trained by master trainers.
- The organization is closely working with the leading Ministries of Government of India like the Ministry of Rural Development, Ministry of Communication and Information Technology, Department of Science and Technology, Ministry of Human Resource Development and others. Apart from this, AISECT is also closely working with the multilateral agencies like United Nations Development Programme, UNICEF, World Bank etc. This has helped AISECT in gaining acceptance and trust of the rural masses across the country.
- The scalability factor of the AISECT model is evident from the fact that what started as a single centre in 1990 is today a widespread network of over 20,000 centres covering 388 districts, 1070 blocks and 6000 panchayatys across 27 States & 3 Union Territories of India.

8. Awards and Recognition

- AISECT has won numerous awards and recognitions at various national and international platforms for its innovations and endeavors which are as follows:
- Listed in World Bank-IIM (A) Joint Report as "the most sustainable and scalable form of IT penetration and popularization in India"
- Recognition by UNDP for AISECT's innovative ICT based vocational training to youth in rural and semi-urban India (http://www.iicpsd.undp.org/content/istanbul/en/home/presscenter/articles/2015/04/17/aisect-provides-innovative-ict-based-vocational-training-to-youth-in-rural-and-semi-urban-india)
- Ashoka Senior Fellowship awarded to Mr. Santosh Choubey
- Schwab Foundation's Social Entrepreneur of the Year Award instituted by the World Economic Forum (Finalist)
- Indian Innovation Award
- Skoch Corporate Leadership Award
- NASSCOM I.T. Innovation Award
- ASSOCHAM Excellence in Education Award
- NASSCOM EMERGE 50 Leader Award
- TiE Lumis Partners Entrepreneurial Excellence Award
- World Education Summit Award
- Inc India 500 Award
- Asian Forum i4d Award
- Best Practice Recognition Award by the National Skill Development Corporation (NSDC)

9. Conclusion

AISECT can be called a true path-breaker in terms of its vision, reach and passion for spreading education, technical expertise, generating employment as well as revenue opportunities for thousands from its unique business model. Through its unique offline-online skill development and placement methodology, the organization is making rapid strides in fulfilling its objective of bridging the skills and ICT gap between semi-urban and rural areas.

Navigating Innovations - Mention of AISECT

Published in 2006

CHAPTER THREE

Innovations in IT education in India

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This chapter deals, first of all, with *societal and educational changes through IT*. It represents a view of education rooted in tradition, where culture and changing technological needs weave a complex tapestry that is at once timeless yet caught in a vortex of change. For those who approach this from a European or US perspective some of the presuppositions and context will seem different to what we know. There is no questioning of the central societal role of the University as something to be respected at all costs, no uncertainty about the need for a scientific background for computer professionals. Although unquestioning, the chapter grapples firmly with those central paradigms and attempts to put them into a context which bridges changing needs with a rich and ancient hierarchic society.

In the subsequent section, we see a change in perspective. It is concerned with how IT teaching, e.g. by the *Punjab Agricultural University PAU,* can better the lot of society as a whole by enabling the spread of Internet-enabled *multimedia kiosks* to places where computers are a new phenomenon.

2. IT Education in India Today (Abhai Mansingh)

Introduction: Technological and Societal Changes through IT

The invention of the tiny transistor in 1947 has truly transformed human society today. That invention gave birth to a new era of electronic machines based on transistors and resistors of which today's computers are only the most recent manifestation. These fifty odd years have witnessed a speed of technological

transformation that almost defies imagination. Indeed, today's computers compare to their forebears of half-a-century ago like human beings compare to their ape-like ancestor.

The recent convergence of the capabilities of modern computers with telecommunications has further revolutionized the technology for Information Communication and Storage (popularly called *Information Technology* IT - or *Information and Communication Technology* ICT; in this chapter the two terms are used in parallel). As a result, any computer on a network today can in principle access information stored in any other networked computer anywhere else in the globe (the Internet). One indicator of the speed of technological developments in this area is the fact that time on the Internet is often measured in "Web-years" - four of which make one calendar year!

It comes as no surprise that this phenomenal technological change has been so rapid that society has not yet been able to fully understand and absorb it and its implications. This is true not just in developing countries like India but also in industrialised countries where the penetration of computer technology into the society is far deeper. In fact, based upon the experience of industrialized countries, there are strong grounds to believe that we are still witnessing only the tip of the proverbial iceberg as regards implications of the new technologies- both at an economic level as well as at broader levels of society and culture.

2.1 Public and Private Responses

The rapid technological changes along with large-scale wealth creation and commercial dynamism in the Information Technology (IT) sector are raising critical challenges for our universities and the education system. These include commercial exploitation of students and individuals ill-informed of the new technologies, declining importance of the basic sciences in our educational output, and a virtual marginalisation of the university system in the explosive growth of the IT sector. Each of these may be detrimental to our society in the long run. How should universities, with their special role in society, react to these challenges, and what role can the University Grants Commission

(UGC) and other government agencies play in developing a meaningful response to these challenges is the subject matter of this section.

For more than a decade now, the private sector has been playing an extremely active role in IT education in India. Private companies offering training in different application software have mushroomed during this period and have been catering to a large number of students. There is tremendous heterogeneity across these initiatives, both in terms of their quality as well as their size. While some of them are "garage-shop" operations, others are large, professionally run companies with international operations and so may justifiably claim high standards.

Neither the All India Council for Technical Education (AICTE) nor the UGC recognizes these private institutions. At the same time, they cannot be wished away because, aside from their popularity, they also cater to several leading software companies like Microsoft, IBM and CISCO etc. that are running their own certification courses through them. However, one has to objectively assess the dangers of such training that may provide merely narrow skills in a few applications currently in demand. In the absence of deeper learning of the general principles that govern creation of such skills, students may be unable to adapt to new technologies and might require training whenever new technology/software comes to market. A survey is required about the placement of students getting trained in such institutions and all good features in their system should be adopted by the University System.

Needless to say, the rapid growth in private teaching initiatives reflects inadequacies of the public education system to the needs of the emerging IT environment, especially considering the steep prices charged for private training However, universities have not been idle: they too have undertaken numerous initiatives to enhance their role in IT education. For example, conventional computer education like Masters in Computer Applications or B.E. Computer Science has been expanded in both universities and engineering colleges. In addition, new courses such as B.E.

in Information Technology and Bachelor of Information Technology have also been started at undergraduate level in engineering colleges and universities.

Unfortunately, Information Technology has often been confused with Computer Education only and, in the hope of millions of jobs in the IT industry, all these new programmes are being designed to produce so-called "IT professionals". However, the term "IT professional" is not properly defined: does it refer to software professionals alone or does it include all professionals working in the IT industry? Obviously, a major share of employment in the industry will go into diverse activities such as management and sales of the products.

A proper framework to assess the role of universities in IT education rests ultimately on a clear understanding of what "IT" means. Information Technology (IT) integrates a wide spectrum of knowledge and skills ranging from the design of hardware and software systems to the consideration of the impact of information technology on society. IT draws on expertise in such diverse areas as network architecture, system administration, multimedia programming, telecommunication and information policy, enterprise systems, computer consulting, data management and retrieval, electronic documentation and publication. Every discipline thus has its own role to play in the proper use of Information Technology. For example, the role of Subject Expert (from social sciences and humanities) in designing a web site is as important as that of a software person.

An intrinsically interdisciplinary programme such as Information Technology can develop only when experts from different disciplines work together and it is perhaps inappropriate to name a teaching program at the Bachelors level as "Information Technology". Moreover, Information Technology is evolving rapidly and teaching courses should not be confined to narrow skills or single applications currently in demand; the teaching programs should be designed to provide strong background knowledge of the specific area in which the tools provided by Information Technology have to be applied. The importance of

both theory and application should be recognized.

Hence, IT education cannot be considered to be only in the domain of Technical/Engineering education. Instead, Universities which provide knowledge across a wide spectrum of subjects such as basic and applied sciences, social sciences, humanities and law, have to play a greater role in IT education.

Universities also have a social responsibility: the role of Universities should not be confined to training manpower for IT industry but also to educate society about the realistic opportunities available to persons gaining different degrees from different institutions.

On a related note, a situation should never arise in our society that a child in public school feels superior to others because he knows how to click a mouse while another child from government school grows with a feeling of inferiority since he does not have access to computer. The development of children in both cases will not be normal.Instead, they should be given a clear message that in order to achieve high positions in any area, including the IT industry, they have to learn fundamentals such as reading, writing and arithmetic irrespective of whether or not they get computer as a tool. The societal aspect of any technology is important, especially of Information Technology which is going to affect our lives in a big way and has to be adopted in the context of our civilization, culture and resources. Universities ultimately will have to play a major role in this vast effort.

2.2 Desegregation of IT Professionals

There is as yet little understanding in our society of the various dimensions of IT education. People are being invited to become maestros in e-commerce in three weeks while a degree like B.Com. takes three years! It is important to create greater awareness of what kind of jobs would be available after what kind of IT education. A clear picture desegregating IT courses for different type of IT jobs should be presented. To make this transparent, appropriate labels/ names should be assigned to different types of courses so that citizens are able to take informed decisions

about which stream of IT education courses to pursue with what potential returns in terms of level and nature of jobs.

There is also an urgent need to have a close look at the programmes being run under the name of Information Technology. For example, there are degrees like Bachelor of Information Technology (without any science background) and B.Tech. (Information Technology) in which Physics, Chemistry and Mathematics is essential at class XII or A-Levels. Not surprisingly, it is confusing for both students as well as employers as to what they should expect from a degree. Both are four-year degrees but can they be treated as equivalent?

Information Technology has become as wide an area as Science or Engineering, which require specification of a subject/field within the discipline such as MSc(Physics) or B.E. (Civil). Probably a similar appropriate specification is required with degrees in Information Technology. The expert committee may provide some framework of degrees and the related course content after examining various programmes all over the world. Informal discussions with European partners suggest that there is some disparity between courses delivered in India and those conducted elsewhere. Some guidelines need to be developed on the basic course and infrastructure requirements of particular degree programmes and the type of jobs for which a student will be eligible after completing the degree. This will not only help in the optimum utilization of the financial and human resources, but also educate society as a whole so that students and parents are less vulnerable to commercial exploitation due to their ignorance of transistor-resistor machines and Information Technology.

2.3 Computer Literacy in the University

We propose that universities should develop new and innovative programmes for students from different basic disciplines to get training for high-end jobs in the IT industry. The infrastructure cost of this will be high so realistic fees should be charged but, at the same time, maintenance and overhead expenses should be cut down. Also, needy students should be provided financial

assistance in the form of teaching/administrative assistantship. Thus the concept of earning while learning has been introduced. These goals may appear too ambitious at first sight but such programmes have already been implemented in University of Delhi's South Campus at the Institute of Informatics and Communication.

Although only 2-5% of students can be selected for training for such high-end jobs, the remaining 95% should not be ignored. Universities should consider computer literacy an integral part of their core activities in the new environment. Computer literacy and its use in gathering information through the Internet is essential for students of all disciplines. While planners are worrying about computers in schools, there are no special programmes at the moment to make our students computer literate, even at the MA/MSc level. For this, they have to depend upon private shops where they have to pay large sums of money.

It is true that computer education is relatively expensive and cannot be provided free. However, it can be made affordable if we make full use of the Computer Centres. These centres were initially established for research and training for specialized courses. With the cost of machines spiralling down, such facilities are now available in Research Laboratories of individuals (the so-called professional courses have their own laboratories). So we should think about changing the role of Computer Centres, using them for computer literacy and for specialized training to students from different disciplines to enable their use of information technology in their own discipline. Such training can be provided even in Universities and Colleges that do not yet have Computer Centres – the model calculation following here, provides some illustrative numbers.

How expensive is Computer Literacy for Indian universities?

Every student will have to pay on an hourly basis without exception but those who cannot afford it should be asked to work within the University System for data entry operation in seasonal jobs. If a laboratory with 20 Computers (initial cost Rs.15 lakhs) works for ten hours a day and six days a week (260)

days a year): then, for a 50 hour course (which is more than sufficient for computer literacy) and two students per terminal, one can train around 2000 students. The recurring cost will be: two trainers @ Rs.500 per day per person for 260 days will cost Rs. 2.6 lakhs, one helper @Rs.150 a day for 260 days (0.39 lakhs). With Contingent expenses of Rs. 1 lakh per year, total expenditure will be about 4 lakhs. So by charging just Rs.5 per hour or Rs. 250 for the programme, it will be self-sustaining; and if we charge Rs.150 extra (i.e. Rs.8 per hour) then it may possible to replace the computers every five years. The subsidy provided by the University will be in the form of space and electricity. (Note: 1 Lakh=0.1 million)

2.4 The Two University Degrees

Two different agencies oversee higher technical education in India. One is the *All India Council of Technical Education* (AICTE) which looks after *Technical Education* such as B.E./B.Tech. (four years after 10+2), M.Tech. (one and one-half years after BE/B.Tech. or MSc), and MBA (two years after graduation in any discipline). The other is the *University Grants Commission*, which looks after BA/BSc etc. (three years after 10+2) and MA/MSc etc. (two years after BA/BSc). Clearly, the number of years in each system is different.

There is a need in today's context to re-examine the utility of two degrees provided by the *University* system, namely, the three-year *Masters in Computer Applications MCA,* and the four-year *Bachelor of Information Technology* B.Tech. (non-science stream). Neither degree conforms to either the norms of a University degree or to those of a degree in technical education. Both degrees are discussed in some detail as follows.

MCA programmes were started about two decades ago when the major requirement was for programmers. Students from different streams like science, commerce, economics etc. who had a minimum number of mathematics papers were selected for these courses. The situation has changed now because applications have become diverse, and specialized two-year MA /MSc programmes for students of specific background may be

more appropriate. A good example is the new two-year MSc (Informatics) for students with training in Physics, Mathematics and Electronics up to the BSc level. This MSc programme, with an emphasis on computer communication and networking, has been accepted by leading IT companies as equivalent to B.E./ B.Tech. from reputed Engineering Institutions (incidentally companies also put MCA at the same level).

The time, thus, seems right to correct the aberration of a three-year Masters programme in the University system that was introduced in the name of professional computer training. The popular myth in India that a three-year Masters Programme is professional should be eliminated: if two-year MBA programmes are professional, why can two year MA /MSc programmes not be professional? It depends only on the course content, quality of infrastructure facilities and the background of students and teachers.

The aberration has only been further compounded by the creation in some Universities of a four-year Bachelors programme in the name of Information Technology, the B.Tech.. If we compare this professional degree with an engineering degree, we face a significant problem. Specifically, in the University system, what should be argued as being equivalent to a B.Tech: our four-year Bachelors degree, five-year MSc degree, or the six-years M.C.A. degree?

