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Principal, Dr. Gurunath Fagare

Dr. Pramod Tandale

Executive Editor

Miss Dipali H. Chavan

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From the Principal's Desk



It gives me an immense pleasure and pride to publish the proceedings of the National Conference on “*Exploring Pillars for Viksit Bharat 2047.*” This conference has provided a valuable academic platform for academicians, researchers, and information professionals to deliberate on the changing role of different contributors to the development of the nation and achievement of the objectives.

The National Conference on “Exploring Pillars for Viksit Bharat- 2047” is a visionary platform aimed at fostering dialogue, innovation, and collaboration to realize the goal of a Developed India by 2047. The conference brought together policymakers, academicians, industry leaders, entrepreneurs, students, and civil society to deliberate on transformative strategies for inclusive, sustainable, and technology-driven national growth.

This national conference successfully addressed contemporary issues, recent trends, and challenges and role of various sectors in achieving objectives of Viksit Bharat. Through keynote addresses, panel discussions, paper presentations, and interactive sessions, the conference paved way to generate actionable insights and policy-oriented recommendations for nation-building. Let this conference serve as a catalyst for ideas that empower our citizens, strengthen our institutions, and contribute to building a prosperous and self-reliant India.

I extend my sincere appreciation to the Editor, Miss Dipali Chavan for her dedicated efforts in bringing out this conference issue. I also congratulate the organizing committee, reviewers, authors, and all contributors for their academic involvement and commitment towards the success of this conference.

I am confident that this publication will serve as a valuable reference source for researchers, students, and professionals in the field of Commerce and Management and Social Sciences. I wish the journal every success and hope it will inspire further research and innovation in the field and Vision of Viksit Bharat-2047.

Dr. Gurunath Fagare
Principal
Kisan Veer Mahavidyalaya, Wai

From the Editorial Desk



We are pleased to present this special issue of the journal dedicated to the National Conference on “*Exploring Pillars for Viksit Bharat 2047*”, organized by the Department of Commerce and Management, BCA, and Psychology, History, Political Sciences, Economics in association with IQAC. This issue provides a platform for academicians, researchers and information professionals to share their research findings, experiences and innovative practices related to the application for “*Exploring Pillars for Viksit Bharat 2047*”.

This enthusiastic participation of academicians, researchers, and scholars across the nation reflects the collective intellectual commitment towards contributing to the vision of Viksit Bharat 2047 — a developed, self-reliant, and globally competitive India. The research papers submitted cover diverse dimensions such as economic growth, sustainable development, digital transformation, governance, reforms, social empowerment, innovations, and entrepreneurship. Each contribution adds meaningful insight into the structural and strategic pillars required to achieve the national vision of Viksit Bharat

As Chief Editor, I sincerely appreciate the dedication of all authors, reviewers, members of the organizing committee, and IQAC for maintaining academic rigor and quality throughout the review and publication process. The success of this conference is a testament to our institution’s commitment to fostering research culture, interdisciplinary dialogue and academic excellence.

I sincerely appreciate the valuable contributions made by the authors, whose scholarly papers have enriched the knowledge and added literature through this journal issue. I am also grateful to the reviewers and editorial board members for their critical evaluation and constructive suggestions, which helped maintain the academic quality of the publication. Special thanks are due to the organizing committee and all contributors who worked tirelessly for the successful completion of this conference journal.

My personal gratitude goes to the eminent personality Hon’ble Dr. Deepak Karanjikar, Advisor, Viksit Maharashtra, Government of Maharashtra who had accepted our invitation as Chief Guest of Inaugural Function and Keynote Speaker, shared his views and ideas. Dr. Parashram Patil , Advisor, Viksit Maharashtra, Government of Maharashtra had accepted our invitation as Resource Person and Dr. Major Ashok Giri, Principal A.S.S.M, Medha for sharing their valuable views in Valedictory function.

We owe our sincere thanks to Hon’ble Shri. Madandada Bhosale, President, Janata Shikshan Sanstha, Wai who is the constant source of inspiration and driving force behind the execution of innovative ideas. We are thankful to secretary Hon’ble Dr. Jayawant Chaudhari for his kind support in the venture. I express my gratitude to Hon’ble. Principal Dr. Gurunath Fagare for his constant support. The organizing committee member also contributed a lot for the success of the Conference. The said conference would not have been successful without cooperation and support of the faculty, library staff and administrative staff. I thank all of them for their kind support and cooperation.

I am confident that this issue will serve as a useful source of knowledge and inspiration for professionals, researchers and students. I hope it will encourage further research and innovation, contributing to the continuous development of Viksit Bharat in digital era.

Executive Editor

Miss. Dipali Chavan

Assistant Professor, Department of Commerce and Management
Kisan Veer Mahavidyalaya, Wai

From the Editorial Desk

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Miss. Saniya Ashpak Kazi
Student (B.C.A III)
Kisan Veer Mahavidyalaya, Wai.
saniyakazi786785@gmail.com

Abstract

Cyber security is now an essential part of today's digital systems, as more governments, companies, and people rely on the internet. The quick expansion of digital platforms, cloud services, online banking, and e-governance has increased efficiency but also widened the risk of cyber threats. This research looks at the main cyber security issues impacting digital infrastructure and evaluates prevention methods that can lower the associated risks. The study is descriptive in nature and relies on secondary data obtained from academic sources, industry reports, and government publications. The results show that technological solutions by themselves are not enough; awareness, policy structures, and on-going supervision are just as crucial. Improving cyber security measures can build confidence, safeguard confidential information, and promote long-term digital development.

