



e-ISSN: 2319-8753 | p-ISSN: 2320-6710

IJIRSET

International Journal of Innovative Research in
SCIENCE | ENGINEERING | TECHNOLOGY

INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

Volume 10, Issue 3, March 2021

ISSN INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA

Impact Factor: 7.512

9940 572 462

6381 907 438

ijirset@gmail.com

www.ijirset.com

Challenges for Balancing Corporate Governance and Artificial Intelligence in Smart Cities of India

Dr. Ravindra T. Borkar ⁽¹⁾, Pramod P. Nandardhane ⁽²⁾

Associate Professor & Head of Management and Commerce, MGAHV Central University Wardha, India

Associate Professor, Mumbai Institute of Management and Research Mumbai, India

ABSTRACT: Increasingly, cities are turning to specialized technologies to solve problems related to society, ecology, morphology, and many others, and the emerging concept of smart cities greatly encourages this perspective by enabling the integration of sensors and big data through the Internet of Things (IoT) promotes. . Increasing data brings new possibilities in the design and management of cities as well as economic prospects. While the processing of big data by artificial intelligence (AI) can make a major contribution to the urban fabric, the dimensions of sustainability and habitability should not be overlooked in favor of. This document examines the urban potential of AI and proposes a new framework that connects AI technology and cities while ensuring the integration of the key dimensions of culture, metabolism and governance; It is known to be of paramount importance for the successful integration of smart cities in order to achieve Sustainable Development Goal 11 and the New Urban Agenda. This document is intended for policy makers, data scientists, and engineers who want to improve the integration of artificial intelligence and big data in smart cities with the aim of improving the habitability of the urban fabric while promoting economic growth and opportunities.

I. INTRODUCTION

Cities are increasingly focusing on their expertise to solve social problems, environments, forms and more. The new concept of smart cities greatly enhances this opportunity by facilitating sensory integration with big data via the Internet of Things (IoT). Increasing data offers new opportunities for urban design and management, and economic outlook. However, processing big data through artificial intelligence (AI) can have a significant impact on the functionality, reliability and efficiency of urban construction and should not be overlooked. This white paper explores the dynamics of the urban AI environment and proposes a new framework that connects AI technology to cities while at the same time integrating key elements of culture, metabolism and governance. It is known as a key factor in the successful integration of smart cities in line with the Sustainable Development Goals 11 and New Town plans. This article is aimed at policy makers, data scientists and engineers looking to improve the integration of artificial intelligence. Smart city big data is there to drive economic growth and opportunities, aiming to maximize the efficiency of the city's framework. AI can be based on algorithms that include pre-testing and guidance rules. The next step is that the initial test is based on machine learning and detailed learning, where the device automatically learns based on rules and actual data. Large Qi implant network. Depending on the algorithm or learning method, the AI device can process important data values to perform problem-solving, decision-making, complex tasks, or identify patterns of data transfer. Smart cities have become a well-known and widely accepted political phenomenon as a major development concept in many countries, but smart city development is neither new nor recent. It first appeared on new self-driving cars in the mid 1800s. City. In the western United States, smart cities have been associated with the concept of growth, especially in terms of transportation, tourism and planning in the 1990s. Since the beginning of the new century, the interest in development of smart cities started to increase. The rise of smart cities in the late 21st century can be explained in two ways. From a city planning and policy perspective, the rise of smart cities is the result of technology campaigns that bring new levels of technology and demand for cities with regard to efficiency and efficiency. Sustainability. As the city is also an educational institution, more and more people are preventing the mobility of students who want to study further in the city. The idea of how smart cities differ has been concurred with their use in numerous studies.