An important issue in this context stems from the fact that, at the national level, the University system also includes numerous universities operating in areas not reached by the "IT boom" (which still centres on major cities of the country). Government jobs still are the major source of employment for their graduates and, consequently, the government's recruitment policies are an important determinant of enhancing the participation of these universities in the IT evolution of our society. These are the areas of rapid growth in the future and government jobs in them should be open to competition between students of B.E./B.Tech. and holders of relevant MSc degrees since they have different duration of studies and different content.

This will motivate Universities to develop new programmes at MA/MSc level in IT for students of science and non-science stream. There is now a wide gap between the infrastructure facilities and quality of students between different institutions awarding engineering degrees. The infrastructure facilities and quality of students passing out with MSc degree in some good Universities may be better than several engineering institutions. By allowing both B.E./B.Tech. and MSc to compete with each other in overlapping disciplines will ensure that good Universities do not decay and bright students are not put to a situation that their parents have to send them to Engineering Colleges just to make them eligible for Government jobs.

The on going IT revolution is raising numerous challenges for the University system. Indian universities, despite being knowledge institutions, have been virtually on the fringes of the IT boom. It is not impossible to conceive that part of the reason for this is the traditional emphasis on science as a foundation for IT, which is not necessarily the case.

2.5 A suggestion for a focused strategy for universities: The Example of Delhi University

In the area of Information Technology, the requirement of trained manpower can therefore be achieved by starting focused two year MA/MSc courses on different aspects of IT. Thus the Institute of Informatics and Communication Technologies (IIC) at DU has developed a distinctive learning and training framework in the area of ICTs. Some of its innovations include earning while learning, networked faculty, Internet communication with European staff and students (see section III), and work experience through participation with IT industry. It has already established its credibility in the ICT job market. It has further potential for catering for the emerging ICT market in dimensions other than IT industry.

Current postgraduate courses in ICT at DU provide a sound basis for a pioneering development in ICT. A focused strategy for further development could be built on a series of integrated

Programmes. A possible proposal is to develop three interdisciplinary programme streams:

- ICT Technology
- Human-ICT Interaction Design
- Learning Technologies

These streams are explained in more detail as follows:

ICT Technology

A science based stream which aims to produce ICT professionals and researchers for manufacturing companies and R andD organisations

Focus: Convergence of hardware and software, and Telecommunications (networks). This focus would enable DU to shape the field of Informatics beyond low level skill oriented programming and application training course currently being offered by many universities and private industry in India.

Knowledge base for convergence: Electronics, Physics, Mathematics

Subject expertise: Core group in Informatics and ICT networking; Networked Faculty in Electronics and Telecommunication hardware and Software integration

Job opportunities: High-end jobs in industry

Human - ICT Interaction Design

A cross disciplinary stream which aims to produce multimedia professionals and researchers for:

- rural development
- emerging socio-economic applications of ICTs
- new media industry markets

Focus: ICT Applications- Multimedia for Communication; Communication design/form; Media technology (hardware and software); human machine interface design and interaction

Knowledge base: Psychology; Design; Communication; Social sciences

Target groups for Applications: Rural development; Industrial enterprises, Business, Commerce, Public organisations

Subject expertise: Core group in Human Computer Interaction; Networked Faculty in Socio-technical systems; Art and Design; Development and Communication; Management and Organisations; Biotechnology, Agriculture and Environment

Job opportunities: Rural and urban enterprises, Development agencies; multimedia industry; R andD

Learning Technologies

Focus: ICT supported Systems, Tools and Packages- Life long learning, Training and retraining in enterprises; Open learning, Distance learning, Self learning; Learning communities and Learning networks (virtual); ICT based content generation for learning and training; Multilingual ICTs

Knowledge base: Education; IT; Media

Subject expertise: Core group in ICT and Learning: Networked Faculty in Extension Education; Training; Mass Communication; Telematics; Media

3. ICT in Rural Development: the Example of the Punjab Region (Harjinder S. Sekhon)

3.1 The roles of PAU in rural development

In this section we see a change in perspective. The *Punjab Agricultural University PAU* has long been a bastion of the Green Revolution, pushing its boundaries far beyond the traditional University's cloisters into the world in which it resides. It is a University by the farmers, for the farmers. As such, the role of IT is very different from that of the computer scientists of Delhi University. In particular, this section is concerned with how IT teaching can better the lot of society as a whole by enabling the spread of Internet-enabled multimedia kiosks to places where computers are a new phenomenon. However, like the preceding

section, it embodies a range of cultural values that may seem strange to readers from the West. Most notably, the role of the University as not just a centre of knowledge but as a benevolent and respected parent, guiding its children to achieve the best they can, is qualitatively different from the style of most Western universities. Although their cultural context means that it will not be possible for Western universities to emulate this model, there is perhaps a great deal that can be learnt from how new ideas can be absorbed to enrich society, not to battle with it and force it to change.

This section also introduces an example of a successful positive interaction between European and Indian universities, where skill transfer was only a part of the benefit achieved.

The key role of Punjab Agricultural University, Ludhiana in ushering the Green Revolution beginning mid sixties is well known in India. Equal partners were also the dynamic and progressive farmers of Punjab, ever ready to adopt new ideas and farming technologies; innovative and hard working artisans along with enterprising manufactures of agricultural machinery and tools; and not the least the supportive policies of the state in encouraging mechanization, providing and assuring irrigation facilities, inputs like fertilizers and seeds, loans and ample subsidies. This grand dream of sufficiency in food production could not have been achieved without the vast extension network of the University fully integrated with teaching and research and the State Department of Agriculture. The policies and activities assure the participation of each concerned in its value-addition chain from the field worker to the top through organizing different programmes, and adopting a variety of strategies. A comprehensive approach is followed to reach every farmer through:

- Media (TV, radio and dailies: through regular talks by the experts and write ups)
- Periodicals (monthly magazines like progressive farming and 'Changi Kheti', covering topics of current and seasonal interest).

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- Publications (bulletins, packages, etc.)
- Demonstrations and field visits / organizing field days.
- Short training courses for every one involved in the value-addition chain - farmers, artisans, women farmers, Govt. department functionaries like gram-sewaks and sewikas, soil conservation officers, development officers, entrepreneurs, etc.)
- Officer workshops (one each in rabi and kharif season to acquaint the concerned officers in the departments of Agriculture, soil and conservation, Horticulture and Animal Husbandry about with new technologies on update.
- Farmers' fairs - These one-day fairs are arranged in al regional research stations along with 2-day fairs at main campus during the beginning of every kharif and rabi season (Sept. and March). Farmers are able to visit different stalls, setup by the University, state and private manufacturers where they can freely interact with the experts and watch demonstrations. They also make use of this opportunity to buy seeds, literature and gain information and know-how about new varieties crop management and cultural practices.
- The University has also established a Farmers' Service Centre for the sale of seeds, answering farmers queries, providing other guidance, etc. The same centre also houses 'Plant Clinic' - a novel idea by PAU, which provides facilities for the diagnosis of diseases / pests affecting plant samples brought out by the farmers of the state. The plant samples are diagnosed immediately and remedial advice rendered to the farmers. Experts from Agronomy, Soil science, Entomology and Plant Pathology are available at all times to provide regular service to the farmers. Guidance regarding sowing of crops, fertilizers and other cultural practices is also imparted to farmers who visit the clinic

before sowing the crops. In special cases field visits are also arranged to assess the actual cause of the plant disease. Based on the receipt of samples, the clinic is also authorized to issue press releases during the period of disease outbreaks.

From the above one thing emerges very loud and clear. The farmers have to travel all the distance from their homes to the PAU or nearby regional centre to seek advice and carry plant samples for diagnosis and treatment. It is just possible that on that particular day the expert may be busy else where or on tour or on leave in which case there is no alternative but to come on the next day if it is already not a holiday.

Further, as an organization, the University has to remain closed on week end and other holidays declared by the state including scheduled and un-scheduled ones. Also, a farmer may not be able to ask all the information in one go and must have to make more trips for further clarifications and providing feed back to the experts.

This is exactly where information and communication technology (ICT) can be gainfully employed for a variety of services. *Kiosks or information centres* can be established with Internet connectivity through multilevel networks at block or sub-block level to begin with and ultimately one for every village. (India has 70,00,00 villages and 5500 blocks out of which 12428 villages and 138 blocks are in Punjab). After attaining the full-level of services, they will act as virtual extension counters not only for agricultural related services but also for host of other purposes like e-learning, e-commerce, e-health and most importantly for e-governance. Such centres will not only overcome the constraints of distance, commonly called geographical barrier, but also be free of time and holidays limitations or the 'dealing hand out for fishing' syndrome.

Some of the common services relating to different areas can be listed as follows.

3.2 Introducing ICT based services in rural Punjab

E-Agriculture

- A query can be e-mailed to the concerned experts whose lists can be compiled and maintained independently without the necessity of its knowledge to the farmer using list serve.
- An on-line chat can be arranged to take counsel with a particular expert.
- Diseased or affected plant samples can be shown to the experts thorough web cameras for at least preliminary diagnosis and treatment so that they need to be carried to the plant clinic only if absolutely essential.
- Live demonstrations of new technologies can be web cast for the benefit of farmers to be watched sitting in their nearby centres.
- Training / workshop announcements can be made available for inviting applications which can be received through e-mail or other Internet technologies.
- Regular training programmes can be planned on-line extending the class-room to the centres and can be made interactive for answering questions and remaining doubts.
- All the literature like bulletins, packages and periodicals can be made on-line, or off-line through CD ROM's.
- Information regarding various subsidies on farm equipment, biogas plants along with list of manufacturer and different vendors can be made available on-line / on-CD ROM.
- CD ROM's can be used for technology demonstrations and vocational skills like bee-keeping, mushroom cultivation, tractor repair and maintenance, bed farming, solar devices, etc.
- Availability of seed for a particular variety of seed and inventory of pesticides and fertilizers can be updated and

will extensively cover the rural and urban areas in due course. The citizen shall be able to avail of such services at a reasonable distance. Moreover the government shall be able to serve the people 7days a week and 24 hours a day. The concept of these kiosks is described in the following paragraph.

3.3 The concept of Kiosks or Information Centres

A kiosk is essentially a free-standing PC that provides information to the public through a multimedia display and interaction (Figure 1). These will become a common way for government and other service agencies to make available services to the citizens who do not have their own PC's or Internet access.

Figure1: Context diagram of a Kiosk or information Centre

In India about 70% of the population is spread over 0.7 million villages, some of them being situated in remote areas without any direct acres by road, etc. Establishment of such centres will be like opening a window for them to the rest of the world. However, the requirement of services for them may differ from that for the urban population in type and level the demand for the city population will by more of vertical (high end) than horizontal (low end) nature for the rural populace. These kiosks can be located at block, sub-block or village cluster level with easy access for all and may be run and managed by private entrepreneurs with back-up support for software, content development and other technical advice and expertise. These

centres will also become interface points for e-governance, e-education, e-commerce, e-health, e-agriculture, etc. To make such centres economically viable, they have to provide multple services. Apart from Internet and purely IT related services, they may also impart training, take up repair and maintenance of electrical and electronic equipment or provide data processing services to schools and panchayats for preparing examination results and accounting, etc. The integration of these services will also enhance the local employment potential apart from economic consideration.

Such centres can have a wide choice of multi-purpose activities and can act as:

- Information windows (Exchange information on Govt. schemes, agricultural commodities and health, education and employment, legal and political issues, self employment opportunities, technology, announcements, information collection, periodic surveys, etc.)
- Training centres (Conducting training and skill development on computer operation, Internet, office automation, computer installation and maintenance, repair of electronic audio and video equipment and electrical and household appliances, supporting institutional training in schools and colleges, rural banks, SC/ST training schemes, panchayats and other elected bodies, women organizations, etc.), or service centres (e.g. Internet and e-mail communication centre), documentation preparation and transfer, data processing or service centres for computer hardware, electronics and electrical items.

Each centre's choice of activities will be flexible and will be based on local demand. Depending upon competence and capability, financial resources and infrastructure available, a good mix from activities indicated above can be chosen for profitable working of a particular centre.

Through these information centres, Panchayats can become very effective carriers of IT to rural area. CD-based applications can

be used for training panchayats, Govt. and NGO functionaries, health and agriculture extension workers, etc. Depending on connectivity, they can be up-linked to district and state resource centres (websites) also. All on-going developmental programmes in the area of literacy, education, material management and drinking water availability can be linked. They can also act as guidance and counseling centres for promotion of knowledge-based enterprise and developing knowledge workers (A knowledge worker is a person who is involved in collection, access, analysis and manipulation of information). Such workers can prove to be a great support for local economy and employment generation. For development, these centres will become authentic data. collection and information dissemination points including issue of warnings and announcements of epidemics, natural colamities and special programmes.

The economic viability of Kiosks across the region of Punjab can be discussed as follows. According to empirical data gathered by the All India Society for Electronics and Computer Technology (AISECT) from its 2500 such centres working in 24 states in the country, a medium category centre can be viable already today. Each such centre typically gives employment to 3-4 persons as follows:

- Centre Incharge, most of the time the entrepreneur himself.
- A 10+2 youth having software background.
- A multi purpose electrical / electronics hardware mechanic (ITI / diploma pass)
- A general purpose assistant.

4. Conclusions: Implementing ICT in India as a Long-Term Project

In the first section of this chapter, we discussed some general issues which affect *IT education in India*, and we have suggested new approaches to cater for changing needs. The second section described the specific application of one such approach to the *needs of the Punjab*, supplying a vision for innovative uses of IT

Citation of AISECT in Social Entrepreneur of the Year India 2010

Published in 2010

Santosh Kumar Choubey

AISECT

www.aisect.org

Finalist - Social Entrepreneur of the Year 2010

AISECT has pioneered a model of ICT-based education in rural India that has opened up entrepreneurship and new employment opportunities for more than 1 million rural youth in their local eco-systems.

Focus

Rural Technical Education and Vocational Training, Livelihoods and Entrepreneurship Creation.

Background

In the context of the Indian sub continent technological progress is extremely disparate. Metros and other major urban centers have charted unprecedented growths owing to their ability to attract investment, technology and manpower to build the modern ICT sector (Information and Communication Technologies). In stark contrast is the situation of rural and backward areas.

Innovation and Activities

Founded by Santosh Kumar Choubey, the AISECT model, based in Bhopal, responds to the indefatigable demand from rural youth for technical and vocational education. Over 25 years, AISECT has emerged as a profitable rural education franchise model with 8000 education centers in 27 states and 3 union territories. The network of AISECT franchisees, a chain of rural education entrepreneurs, cumulatively employ 32,000 rural knowledge workers in their centers from their local communities.

100,000 students graduate from AISECT centers every year with training in any of the 100 courses available. 50% of AISECT's students come from the most backward districts of India, availing scholarships of upto 50% of their course fee. All curriculum and teaching-learning material developed by AISECT are in regional languages. More than 80% of the AISECT graduates are then placed by AISECT centre owners in best-fit local jobs.

