THE INNOVATIVE USE OF ARTIFICIAL INTELLIGENCE IN THE ARBITRALTRIBUNAL: MALAYSIAN PERSPECTIVE

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Abstract

-Arbitration is one of the mechanism for dispute resolution in Malaysia. This institution is not new and works as a complementary to the court system. The current arbitration institution still applying the traditional method in hearing the arbitral process. With the current development of technology, it seems that the adoption of new technology into this institution needs to be considered. Especially preparing this institution facing the era of IR4.0. Artificial intelligence is one of the tool which need to be addressed in the arbitration system. Is it possible to use the artificial intelligence as an arbitrator in hearing process? Whether the existing arbitration framework in Malaysia is ready to adopt such artificial intelligence? This article seeks to scrutinize the using of artificial intelligence into arbitration processes. Also to examine whether the existing arbitration framework is ready to use artificial intelligence in handling disputes especially the legal fraternity. By using library research methodology, this study found that, a lot of advantages of using artificial intelligent in arbitration processes. However in order to adopt artificial intelligent in this institution, several loopholes of the current arbitration framework need to be improved especially the legal aspect. Artificial intelligence able to work as a complimentary to the existing arbitration framework.

Keywords: Arbitration; Artificial Intelligence;Arbitrator; Arbitral Tribunal.

Introduction

Arbitration has extremely adopted as a major alternative dispute resolution mechanism for resolving different types of disputes such as commercial disputes. These days arbitration has become the most convenient mechanism to the disputants compared with litigation because of its inherent characteristics such as confidentiality.

Malaysia has emerged as one of the main arbitration centers in the region and recognised as a favourable arbitral seat (Leong, Kamilah & Chong, 2012). The arbitration system in Malaysia is incarnate in the Arbitration Act 2005 (Act 646) (hereinafter referred to as "Act 646"), which enforced in 2006. The absolute purpose of Act 646 is to improve the international compatibility and consistency of the arbitral bodies which have been modelled according to the United Nations Commission on International Trade Law.

On 1st July 2011, the Malaysian arbitration system headed toward a new horizon as a new commitment for the Malaysian government to enhance the growth of the use of arbitration in Malaysia. The amendments,which took place in 2011 aim to fill in the lacunas appeared in Act 646. One of the notable reforms brought by Act 646amended in 2011 can be seen in article 8.

Moreover, on 8th May 2018, the Malaysian government announced the new era of arbitration in Malaysia by amending some articles in Act 646 amended in 2011. The 2018 amendment is following the modern revision of the UNCITRAL Model Law 2006 and arbitral laws adopted among the leading countries in arbitration not only on the regional level but also in the worldwide level (Asian International Arbitration Centre, 2018). Among the key amendments, article 42 and 43 of Act 646 amended in 2011 are no more available in Act 646 amended in 2018.

Recently, the adoption of technology has been unendingly starting in the legal field, especially, the legal practitioners have depended on technology because of its substantial advantages such as simplicity and user-friendly. In the same context, the accelerated development of both the internet and

computing technology have opened the door for the establishment of artificial intelligence (Ikram & Kepli, 2018).

Historically,in 1955, John McCarthy, the founding father of the discipline of artificial intelligence, described the process as, "that of making a machine behave in such ways that would be called intelligent if a human were so behaving" (Kaplan, 2016). Indeed, the adoption of artificial intelligence is not restricted to developed countries. One study reveals an impressive findings that the present artificial intelligence adoption rates in Southeast Asia refers to 14% compared to 8% last year. Fortunately, Malaysia was not out of this development because some reports show that in 2012, half of the businesses universally including Malaysia will start utilising artificial intelligence services (Digital News Asia, 2018). Also, 34% of Malaysians organizations have serious attempts today to implement artificial intelligence within two years(Digital News Asia, 2018).So, it is contended that artificial intelligence might be regarded to be the major game-changer in the Malaysian and international economy.

Speaking on that, it worth to mention that there are several companies which owned and supported by the Malaysian government agencies focus on artificial intelligence such as Malaysia Digital Economy Corporation (MDEC) and Malaysia's National Applied Research and Development Centre (MIMOS).

The adoption of artificial intelligence in the legal field has been the most discussed topic around the world. However,there is no accepted definition of artificial intelligence. Because we do not know what artificial intelligenceis (Russell & Norvig, 2010) and due to the rapid developments, the definition of artificial intelligence has changed through time (Kok, Boers, Kosters, Van der Putten & Poel, 2009).

