

PREFACE

Various delegates from different states of India shared their research insights at Directorate of Higher Education sponsored one day National Seminar on “Recent Advancements in IT & E-Commerce: Present Scenario & Future Prospects”. The main objective of this seminar is to bring academicians, research scholars and experts from higher education institutes and industry under one roof together to discuss and analyze the future prospects of Information Technology and E-Commerce.

Gone are the days when each researcher was restricted to only one core domain. Today is the era of interdisciplinary research and Information Technology has gained lot of momentum in the past decade. Technological advancements have had a huge impact on the ecommerce world, transforming the way consumers connect with brands and empowering them to shop more cost effectively. The participants and authors actively presented papers on the topics like Social Commerce, Quantum Computing, E-business and E-commerce, Role of Artificial Intelligence in Education, Internet of Things, Software agents, Cloud Computing, Big Data etc. The one day Seminar revealed that there is need and lot of scope of using Information Technology in today’s commercial world.

The Seminar has brought together renowned resource persons from reputed academicorganisations to exchange and share new ideas and research results in all aspects of the seminar theme. Some key aspects highlighted by esteemed resource persons were Artificial Intelligence and Machine Learning, Internet of Bodies (IoB), contextual and programmatic advertising, artificial intelligence, Mobile Commerce and Augmented reality and security issues in E-commerce.

Weare highly grateful to the Directorate of Higher Education (Haryana) for sponsoring the one day National Seminar on “Recent Advancements in IT & E-Commerce: Present Scenario & Future Prospects” in order to promote research in this domain. We are indebted to our ever encouraging management and respected Principal for constant motivation and guidance. Ms. Amandeep Mehta, Organizing Secretary of the Seminar have provided an intellectual platform to researchers from the areas of Computer Science, Commerce and Management for sharing their valuable insights on the theme. We also appreciate the resource persons for sharing their knowledge on the topics relevant to the seminar themes. Wewould like to acknowledge the disciplined and tireless efforts of our organising committee as a whole who left no stone unturned in making this event a grand success. We are sincerely thankful to the esteemed authors and participants for their contributions and wish that everyone should keep working and unravel new aspects of technology.

Finally, we are thankful to one and all, who have contributed directly or indirectly in making this seminar successful. We are hopeful that these contributions will enrich our knowledge and motivate many of us to take up these challenging application areas and would come with up new ideas for blending technology with commerce.

Dr. Girdhar Gopal

Ms. Kaveleen Bharej

FOREWORD

Technological advancements have revolutionised the methods of doing business across the world. Every now and then new technologies are being developed and there is a need to identify the requirement of the users of such technology so that all its benefits can be harnessed well by every segment of the society. Numerous researchers have explored different angles of Information Technology and E-Commerce. As E-commerce activities are expanding exponentially, consequently there is a lot of scope of research in this domain. Some research work presented by delegates at National Seminar on the theme “Recent Advancements in IT & E-Commerce: Present Scenario & Future Prospects” held at Sanatan Dharma College, Ambala Cantt on November 11, 2019 have been compiled in this proceeding.

One day National Seminar on the theme “Recent Advancements in IT & E-Commerce: Present Scenario & Future Prospects” is the output of tremendous effort put up by the organising committee. It is jointly organized by Department of Computer Science and Applications and Department of Commerce and Management and is sponsored by Directorate of Higher Education, Haryana. The two academic disciplines joined hands together to create a powerful learning experience and emphasize integrative learning, critical thinking and creative problem solving.

It gives me immense pleasure to know that participants and resource persons across the country have come together on a single platform to focus on new advancements in Information Technology and E-commerce. The relevance of the theme of the Seminar has drawn a huge response in terms of research papers and participants.

I would like to congratulate the editors Dr. Girdhar Gopal and Ms. Kavleen Bharej alongwith their dedicated organising committee for success of the seminar.

I wish this seminar proceedings will be of immense use for the readers and would stimulate further research in the domain of technology and E-commerce.

Dr. Rajinder Singh
Principal
Sanatan Dharma College
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IDEA OF THE SEMINAR

In today's technology driven world, it is possible to perform majority of tasks in few minutes which earlier needed lot of time and effort to be invested by humans. Artificial intelligence, Cloud Computing, Augmented Reality, Big Data Analytics, Virtual Reality are some of the latest technologies which have revolutionized the methods of doing a business across the world. These technologies have created a better-informed consumer and a manager who is equipped with up-to-the-second information.

E-Commerce is a buzzword in the business world today. The blend of technology with commercial activities has opened a gateway for new opportunities and ideas. Simply e-commerce refers to all the commercial activities which are undertaken by usage of an electronic medium. Initially computers were designed as a number cruncher and today they are most widely used in commerce.

Due to the dynamic environment, it is important to understand and implement the latest technological advancements in Information Technology and E-Commerce.

Some existing techniques like machine learning are old but can be modified according to the requirement of the organisations. The term Machine Learning was coined by Arthur Lee Samuel in 1959. Samuel's checkers playing program was among the world's first successful self-learning program. But today there is a need of a market personalization in accordance with the requirements of the consumer and it can be done by using Artificial Intelligence and Machine Learning. There are many companies which are already using such technologies to make their business a success and in the coming years Artificial Intelligence and Machine Learning will be embedded in the business platform for creating and enabling smart business operations.

5G data networks, CPU to GPU, quantum computing are also some of the recent technologies which are enabling industries in performing better. Home personal assistants like Alexa, smart home devices and many more have modernized the lifestyles. Artificial Intelligence has various applications like it is being used in autonomous vehicles, chatbots, automated voice call spam prevention and social credit algorithm. Initially the concept of Internet of Things (IoT) was introduced, then Internet of Everything came into picture and the latest trend is of Internet of Bodies (IoB) which includes digital pills and Smart Glasses. Smart glasses are being used for security purposes and healthcare systems. This is an era of collaborative learning and in coming times, Artificial Intelligence applications (apps) will be provided as a service to consumers.

Developments in Information Technology have provided lot of business opportunities for different stakeholders of a business but it has also given rise to some issues. Security is one of the major issues while using technology. Management Information Systems and Enterprise Resource planning software are being widely used by brick and mortar companies and by e-commerce companies as well. Such software helps in managing database of all departments like

human resources, production, operations, finance and marketing. Breach of data at any segment in these software programs can create numerous problems both for the company and for the consumer. There is a need to actively conduct research in the domain of information technology in order to develop software for handling such security breaches. The existing MIS portals used by E-Commerce companies have to be studied carefully by the researchers for identifying the loopholes and for developing better mechanisms. Technology is a double edged sword and needs to be handled carefully.

To conclude, technologies are being developed at a very fast pace and there is a need for e-commerce companies to make best efforts to encash such opportunities. Keeping it in view, the theme of the seminar is “Recent Advancements in IT & E-Commerce: Present Scenario & Future Prospects”. For every new development there is a need, which can be identified only through research. The gap between existing technologies and the requirement of e-commerce companies needs to be studied and suggestions are needed for reducing this gap.

Ms. Amandeep Mehta
Organising Secretary

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