To maximize the operations of ICT centers at the district, block and panchayat levels, AISECT franchisees that are not under the CSC scheme of the government have converted their education centers into multi-purpose service stations, thereby linking their local communities to government services and development schemes.

As an extension of its goal of developing knowledge capital among rural youth and creating high quality rural education infrastructure, the AISECT team has set up a private university in Bilaspur (the first in the country to be set up in a backward tribal district of Madhya Pradesh). It will soon launch the country's first rural employment portal service.

The Entrepreneur

Santosh Kumar Choubey, Chairman and Founder, AISECT & Chancellor, Dr. C.V Raman University, heads the organisation in its entirety and controls its centralised functioning, policy planning initiatives and strategy for the organisation. He comes from an Engineering background and was also selected into the Civil Services which he gave up to set up AISECT, today an,8000 strong franchisee centre network which has educated over 10 lakh students across 27 states of the country.

Citation of AISECT in Bihar Innovation Forum

Published in 2014

IMPACT

The project has imparted the following tangible benefits in the districts and blocks of intervention -

- Information empowerment of target communities
- Rural competency development
- Rural Employment creation
- Rural Household income increase
- Rural empowerment

AISECT plans to establish more field level training cum service delivery centres and provide government funded or subsidised training opportunities to rural youth and women.

ABOUT THE INNOVATOR

AISECT was established in 1985 as an IT Training and Educational services network with a spread of over 8000 franchisee centres across 27 states and 3 Union Territories in the country. AISECT's mission is to reach out to the remotest corner of India and promote ICT based training and services to empower people, generate employment for the youth and unfold entrepreneurship based initiatives to create an inclusive society. AISECT is primarily engaged in the areas of skill development and training, development of models and teaching methodologies to strengthen the education sector across semi urban and rural India.

AISECT centres will act as a service delivery outlet for providing financial inclusion solutions, delivering ongoing e-governance services, provision of ICT enabled B2C services like e-rail ticketing, DTH recharge, mobile recharge and more. It plans to establish more field level training cum service delivery centres and provide training opportunities to rural youth and women.

ICT BASED SOLUTIONS

All India Society for Electronics and Computer Technology

INNOVATION **IMPACT** **INNOVATOR**

ABOUT THE INNOVATION

Rural and semi-urban areas lack awareness about Information and Communication Technology (ICT) in education and development. One of the main reasons for this is the poor accessibility of ICT enabled services at the rural community level. This leads to an absence of resource support for sustainability of ICT enabled services.

Keeping this in mind, All Indian Society for Electronics and Computer Technology (AISECT) proposes to establish 10 ICT enabled Training cum Service Delivery Centers in ten blocks, mostly in backward, remote and rural areas of Bihar. These centers will be engaged in providing skill development and training opportunities for the youth. Besides this, they will offer various types of training and services like placement linked skill development, capacity building for setting up enterprises under various ongoing government schemes and conduct of entrepreneurship development programmes. These centers will also act as a service delivery outlet for providing financial inclusion solutions, delivering ongoing e-governance services, provision of ICT enabled B2C services like e-rail ticketing, DTH recharge, mobile recharge and more.

This model is proven and has evolved as one of the most sustainable and scalable solutions for rural and semi-urban areas. The centre established for the communities, is managed by enterprising youth from the community and supported by AISECT with its reputed and experienced national level network.

FICCI Report on Employer Led Models of Job Creation - Mention of AISECT

Published in 2018

Grassroots Based Models

AISECT

Organization: Snapshot

Established in 1985, AISECT has been working towards bridging the skill and ICT gap between urban and rural India and creating local opportunities for the rural youth. Focused on creating an inclusive society, AISECT has been untiringly reaching out to the remotest corners of the country to empower people, generate employment for the youth and unfold entrepreneurial initiatives.

Organization has PAN India presence of 20,000 centres across 29 States and 3 Union Territories, 10 State offices and 30 regional offices. It has created entrepreneurial driven network present at the district (388), block (1070) and Panchayat (6000) levels and has generated more than 15,000 rural entrepreneurs with an annual income ranging from Rs. 2 lakh to 1 crore.

AISECT group has around 1600 employees and 15000 entrepreneurs in the network. These entrepreneurs in turn provide job opportunities to 9-10 people at their centre. Hence, the entire network of AISECT has created jobs for more than 1,50,000 people.

The pivot of the entire AISECT model is the rural entrepreneur who sets up a center of his own in his locality. AISECT works tirelessly in identifying and honing entrepreneurship skills of these Rural Entrepreneurs. All the projects of AISECT reach the ultimate beneficiaries through the strong network of these centers.

Growth Plan

AISECT group is growing at a very fast pace both in terms of geographies and the offerings and services to its stakeholders. The skills initiative of AISECT is rapidly expanding and scaling up in new geographies especially in southern and north eastern part of India. It has established new universities in Bihar and Jharkhand and is planning to open 2 more in Odisha and Assam. Organisation has also increased its online services portfolio, AISECT Online is becoming a strong platform for providing both B2C and G2C services.

Fino Paytech

Organization: Snapshot

Fino Paytech is a business and banking technology platform combined with an extensive services delivery channel. As an alternate banking channel, Fino Paytech enables seamless end-to-end customer sourcing and servicing. Company's network is spread in 499 districts across 28 states of India. It has a total of 28000 banking points or CSPs in these states, and hence generating employment for 28000 people. Business correspondent services of Fino Paytech enable banks to financially include the underserved and unserved rural masses, by offering a bouquet of financial services like savings, deposits, insurance and remittance through a pan India network of CSPs.

Growth Plan

Fino Paytech started with 17 employees in year 2006 and has reached to 3500 employees in the span of 12 years with operation-spread pan India. It started its business with the aim of using technology to enable financial inclusion. Company has also developed an extended consulting arm on payment technology offerings, software and hardware assets for different business requirements. It has established a payment Bank in 2017. It raised INR 400 crore for its payments bank with oil major BPCL investing INR 251 crore, helping it to reduce its foreign shareholding.

Organization has around 28000 CSPs across India generating employment for 28000 people in the remotest corners of our country. Other than this indirect employment, company has around 3500 professionals on its payroll. These professionals are hired through campus placements and referrals. It aims to continue with the expansion and is expected to engage 5000+ more professionals in coming 2-3 years.

Fullerton India Credit Company

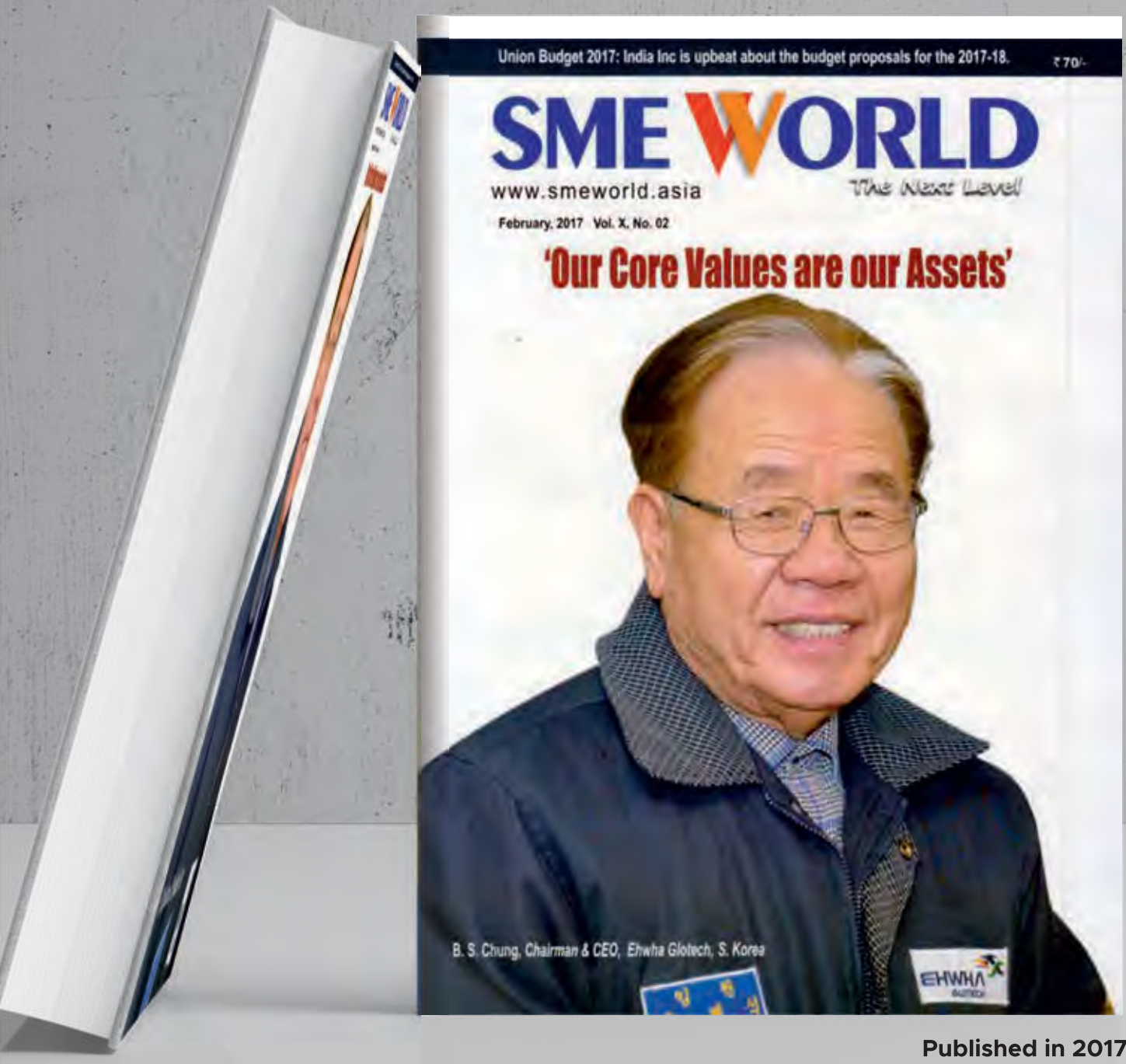
Organization: Snapshot

Launched in year 2007 and headquartered at Mumbai, Fullerton India a Non Banking Financial Company and is spread across the country's broad financial landscape, with a network of over 526 branches and serving over 1.5 million customers. The primary services of Fullerton constitute financing of SME for working capital and growth, loans for commercial vehicles and two-wheelers, home improvement loans, loans against property, personal loans, working capital loans for urban self-employed and loans for rural livelihood advancement, rural housing finance and financing of various rural micro enterprises.

There are close to 10500 employees on the payroll of Fullerton India. For their commitment towards their employees, it has been recognized by various industry awards like Golden Peacock for HR Excellence, a top ranking in the Times Ascent "Dream Companies to work for."

Fullerton India's rural business operates under the brand name of Gramshakti. Operations of Gramshakti are spread

Mention in SME WORLD 2017



Published in 2017

"The budget for the first time addressed well being of the nation by changing health centres to well being centres and this is good sign for the health and fitness sector in general and sports in particular. Recognition is the first step to trigger change. Also a further boost on skilling is welcome if we have to create jobs to effect transformation in sports outcomes." - **Chirag Patel**, *CEO - KOOH*

Sudarshan Motwani,
CEO, BookMyForex

The only one thing that will impact fx market is the clarity by Finance Minister that there will be no tax on long term capital gains. This will stop the flows by FIIs and hence will cool the USD-INR rates. However, there can be capital outflows due to debt market with interest rates coming down in India and the expectation that those will firm up in US

USD - INR pair that is tat is trading at 67.61 down from highs of 68.25 just a few days back should stabilize between 67.7 to 68.2 range.

Rajeev Dimri,
Leader, Indirect Tax, BMR & Associates LLP

No major indirect tax related announcements are in line with the general expectation as the nation is on the verge of transitioning to GST. Keeping the service tax rate unchanged and withdrawal of R&D cess are welcome and pragmatic decisions at this juncture for boosting economic growth of the country. R&D cess withdrawal in particular will encourage import of technology and compliments the Make-in-India campaign.

Reassurance that the government is up to speed on GST implementation work (including IT preparedness) is good news. Also, commitment to initiate GST awareness / orientation for businesses starting next fiscal, reaffirms the collaborative and inclusive approach of the Government to effectively implement GST.

Alok Mittal,
An active angel investor & Co-founder, Indifi Technologies

The enhancement in PM Mudra Yojna and the rebate on corporate tax for MSMEs are welcome measures, which will help drive growth in the segment. Announcements of schemes on cash-back for merchants to promote digital transactions and Aadhar based POS will help MSMEs create a transaction trail that starts to improve their creditworthiness.

Vidushi Daga,
Founder and Director of Clone Futura Education

Although the focus on skill development and implementation of quality education parameters by introducing the practise of measuring annual learning outcome in schools is a very good move by the government, but the main concern is that the entire focus was only on higher education. The base of having a systematic and future oriented education system can only be implemented by building a good platform for teachers to learn. Next is if the primary education system is not moulded, then eventually it is going to affect the higher education sector as well. There should have been focus on how digital education can be provided to the primary school students and teachers by providing some special counselling/awareness about cyber safety, latest trends in technology and education modules etc. All in all the budget does look promising when it comes to rural development, higher education and tax benefits but there could have been a better focus on the overall education sector.

Varun Rathi,
COO & CO-founder of Happay

This budget is meritorious & stands to benefit all. The government is working more like a startup & is quick to introduce incentives & continual iterations to ensure mass adoption, much needed for the large population sitting on the fence. On one hand, 5% tax rebate for SMEs is a great incentive, limiting cash transactions to 3 lacs is a strategic move. It will not affect the regular transactions.

Priti Shah,
CEO of Paynear Solutions

According to the budget, 20 Lakh POS machines will be deployed this year. *This is a great move and encouragement to fintech companies to play a big role in the eco system to digitise India. Paynear is keen in having decent market share and plans to deploy more than 1.5 lac devices this financial year.*

Sameer Grover,
Founder and CEO Crownit

Overall the budget is pro-entrepreneurs which will help create jobs in India, hire skilled talent at low cost and also improve industry output. Two specific highlights of the budget which particularly enthuse me are i) easing of tax for India based funds and FDI/FIPB changes- this will give a big boost to early stage start-ups and ii) tax exemption for startups, now that's a big support to the Indian start-ups.

Siddharth Chaturvedi,
Director, AISECT

I hail the Government's decision of opening 100 international skill centres. Work is already in progress to map India skills sector to international skills sector. For example, there is already equivalence in skills in India and the UK. These 100 international skills centres will go a long way towards providing skilled manpower for the international skills market. Most candidates who go overseas do so without a skills certificate. The launch of these centres will be a good step to make sure that all the labour going out of the country will be certified labour.

