

EXECUTIVE SUMMARY

Artificial Intelligence (AI) is transforming the global technological landscape with socio-economic implications on economies worldwide. In India, it holds significant scientific and economic potential. AI is widely being deployed across all major sectors such as manufacturing, agriculture, healthcare, retail, banking, financial services, public utility, and also being used for national defense and security. The market size of AI is growing rapidly over a period of time. With the nation striving to become a US\$ 5 trillion economy in the coming years, AI could perhaps be the next generation technology tool to achieve the target.

Considering the increasing scope and relevance of AI in the Indian context, Ashoka University organized an engaging webinar on AI on July 17, 2020. The virtual conference was organized to promote knowledge exchange, policy advocacy, dissemination of state-of-the-art research in AI and strengthen academia-industry collaborative efforts in the field.

Held under the title 'Artificial Intelligence in India: Enabling a Robust AI-driven Technology Ecosystem in India', the webinar comprised a panel of distinguished experts specializing in AI who spoke about their insights and experiences in the field ranging from academic learnings to practical applications and policy implications of AI. The conference was structured to foster discussions on six primary sub-themes, namely AI in the education sector, in healthcare, for supply-chain management,

core AI, for social good and its policy dimensions in the context of India.

The invited panelists were Prof. Pushpak Bhattacharyya (Professor, Department of Computer Science and Engineering, IIT Bombay and Ex-Director, IIT Patna), Dr. Manish Gupta (Director, Google Research India and Infosys Foundation Chair Professor, IIIT Bangalore), Dr. Alpan Raval (Head, Data Science, Wadhvani Institute for Artificial Intelligence), Dr. Taposh Roy (Manager, Data Science & Innovation, Health Care Delivery Innovation and Delivery System Planning, Kaiser Permanente), Dr. Avik Sarkar (Visiting Professor, Indian School of Business and previously, Head, Data Analytics Cell, NITI Aayog), Prof. Sudeshna Sarkar (Professor, Department of Computer Science and Engineering and Head, Centre of Excellence in AI, IIT Kharagpur), Dr. Gautam Shroff (Senior Vice President, TCS Fellow & Head, TCS Research, Tata Consultancy Services), Prof. Samir K. Srivastava (Professor and Dean, Research, IIM Lucknow), Prof. Partha Pratim Talukar (Associate Professor, Department of Computational and Data Science, Indian Institute of Science and Founder KENOME), Prof. Mayank Vatsa (Professor and Swarnajayanti Fellow, Department of Computer Science and Engineering, IIT Jodhpur & Project Director, iHUB Drishti) and Ms. Madhu Vazirani (Principal Director, Accenture Research).

This interactive conference was well received by the participants and we at

Ashoka University decided to make this knowledge exchange a continuous process. The Compendium on AI is a result of one such policy initiative which we have been consistently pursuing at Ashoka.

A collection of policy briefs on some of the pressing issues concerning AI, this publication has been put together based on the talks delivered by such AI experts invited at the virtual conference last year and in consultation with them.

The compendium comprises 7 chapters including 5 main chapters covering AI's deployment and potential use in areas like social good, AI ethics in healthcare, education, supply-chain management and the enabling policy framework for its effective deployment in India. Each core chapter underlines a status update, key challenges and issues at hand concerning AI's deployment in a particular field as well as a roadmap for future or policy recommendation for its effective implementation. The Introduction and Conclusion chapters of the publication examine the potential, scope of AI in India, the ongoing national initiatives vis-à-vis rest of the world and underline various suggestions to reap benefits from its growing deployment in India. The Chapters are supported by a detailed bibliography towards the end and an Annexure of profiles of the various experts who have co-authored the chapters.

We are hopeful that this Compendium will

be useful for students, youth, practitioners, researchers, policy experts and all the relevant stakeholders from the government, academia and the industry, for a comprehensive understanding of the existing issues at hand in AI and ensure effective policy advocacy in this field in India.

Happy reading!