Advanced technology is one of the most important elements in the development of smart cities for efficient urban systems. A large amount of data on the Internet of Things (IoT) is expected to increase the efficiency of city construction and management as well as stimulate economic growth. The power of IoT and connected urban systems is



driven by the unprecedented growth of information and communication technology (ICT), leading to data processing and processing of new technologies such as quantum computing, machine learning, and in-depth learning. Extensive data availability. Low data processing capacity. Due to the high penetration of mobile technology among citizens, it can be directly linked to the decision-making process. In short, smart cities are seen as offering new solutions to many of the social and economic and environmental problems facing the city. Professional-led technology solutions have been at the forefront of smart cities, emphasizing participatory approaches as participants and participants who build community value after smart city management. Emphasize the importance of citizenship. Similarly, public participation in the development of a vibrant city and in interagency interactions with high levels of participation, including citizens, are some of the key functions of smart city management. In fact, citizens are important lessons for society. The growth of smart cities needs to consistently show how much society can benefit. We benefit from going to integrate information into other city management practices.

II. RESEARCH OBJECTIVES

The following are the main objectives frame for the research work

- 1) To understand the Artificial Intelligence practices in corporate governance in smartcities of India.
- 2) To find out the impact of Artificial Intelligence on corporate governance in India.
- 3) To evaluate the Awareness Programs which is conducting by the companies for their improvement in Artificial Intelligence.

III. REVIEW OF LITERATURE

Cossin and Metayer (2014) This paper found that although National laws differ in terms of the roles and responsibilities assigned to directors, identify three generic key roles of BoDs across all jurisdictions: supervisor, co-creator and supporter, hereby extending the traditional dualistic perspective of direction and control.

Nilson (2010) This paper found that artificial intelligence (AI) as the “activity devoted to making machines intelligent, and intelligence is that quality that enables an entity to function appropriately and with foresight in its environment .

Scott (1995) This paper found that in line with the neo-institutional view that ethical considerations eventually evolve into legally binding rules we merge the latter two into one perspective, which defines the realm of *responsibility*. Still (1958) et al this paper found that the choice always depends on the criteria chosen. An informed decision usually follows a similar pattern as outlined by They distinguish between three phases, i.e. conceptualization, information, and prediction.

Thomsen (2008) et.al. This paper found that the system can be as the composite of “ownership, boards, incentives, company law, and other mechanisms. It is found that general solution technology is the solution to any managerial, commercial, or even societal problem.

IV. RESEARCH METHODOLOGY

In carrying out analysis daily data collected from 2018 to 2020 has been used .

Types : Empirical

Research Instrument : Personal Interview.

Research Design : Descriptive

Data Type : Primary & Secondary data

Contact Method : Survey and observations,

Sample size : 400

Analysis Tools : Likert Rating Scale 1-5

Research Area: Area of research includes the cities i.e Mumbai , Delhi Kolkata, Chennai, Ahembadabad , Pune , Banglore, Hyderbad, Nagpur , Chandigarh.

V. ANALYSIS AND RESULTS

Variable used for corporate

VAR 1 :- DIRECTION

VAR 2 :- CONTROL

VAR 3 :- COACHING



Parameters for the analysis :

Category	Parameter	Category	Parameter
A	Innovation	H	Meeting accounting standards
B	Collaboration	I	Legal compliance
C	Optimization	J	Ethical compliance
D	Transformation	K	Executive appointments
E	Diversification / Concentration	L	Executive developments
F	Internalization	M	Executive Compensation
G	Target Achievement	N	Executive Compositions

Table No. 1 : Parameters for the Analysis

DATA ANALYSIS AND RESULTS

SAMPLE	DIRECTION		CONTROL		COACHING		Weightage
	Score obtained out of 200		Score obtained out of 200		Score obtained out of 200		
SAMPLE NO 01 TO 100	A	155	A	119	A	111	385
	B	123	B	115	B	96	334
	C	120	C	111	C	82	313
	D	165	D	98	D	80	343
	E	141	E	134	E	102	377
	F	126	F	115	F	96	337
	G	142	G	115	G	104	361
	H	147	H	118	H	81	346
	I	158	I	126	I	93	377
	J	126	J	115	J	82	323
	K	123	K	106	K	75	304
	L	148	L	146	L	99	393
	M	152	M	152	M	98	402
	N	134	N	132	N	77	343
SUM		1960		1702		1276	4938
Assigned Standard Score		1400		1400		1400	-
Minimum score required		1050		1050		1050	-
Obtained score against standard score		980		851		638	-
% of score		70.0 %		60.79 %		45.57%	-
Deficit in Score (%)		5.0%		14.21%		29.43%	-
Mean		140		121.57		91.14	-

