Artificial Intelligence: A Digitalized Solution for Deviation Free Education System and Corruption Free Society

Dr. Jagannath K. Dange, Associate Professor, Department of P.G. Studies and Research in Education, Kuvempu University Shankaraghatta-577451 *E-mail:* *drjkdange@gmail.com*

Robit Mathew, Research Scholar, Department of P.G. Studies and Research in Education, Kuvempu University Shankaraghatta-577451 *E-mail:* *mathewrobit@gmail.com*

Abstract
A healthy education system only can generate a healthy generation for a corruption-free Society. But, education system is itself is being deviated from its goals due to the over impact of social corruption and deviations. In this digital era Artificial Intelligence can be the best solution to form a deviation free education system for a corruption free society. This article tries to depict the pros and cons of AI in human and nation advancement. An attempt is also being made in this paper to evaluate artificial intelligence from an ethical point of view. Aim of this conceptual article is to explore how artificial intelligence can be best utilised in education system as a whole for an anti-corruption culture in the future society. Authors conclude this article by recommending a new mechanism based on AI for deviated practices free education system which is needed for a successful democratic system.
Keywords: Artificial Intelligence, Technology, Deviated practices, Corruption, Educational objectives.

Introduction

In this digital era hardly a day passes without any news on the wonders of artificial intelligence. Artificial intelligence (AI) is truly a revolutionary accomplishment of human intellect in the field of science and technology. AI refers to the brain behind human developed machines to substitute or assist human intelligence in performing certain tasks with ease and perfection. Artificial intelligence proves its excellence at day to day social activities such as diagnosing disease, translating languages, providing customer service, etc. AI can be best employed to prevent deviated practices in the education system for forming a sound generation fit for a successful democratic set up in the nation.

Artificial Intelligence: Human endeavour of moving to perfection

Human beings are finite in nature and strive to conquer infinity by Artificial intelligence. "AI replaces humans in repetitive, mind-numbing and laborious types of tasks" (Sunil Kumar, 2019). For instance, computerized response and follow up from customer care centres to customers even at night is the best example for monotonous and hard services offered by AI. It is correct with google map, because it will help anyone to take correct direction of movement towards the target without any human external assistance.

It enables us to overcome human limitations and it serves as a rectification for human failure or limitations. If properly coded, AI can be utilized for the process which seems to be hazardous for human beings (Artificial Intelligence, 2017). Artificial intelligence takes decisions logically without emotional impact and situational mistakes (B. Ozgen, 2020). For example, diagnosing the internal disease in human beings is a hazardous task for individuals, whereas a number of machines like MRI scanning machines are designed to overcome the

limitation of human understanding with accuracy. Human beings develop AI that would be capable of achieving what is too difficult for human beings and doing monotonous work instead of human beings. For instance, what is amazing with autocorrect is that it understands what one is trying to say and presents the sentence in the best way possible.

Even though AI is coded by humans, in some cases it has proved predominance over human beings with incredible precision, accuracy, and speed. Every system based on AI is designed either to assist or replace human beings for hard or monotonous tasks. Different mobile companies' customer service centres utilize AI with an aim of assisting the human beings for monotonous work and even replacing persons by providing the service available even day and night. Machines developed with AI don't entail recurrent breaks and refreshments as human beings need.

Digitalized world is a perfect development of artificial intelligence and it is the hub of artificial intelligence that demands more perfection, accuracy, speed, etc. For instance, in the medical field AI can simulate medical procedures by providing precision that humans can't. Artificial surgery simulators became a part of the great discovery of the AI. Robotics is used for the treatment of mentally sick patients to save them from their depression and make them active in the real world, (D. Team. 2017). For example, while a person posts a picture on social media, he/she tags people, but technologies automatically detect the person's face and tag concerned and related individuals. Same is when one works on google photos: automatically, a folder is created of the people with the help of their faces. In short, a digitalized world is a human endeavour to conquer time and space with a determination of overcoming human limitations.

Artificial Intelligence system under Human master brain

Expected functions with better results of Artificial intelligence can be attained only under the remote control of Human beings. Behind every artificial intelligence system there is a human master brain who designed it with specific intentions. They know what they need and are able to transform the need into reality. No one can build a perfect and deficiency free AI system which can replace human beings in all human dealings, because every AI based system is developed by human beings to assist the people in better and more effective ways. In some rare cases only it can replace the human being for a monotonous task that too needs human follow up. AI can provide only data based information which needs human intervention for furtherance.

