

Analysis of Cyber Security Infrastructure in Current Scenario

Anukool Bajpai* and Brahampal Singh**

ABSTRACT

Immense need for cyber security infrastructure to ensure the developing ICT infrastructure in present day information society needn't bother with any accentuation. ICT infrastructure is the string through which all basic public infrastructures are woven together. Presence of a reliable cyber security infrastructure is a precondition for all E-administration and E-business activities being taken world over. Endeavor is being made in this paper to introduce a preview of this infrastructure, likely patterns and goals that rise up out of this examination in Indian setting.

Keywords: Cybersecurity; Infrastructure; Information and Communication Technology; Threats; cyberspace.

1.0 Introduction

Basic infrastructures are irreplaceable for the cutting edge society (for example banking-money, vitality, communication, trade, medical care, transport), and their inability to meet a normal assistance level may significantly affect the general public. A rising issue is that infrastructures, as of recently free, are getting snared into network-of-networks. It is this interconnection where the information and communication advances assume a significant job. Following passage from the chief request of President George W. Hedge gave on 16 October 2001 sums up the main point of interest in the result of 9/11 attack on the exchange tower USA "The information technology transformation has changed the manner in which business is executed, government works, and public protection is led. Those three capacities currently rely upon an associated organization of basic information infrastructures. The assurance program approved by this request will comprise of persistent endeavors to make sure about information frameworks for basic infrastructure, including crisis readiness communications, and the physical resources that help such frameworks. Security of these frameworks is fundamental to the telecommunications, vitality, budgetary administrations, fabricating, water, transportation, medical care, and crisis administrations areas".

1.1 Threats to ict infrastructure

Intends to abuse, twist, disturb, and crush information assets run from programmer devices to gadgets, for example, electromagnetic weapons; coordinated vitality weapons; HPM (High Power Microwave) or HERF (High Energy Radio Frequency) firearms; and electromagnetic heartbeat (EMP) guns. The attack against an information infrastructure can be done with both physical actualizes (hammer, excavator, bomb, HERF, HPM) and cyber-based hacking devices (Chaturvedi et al, 2007). The equivalent is valid for the objective: It can be cyber, comprising for instance of information or applications on an organization, or physical, for example, PCs or a telecommunications link. Infrastructure danger framework recognizes four kinds of information attack, every one of the four of which include the vindictive utilization of the information infrastructure either as an objective or as a device.

2.0 Literature Review

*Corresponding author; Principal, Delhi, Research Scholar, Department of IT, SIMS, GGSIP University, New Delhi, Delhi, India. (Email: anukoolbajpai@gmail.com)

**Associate Professor, Department of IT, Trinity Institute of Professional Studies, New Delhi, Delhi, India.

The Entrepreneurship Development Cell organizes many entrepreneurship development programmes to eliminate those who do not possess the basic capabilities for entering into business ventures, weed out such persons and help develop latest facilities of those who possess potential for becoming entrepreneurs.

2.0 Need for the Study

Government spends huge amount for the purpose of developing entrepreneurs in India. Most of the funds are spent through DST (Department of Science and Technology), AICTE (All India Council for Technical Education), UGC (University Grants Commission), etc... to the educational institution to set up Entrepreneurship Development Cells. The role and functions of Entrepreneurship Development Cells are to develop the entrepreneurs in the colleges and universities. This study focuses to identify the consequences of Entrepreneurship Development Cells of Colleges at Madurai District in the present scenario

3.0 Statement of the Problem

The entrepreneurs are compelled to face the many challenges in the modern business world. To bring a start up for the product, it is a very big task for the entrepreneurs. There is a rapid development in small scale industries like manufacturing and service sectors. The basic initiation is the process of making a prospect into an entrepreneur is identification of skilled capable youngsters who possess the courage, confident and willingness to face and take risks. This study analyses the roles and functions of Entrepreneurship Development Cells in Arts and Science Colleges of Madurai District, which were created with an intention of promoting entrepreneurship among the students.

4.0 Review of Literature

1. Saif Siddiqui "In the rural area, the development plan should be made on the basis of vocational pattern and a plan should not be imposed on all segments".
2. Srinivas, G. "the importance of entrepreneurial education among the students is to spread the message of entrepreneurship as one of the career option, teachers and mentors are very important to play the role".
3. Neal E. Thomberry "Large organizations focused on the term called corporate entrepreneurship and organizes management development programs to identify the managers can act as an indeed and being trained to act like entrepreneurs to create new value for the business".
4. Ahmed, K. "the need of the various training programme is to create awareness and also to inculcate the entrepreneurial opportunities and to develop entrepreneurial behaviour among the students".
5. Ranade "The success rate was reduced due to business environment deficiencies but not due to entrepreneurial inadequacy among the entrepreneurs. He also mentioned that the Entrepreneurship Development Programme models will be more dynamic, flexible, to meet the requirements of different economic, social and infrastructure strata existing in the country".