Table No. 2: Data Analysis & Results

From the above table no 1.1 that the total number of sample weightage value Direction of Variable SUM 1960 and Assigned Standard Score 1400 and Minimum Score Required to score 1050 but obtained only 980 score in percentage of score in 70% which is deficit found in control variable 5.0 Control of variable that the total number of sample weightage value was SUM 1702 and Assigned Standard Score 1400 and Minimum Score Required to score 1050 but obtained only 851 score in percentage of score in 76.79% which is deficit found in control variable 14.21. Coaching of variable that the total number of sample weightage value was SUM 1276 and Assigned Standard Score 1400 and Minimum Score Required to score 1050 but obtained only 638 score in percentage of score in 45.57% which is deficit found in control variable 29.43.

GLOBAL SCENARIO FOR ARTIFICIAL INTELLIGENCE

- 1] As per report of International Data Corporation, spending on AI systems will reach \$97.9 billion in 2023, more than two and one half times the \$37.5 billion that had spent in 2019. The compound annual growth rate (CAGR) is estimated 28.4%. for the 2018-2023 forecast period .
- 2] The AI market continues to grow at a steady rate in 2019 and expected this momentum to carry forward. In next decade.
- 3] "The use of artificial intelligence and machine learning (ML) is occurring in a wide range of solutions and applications from ERP and manufacturing software to content management, collaboration, and user productivity.
- 4] Artificial intelligence and machine learning are top of mind for most organizations and IDC expects that AI will be the disrupting influence changing entire industries over the next decade.
- 5] Spending on AI systems in the retail and banking industries, each of which near about invest more than \$5 billion in 2019. The banking industry is focus its investments on automated threat intelligence and prevention systems and fraud analysis and investigation.
- 6] Industries like discrete manufacturing, process manufacturing, healthcare, and professional services. will make significant investments in AI systems.
- 7] The fastest spending growth is expected from the media industry and federal/central governments with five-year CAGRs of 33.7% and 33.6% respectively. during the period 2018- 2023
- 8] The three largest use cases – automated customer service agents, automated threat intelligence and prevention systems, and sales process recommendation and automation – has deliver 25% of all spending in 2019.
- 9] The use cases that will see the fastest spending growth over the 2018-2023 forecast period are automated human resources (43.3% CAGR) and pharmaceutical research and development (36.7% CAGR). However, eight other use cases will have spending growth with five-year CAGRs greater than 30%.
- 10] On a geographic basis, the United States will deliver more than 50% of all AI spending throughout the forecast, led by the retail and banking industries. Western Europe will be the second largest geographic region, led by banking and discrete manufacturing.
- 11] China will be the third largest region for AI spending with retail, state/local government, and professional services vying for the top position. The strongest spending growth over the five-year forecast will be in Japan (45.3% CAGR) and China (44.9% CAGR).
- 12] Worldwide spending on artificial intelligence (AI) is forecast to double over the coming for years to hit \$110 billion by 2024, according to new data from IDC.

KEY FINDINGS

- 1] Retail, banking and health care sectors were found the biggest investors in artificial intelligence,
- 2] Big Data can be better managed through Artificial Intelligence processes focus of Smart Cities like Mumbai Delhi, Chennai. Kolkata , Pune, Ahemdabad.
- 3] Some other parts Artificial Intelligence cannot support livability dimensions to ensure Resilience, Safety and Sustainability which can be not good sign for human
- 4] Inception of Artificial Intelligence with any development may create risk and shareholders' value can be degraded.
- 5] Many firms are focusing on building more diverse and inclusive workforces, by using Artificial Intelligence is highly risky in some of companies.
- 6] Some of companies are fail to take advantage of artificial intelligence.
- 7] AI is transforming businesses: some workers' are Jobs may become obsolete; some employees may see AI as a way to leverage their skills and contribute to the transformation.