Since change is mandatory in the digital world, any systems developed on AI for a specific scenario may not work perfectly for the updated scenario. So human intelligence is the master brain behind any kind of AI without which it does not have permanent existence. Machines can be manipulated by anyone and can be gone wrong according to the process mistake, because machine intelligence is human made for specific purposes only. Identification of machine error, follow up and rectification can be done only by human beings. "Machine's result is just a reference which needs to be checked and verified its validity because the machine cannot pick up the phone and call the person with a problem. The final decision is always to be made by humans." (Stephen Chen, 2019). Some time AI may be the best solution for the time being, but needs updation and human coordination which can be possible only by human beings. Machines can bring better results with tasks if coded, but it's questionable that they can adjust with the situational changes with needed creativity as humans can do. (Tatsuo Tabata, 2017). In short it is impossible for machines to

function   outside of the structured area they were programmed for. So, the human brain is the superpower behind every machine and its perfect functions.

Ethical perspective of Artificial Intelligence: Possibility of a broken society

Every finding is being made for the betterment of humanity and nothing is greater than human beings. Human resource is the most valued asset of every nation and it cannot be compromised for any other things. Giving more importance to AI will reduce the human interaction or mutual rapport leading to the division of humanity. Over dependence on machines and AI based systems may swallow the working opportunities of the people creating a situation of unemployment and livelihood crisis. Undue importance of digitalization will question the credibility of human beings in the field of service and work.

The present digitalized scenario has created a situation in the society where machine intelligence is more acceptable than human intelligence. Human relation is being counted with less respect and value in business terms. Trust in the human work force is almost lost in comparison with machine efficiency. Employment crisis is the most endangering situation created by the over influence of the machine era.

Machine intelligence can never replace human beings in the field of service where they need a healthy combination of brain and heart. They cannot be persons who can sympathize with fellow beings and who can utilise the common sense ability as situations demand. Even if machines are coded with common sense successfully, it is tough for them to act according to the different situations that human beings can.

Human beings are made addicted to smart phones and other technologies which created unhealthy gaps between people. Too much dependency on AI has affected adversely human mental and intellectual capacities. The heavy use of application of AI may addict to or make dependent on machines by losing their mental capacities, (Neeraj Mishra, 2018). For instance in earlier days people were sharp enough to feed phone digital memory, but the arrival of the smart phones has replaced human memory with phone memory. Health related issues and ecological related crisis are of great concern.

Artificial Intelligence As a solution for corruption-free society with anti-corruption culture

Corruption or deviated practice in the society creates inequality among the people. UNESCO has identified different forms of corruption in the society even in the education system such as embezzlement, fraud, bribery, favouritism, etc. (Hallak Jacques & Muriel Poisson, 2007). The World Bank considers promoting use of technology for more efficient, transparent, and responsive service delivery as a fundamental aspect of their commitment for fighting corruption (Vinay Sharma, 2018).

AI technologies have impacted every part of human life. E-government, where transactions to a large extent are digital, can be one of the best ways to make a society corruption free with an anti corruption culture. AI-based solutions to deliver government services will be the most suitable methods for preventing corruptions. For example, *The Tax Administration Services of Mexico* piloted a project to detect fraudulent operations among taxpaying companies where AI algorithms and analysis tools detected 1200 fraudulent companies and identified 3500 fraudulent transactions within three months. Next important initiation of Mexico towards starting digital government services is to deliver 4G mobile

connectivity to more than 90% of the population within 2024 at an affordable rate. Transparency International UK has adopted AI –solutions to automate searches in public records and strengthen its analytical capacity, (Per Aarvik, 2019). So, AI solutions can be best utilized for a better corruption free society to promote anti corruption culture. It is even possible to develop certain AI based anti-corruption applications for a corruption free society which demands deviated practices free education system.

NEP 2019 draft explicitly states that Corruption remains as an important element that distorts governance of education and argues for a system of governance with no possibility of deviations, (Draft National Education Policy, 2019). UNESCO states reorientation of education for sustainable development is must which requires a new vision for education (*Education for Sustainable Development*. 2020). According to Theory of Success every learner goes through three stages of success: perception, passion and obsession to reach at the gaol realisation (Jagannath K. Dange, 2016). Deviated practices can become a barrier in the lives of the learners to form perfect perception which may damage even passion. Pellumb Karameta, Council of Europe Expert (2010) in the study on "Corruption in the Albanian Education System" states that 'corruption taking place within the classroom at school education level can contribute to developing a "culture of corruption". The sheer power and efficiency of the technology proved that it can be best utilised in many ways for different purposes in the education system to make it deviation free by developing AI based anti-corruption applications, (Cher Michelsen Institute, 2019). It is well depicted below that how AI can be embedded in all transaction and monitoring process devices for creating deviation free education systems.