As far as the provisions that the Government has made for rural India are concerned, I think it is high time for the Government to focus on rural India as most of our country's population lives there. The fundamental infrastructural changes related to road, housing and electricity in rural areas proposed in the Union Budget, will go a long way to improve the quality of life in rural India. Moreover, the Government's focus on quality skills in rural India will help rural areas break away the employability barrier that currently exists because of lack of quality skills-based education in those areas.

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Mention in SME WORLD 2019

Published in 2019

kill & ICT Gap

AISECT is India's leading Social Enterprise working in the areas of Skill Development, Higher Education, Financial Inclusion and other ICT based services to bring about inclusive change in the semi-urban and rural areas of the country. Established 1985, the organization has been working towards bridging the skills and ICT gap between urban and rural India and creating local job opportunities for the rural youth. AISECT has been untiringly reaching out to the remotest corners of the country to empower people, generate employment for the youth and unfold entrepreneurial initiatives.

With a pan-India presence through 23,000 Skill Knowledge Provider Centres across 29 States and 3 Union Territories, 10 State offices and 30 Regional offices, AISECT has gradually built its network at the grassroots level. An ISO 9001:2008 certified organization; AISECT's initiatives are targeted towards all categories of people from the community – school students, graduate program students, office goers/job holders, working women, housewives, Below Poverty Line Youth, Panchayati Raj Institutions, Parent Teacher Associations and Government Departments.

Entrepreneurial Network

The self-sustainable and scalable AISECT model reflects the demand side of communities for various skills and ICT services required in the unorganized sector. It is today India's biggest entrepreneurial network in semi-urban and rural areas with more than 15,000 rural entrepreneurs across 388 districts, 1,070 blocks and 6,000 panchayats who have an annual income ranging from Rs. 2 lakh to 1 crore. Furthermore, the organization has so far successfully trained over 20 lakh people, created employment opportunities within the network for more than 75,000 people and empowered the lives of over 50 lakh people through innovative services.

Pioneering the 'Multipurpose Centre' Model, AISECT utilizes the infrastructure of its existing Education Centre to offer numerous services including skill development, capacity building, information window, maintenance and repair, sale of allied products and services, e-Governance, banking and insurance services, etc.

In its endeavor to uplift and empower the rural and semi-urban masses, AISECT has introduced a series of path-breaking innovative solutions. These include:

Vocational Education: In association with the National Skill Development Corporation (NSDC), AISECT has set-up 12 academies based upon the opportunities in the job market and the value of such employable skills to the growing workforce. These academies offer low cost, high quality teaching through university certified undergraduate, postgraduate, certificate and diploma courses in areas like IT & Management, Hardware & Networking, Teacher Training, Telecom Skills, Retail Management, Agriculture, Insurance, Banking & Finance, Textile Training, Fire Safety & Security, Livelihood & Vocational Training and Auto Skills.

Pioneering the 'Multipurpose Centre' Model, AISECT utilizes the infrastructure of its existing Education Centre to offer numerous services including skill development, capacity building, information window, maintenance and repair, sale of allied products and services, e-Governance, banking and insurance services, etc.

Skill Development: Spearheading skill development and capacity building initiatives of the Central & State Governments, AISECT's key projects include Pradhan Mantri Kaushal VikasYojana, SarvaShikshaAbhiyan, Swarnjayanti Gram SwarozgarYojana (SGSY) etc.

Online Education: For AISECT's endeavors to support the Skill India and Sarva Shiksha Abhiyan movements, aisectmoocs.com was established as India's largest free online open learning platform. In association with Ireland-based ALISON, AISECT offers inclusivity in education by giving students in the remotest corners of the country easy and free access to world-class course curriculum with over 2000 free certificate/ diploma courses available in both English and Hindi..

Higher Education: The AISECT Group has established several premier higher education institutions at locations which were in dire need of quality higher education institutions. In 2006, the Dr. C.V. Raman University was established in Bilaspur, Chhattisgarh as Central

India's first private university and over the years it has empowered thousands of students with industry-oriented skills. AISECT University was established in Bhopal in 2012 as India's first skills university.

AISECT School Services: 'Eduvantage PRO', a low cost, bilingual multimedia solution for students from kindergarten to class 12, aims to make quality interactive education accessible to every school across India.

Early Childhood Learning: In 2014, Brainy Bear Pre-School & Activity Club was launched to address the problem of lack of fine pre-schools meeting the educational requirement of young minds in the small town and district level areas.

Placement: Focused on bridging the demand and supply gap in the job market, AISECT has established India's biggest rural job portal, Rojgar Mantra. Rojgarmantra.com is a one-of-a-kind job portal focused on providing relevant employment opportunities and related services to the job seekers while at the same time providing a medium for employers to recruit suitable skilled and unskilled manpower.

Financial Inclusion: AISECT works as a Business Correspondent under the financial inclusion scheme wherein it has set up over 4,000 banking kiosks in association with 26 nationalized banks with 75 lakh accounts opened so far and transactions worth Rs. 5000 crores. The organization has also initiated mobile ATM services in partnership with its banking partners.

AISECT has also tied-up with renowned insurance providers such as SBI Life to provide renewal premium collection services through its banking kiosks. The organization is also conducting financial literacy programme in the states of Madhya Pradesh and Chhattisgarh for rural adults, especially women, as per its partnership with CSC SPV and National Bank for Agriculture and Rural Development (NABARD).

e-Governance: AISECT's prestigious Common Service Centre Project, under the Government of India, was a resonating success and led to the establishment of 2,926 CSCs in Madhya Pradesh, 1,487 in Chhattisgarh and 585 CSCs in Punjab. Apart from AISECT's core education, training & B2C services, these CSCs provided services under schemes like Jan Sunwai Kendra, Farmer Registration, PFRDA, MP Online, National Population Register, MNREGA, PAN Card as well as Suvidhaa Online. The AISECT CSCs in M.P., Chhattisgarh and Punjab also functioned as the permanent UID (Aadhar) Card Enrolment Centres.

AISECT has won numerous awards and recognitions at national as well as international platforms. Recognized as the "the most sustainable and scalable form of IT penetration & popularization in India" by the World Bank-IIM (A) Joint Report, AISECT's achievements and innovative initiatives have also been acknowledged by UNDP and Sitaram Rao Livelihoods Asiain the form of case studies.

B2C Services: AISECT has also initiated concentrated efforts to offer various B2C services such as mobile and DTH recharge, examination form download and submission, railway ticket booking, data entry operations, etc.through its widespread network of centres so as to make such services more accessible to the common man.

Awards

AISECT has won numerous awards and recognitions at national as well as international platforms. Recognized as the "the most sustainable and scalable form of IT penetration & popularization in India" by the World Bank-IIM (A) Joint Report, AISECT's achievements and innovative initiatives have also been acknowledged by UNDP and Sitaram Rao Livelihoods Asiain the form of case studies. The organization has been a recipient of prestigious awards like the Schwab Foundation's Social Entrepreneur of the Year Award instituted by the World Economic Forum as well as the Ashoka Senior Fellowship for AISECT's Chairman & Managing Director Santosh Choubey, Indian Innovation Award, Manthan Award South Asia & Asia Pacific, SKOCH Corporate Leadership Award, NASSCOM ITInnovation Award, Asian Forum i4d Award, ASSOCHAM Excellence in Education Award, NASSCOM EMERGE 50 Leader Award, Golden Icon National e-Governance Award, TiE-Lumis Partners Entrepreneurial Excellence Award, World Education Summit Award, eGov India Award, Inc India 500 Award, Best Practice Recognition Award by the National Skill Development Corporation (NSDC) etc.

Siddharth Chaturvedi

Skill Development Key to Jobs Creation in Semi-Urban and Rural India

A country's economic policies and strategies are the precipices for its bloom. A successful economic strategy would always put tremendous faith in people and prioritize fostering the skill-set of workforce thereby reducing the cost of doing business and making available the resources, which any business needs to thrive in today's competitive and globalized world.

The Challenges

In our current atmosphere of prevailing unemployment and frail jobs infrastructure, there are several factors that have obstructed businesses and individuals from growing faster. One such factor is the shortage of appropriately skilled workforce. This becomes especially relevant in non-metropolitancontext where most of the junior level workforce ranks are filled by people with little or no formal training in their respective fields. Recruiters simply can't find properly skilled job-seekers to fill these vacancies. The country that once gained global appreciation as an attractive outsourcing destination is struggling hard to overcome its skilled workforce woes. India's available workforce is the second largest in the world after China. But there is a huge mismatch between the jobs that are available and the workers that are out there.

AISECT is established on a self-sustainable, scalable model under which our ICT-based centres are used for a variety of educational and developmental activities including skill development programmes and job placements. So far, we have successfully trained over 20 lakh people under various self-engineered and government-linked skills development initiatives, created employment opportunities within the network for more than 75,000 people and empowered the lives of over 50 lakh people through numerous innovative services.

In order to find a solution for these problems, we must first understand the major reasons behind skills-lag in our workforce. Every year, approximately 12 million new job seekers enter the market while our current skilling infrastructure can handle a maximum of 3.1 million entrants. Language is another great barrier as some workers, despite being informally but adequately skilled in their field of work, don't pursue formal accreditations due to lack of proper language literacy. Also, our rural understanding hardly accepts skills-based training as education. We must create awareness in every nook and corner of the country that skill development of aspiring job seekers is crucial and at par with formal education. Our nation has a large chunk of population that is below 25 years of age and most of them are based outside metro cities. If we tread systematically, this gigantic youth can be effectively transformed into a productive workforce who could bestow the Indian economy with a massive edge which it desperately needs.

Devising Workable Solutions

We must draft suitable solutions to these challenges in our policy-making; solutions that suit the interests of all parties concerned – people, industries and the Government. Migration to metro cities is a visible trend among rural and semi-urban populations, but

In our current atmosphere of prevailing unemployment and frail jobs infrastructure, there are several factors that have obstructed businesses and individuals from growing faster. One such factor is the shortage of appropriately skilled workforce.

most of them migrate unwillingly, in an absence of feasible job infrastructure in their vicinities. To overcome this, we must develop a whole new system where fresh opportunities are created for people at district and sub-district levels. Recognition of Prior Learning (RPL) is an ambitious scheme in the pipeline, under the NSQF framework, which accredits the skills of workers who have gained them through experience in informal sector. RPLwill provide proper certifications and gradations to this workforce upon clearing certain assessments. Though functional at some levels and under process in others, a full-fledged implementation of RPL as soon as possible would help us to bring our massive informally skilled workforce into the mainstream.

On the part of industries and businesses, they must be open to hiring people based on their skills expertise and qualifications. Most of the businesses judge candidates on the basis of their formal degrees and performances in formal sector. The Industry must break the trend and also welcome people on the basis of their skills competitiveness and informal sector experience.

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AISECT's Initiatives

Addressing the above challenges, AISECT has emerged as one of the leading players in the sphere ofemployment-linked training and job placements across the country. We are working tirelessly to bring about an inclusive change in the semi-urban and rural areas of the country with our pan-India presence of 20,000 Skill Knowledge Provider and Services Centres at grassroot levels. Ever since our establishment in 1985, we have been reaching out to the remotest corners of the country to empower people, generate employment for the youth and unfold entrepreneurial initiatives. Our decades-old strong belief in skilling people for overall progress has been reaffirmed by the Government of India's recent emphasis on 'Skill India' and 'Make in India'.

AISECT is established on a self-sustainable, scalable model under which our ICT-based centres are used for a variety of educational and developmental activities including skill development programmes and job placements. So far, we have successfully trained over 20 lakh people under various self-engineered and government-linked skills development initiatives, created employment opportunities within the network for more than 75,000 people and empowered the lives of over 50 lakh people through numerous innovative services. We launched India's first skills-based university, the AISECT University, to lay special focus on cognitive skill development of the future workforce.

In 2013, we established India's biggest rural job portal RojgarMantra.com, which focuses on bridging the demand and supply gap in the job market. It is a one-of-a-kind job portal focused on providing relevant employment opportunities and related services to the job seekers while at the same time providing a medium for employers to recruit suitable skilled and unskilled manpower. AISECT regularly organizes 'RojgarMelas' or job fairs to link rural job seekers with employers in their region.

Bottomline

Our country has a long way to marchin order to reach a level at par with developed nations in terms of jobs infrastructure. We must understand that the way forward for jobs in India is wholly linked with skill development and capacity building of those seeking jobs. There is a huge scope of generating massive skilled workforce in our country and active involvement of both the Public and the Private sectors will act as a backbone to it. A skilled workforce in an amicable job environment would act as a formidable foundation for our economic development and we must continue to make well-thought and well-intentioned strides towards such a system for our mutual prosperity.

-Siddharth Chaturvedi is Director, AISECT.

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Mention in Higher Education Review

Published in 2017

DIRECTOR'S INSIGHTS

BOON, NOT BURDEN: HOW SKILL DEVELOPMENT INITIATIVES ARE TRANSFORMING INDIA'S MASSIVE MANPOWER INTO AN IMPRESSIVE WORKFORCE

By Siddharth Chaturvedi, Director, AISECT

Despite being blessed with one of the largest youth populations in the world, our country is struggling to channelize this strength in the right direction to ensure economic growth and an overall development of the nation. We have set up a large number of higher education institutions and are constantly trying to increase the number and quality of these. But as we grow swiftly to become the world's youngest nation by 2022, how do we use this huge reservoir of employable youth to our country's advantage? The answer lies in developing their competencies and skills so that they are fit for the diverse market needs.

The Need for Skills

The Ministry of Skill Development and Entrepreneurship (MSDE) has been created to put special emphasis on skill development of the country's present and aspiring workforce. Critics of skill development policy claim that it is a slow and uncertain process for achieving the target Human Development Index; but they must understand that there is a visible gap in our very basic jobs infrastructure in terms of jobs that are vacant and the workforce that is available to fill in these vacancies.

There are numerous positions that are left unoccupied in our private-owned industries due to an absence of rightly skilled candidates. Youth, under the absence of awareness, would pop-up at interviews with just their regular degrees; get rejected and blame inability for their rejection. This gap is especially critical in rural and semi-urban areas, which are the last to absorb latest trends in the market. These clusters hold the majority of our youth, who need to be communicated about the exact demands of industry, and be prepared accordingly.

Siddharth Chaturvedi

Siddharth handles the functioning of the 12,000 centre network, strategy for expansion and business diversification. He also handles financial strategy for the AISECT Group and is a part of the Governing Body and Board of Management of Dr. C. V. Raman University and AISECT University. He holds a Bachelors degree in Electrical Engineering from NIT Bhopal and an MBA in Marketing and Finance from the prestigious S.P Jain Institute of Management and Research, Mumbai.