Indeed, the literature shows that there are four approaches have been followed by different scholars in order to describe the artificial intelligence, namely thinking humanly(Haugeland,1985), thinking rationally(Winston, 1992), acting humanly (Kurzweil, 1990) and acting rationally (Nilsson, 1998). Despite the above-mentioned approaches, artificial intelligence has been defined as about "machines thinking like humans and performing human tasks" (ABA Journal, 2016).

Surprisingly, there are two sorts of artificial intelligence known as hard artificial intelligence and soft artificial intelligence, in which the first one is concentrated on the machine that thinks in a similar way to a human. On the other hands, the second one focused on a machine which is able to achieve the tasks that are performed and completed by a human (ABA Journal, 2016). The central distinction between both of them is that soft artificial intelligence does not necessarily require a machine that is thinking similar to the human (ABA Journal, 2016).

In fact,artificial intelligence has been used and disseminated in all sectors, and artificial intelligence products and services are available to the public, such as healthcare(Mukherjee, 2018), surveillance (Jacobs, 2018) and mobile phone applications such as Google Allo and Robin (Saeed, 2017).

Furthermore, in the context of the legal field, it was argued that the utilise of artificial intelligence will soon increase the level of technological intervention within the dispute resolution process (Raymond, 2014) because "one of the aims of artificial intelligence and law is basically to apply advanced technology to the domain of law" (Lodder &Zeleznikow, 2014). The intelligent online dispute resolution systems are taking a step further to automate the arbitral processes by utilising artificial intelligence to supplement or replace the arbitrator (Wang, 2018).

Consequently and based on the facts mentioned earlier,artificial intelligence is not kind of fiction.It exists and plays an essential role in enhancing the quality of our lives and specifically in the field of arbitration. Arbitration may not chirp outside the squadron in terms of the use of artificial intelligence.

The Benefits of Utilising Artificial Intelligence in ArbitralProcesses
Artificial intelligence is a legal uprising that may affect the whole arbitral processes and could enrich the capabilities of the arbitral tribunal, reduce the time-consuming and enhance the cost efficiency ofthe arbitral processes.

Undeniably, several artificial intelligence services and products have already in place and played a vital role in predicting the legal outcome. For instance, in the legislature context,it was argued that, the computer judge isn't likely to take the place of judges any time soon. But it could be used to help them out, prioritising cases that are clearly important or need to be heard (Griffin, 2016).

Side by side, in 2015, Ravel lawis a new kind of intelligent instrument which combines analytics and legal research, supported by machine learning, expert legal knowledge and extensive case law from the law library of Harvard (Ravel Law, 2019). Among its goals, it aims to provide users with an at-a-glance insight into how a particular judge thinks and predict outcomes (Ravel Law, 2019).

Another successful instance for the usage of artificial intelligence in foreseeing the legal result is seen in the algorithm which has the abilities to expect the results for the Supreme Court cases in U.S., it is achieving 70 % correctness for 7,700 provisions from 1953 to 2013 (Papageorgiou, 2018). Therefore, it is believed that realising the potential of artificial intelligence to predict the legal outcomes will be key to making progress toward the sustainable stability in the arbitral processes especially when it comes to issuing the arbitral award.

Furthermore, one more advantage for the usage of artificial intelligence in the context of arbitral processes can be obviously seen in terms of reviewing agreements and documents quickly and effectively. On some occasions, the arbitration cases are huge, and the arbitral tribunal will get thousands of arguments and documents, that need a big number of reviewers and spending a long time in terms of the analysis of these documents and arguments. Sometimes, there are disregarded small details by the arbitral tribunal that prevent one of the disputants to get the fair and just decision. However the arbitral tribunal misses these details.

Therefore, the adoption of one of the artificial intelligence products or services such as eBrevia's Diligence Accelerator program (it performs either a full or partial review of a database of documents (ABA Journal, 2016) in the context of arbitral processes, the arbitrators would be more precise and jump directly to the fundamental points and details without wasting time on the unnecessary contents that have been provided by the lawyers in order to distract and confuse the arbitral tribunal.

Thus, both time and cost that required by the arbitrators or reviewers in order to do the tasks of reviewing the submitted documents by the disputants will be decreased dramatically since artificial intelligence applications can analysis huge amount of documents quickly and take out the hidden information in the complex documents.