1) **Digitalised school finance management**

Artificial intelligence and machine learning (ML) algorithms technology which is used in banks and financial organisations, has the potential to analyze large amounts of transaction data and malicious transactions accurately in real-time and detect the deviations (Divyesh Dharaiya, 2020). In the same way this kind of AI and ML algorithms can be utilized for deviation free education system with following facilities of payment:

a) E-Payment: IF AI developed softwares with different payment heads such as tuition fee, admission fee, extracurricular fee, Uniform fee, etc are introduced by state governments, payments other than fixed amount and permitted heads will be automatically rejected which may prevent fraud, enforcement, extortion, etc. For instance AI based online state managed software for admission and extra curriculum fee payments can prevent the enforcement related deviated practices such as donation, building fee, etc. If an option is given for special consideration of reserved classes, this intention also can be met without deviated practices like favouritism, transgression, payment related harassment, etc.

b) E- Salary transactions: AI based digitalized system of salary transaction for teachers can prevent salary related deviated practices with regard to embezzlement and transgression. There should be fixed salary payment out of fees collected for teachers at different levels of education which will prevent payment of more or less than prescribed salary.

c) Any other payments from schools should be made through accounts only. For example school renewal payment, payment for books and uniforms, procurement, etc. No human interference shall be promoted, so that chances for embezzlement and bribe related deviations can be controlled.

2)   E-Admission and school administrative duties

AI can automate administrative and academic related duties such as admission, file management, etc. AL based open admission platform can prevent admission related deviated practices based on favouritism, transgression, extortion, etc. For example, entrance exam, selection of students on the basis of caste, region, language, influence and forced failure or transfer for the exam result purpose.

3)   Face detection AI system

After a number of trial and errors, at Beijing a facial recognition system is being developed to make out any person within fractions of a second. (Stephen Chen, 2019). In the same way Embezzlement in the distribution of midday meals, textbook, uniform, etc and fraud related deviated practices with regard to attendance, drop outs, inclusive education malpractices can be detected and controlled through Face detection AI system.

4)   Digitalised school functioning

Digitalised process of school can prevent the deviated practices in the school functioning. For example *PayPal* which is used in many international organisations is very much suited for finding out fraudulent, transgression, extortion (Eric Knorr, 2015). Keeping barcode or QR code in any types of certificates can prevent acts of fraud with regard to appointments. For example, permanent affiliation of school or qualification certificate of a teacher without QR code can be verified easily during the process of digitalised system of approval of the school. Automatically created experience certificate of teachers on the basis of Unique ID in digitalized system of education system can control the fraudulent experience certificates and can have fair promotion system. Digitalized process of approval and permission without any interference of mediators purely based on the norms and regulations can reduce the tendency of embezzlement and bribe. Modern video conferencing and digitalized selection procedures such as eligibility test, video record of taking class, certificate uploading, etc can prevent the appointment related deviated practices based on favouritism, fraud and bribe.

5)   Online exam and evaluation system

If education systems and procedures related with evaluation, examination, and internal marks system are made more digitized, there are more opportunities to prevent the deviated practices and other integrity risks. Digitalized examination and evaluation system can detect a kind of favouritism related deviated practices.

6)   Score-card system

AI developed community score cards of every teacher and school in connection with Unique ID which is executed in Iraq successfully (Milena Niehaus, 2018) can be utilised for monitoring teaching related deviations and even for promotion process, salary hike, further in-service training, etc.

7)   Grievance platform

Every school is to be asked to provide a digitalized grievance platform system with AI developed video devices like child helpline system where on the spot complaints can be registered with proofs by parents, students and even teachers. These types of complaints

on deviated practices related with harassment and extortion can be done follow ups by AI systems through directing to state legal set up.

8)   Individual tracking system

Individual tracking system on ML based follows every user in relation to the data-driven online and recommends each one of the users many things through websites such as amazon or flipkart. It is the M L technology that proposes new products based on previous purchases every online customer. Using similar technology to track the performance of every student based on his/her previous academic performances it is easy to enhance his or her performance by doing individual care and follow up. In this case AI can rectify the failure of fraud teachers to take remedial class and give individual care.

9)   Intelligent Tutoring Systems

Customised electronic tutoring to individual learner's learning styles and preferences can overcome the shadow teaching deviated practices by teachers. For example Carnegie Learning's "Mika" software uses cognitive science and AI technologies to provide personalized tutoring and real-time feedback for individual students even with remedial class and individual care, (Daniel Fagella, 2019).

Conclusion

Corruption in the society has made its entry into the fold of education which deviates all the education system. Anti corruption culture and corruption free society are the hallmark of a successful democratic system. Corrupted society is the immediate sign of social life destruction and threat to national development. Digitalized world is potent enough to control the corruption related deviations in society. Cashless economy with smart card transactions can make a corruption free society to a certain extent. All the modern AI based technologies are best utilised for preventing deviated practices related with fraud, favouritism, transgression, embezzlement, bribery, extortion, harassment, etc in the schools. In our highly digitised societies, artificial intelligence can be embedded in all transaction and monitoring process devices for creating deviation free education systems. Deviated practice free education system is the best desirable healthy educational environment for moulding the future of a healthy nation with an anti corruption culture.