The Role of Right Kind of Education

Many would agree that a sophisticated education system with world-class facilities at our campuses is a practical option to provide our students with employable exposure. But in my opinion, an enhanced &industry-relevant course curriculum in higher education, supplemented by a proper induction of vocational education & employability-linked training is what we need desperately. But as we progress deeper into the 21st century, it is not merely the intent and direction of initiatives that matter; the velocity with which these initiatives are spread uniformly will determine the overall success. Thus, it is imperative for UGC to pay heed to skills and mandate compulsory vocational education programs, along with regular education curriculum, across all higher education institutions pan India.

The Role of Private Training Institutions

On the part of skilling our work-ready manpower, we have attained significant velocity in terms of training initiatives. Various private and public organizations have been assigned the role of implementation agencies for the Central Government's 'Skill India' ambitions, and the work progress so far in three years can be termed satisfactory. An extensive index of region-relevant skill development courses has been laid down. Students are free to choose from this vast variety of options to suit their career choices. The inability of rural people to pay fees for formal skilling courses has been solved to some extent as most of these programs are entirely sponsored by government enterprises. Flexible timings are being adopted for training so that people can work and learn simultaneously. Moreover, people who are already employed in informal sectors can demand higher wages post- training on account of their enhanced skills competence.

As a result, expanding industries like rural marketing, telecom, BFSI and hospitality, which require the skilled workforce to fill their vacancies, are now recruiting from this freshly skilled youth, providing them with livelihood options in their vicinity. People working for traditional industries like bangle-crafts, handicrafts, textile and many more can especially benefit from skill development initiatives, as this way they get to learn the best practices from around the world in their field of work. Even when migrating to cities, the workforce that once got nothing more than meager wages is now able to earn worthy incomes because of their formal skills qualifications. These initiatives, if carried forward correctly, are leading us to a herald of a whole new system of economy that will be robust, more decentralized and based on a knowledgeable workforce.

The public-private partnership in establishing training centers has turned out to be a successful model, as one party provides the required investment and the other compliments it with expertise and execution. As a testimony to its success, more and more people are attaining jobs, and promotions in their jobs, post acquiring skill certificates. It is safe to conclude that Skill Development Initiatives are a far-sighted formula to resolve our country's employment troubles. With constant efforts and careful steps, the day is not very far when India would be respected as the Human Resource Capital of the world and Indian workforce will be a force to be reckoned with, both domestically and internationally. HER

DIRECTOR'S INSIGHTS

WHY IS DIGITAL LEARNING THE RIGHT WAY TO BUILD OFFLINE SKILLS: THE PROSPECTS OF ICT IN OUR EDUCATION SYSTEM?

By Siddhartha Chaturvedi, Director, AISECT

Information and Communication Technologies (ICTs) are the upcoming pioneers in the transformation of the Indian education and skill development sector. Significant innovations in the field of ICT are creating ample opportunities for educationists to utilize them for the betterment of learning system as a whole. Till the mid-2000s, it was not a common sight in India to see schools and higher education institutions having televisions and film strips on their premises. Even if they had such infrastructure in place, it was usually confined to a separate audio-visual room.

But, these days, teaching and learning have been enhanced by numerous ICT based technologies and tools like interactive radios, teleconferencing, web-based and satellite-based services, etc. ICT-based technologies are a convenient way to access a plethora of database using various resources and multiple perspectives, thus fostering the authenticity of learning in such environments. In recent years, the prosperity of ICT tools in the education sector is evident and looks set for continued elevation in the future.

However, the major roadblock in the successful realization of this dream is the Digital Divide – the existing gap between rural and urban technological reach. This implies that introduction and integration of ICT tools at different levels of the education system is the most challenging undertaking. It requires the immediate and immense attention of educationists across the country and central-state governments to try and fill this void by all possible measures at hand.

The biggest beneficiaries to an 'ICT in education and skills development' boom would be populations which have been traditionally devoid of high-class exposure — scattered and rural populations, groups traditionally excluded from education due to cultural or social reasons such as ethnic minorities, girls, and women, people with disabilities, the elderly, as well as all others who for financial reasons or because of time constraints are unable to enroll for regular campus programs. One defining feature of ICTs is their ability to transcend time and space and deliver data almost anytime, anywhere. ICTs have made 'asynchronous learning' possible, or in other words, a learning characterized by no time and distance lag issue between the transmission of guidance and its reception by targeted learners.

For instance, a person who works five hours a day in peak morning hours may not be able to join a regular education or skills-based program but can readily access scores of data available on a single touch of his phone. Secondly, ICT-based technologies provide a handy access to tons of remote and rare data to educationists, instructors and learners alike. They no longer have to rely solely on printed books and other materials in physical media housed in libraries (obtainable in limited quantities) to meet their knowledge-bank demands. This set-up is especially very useful for not-so-privileged sections of our population who lack a world-class exposure to education and skills.

Apart from this, ICTs are hugely contributing to making Indians more work-ready. One of the most regularly heard statements in criticism of digital education is that it does not provide practical skills required to excel at a workplace. Quite contrary to that, in reality, an ICT based learning ecosystem provides its learners with the first-hand manual on the usage of various ICT tools which are certain components of a workplace in the twenty-first century. Along with that, it inculcates functional, scientific, technological, and cultural skills literacy in its learners.

> In recent years, the prosperity of ICT tools in the education sector is evident and looks set for continued elevation in the future

A variety of skill development programs, both practical and theoretical, are available these days, which are precise and cater to varied learning capabilities of students. This provides an extra edge to digital learning as every individual can customize the program to suit his learning and understanding capabilities. With all the convenience and resources at hand, learners are increasingly finding it easier to educate themselves with such programs. There is a dire need to develop, standardize and accredit digital learning programs in concurrence with formal learning courses. We must understand this potential and work together towards achieving this mutual goal.

In the relatively brief history of ICT use in Indian educational and skill development space, it can be deduced that it is not about providing the best of technology; it is more about providing the best of technological utility. In other words, ICT-based learning must be instituted in lines with the existing Indian technological background. It should be made more useful to sections that are untouched by standard exposure available to the urban populace. Only then can ICT fulfill the bright prospects it brings for the Indian educational and skills development system. HEB

Siddharth Chaturvedi

Siddharth Chaturvedi handles the functioning of the 12,000 centre network, strategy for expansion and business diversification. He also handles financial strategy for the AISECT Group and is a part of the Governing Body and Board of Management of Dr. C. V. Raman University and AISECT University. Siddharth holds a Bachelors degree in Electrical Engineering from NIT Bhopal and an MBA in Marketing and Finance from the prestigious S. P Jain Institute of Management and Research, Mumbai.

HIGHER EDUCATION PERSPECTIVE

AISECT University: Refining Private Education Space

AISECT, the first private university of Madhya Pradesh, has taken various initiatives on different fronts to provide quality higher education in the State. The University has also made efforts to ease the norms for operating a private university in India, says **Santosh Kumar Choubey**, Chancellor, AISECT University, in an interview with Arpit Gupta of the **Elets News Network (ENN)**.

With the changing times and maddening race to emulate competitors, what prominent challenges a private university like yours is faced with?

The biggest challenge for the university was to change the perception of education stakeholders and build reputation. Earlier, the rules of operating a university were harder, which continues to be the case. Private universities were deprived from the funding benefits and various types of assistance that State and Central Universities enjoy.

To improve the situation, an All India Private University Conference was organised by AISECT University in 2012 where all universities from across the country were invited.

The Central and State Government regulatory bodies discussed about challenges and anomalies faced by the private operators in higher education system at the conference. Almost everyone in the conference agreed to the problems faced by private universities in terms of regulation, multiple commands and operations.

Since then efforts have been made to ease the norms for operating private universities across the country. It is also expected that in coming time all the universities, irrespective of private or government, will be provided a level field to operate.

What are some of the innovations being introduced in AISECT University vis-a-vis State and Central Universities?

Some of the important innovations introduced by AISECT University include:

- Promoting Skill Development by setting up skill academies, collaborating with the National Skill Development Corporation (NSDC) and making one skill course compulsory for each year at UG and PG level i.e. four skill courses in an undergraduate (UG) course and two at PG level.
- Establishing Renewable Energy Centre and Energy Park in the University to develop green energy culture, the only campus in Madhya Pradesh and amongst 17 in India to be selected for Green Campus by the Ministry of New and Renewable Energy (MNRE).
- Adopting three villages and holding week-long camps in the villages at regular intervals for awareness and training of villagers in the areas of health, cleanliness, education, literacy, digital communication, banking etc.
- Developing an incubation centre to promote the best startup projects and conducting startup competitions at national-level. The centre has also attracted industry mentors who have supported the finest startup projects at AISECT University.

With placement of students becoming a yardstick to evaluate a university's status, what has been your achievement in this context? How significant innovation is to your university?

Placement is an important mark of credibility for an institution. Our University's innovative Training and Placement Department serves this aspect. Our emphasis is on producing well educated, skilled and confident professionals who are industry-ready after graduation. More than 50 per cent of our students get placed before completing their respective courses. A strong incubation centre is one of the most important dimensions of our placement. With an abundance of startup competitions, thereby enabling us to produce not only good number of employees but also successful entrepreneurs.

Almost every other university is collaborating with foreign universities and government departments, what initiatives have been taken by your university in this regard?

Right from the beginning, AISECT University has given lot of importance to expand its horizon across the academia, industries and research labs. We have identified organisations in India and abroad for collaboration and to gain from their expertise in specific fields. Some of these collaborations include:

NCTU, Taiwan: We are working together with IIT Delhi to enhance spectral efficiency of solar cell in a project costing about Rs 40 lakh.

ICEWaRM, Australia: This collaboration involves working jointly in the field of water resources and management. In this context, we organised a four-day international conference on Water, Energy and Environment where 350 research papers were presented by 20 countries were being published by Elsevier.

KIEV University, Ukraine: This entails collaboration in the field of space and earth-science.

Mol University Eldoret, Kenya: This is a research project in the pipeline on water resources.

KAIST, South Korea & RPI, USA: It involves collaborative work on Renewable Energy.

PetruMaior University of Targu-Mures, Romania: We are working jointly on environmental science/engineering.

Similady, there are more than 15 research laboratories, industries and institutes in India, including AMPRI, CIAE, NITTTR, IIT New Delhi, TATA Motors, Reliance, BSNL, etc, with whom AISECT University has a collaboration for skill delivery, research projects and exchange programmes.

What steps your university has been following to ensure the finest faculty delivering in this fast developing world?

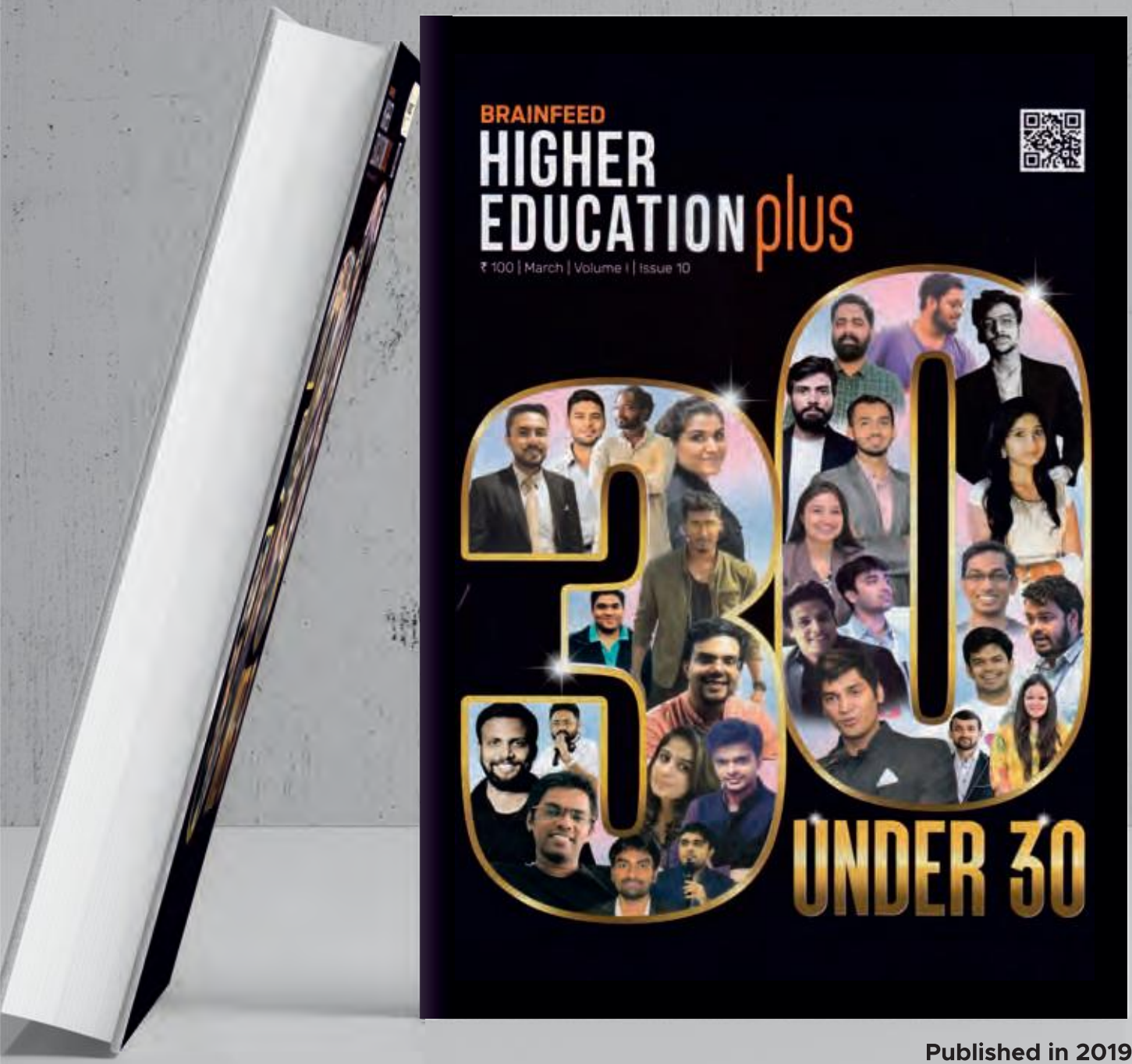
Rigorous faculty selection process is undertaken by the university to ensure highly qualified and experienced teachers. Almost 50 per cent of which are PhDs and around 20 per cent are having industry experience. Moreover, collaboration with seven foreign universities, 10 Indian institutes, research laboratories and industries, facilitates exchange programmes for students and renowned experts. We promote a strong culture of national and international academic events, about five every year, where experts expose students to latest development in technology, corporate, industries and academia.

What steps have been undertaken for research-based learning by your university?