Keywords: Cyber Security, Digital Infrastructure, Cyber Threats, Data Protection, Information Security

1. Introduction

Digital infrastructure serves as the foundation of contemporary society. Banking systems, healthcare services, education platforms, transportation networks, and government services now rely heavily on digital technologies. Although this transformation has improved speed, connectivity, and access, it has also made systems more vulnerable to different types of cyber threats.

Cyber security involves safeguarding digital systems, networks, software, and information against unauthorized access, improper use, or cyber threats. With an increasing number of devices linked via the internet, the risk of vulnerabilities grows. Cyber-attacks are no longer confined to big companies; small businesses, educational organizations, and individual users are also frequently targeted.

The expansion of cloud computing, remote work, digital payments, and smart technologies has increased the potential targets for attacks. Therefore, grasping cyber security challenges and putting in place protective steps is crucial for maintaining secure and dependable digital systems.

2. Objectives of the Study

The main objectives of this study are:

- To explain the concept and importance of cyber security
- To identify major cyber security challenges in digital infrastructure
- To examine different types of cyber threats
- To analyze preventive measures used for cyber protection

3. Hypothesis

- **H₀:** Cyber security measures do not significantly reduce risks in digital infrastructure.
- **H₁:** Proper implementation of cyber security measures significantly reduces risks in digital infrastructure.

4. Research Methodology

This research has a descriptive and analytical character. It relies on secondary data gathered from textbooks, research papers, government documents, and cyber security reports. Information from multiple sources was reviewed to gain insight into present cyber threats and the security measures that are currently

From the Editorial Desk

available. The research does not collect primary data but instead uses existing literature to offer a structured examination of cyber security issues within digital infrastructure.

5. Importance of Digital Infrastructure

Digital infrastructure comprises computer networks, cloud platforms, servers, databases, internet services, and communication technologies that underpin digital services. It facilitates online banking, electronic governance, digital transactions, e-commerce, and educational platforms.

Since digital infrastructure is highly interconnected, a weakness in one part can impact the whole system. If a company's server is hacked, customer data, financial details, and internal communication systems could all be at risk. Cyber security is essential for ensuring system integrity, confidentiality, and availability.

6. Major Cyber Security Challenges

- **Malware Attacks**

Malware refers to malicious software designed to damage or disrupt systems. It includes viruses, worms, spyware, and ransomware. For example, if a user downloads software from an untrusted website, malicious code can enter the system and damage files or steal information.

- **Phishing**

Phishing is another serious threat. In phishing attacks, users receive fake emails or messages that appear genuine. When users enter their passwords or banking details, attackers capture this information.

- **Data Breaches**

Data breaches occur when confidential information is accessed without authorization. Weak passwords, unsecured databases, and poor network security can lead to data leaks.

- **Denial of Service (DoS) Attacks**

These attacks overload servers with excessive traffic, causing services to become unavailable to legal users.

- **Insider Threats**

Employees or internal users may intentionally or unintentionally cause security incidents by mishandling data or ignoring security protocols.

7. Preventive Measures

- **Encryption**

Encryption converts data into coded form, making it unreadable to unauthorized users.

- **Firewalls and Antivirus Software**

Firewalls monitor incoming and outgoing traffic, while antivirus software detects and removes malicious programs.

- **Multi-Factor Authentication**

Using additional verification methods such as OTPs or biometric authentication increases security.

- **Regular Updates and Patching**

Updating software fixes security vulnerabilities that attackers may exploit.

- **Cyber Awareness Programs**

User education is critical, as many cyber-attacks succeed due to human error. Awareness training helps users recognize suspicious activities.

8. Key Findings

The research highlights that as digital growth continues, so too are the risks posed by cyber threats. Technical tools by themselves are not sufficient; user awareness and the correct implementation of policies are just as crucial. Companies that implement multi-layered security approaches face fewer successful cyber-attacks. Improving cyber security increases confidence in digital services.

The results back up the alternative theory that strong cyber security measures greatly lower risks in digital systems.

9. Conclusion

In the digital age, cyber security is now essential. As digital infrastructure grows, the likelihood of experiencing cyber-attacks rises. Malware, phishing, data breaches, and denial of service attacks are threats that can lead to financial loss, harm to reputation, and interruption of critical services.

Effective preventive measures, such as encryption, authentication mechanisms, routine software updates, and educating users, are essential for safeguarding digital resources. Cyber security depends on a mix of technology, regulations, and users acting responsibly.

Improving secure digital infrastructure will boost confidence in online systems and promote sustained digital progress.

10. Future Scope

The future of cyber security depends on sophisticated technologies like AI-driven threat detection, block chain-based security systems, and automated surveillance tools. Governments and institutions should allocate resources to research and innovation in order to enhance security systems.

There is an increasing demand for qualified professionals in the field of cyber security. Educational institutions ought to implement focused training programs to equip students for new security threats.

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