- 8] AI creates a significant challenge for directors and boards. It is a complex field and technical expertise is in its infancy, even as AI usage is accelerating.
- 9] . Artificial intelligence have made obsolete like automated phone systems, with voice-recognition software replacing some customer-service operators etc.
- 10] In addition, as computers and machines continually evolve into deep learning, it may be more problematic to discern how massive amounts of unreliable data are interpreted through AI.
- 11] It is found that there is a complaints from companies being hacked and there are increasing concerns about privacy and protection of data in an AI world.
- 12] AI is available to analyze trends in the marketplace to assist in marketing the business and targeting new consumers.

VI. CONCLUSIONS

Most of the companies are not informed to directors of any developing trends or activities at their company that may create a risk of liability for the company. To Cities are gaining popularity and the Internet of Things (IoT) is leading to the generation of massive amounts of Data. AI in making decisions for the corporation and many AI technologies can reach a decision based on their interpretation of data, keeping a record of how they reached that decision can be more problematic. AI should not be the sole source upon which board members rely in governing a business or making decisions. AI can be useful to improve the business practices of the organization, or whether it should be incorporated to assist the board in making informed decisions. AI is available to analyze trends in the marketplace to assist in marketing the business and targeting new consumers. If the board does not keep abreast of such technological advances, then it is not being materially informed or investigating developing trends to effectively govern the corporation, and thus failing to fulfill its duty of care. The recent surge in AI investment is likely to continue, and companies that capture its value could develop a significant competitive advantage. In order to provide effective oversight, directors must be educated about AI. Artificial intelligence creates similar challenges in terms of cyber risk—there are many unknowns for a company and board that make constant oversight critical.

REFERENCES

- [1] Armour, John and Enriques, Luca and Ezrachi, Ariel and Vella, John, (2018) “ Putting Technology to Good Use for Society: The Role of Corporate, Competition and Tax Law European Corporate Governance Institute (ECGI) - Law Working Paper No. 427/2018
- [2] Bayern, Shawn J. and Burri, Thomas and Grant, Thomas D. and Häusermann, Daniel Markus and Möslein, Florian and Williams,(2017) Richard, Company Law and Autonomous Systems: A Blueprint for Lawyers, Entrepreneurs, and Regulators Hastings Science an Technology Law Journal 2 pp 135-162.
- [3] Fenwick, Mark and Vermeulen, Erik P.M.,(2018) Technology and Corporate Governance: Blockchain, Crypto, and Artificial Intelligence . Lex Research Topics in Corporate Law & Economics Working Paper No. 2018-7; European Corporate Governance Institute (ECGI) - Law Working Paper No. 424/2018.
- [4] Ferreira, Daniel and Li, Jin and Nikolowa, Radoslaw, (2019) “ Corporate Capture of Blockchain Governance “ “. European Corporate Governance Institute (ECGI) - Finance Working Paper No. 593/2019.
- [5] Geis, George, (2018) Traceable shares and corporate law, Northwestern University Law Review pp, 227-278.
- [6] Van der Elst, Christoph, (2018). Blockchain Technology for Corporate Governance and Shareholder Activism European Corporate Governance Institute (ECGI) - Law Working Paper No. 390/2018; Tilburg Law School Research Paper No. 2018-7.
- [7] Möslein, Florian, (2018). Robots in the Boardroom: Artificial Intelligence and Corporate law . in: Woodrow Barfield and Ugo Pagallo (eds), Research Handbook on the Law of Artificial Intelligence, Edward Elgar
- [8] Song, Wonnice, (2017 Bullish on Blockchain: Examining Delaware’s Approach to Distributed Ledger Technology in Corporate Governance Law and Beyond, Harvard Business Law Review pp, 9-20
- [9] Yermack, David (2017) -, Corporate Governance and Blockchains, Review of Finance Vol 21(1) pp 7–31



INNO  **SPACE**
SJIF Scientific Journal Impact Factor

Impact Factor:
7.512

ISSN INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA



INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

 **9940 572 462**  **6381 907 438**  **ijirset@gmail.com**



www.ijirset.com

Scan to save the contact details