Research-driven education is an integral part of our vision and mission. Following initiatives have been taken in this regard:

- The University has identified four areas to encourage researches – Renewable Energy, Material Science, Environmental Engineering and Water Resources, and Earth and Space Science. Advanced research labs in these four areas have been developed with an investment of more than Rs two crore. An advanced software lab covering these areas is also available. These resources are available from undergraduate to research scholars.
- The university has been publishing two bi-annual peer reviewed research journals – "Amusandhan" for Science, Management and Technology and "Shodhayan" for Non Tech discipline from the past five years.
- A Core Research Group (CRG) has been formed to promote research projects with external and internal funding. CRG has pan India experts in the field as members. In this context, the university has one ongoing Indo-Taiwan project in the field of solar cells, five ongoing internally funded projects marked at Rs one crore each and four projects have been currently put up to various external agencies for funding.
- The university has an incentive scheme for research activities and writing. This has resulted in publishing of more than 300 research papers in national and international conferences and seminars and more than 20 books. In last three years, more than 15 faculty members and students have gone abroad related to research activities. ■

Mention in
Brainfeed Higher Education Plus



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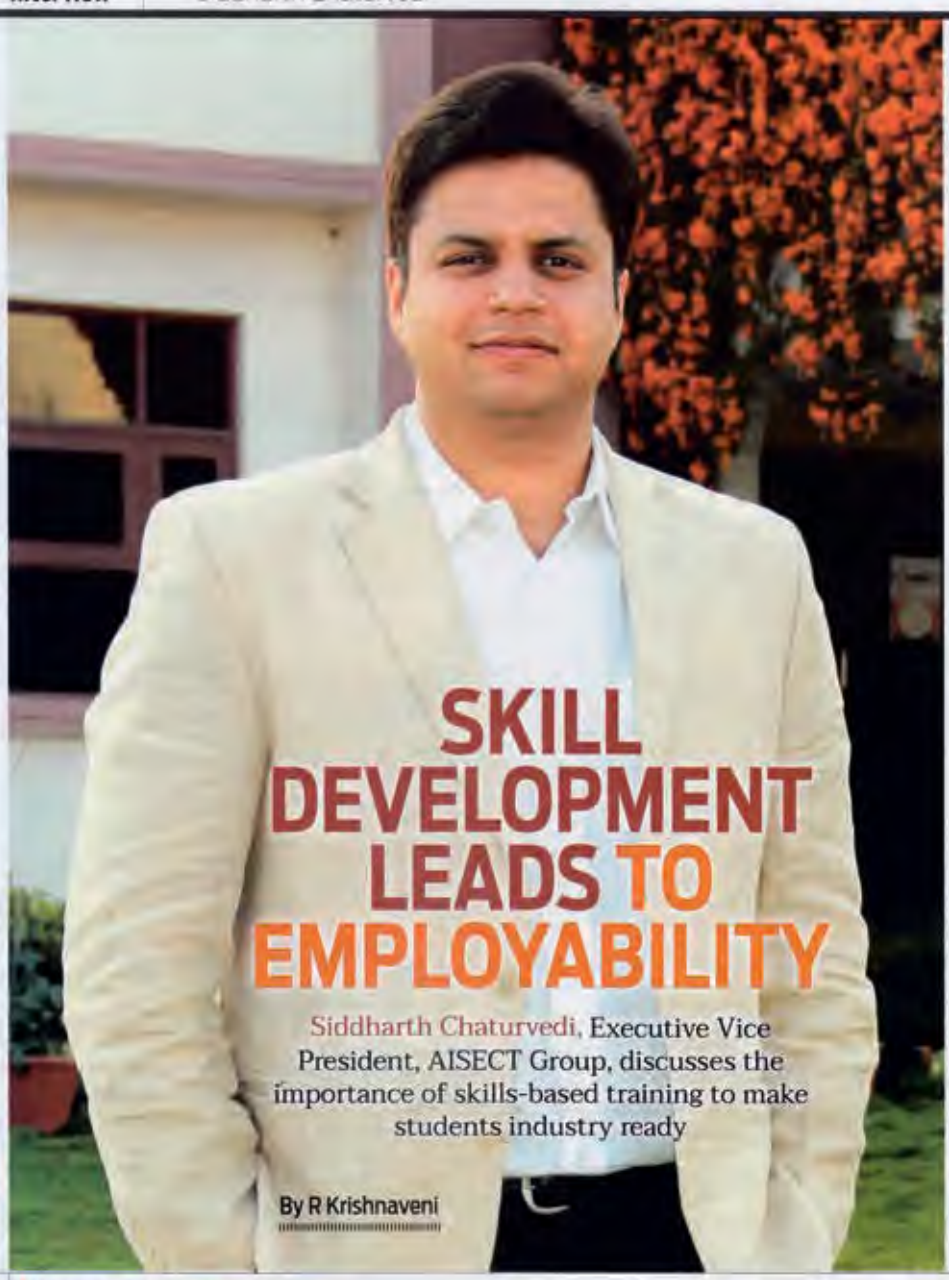


SKILL DEVELOPMENT LEADS TO EMPLOYABILITY

Siddharth Chaturvedi, Executive Vice President, AISECT Group, discusses the importance of skills-based training to make students industry ready

By R Krishnaveni

Apprenticeship and industry training is a great way to bring an individual closer to the industry and teach the working of a professional workspace

Q. How has the partnership between AISECT-NSDC helped in achieving your objective of skilling and training youth?

The partnership with NSDC helped in increasing the credibility and acceptability of our courses and certifications. We joined hands with the National Skill Development Corporation in 2012 with the objective of skilling 13 lakh youth. Under this partnership, we have set up 12 vocational training academies, which offer over 150 low cost, high quality University certified undergraduate, postgraduate, certificate and diploma courses in areas like IT & Management; Teacher Training; Apparel & Textile; Banking, Financial Services & Insurance; Marketing & Retail; Hardware & Networking; Livelihood & Vocational Training; Fire Safety & Security; Agriculture; Tourism & Hospitality; Competitive Examinations and Beauty & Wellness.

Q. How effective are your training modules for various job roles?

The training courses offered by us are QPNOS-aligned, which makes students industry-aligned. All courses offered by us include a section of personality development, spoken English and basic computer skills.

Q. What are the various programs run by the institution?

Type of the Program	Name of the Program
Skill Development	PMKVY, PMKKs, DDU-GKY, NULM, NSQF, SDMs, etc
Corporate Social Responsibility (CSR)	We implement CSR programs for PSUs, NSDC and Corporates
Higher Education	We established 5 higher education institutions at locations, in dire need of quality higher education
ICT intervention focusing on placements in rural India	Our portal RojgarMantra.com is India's biggest rural job placement initiative
Online Services	AISECTOnline.com and AISECTMOOCS.com
Affordable model of pre-schools for rural areas	We have set up Brainy Bear Pre-school & Activity Club

Q. How is your institution planning to offer affordable, quality higher education to semi-urban and rural parts of the country?

At all our universities, we have made it compulsory for students to learn at least one skill every semester. We have also established the 'Navratna Centres of Excellence', which are nine centers of excellence for research and skills in Energy, Material Science, Earth & Space Science, etc.

Q. What are your views on the unemployment scenario in India?

Indian educational institutions must offer courses, which have the skill training component ingrained in them from the start.

Q. How many students benefitted out of Government Skilling Projects executed by your institution?

Government Skilling Projects	Number of students trained
Pradhan Mantri Kaushal Vikas Yojana (PMKVY)	Trained 14,662 candidates in 108 districts across 18 states
NSDC Project	4,18,740 candidates enrolled; 3,63,710 candidates trained; 1,54,048 successfully placed and 23,720 candidates up-skilled
Deen Dayal Upadhyay-Grameen Kaushalya Yojana (DDU-GKY)	More than 78 percent candidates successfully trained, with placement process initiated
National Urban Livelihood Mission	Out of 17,381 urban BPL youth, 13,368 trained in 11 sectors

Q. How far the Rojgar Mantra has implemented its initiative of creating rural job placement in India?

With around 300 employers and 32,768 job seekers registered on the website, Rojgar Mantra is one of the focused rural job placement initiatives of India.

Q. How to bridge the gap between industry and academia in India?

Apprenticeship and industry training is a great way to bring an individual closer to the industry and teach the working of a professional workspace. Initiating universities' partnerships with big names in the industry allows a student to experience the industry. So the candidate is work-ready and industry ready.

Guest Article

IN 2020, FOCUS SHOULD BE ON LEARNING AND NOTHING ELSE

Mr Santosh Kumar Choubey,
Chancellor, Rabindranath Tagore University (RNTU), Bhopal

As every educational institution is gearing up its efforts to tackle problems arising during the lockdown period, they are trying to chalk-out a plan to keep up with the academic calendar. Higher learning institutes are now shifting towards online and digital platforms. It's a humongous task to implement online education during the time of a pandemic and in a lockdown situation where resources are limited, the institutions have managed to smartly design schedules and are constantly improving.

To ensure continuity in classes so that students' engagement is not completely lost, online classes were launched widely using digital platforms like Zoom, Instagram, YouTube, Facebook, etc. which are easy to access and are popular. These options have helped immensely for the smooth flow of knowledge during lockdown.

Higher-Ed's Quick Adaption

The higher learning centers were quick in their response to the pandemic and the country-wide lockdown. By allowing students and staff to stay safe at homes, the educators used easily accessible tools to run classes online with applications like Zoom Cloud meetings, Skype, live streams on Instagram, Facebook, etc. Online sessions are also important to engage students and tutors with assignments and question banks in a way to improve retention quality.

Similarly, by utilising basic technology, the trainers can prepare a basic level of e-learning content for Whatsapp, emails, etc. which can be used as supplementary learning material by the trainees. The time should be also utilised to conduct online training of teachers/trainers (TOTs) by a Master Trainer covering domain skills, subject knowledge and pedagogical aspects. In addition, promotion of free online resources should be done. By visiting **AISECTOnline.com**, anyone can access 600 Massive Open Online Courses (MOOCs) free of cost. The portal also offers content in Hindi and covers 3 broad categories of courses—School Courses, Skill Courses and Higher Education Courses. Platforms like Coursera too come with a lot of options.

Government initiatives to promote digital learning

It is important here to mention the Government's efforts to bridge the gap between digital platforms and students, especially in rural areas. For those students who don't have access to the internet, online classes are available on 32 DTH channels on TV along with Tata Sky and DishTV. In addition, government education portals such as SWAYAM, DIKSHA and E-Pathshala, which have all the study materials for students, are free.

Not a complete smooth digital ride though

No one could have possibly imagined a situation like this. With poor internet signals and constant threats in cyber security, the challenges continue to grow. Non-availability of uniform bandwidth across all regions and high amount of data consumption are adding additional costs and are acting as a deterrent. Most importantly, sustaining interest of students requires a higher quality of content with simulation etc. which requires high investment. Language is also acting as a barrier as standardized online content is currently unavailable in all regional languages. Universities have to be generous this time and should allow maximum relaxations. Complicated procedures, expensive online resources, glitches in servers, etc. are hurdles which need to go.

We don't know how long the situation will prevail and it's the responsibility of institutions to provide a safe learning environment and develop methods for easy dissemination of knowledge with new tools. In 2020, the focus should only be on learning and nothing else.

डॉ. सी.वी. रमन यूनिवर्सिटी,

छत्तीसगढ़

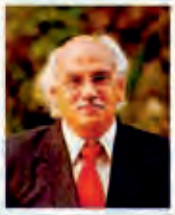
डॉ. सी.वी. रमन यूनिवर्सिटी में हम बखूबी जानते हैं कि कामयाबी उच्च गुणवत्ता वाले कोर्सेज, अच्छी सुविधाओं, दोस्ताना माहौल और समर्पित अकादमिक स्टाफ पर निर्भर करती है. यहां जो हम सिखाते हैं उसे व्यवहार में भी उतारते हैं और हमारे छात्रों को फैकल्टी और एडमिनिस्ट्रेशन की पूरी मदद हासिल होती है. हमारी ताकतों में एक इंटीग्रेटेड और ह्यूइस बेस्ड कोर्स हैं जो छात्रों को उन विषयों में ग्रेजुएट होने के लिए गाइड करते हैं, जिसमें वे पोस्ट-ग्रेजुएशन में स्पेशलाइजेशन करना चाहते हैं और रिसर्च के जरिए आगे का ज्ञान अर्जित करना चाहते हैं. इनोवेटिव कोर्स इस तरह डिजाइन किए गए हैं, ताकि छात्रों का कीमती समय, पैसा और ऊर्जा बचे और वे अपनी पसंद के क्षेत्र पर ध्यान केंद्रित कर सकें. मैं आपको सुनिश्चित करना चाहता हूं कि हम आपको सुरक्षित, दोस्ताना और संवारने वाला माहौल मुहैया करेंगे ताकि आप संपूर्ण तथा कामयाब नागरिक के तौर पर तैयार हों.

— संतोष के. चौबे, चांसलर, डॉ. सी.वी. रमन यूनिवर्सिटी

मध्य भारत में मैनेजमेंट, साइंस, लॉ, आर्ट्स और नेचुरोपैथी जैसे प्रोफेशनल कोर्सेज के लिए एजुकेशन और रिसर्च के केंद्र के तौर पर प्रतिष्ठित डॉ. सी.वी. रमन यूनिवर्सिटी सक्षम , उन्नत और आत्मविश्वासी की एक पीढ़ी को सफलतापूर्वक तैयार कर रही है. यह पीढ़ी वैश्विक स्तर पर भारत की खोयी हुई चमक को दोबारा स्थापित करने का काम कर रहे हैं. यह प्रोफेशन-आधारित अध्यापन कला और इनोवेटिव रिसर्च की क्षमता, बेहतरीन इन्फ्रास्ट्रक्चर और अवसरों से लैस है. इस तरह हमने छत्तीसगढ़ में अत्याधुनिक कॉलेजों की की रेंज सफलातपूर्वक तैयार किया है, जहां आइडिया सृजित होते हैं, स्किल विकसित किए जाते हैं और अगली पीढ़ी के लीडर तैयार कर उन्हें प्रोत्साहित किया जाता है. यहां से 85000 से ज्यादा छात्रों ने विभिन्न डिग्रियां हासिल की हैं और वे मशहूर कंपनियों में नौकरी कर रहे हैं तथा वैश्विक स्तर के रिसर्च के क्रियाकलाप को अंजाम दे रहे हैं. यूनिवर्सिटी ने अपने विजन को सिद्ध किया है और भारत के सर्वश्रेष्ठ प्राइवेट यूनिवर्सिटी में अपना नाम शुमार किया है. इंडस्ट्रीयल अनुभव वाले क्वालिफाइड फैकल्टी के साथ-साथ रिसर्च इन्फ्रास्ट्रक्चर छात्रों को क्षमतावान बनाते हैं और सक्षम वर्कफोर्स तैयार करते हैं-हम ऐसी ही जगह हैं.