Reference

Aarvik, Per. (2019). *Artificial Intelligence – a promising anti-corruption tool in development settings?* U4, retrieved on 12 May, 2020 from https://www.u4.no/publications/artificial-intelligence-a-promising-anti-corruption-tool-in-development-settings.pdf

Advantages of Artificial Intelligence. (2017). EDUCBA, retrieved on 12 May, 2020 from https://www.educba.com/advantages-of-artificial-intelligence/

Chen, Stephen. (2019, February 5). *Is China's corruption-busting AI system 'Zero Trust' being turned off for being too efficient?* South China Morning Post, retrieved on 12 May, 2020 from https://www.scmp.com/news/china/science/article/2184857/chinas-corruption-busting-ai-system-zero-trust-being-turned-being

Cher Michelsen Institute. (2019). *Is Artificial Intelligence the future tool for anti-corruption?* CMI, retrieved on 12 May, 2020 from https://www.cmi.no/news/2149-is-artificial-intelligence-the-future-tool-for.

Dange, J. (2016). *Perception, passion and obsession: The three elements of theory of success*. Academia.Edu. retrieved on 14 May, 2020 from https://www.academia.edu/33641364/Perception_passion_and_obsession_The_three_elements_of_theory_of_success

Dharaiya, Divyesh. (2020, January 14). Does Artificial Intelligence Help Fight Financial Fraud? ReadWrite, retrieved on 12 May, 2020 from *https://readwrite.com/2020/01/16/does-artificial-intelligence-help-fight-financial-fraud/*

Draft National Education Policy 2019. (2019, August 22). PRS India, retrieved on 12 may from https://www.prsindia.org/report-summaries/draft-national-education-policy-2019

Education for Sustainable Development. (2020, March 4). UNESCO, retrieved on 12 May, 2020 from https://en.unesco.org/themes/education-sustainable-development

Faggella, Daniel. (2019, November 21). *Examples of Artificial Intelligence in Education.* Emerj, retrieved on 20 May, 2020 from https://emerj.com/ai-sector-overviews/examples-of-artificial-intelligence-in-education/

Hallak, J. & Poisson, M., (2007). *Corrupt Schools, Corrupt Universities*, UNESCO & International Institute for Educational Planning.

Knorr, Eric. (2015, April 13). *How PayPal beats the bad guys with machine learning.* InfoWorld, retrieved on 11 May, 2020 from https://www.infoworld.com/article/2907877/how-paypal-reduces-fraud-with-machine-learning.html

Kumar, Sunil . (2019). *Advantages and Disadvantages of Artificial Intelligence,* M, retrieved on 18 may, 2020 from https://towardsdatascience.com/advantages-and-disadvantages-of-artificial-intelligence-182a5ef6588c

Mishra, Neeraj. (2018, December 13). *Advantages and Disadvantages of Artificial Intelligence*. The Crazy Programmer. https://www.thecrazyprogrammer.com/2018/02/advantages-disadvantages-artificial-intelligence.html

Niehaus, Milena. (2018). *Anti-Corruption Methods in the Education Sector in Iraq*. Utwente.nl, retrieved on 14 May, 2020 from http://essay.utwente.nl/75780/1/Niehaus_BA_BMS.pdf.

Ozgen, B. (2020, January 1). *Advantages of AI in 2020 according to top practitioners*. AppliedAI, retrieved from https://research.aimultiple.com/advantages-of-ai/

Sharma, Vinay. (2018, November 15). *Can artificial intelligence stop corruption in its tracks?* Worldbank.Org, retrieved 14 May, 2010. https://blogs.worldbank.org/governance/can-artificial-intelligence-stop-corruption-its-tracks

Tabata, Tatsuo. (2017). What *are the advantages and disadvantages of artificial intelligence?* ResearchGate, retrieved on 15 May, 2020 from https://www.researchgate.net/post/What_are_the_advantages_and_disadvantages_of_artificial_intelligence.

Team, D. (2019, September 25). *Pros and Cons of Artificial Intelligence – A Threat or a Blessing?* DataFlair, retrieved on 21 May, 2020 from https://data-flair.training/blogs/artificial-intelligence-advantages-disadvantages/

Pellumb Karameta, Council of Europe Expert. (2010). *CORRUPTION IN THE ALBANIAN EDUCATION SYSTEM*. Rm.Coe.Int., retrieved from https://rm.coe.int/16806ec8bc