Another assuming advantage for the adoption of artificial intelligencein the arbitral processesmay predominate in choosing the qualified and specialised arbitrators by the disputants or the arbitralcenters. Indeed, both efficiency and expertise are difficult to be measured or estimated (Rogers, 2018). One examination demonstrates that the most essential attributes in choosing an arbitrator are classified as expertise and efficiency based on 91% and 93% of respondents sequentially (Mulcahy, 2017). So, it is argued that the usage of artificial intelligence could help the parties and the arbitral centersto appoint the most competent and qualified arbitrator with short time rather than carrying out protracted and costly examinations and investigations.

Recently,this service is not fiction. It has been provided by many artificial intelligence service providers. For instance, the Arbitrator Intelligence is a universal system that gathers and examines important information concerning international arbitrator decision making (Arbitrator Intelligence, 2019). This system assembles the information from both the counsels and uses unique qualitative and quantitative feedback regarding key features of arbitrator decision making such as timing, duration, legal methodologies and interim relief (Arbitrator Intelligence, 2019). Thus, this system improves the choosing of the arbitrator (Arbitrator Intelligence, 2019).

In this vein, the authors advocated the use of this innovative artificial intelligence application in Malaysian arbitration industry because it may provide several advantages. Firstly, it might solve the wrong selection of the arbitrators. Secondly, allow the parties and others to select the most suitable and appropriate arbitrator in arbitration. Thirdly, enhances the quality of thearbitral processes since

the arbitrator will be more careful in handling the arbitration dispute. On the other hands, the authors suggested that the scientists should ensure that the data provided by the artificial intelligence application are totally fair, transparent and trustworthy.

Can Artificial Intelligence Arbitrator Substitute the Human Arbitrator?

Until now artificial intelligence arbitrator does not have the capability to feel, foresee or understand the sensations precisely.So, the lack of passionate processing in the artificial intelligence arbitrator would contribute vital deficiency. It is because artificial intelligence arbitrator can neither comprehend the facial expression nor identify the signs such one example is the body language (Pandey, 2017).

Contrarily, one may argue that artificial intelligence arbitrator is not a useless idea as it appears. Because of several examples, such as a firm of venture capital selected a "robot" or an "algorithm" to be one of its six-member in the board directors(Zolfagharifard, 2014).Side by side, many current artificial intelligence projects are demonstrating otherwise. For instance, Affectivahas been providing sophisticated technology for the analysis of facial expressions of emotions, and most lately, Affectiva has offered a new feature which is the speech capabilities. (Affective, 2019).

Despite the facts mentioned above, it is contended that the use of artificial intelligence arbitrator is still in the infancy stage and it is not ripe enough. Meaning that artificial intelligence arbitrator cannot substitute completely the human arbitrator because of four reasons.Firstly, the human arbitrator combines the application of the rules of laws (that may exist in the artificial intelligence arbitrator) and the *ex aequo et bono*means,"the settlement of dispute out of the law, in accordance with the moral principles" (that may not be absolutely available in the artificial intelligence arbitrator in the current stage). Therefore, artificial intelligence arbitrator would seemingly issue a final arbitral award which is not in line with the rules of justice and fairness.

Secondly, denying of the emotions and feelings which play a significant role in the decision making. This would lead to the breach of the disputants' rights in arbitration to have same treatment and given a fair and just chance during the presentation of their case. This is parallel with article 18 of UNCITRAL Model Law on International Commercial Arbitration 2006 (hereinafter referred to as "MLICA 2006") and article 20 of Act 646 amended in 2011.

Thirdly, the replacement of human arbitrator by artificial intelligence arbitrator may lead to a catastrophic problem in the arbitration industry. Due to the fact that arbitrators may resist embracing technology that could replace the role of human arbitrators, as it could put them out of their jobs (Piers & Schauer, 2018).

Fourthly, there is one more necessary factor, which is expected to be complied with by an arbitrator, i.e. a code of conduct. For instance, the AIAC Code of Conduct for Arbitrator, obligates the arbitrator to be impartial and independent. It states that;

> When approached with an appointment, an Arbitrator shall conduct reasonable enquiries with regard to potential conflict of interest that may arise from his appointment for that particular matter that may affect impartiality and independence.

The question that may appear here concerning the Code of Conduct for Arbitrators whether an artificial intelligence arbitrator could have the ability to comply with those requirements or whether there is an urgent need to impose a special Code of Conduct for the artificial intelligence arbitrator?

Although,artificial intelligence arbitrator may become more advanced than human arbitrators (Wang, 2018). However, the authors insist that artificial intelligence arbitrator could play a supplementary role in arbitral processes. Meaning that artificial intelligence arbitrator can be as an assistant member in the arbitral tribunal, helps the arbitral tribunals in terms of suggesting non-mandatory arbitral award and/or analysing the data and documents provided by the parties.