एआइएसईसीटी यूनिवर्सिटी

भोपाल, मध्य प्रदेश



मुझे खुशी है कि यूनिवर्सिटी अपना सर्वश्रेष्ठ देने की राह में है और इसने प्रभावी शिक्षण-सीखने की कला, सार्थक रिसर्च व्यवस्था और मजबूत सामाजिक जुड़ाव के बीच जबरदस्त संतुलन बनाया है. अब यह प्रोफेशनल प्रासंगिकता, छात्रों और शिक्षकों का समग्र विकास से युक्त अकादमिक एक्सीलेंस का प्रतीक ब्रांड बन गया है.

यूनिवर्सिटी असल अगुआ के तौर पर उभरा है और इसने कई मुकाम हासिल किए हैं- यूजी और पीजी प्रोग्राम्स में रिकल कोर्सेज लाने वाली पहली यूनिवर्सिटी, मध्य प्रदेश में इकलौती हरी-भरी यूनिवर्सिटी कैंपस के लिए सरकारी फंड हासिल करने वाली पहली यूनिवर्सिटी, अपने सभी प्रोग्राम्स में सीबीसीएस शुरू करने वाली पहली, यूरोप और चीन की यूनिवर्सिटीज का दौरा करने वाली दस सदस्यीय भारतीय डेलीगेशन में एएआइसीसीआइ के द्वारा चुनी गई पहली और इकलौती यूनिवर्सिटी, अध्ययन के सभी डिसिप्लीन को कवर करती दो क्वालिटी रिसर्च जर्नल्स प्रकाशित करने वाली पहली यूनिवर्सिटी और अमेरिका, जर्मनी, ताइवान, यूक्रेन, आस्ट्रेलिया, रोमानिया आदि देशों की विभिन्न यूनिवर्सिटीज के साथ गठजोड़ करने वाली यूनिवर्सिटी-उपलब्धियों की लिस्ट बहुत लंबी है.

— संतोष के. चौबे, चांसलर, एआइएसईसीटी यूनिवर्सिटी

एआइएसईसीटी यूनिवर्सिटी की स्थापना प्रतिष्ठित एजुकेशनल समूह एआइएसईसीटी ने की है. यह भारत का अग्रणी समूह है और इस क्षेत्र में इसके पास 31 साल का अनुभव है. 23 राज्यों और 3 केंद्रशासित प्रदेशों में कुल मिलाकर इसके 13000 केंद्र हैं. यह मध्य प्रदेश का पहला प्राइवेट यूनिवर्सिटी है. यूनिवर्सिटी का कैंपस अत्याधुनिक वास्तुकला और प्राचीन डिजाइन का समिश्रण है और भोपाल के हरे-भरे मनोरम इलाके में स्थित है. इस तरह एआइएसईसीटी यूनिवर्सिटी युवा लर्नर्स के लिए आदर्श जगह है.

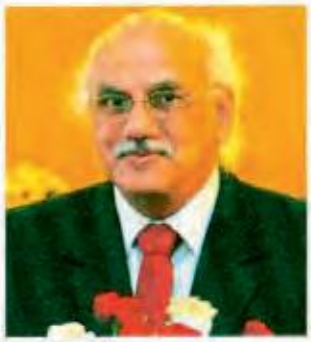
एआइएसईसीटी यूनिवर्सिटी राज्य का इकलौती प्राइवेट यूनिवर्सिटी है जिसने नई दिल्ली में मानव संसाधन विकास मंत्रालय की ओर से जारी एनशनल इंस्टीट्यूशनल रैंकिंग फ्रेमवर्क (एनआइआरएफ) 2017 में भारत के सर्वश्रेष्ठ 200 यूनिवर्सिटीज में जगह बनाया है.

एआइएसईसीटी यूनिवर्सिटी को कई सारे पुरस्कार मिल चुके हैं. इनमें 2012 में मध्य प्रदेश में सर्वश्रेष्ठ प्राइवेट यूनिवर्सिटी अवार्ड शिक्षा रत्न, 2014 में एचोमैम एक्सीलेंस इन एजुकेशन अवार्ड, 2015 में वर्ल्ड एजुकेशन समिट में बेस्ट रिकल यूनिवर्सिटी, 2016वें सातवें वर्ल्ड एजुकेशन समिट में एआइएसईसीटी वीसी को लीडरशिप अवार्ड, 2017 में देश का बेस्ट इनोवेटिव एंड स्किल डेवलपमेंट यूनिवर्सिटी अवार्ड.

इंपैक्ट फीचर

कौशल विकास में नए आयाम रचता आईसेक्ट

उद्यमिता और कौशल विकास के क्षेत्र में देश में पिछले एक दशक में कई बड़े बदलाव हुए हैं। खासकर कौशल विकास के क्षेत्र में गुजरे पांच वर्षों में अभूतपूर्व काम हुआ है। विशेष बात यह है कि इस बदलाव में आईसेक्ट संस्थान ने अहम भागीदारी की है। आईसेक्ट ग्रामीण एवं अर्धशहरी क्षेत्रों में कम्प्यूटर शिक्षण, प्रशिक्षण और सामाजिक उद्यमिता के क्षेत्र में नवाचार और उत्कृष्ट कार्यशैली के लिए चर्चित और पुरस्कृत रहा है।



संतोष चौबे
चेयरमैन, आईसेक्ट

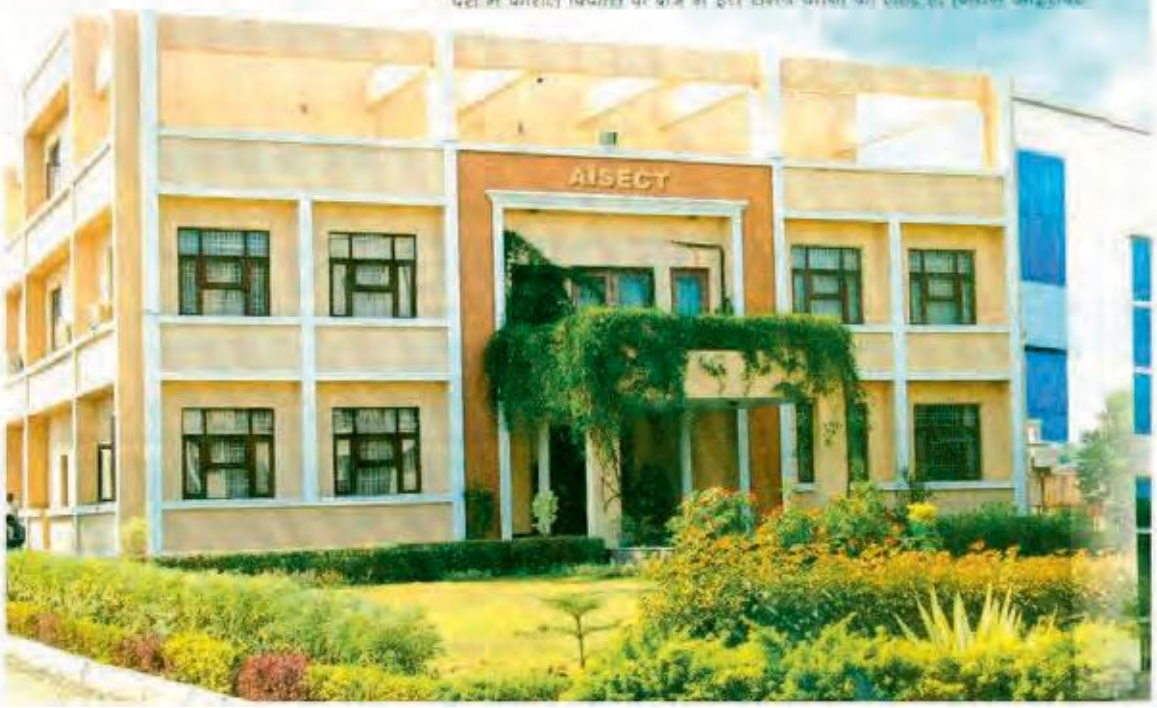
इसकी स्थापना बहुआयामी व्यक्तित्व के धनी श्री संतोष चौबे द्वारा की गई। श्री चौबे ने उद्यमिता, कौशल विकास, शिक्षा, प्रशिक्षण के क्षेत्र में उल्लेखनीय कार्य करते न सिर्फ संस्था का विकास किया बल्कि देश के विकास में भी विशेष भूमिका निभाई। आइए जानते हैं आईसेक्ट और श्री संतोष चौबे के बारे में -

आईसेक्टः एक परिचय

आईसेक्ट की स्थापना 1985 में हुई। संस्थापक श्री संतोष चौबे ने पूर्व में 1977 में भारतीय इंजीनियरिंग सेवा और 1982 में भारतीय प्रशासनिक सेवा में चयनित होने के बाद भी स्वयंसेवी संस्था के माध्यम से युवाओं को प्रशिक्षित एवं रोजगार उपलब्ध कराने का कार्य बेहतर समझा। इनके अनुशासन, कर्मठता, दूरदृष्टि का परिणाम रहा कि आज आईसेक्ट 27 राज्यों व तीन केन्द्र शासित प्रदेशों में विशाल नेटवर्क के रूप में कार्य कर रही है। आईसेक्ट के कुल 25,000 हजार प्रशिक्षण एवं सेवा केन्द्र संचालित हो रहे हैं जिसके माध्यम से लाखों युवा प्रशिक्षण एवं रोजगार प्राप्त कर रहे हैं।

कौशल विकास के क्षेत्र में:-

देश में कौशल विकास के क्षेत्र में इस समय चेतना की लहर है, जिसमें आईसेक्ट



World Education Award, 2016

Skoch Corporate Leadership Award 2013

Manthan Award South Asia & Asia Pacific 2012

पुरस्कार एवं सम्मान- आईसेक्ट को कई राष्ट्रीय और अंतरराष्ट्रीय पुरस्कार प्राप्त हो चुके हैं. राष्ट्रपति ए.पी.जे. अब्दुल कलाम द्वारा इंडियन इनोवेशन अवार्ड-2005, नेशनल आई टी इनोवेशन अवार्ड-2006, गोल्डन आईकॉन अवार्ड 2006, एशियन फोरम आई फॉर डी अवार्ड 2007, टाई एक्सिलेंसियस पार्टनर्स अकृष्ट उद्यमिता पुरस्कार 2009, सोशल इंटरप्रिन्योर अवार्ड 2010, शिक्षा रत्न अवार्ड 2010, ई-इंडिया बेस्ट इनफ्रास्ट्रक्चर इन्फ्लुएंस अवार्ड एवं मंथन साउथ एशिया अवार्ड 2012, स्किल डेवलपमेंट हेतु इनेक्टस स्मार्ट सिटी अवार्ड 2015 प्राप्त हो चुके हैं।

महती भूमिका निभा रहा है। आईसेक्ट नेशनल स्किल डेवलपमेंट कॉरपोरेशन के पार्टनर के रूप में कार्य कर रहा है। अपने देश भर में फैले नेटवर्क के माध्यम से युवाओं का कौशल विकास कर रोजगार मेलों के माध्यम से उन्हें आजीविका से जोड़ने के कार्य को बखूबी अंजाम दे रहा है। इस कार्य के लिए आईसेक्ट को राष्ट्रीय स्तर पर सराहा जा रहा है। भारत सरकार की महत्वपूर्ण कौशल विकास योजनाएं जैसे- PMKVY, DDU-GKY, NULM, PMAY आदि भी संचालित कर रहा है। आईसेक्ट द्वारा PMAY योजना के तहत मध्यप्रदेश और छत्तीसगढ़ में 28 प्रशालकीय कौशल केन्द्रों की स्थापना कर उनका संचालन किया जा रहा है।

आईसेक्ट द्वारा स्थापित विश्वविद्यालय

आईसेक्ट द्वारा डॉ. सी वी रमन विश्वविद्यालय (सन् 2006) की स्थापना छत्तीसगढ़ में की गई। जहां इंजीनियरिंग एवं तकनीकी शिक्षा, वाणिज्य प्रबंधन एम फिल पी.एच.डी. पाठ्यक्रम और कई रोजगारपरक पाठ्यक्रम संचालित हो रहे हैं।

इसी तरह आईसेक्ट विश्वविद्यालय (सन् 2012) में स्थापित) भोपाल मध्य में विश्वस्तरीय गुणवत्ता की शिक्षा वाले अपने लक्ष्य की ओर अग्रसर है। झारखंड राज्य के हजारीबाग में भी विश्वविद्यालय की स्थापना (सन् 2016) की गई है।

शिक्षा के क्षेत्र में प्रगति पथ पर अग्रसर

आईसेक्ट द्वारा भोपाल में सेक्ट प्रोफेशनल कॉलेज (सन् 2000), स्कोप इंजीनियरिंग कॉलेज (सन् 2005), बेनी विवर प्री स्कूल (2014) तथा स्कोप पब्लिक हा. से. स्कूल (सन् 2001) भी संचालित किए जा रहे हैं।

वित्तिय समावेशन और सर्विस सेक्टर:-आईसेक्ट नेटवर्क के माध्यम से असंगठित क्षेत्र में बैंकिंग, इंश्योरेंस, यूआईडी और अन्य सेवाएं भी प्रदान कर रहा है। ये देश में अपनी तरह का अनूठा नवाचार है।

लेखन, संपादन और पुरस्कार:-अपने नेतृत्व से संस्थान को शीर्ष पर पहुंचाने वाले संतोष चौबे का साहित्य के क्षेत्र में भी गहरा दखल रहा है। उनके दो कथा संग्रह 'हल्के रंग की कमीज़' तथा 'रेस्त्रां में दोपहर' तथा 'प्रतिनिधि कहानियां', तीन उपन्यास 'राग केदार' और 'क्या पता कामरेड मोहन' और बहुचर्चित जलतरंग प्रमुख है। तीन कविता संग्रह 'कहीं और सच होंगे सपने', 'कोना धरती का' एवं 'इस अ-कवि समय में' प्रकाशित एवं चर्चित हुए हैं। लेखन के लिए उन्हें मप्र साहित्य परिषद् का दुष्यंत कुमार पुरस्कार, भारत सरकार का मेघनाद साहा पुरस्कार, राष्ट्रीय विज्ञान प्रचार पुरस्कार, समग्र विज्ञान लेखन के लिए मप्र हिन्दी ग्रंथ अकादमी का डॉ. शंकर दयाल शर्मा पुरस्कार, उपन्यास जलतरंग के लिए शैलेष मटियानी पुरस्कार और देहरादून में सर्वश्रेष्ठ औपन्यासिक कृति के लिए इंटरनेशनल लिटरेचर फेस्टिवल वैली ऑफ वर्ड्स में सम्मानित किया गया।

Mention in Prominent Newspapers and Magazines

SKILLING: INTERVIEW

PALLAVI RAO CHATURVEDI, Director, AISECT

'WE TRAIN RURAL YOUTH FOR ENTRY LEVEL IT JOBS'

AISECT established in 1965, is a training and educational services network, spread over 8,500 centres across 21 states and three Union Territories. Primarily focussed on the rural and semi-urban centres, the Bhopal-headquartered Aisect's alumni has trained over a million students through its various skill enhancement programmes and nurtured more than 18,000 entrepreneurs. Aisect, founded by Santosh Chaubey, takes many government programmes for skill development ahead, especially in IT & ITeS, strengthening the non-formal education sector. It also has two universities and colleges under the Aisect banner. Insider.in tie-up with IGNOU. In an email interview, Aisect's director Pallavi Rao Chaturvedi, tells SME World about the institution's various activities. Excerpts

Can you tell us about the various skill development programmes taken up by Aisect?