5.0 Objectives of the Study

1. To study about the profile of Entrepreneurship Development Cells
2. To study about the various programmes organized by the Entrepreneurship Development Cells
3. To know about the working style of various Entrepreneurship Development Cells
4. To suggest the policy recommendations based on the objective findings.

6.0 Research Methodology

Research Design used for the study	Descriptive Research Design
Data Collection Method	Data is collected through primary as well as secondary sources. <ul style="list-style-type: none"> • Through, questionnaire for the purpose of collecting primary data from the Entrepreneurship Development Cells in Arts and Science Colleges, Madurai. • Secondary sources consist of books, periodicals, newspapers and online resources.
Sample Size	In Madurai District, there are 15 Arts Colleges having Entrepreneurship Development Cells are taken as samples
Sampling Method	Census Sampling

7.0 Data Analysis, Interpretation and Hypothesis Testing:

The framed questionnaires were distributed to 25 Arts Colleges which are having Entrepreneurship Development Cells. The statistical tools like Chi-square, One way ANOVA, Factor analysis were used to analyze the study to bring out the significant relationship between variables.

Data Analysis and Interpretation:

- Demographic profile
- Reasons for not starting the business
- No. of Programmes organized
- Functions of ED Cells
- Types of Training provided by ED Cells
- Responsibilities of ED Cells
- Role of ED Cells
- Difficulties faced by ED Cells

Correlation between the Duration of Functioning of the ED Cells and Total number of programmes organized

Variables	R ²	Statistical Inference
Duration of Functioning of the ED Cells	0.462**	P<0.01, Significant
Total number of programmes organized	0.470**	P<0.01, Significant

**-. Correlation is significant at 0.01level.

There is significant relationship between duration of functioning of the Entrepreneurship Development Cell and the total number of programmes organized. Hence, the hypothesis is accepted.

8.0 Findings

1. Majority of the Colleges have been functioning the Entrepreneurship Development Cells less than 2 years.
2. The major funding agency for the colleges with ED Cells is University Grants Commission (UGC) and Entrepreneurship Development and Innovation Institute (EDII).
3. There is a significant relationship between total number of programmes organized and the funds

received by the EDII Cell.

4. There is a significant relationship between the ED Cells and ED programs which includes Faculty Development Programme, E-Leader Workshop and Tamil Nadu Student Innovators Camp which are organized by the ED Cells

5. The total number of Arts and Science Colleges in Madurai is 35. But only 15 Arts and Science Colleges are having Entrepreneurship Development Cells and they actively organizes the programme with a motive to create entrepreneurs.

6. The factors such as creativity ability of the trainers during the training programme, and their experience, communication skills are extracted from the colleges that are having Entrepreneurship Development Cells and they are grouped together based on the analysis and finally termed as best quality of trainers during the training programme.

9.0 Suggestions

1. Participants (Students) involvement level in the programme shows the success of the training programme. The ED Cells makes a proper planning and design the programme according to the profile of the participant.

2. Proper advertisement for the programme should be made to make an outreach about the programme to the participants.

3. Training programmes organized by the ED Cells should focuses on methodology of the training, quality / capability of the trainers, infrastructural facilities and real practical exposure about the environment.

4. Entrepreneurship is also acting a base tool for Economic Development. So, every college planned to set up an ED Cell and organize valuable programme to develop the students as Entrepreneurs to the Society.

10.0 Conclusion

Unemployment is a major problem in our country. The rate of unemployment is growing day by day. The overcome the problem and also to develop the economy, the colleges and schools should create awareness of Entrepreneurship among the students. All the Entrepreneurs are not born but they can be made by inculcating the entrepreneurial skills.

The role of ED Cells is more important to develop the entrepreneurial quality among the students. This research has concluded that the roles and functions of ED Cells should be functioned effectively to make the students as entrepreneurs for developing the society and nation.

References

Even's, George Herberton, "Entrepreneur and Economic Theory". American Economic Review, 1949, p.338.

G.P. Gupta and N.P. Srinivasan, Entrepreneurial Development, Sultan Chand &Co. New Delhi, 1993, pp 127-130

H.N.Pathai, , "Problems of Small-Scale Entrepreneurs" IDBI. Mumbai, 1975 pp.215-235

Saif Siddiqui, "Rural entrepreneurship and poverty alleviation programmes", Fcya/ia 2003, pp.21-25.

Srinivas, G., "Importance of Entrepreneurial Education", Kisan World, 2003, pp.18-21.

Neal E., "Thomberry Corporate entrepreneurship: teaching managers to be entrepreneurs". Journal of Management Development, MCB UP Ltd, 2003, Vol: 22, Issue: 4, Page: 329 - 344.

Ahmed, K., "Need of Entrepreneurial Training", HRD Times, 2002, p.31-34.

Ranade. S.P., "Entrepreneurship Development Model for 21st Century : A short Note", SEDME, 1996, Vol. XXIII, No.2, pp.47-48.

Dr.P.T.Vijayakumar., "A Study on the Role and Functions of Entrepreneurship Development Cells in Tamilnadu" 2014.