This analysis is based on the point that the notion of utilising robots along with the human brings great benefit compared with using robots solely (Graves, 2015). Another justification for the use of artificial intelligence arbitrator as a supplementary role could be seenin one survey confirms that the lack of industry expertise by the arbitrator constitutes a huge obstacle in front of utilising the international arbitration in settling the technology disputes (Queen Mary, 2016).

In this regard,it is deserving to envision what may happen in the situation that an arbitral tribunal has been selected for resolving technology disputes, comprises 3 arbitrators, 2 human arbitrators and 1 artificial intelligence arbitrator which is totally knowledgeable in this kind of dispute. Obviously, the consequences would be more reasonable than having 3 human arbitrators.

Is Act 646 Sufficient to Recognise the Use of Artificial Intelligence Arbitrator?
Several arbitration systems stipulate clearly that the arbitrators should be a human. For instance, article 1450 of the French Code of Civil Procedure and article 27 of the Egyptian Arbitration Law 1994.

In the context of Malaysia, article 2 of Act 646 defined the arbitral tribunal as "an emergency arbitrator, a sole arbitrator or a panel of arbitrators". Also, article 2 (b) of MLICA 2006 defined the "arbitral tribunal" as a sole arbitrator or a panel of arbitrators.

By the virtue of the above-mentioned articles, it is clear that Act 646 amended in 2018 and MLICA 2006 are not sure about the possibility to use artificial intelligence arbitrator because they do not expressly reject the use of artificial intelligence arbitrator. However, it was witnessed that MLICA 2006 implicitly presumes that an arbitrator is a natural person by using human-associated pronouns such as he/she or his/her (MLICA 2006, article 12(1)).

So, by following literally the grammatical language used in article 21(1) of MLICA 2006, it can be said that it is quite challenging to acknowledge the usage of artificial intelligence arbitrator in the context of MLICA 2006 (only in the situation when we treat artificial intelligence arbitrator as something neuter (using the "it subject" rather than personal pronounce subject he/she).

In contrast, it worth noting here that Act 646 amended in 2018 neither designate the biological features of the arbitrator (such as being a man, woman), require the disputants to appoint an arbitrator in the human formnor use the human-associated pronouns similar to what used in article 12 (1) of MLICA 2006.

Thus, from legal dimension, it could be said that the legal lacuna on Act 646 amended in 2018 would enable the disputants to pick out artificial intelligence arbitrator as an arbitrator if the definition provided by Act 646 amended in 2018 has been interpreted in a way that embraces the artificial intelligence arbitrator and the parties agreed on so. Thus, the Malaysian legislators should give a clear and detailed answer concerningwhether Act 646 amended in 2018 allows the use of artificial intelligence arbitrator or not? In doing so, the uncertainty and confusion in the Malaysian arbitration system would be mitigated.

Conclusion
Despite the reality that the emergence of artificial intelligence may jeopardise our jobs, the arbitral centers and lawyers should adopt as soon as possible the artificial intelligence technologies that improve the efficiency of the arbitral processes and enhance access to justice.

However, the involvement and adoption of artificial intelligence in the arbitral processes cannot be anticipated because based on the historical records, there is needed time in order to introduce new technology and make it accessible to the public. For example, even though the firstgeneration of computer technology was built in 1937, it was not obtainable to the public at first. In this vein, the authors argued that the Malaysian government should launch a comprehensive advertising campaign and highlight the benefits of artificial intelligence in order to speed up the processes of adoption the artificial intelligence technologies in the dispute resolution industry (arbitration).By doing so, the

stakeholder could agree quickly on the use of artificial intelligence in the arbitral processes especially when it shows to be cost-effective, just, useful and needful.

Moreover, for the time being,artificial intelligence arbitrator cannot completely substitute human arbitrator. In contrast, a supplementary role of artificial intelligence arbitrator should not be ignored. In doing so, human arbitrators can have an opportunity to do and achieve several tasks, on the other hand, this suggestion may reduce the level of resistance by the stakeholders who refuse the full utilisation of artificial intelligence arbitrator in the arbitral processes.

Additionally, this article founds that Act 646does not provide a clear answer regarding the validityof using artificial intelligence arbitrator. However, it is suggested that Malaysian lawmakers should provide a clear answer in this regard.

Finally, it is recommended that since there are still several gaps in the current laws. The legislators in Malaysia and around the world should seek to move toward the new era of the legal development by reforming their laws to provide a suitable environment for the use of artificial intelligence and artificial intelligence arbitrator in the arbitral processes

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