AISECT has a widespread network of over 8,500 centres, located primarily in semi-urban and rural areas of 21 states and three Union territories. These centres offer a wide range of vocational education courses. Our six academies provide various university-certified undergraduate, post-graduate, certificate and diploma courses in IT & ITeS, hardware and networking, arts, animation, commerce, livelihood, vocational training, banking, finance, insurance and rural management.

Till date, Aisect has transformed the lives of over six million students through a host of skill enhancement programmes. Aisect has also partnered the central and state governments for skill development and capacity building programmes, including Swarnajayanti Gram Swarozgar Yojana (SGSY), Sarva Shiksha Abhiyan, Indira Awaas Shakti Yojana, Swashakti Project, Tejaswini Project and SHMS Project.

The SGSY Project, supported by the Union ministry of rural development, is being executed by Aisect in Madhya Pradesh, which envisages skill development of about 15,000 rural Below Poverty Line youth for employment and self-employment opportunities. Phase I of this project has completed with about 5,250 benefitting from it. Placement was the most significant area of the entire project. About 3,000 trainees have been placed locally, while 10 Rojgar Melas (rural job fairs) were organised for corporate placement in the last quarter of 2008, benefitting 500 students.

How do you link your programmes with industry needs?

All our programmes have been designed to provide entry level IT jobs in the rural youth. Typically our students gain employment as data entry operators, bank tellers, office administration assistants in various retail showrooms or offices of the local district administration. We take regular feedback from these stakeholders and update our programmes accordingly. We are also in conversation with a couple of large industry players to partner on some innovative programmes. Aisect is a part Nasscom First and CII as well.

What is the student response to programmes aimed at self-employment?

We are getting an extremely positive response from students. Aisect trains about 1 lakh students annually in the fields of IT and ITeS and about 10% of our students take up entrepreneurial activities. Moreover, we have also been participating in all major self-help group (SHG) movements of Central India over the last decade. These initiatives include Swashakti Project assisted by World Bank and Tejaswini Project assisted by IFAD. Tejaswini Project, being implemented by us in Dindori and Shahpur districts of Madhya Pradesh, envisages linking SHG members with market for sustainable livelihood activities and helping them form women federations. Till date, Aisect has formed about 500 women SHGs in these districts.

How big is the Aisect organisation today?

We are today India's leading IT training, education, services and e-governance network. We have reached out to the remotest corner of India through over 8,500 centres and are promoting ICT-based training and services. Our aim is to reach the 25,000-mark within the next five years. A World Bank-IIM-A joint study has listed Aisect's among the most successful initiatives on ICT for rural development. Aisect has executed large e-governance, skill development and capacity building projects for the central and state governments.

WHAT MADE OUR BUSINESS MODEL POPULAR AMONG THE FRANCHISEES WAS ITS 'MULTIPURPOSE FACTOR'

With the vision of making quality education accessible at the grass root level, Aisect has set up various institutions of higher education, including Central India's first private University IIt CV Raman University, located in the tribal area of Kota-Bilaspur in Chhattisgarh, Sirajo College of Engineering in Bhopal and the recently launched Aisect University which is Bhopal's first private university.

How did you develop such a vast franchisee network? How do you ensure quality and uniformity is maintained at various franchisees?

What made our business model popular among the franchisees was its 'multipurpose factor'. When an entrepreneur becomes a part of our network, on the one hand he gets an opportunity to offer low cost high quality teaching and a whole range of university certified programs, while on the other hand, the infrastructure created by him for training can be leveraged for delivering services to our audience larger than just the student community. Hence, the Aisect Centres also deliver services like data processing & data entry, insurance policy sales and premium collection, sales of recharge vouchers, railway ticket booking, among others. Thus with a very low cost investment, the franchisee gets the opportunity to have several means of earning profits. The high return on investment has created a goodwill for our brand and helped in the rapid expansion of our network.

Once a franchisee is registered within the Aisect network, we support him through course content and faculty training programmes. It takes continuous training and hand-holding from the Aisect headquarters to maintain our extremely large network. It is not easy to ensure 100% knowledge transfer to our franchisees, especially since most of them are from rural and semi-urban areas. However, standardisation and continuous process improvements help us achieve the kind of results we want at Aisect.

What kind of arrangement do you have with IGNOU?

Aisect has a unique strategic partnership with the Indira Gandhi National Open University to deliver various educational programmes, especially in the rural and semi-urban areas. Through this MoU, all the Aisect courses are now available with an added advantage of IGNOU certification. Further, Aisect-IGNOU Study Centres have also been established to administer graduate and post-graduate programmes of IGNOU.

"We want to build relevant skill sets to back educational qualifications"

"Rural electrification was and still is more of a necessity than an option"

"Financial issues have never been a hindrance and does not affect our work"

Towards a skilled India

PALLAVI RAO CHATURVEDI

'Bridging the gap of unemployability'

PALLAVI RAO talks to SANGEETA YADAV about roggermantra.com which aims at providing job opportunities in both the organised and unorganised sectors

A major step forward

BUDGET ALLOCATIONS FOR SKILL DEVELOPMENT AND CAPACITY BUILDING LAUDED

Awards & Accolades

Santosh Choubey Receiving the Meghnad Saha Award for the first Hindi Book on computers "Computer Ek Parichay" from Dr. K. K. Narayanan

Dr. A.P.J. Abdul Kalam, President of India, presenting the Indian Innovation Award to Mr. Santosh Choubey, Founder & Chairman, AISECT

Dr. A.P.J. Abdul Kalam, President of India, presenting the NASSCOM IT Innovation Award to Mr. Santosh Choubey, Founder & Chairman, AISECT

Mr. Santosh Choubey, Founder & Chairman, AISECT, receiving the honour from Mr. Kapil Sibal, Former Minister of Human Resource Development and Mrs. Hilde Schwab, Founder of the Schwab Foundation for Social Entrepreneurs

AISECT's Founder & Chairman, Mr. Santosh Choubey, receiving the Skoch Renaissance Award 2013 for Excellence in Education from Union Finance Minister, Mr. P. Chidambaram & Planning Commission's Deputy Chairman, Mr. Montek Singh Ahluwalia

Shri Santosh Choubey, Founder & Chairman of AISECT and Chancellor, AISECT Group of Universities, receiving the Excellent University Award 2018 from Prof. R.J. Rao, Vice Chancellor, Barkatullah University, Bhopal and Dr. Akhilesh Kumar Pandey, Chairman, Madhya Pradesh Private University Regulatory Commission, Bhopal.

Recieving Madhya Pradesh Ratna Award by Shri Shivraj Singh Chouchan CM, Madhya Pradesh

(L-R)Mr. Vijay Singh, Registrar, Rabindranath Tagore University, Padma Vibhushan Dr. Karan Singh, Prof. Vijay Kant Verma (VC, Rabindranath Tagore University) and an ASSOCHAM official at the award ceremony

Mr Siddharth Chaturvedi, Executive Vice President of AISECT receiving the Most promising University of Madhya Pradesh Award 2017 from Shri Shivraj Singh Chauhan, Former Chief Minister, Madhya Pradesh

Shri Santosh Kumar Choubey, Founder & Chairman AISECT and Chancellor, AISECT Group of Universities, Dr. Vijay Singh, Registrar Rabindranath Tagore University, and Mr Nitin Vats, Director Rabindranath Tagore University, receiving the award from Shri K. K. Nirala, former Director Technical Education – Gujarat and Dr. Ravi Gupta

With Hon'ble Governor Rameshwar Thakur & Mrs. Archna Chitnis, Minister Of Madhya Pradesh

Mr. Santosh Choubey, Founder & Chairman of AISECT, receiving Asian Forum i4D Award

CONTRIBUTORS TO THIS COMPENDIUM

Siddharth Chaturvedi

Executive Vice President
AISECT Group

Mr Siddharth Chaturvedi is the Executive Vice President of the AISECT Group, which is India's leading Social Enterprise. HE handles the Strategy and Operations of AISECT Group. Along with this, he is the Chairman of the CII Bhopal chapter. Siddharth is also a part of the Governing Body and Board of Management of Dr. C. V. Raman University in Chhattisgarh and Pro-Chancellor of Rabindranath Tagore University in Madhya Pradesh. Furthermore, he is a Member of the CII Western Region Committee on Startups, Skills and Employability; a Charter Member of the TIE Madhya Pradesh; Founding and Governing Board Member of the Association of Skills Training Providers; the Convener of CII Madhya Pradesh Panel on Education and Skill Development and an Invitee Member for the Government of Madhya Pradesh Committee on TEQIP Programme Implementation. Academically, Siddharth holds a Bachelor's Degree in Electronics Engineering from the Maulana Azad National Institute of Technology (MANIT), Bhopal and an MBA from the prestigious S.P. Jain Institute of Management and Research, Mumbai.

Dr. Pallavi Rao Chaturvedi

Executive Vice President
AISECT Group

Dr. Pallavi Rao Chaturvedi is the Executive Vice President of the AISECT Group, which is India's leading Social Enterprise. She looks after the HR & Marketing of AISECT. She is also an Educationist, entrepreneur and parenting coach. She is the Founder of India's fastest growing Parenting resource organization – Get Set Parent. Her social media handles @getsetparentwithpallavi have over 4,00,000 followers within a year and have become a hub for young parents across India and globally. She is also the Founder of a line of Early Learning Products for children under the brand name of The Brainy Bear Store and founded the Brainy Bear Preschool chain in 2014. She is on the National Working Committee of the FICCI Toys Council. She is also featured in India Today's Top 10 most rising, iconic and inspirational leaders of India. Armed with a degree in Engineering, an MBA in Marketing and Operations from the prestigious S. P. Jain Institute of Management and Research, Mumbai and a Ph.D. in Women entrepreneurship, Dr Pallavi Rao Chaturvedi has played a pivotal role in democratizing informed, mindful and conscious parenting.

Abhishek Pandit

Executive Vice President
AISECT Group

Mr. Abhishek Pandit is the Executive Vice President for the AISECT Group. He efficiently handles the organization's National Office in Delhi and executes new business ideas for its diversification and growth. AISECT, which already holds the position of being a leader in the country for its ICT & Skills based education, training and services, has scored immense success in its much appreciated and affordable Financial Inclusion initiatives for the underprivileged and unbanked population of the country. To make these initiatives possible, Abhishek has left no stones unturned and went forward to generate accessible banking services at the grassroots level.

Aditi Chaturvedi

Director
AISECT Group

Dr. Aditi Chaturvedi is the Director of AISECT and handles research and documentation in the organization. She also acts as the Director of AISECT Group of Universities. She has worked on research reports and case studies while being in the organization. She has completed her Engineering in Electronics and Computer Technology and holds a Post Graduate Diploma in Rural Management from the prestigious Institute of Rural Management Anand.

Shilpi Varshney
Director
Projects and Skill Development
AISECT Group

A Management professional with a focus on Community development programs. Shilpi comes with 20 years of experience in the Development space. She is currently working as the Director in AISECT and is looking after the Government & Skill Development Projects of AISECT.

Aparna Singh
Associate General Manager
AISECT Group

A Gold Medallist Agri-graduate with Post-graduate Diploma in Rural Management from IRMA, Aparna has been working in the development sector for the past 12 years. She is currently working as Associate General Manager in AISECT and looking after CSR & projects activities from New Delhi. Here as national lead she has liaised & worked for designing, structuring & execution of central government funded projects under NSDC, MoRD, MHRD, NULM, MoD & MoMA etc.

Her portfolio is enriched with the experience of working with corporate, public & private organizations. She has spearheaded skill development projects like DDU-GKY, Nai Roshini, MANAS, Learn & earn scheme, CSS for VSE in several states, Placement Linked skill development for urban BPL youth, training of SMCs, RPL etc.

Abhishek Gupta
National Project Manager
AISECT Group

Having completed his Post Graduate degree in Rural Management from IRMA, Abhishek has over 10 years of experience in the Development Space. He is a development practitioner, working towards catalyzing learning and growth opportunities for school students & youths, and livelihood opportunities to marginalized communities across the country. He is currently working as the National Project Manager in AISECT and handles projects & skill development initiatives ranging from Education, Vocational education, cluster development, livelihoods, School programs, employability programs & CSR across India. He comes with an experience of Implementing schemes of 12+ Central ministries, 20+ state' department's schemes and various CSR funded programs across the above sectors. He has also published a paper on "Social Inclusion" at the PSSCIVE National Conference and has formulated numerous innovative models which have been incorporated in the Skilling space.

AISECT Awards & Accolades

SBI UTTOLAN
FI Conclave 2021-22

Madhya Pradesh Gaurav
Samman 2019

Education Excellence Awards 2020
CV Raman University, Bilaspur
Excellence in Placement
(Engineering)

Education Excellence Awards 2020
CV Raman University, Khandwa
Excellence in Faculty
(Agriculture)

Education Excellence Awards 2020
Rabindranath Tagore University, Bhopal
Excellence in Placement
(Engineering)

Grand Jury Award 2019,
by Education
World Magazine

eGov India
Award 2011

TiE Lumis Partners
Entrepreneurial
Excellence Award 2009

Social Entrepreneur
of the Year Award 2010

Shiksha Ratna
Award 2012

Skoch Corporate
Leadership Award 2013

Golden Icon National
E-Governance Award 2005

Financial Inclusion
& Payment Systems
Award 2013

Bihar Innovation
Forum Award

27th amongst the
fastest growing mid-size
businesses in India 2013

ASSOCHAM National
Education Excellence
Awards (AISECT University)

NASSCOM Emerge
50 Leader Award 2009

ASHOKA Senior
Fellowship 2011

Indian Innovation
Award 2005

Manthan Award South Asia
& Asia Pacific 2012

Voted amongst
the top 100 franchises
in 2010 and 2013

Elets Smart City
Award, 2015 for Skill
Development initiatives

Asian Forum i4D
Award 2007

World Education Award
2016, Dubai (Brainy Bear
Pre-school & Activity Club)

Editor's Choice:
Edupreneur
Award 2016 (Dubai)

ASSOCHAM Skill
India Award 2016

The National CSI
Award 2011

NASSCOM I.T.
Innovation Award 2006

ASIA RESPONSIBLE
ENTERPRISE
Award 2019 in Taiwan

Lauded by World Renowned Bodies

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Education. Empowerment. Enterprise.

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