

## EUROPEAN UNION POLICY ON ARTIFICIAL INTELLIGENCE RELATED TO CYBER CRIME

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### Abstract

Artificial Intelligence is one of the sector in Revolution Industry 4.0 that become serious topic to discuss in every country in the world including the European Union itself. They believe that Artificial Intelligence can make the good benefit for the society, however the using of Artificial Intelligence usually make a negative impact for the society therefore the European Union made some Policy about the Artificial Intelligence to support about the Revolution Industry 4.0. The Policy about Artificial Intelligence have the purpose to regulate about using Artificial Intelligence in European Union basically for the members, everything about Artificial Intelligence have the relation with the Technology that have been develop nevertheless everything about technology, internet, computer, and data have already regulated in Convention on Cyber Crime Budapest 2001 therefore everything about Artificial Intelligence including the Policy of Artificial Intelligence in European Union have to related with the Convention on Cyber Crime.

### Keywords

Artificial intelligence, cyber crime, European Union

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## Introduction

We already facing the Revolution of Industry 4.0, Industry 4.0 is more than just the invention of new technology but it's about the major improvisation in manufacturing efficiency(Marr,B.2018) therefore every great people have said that this Era will be the biggest change of the Technology and Internet era, the one that already exist is Artificial Intelligence. Artificial Intelligence has the highest existence in this century, each country is competing to create one of the machines that will be able to replace the position of humans in certain sectors. The AI system will demonstrate at least some of the following behaviors associated with human intelligence, for example: Learning, Planning, Problem Solving, Perception, motion, manipulation, creativity and social intelligence and many more. What can human do, AI also can do. One of the Example about Artificial Intelligence that we know is SIRI, the application in Apple while we use our voice it will answer what we said, another example is Amazon Alexa. At very high level, there are two broad types for Artificial Intelligences: Narrow AI and General AI (Nick Heath.2018).

Narrow AI is where we have been that means Narrow AI is "specific type of Artificial Intelligence in which a technology can defeat the humans in some very narrowly defined tasks but not at all (Leah Davidson. 2019). If Narrow AI can only what can human do, however the General AI or as known as Strong AI allows a machines to apply not only the skills but also the knowledge in different contexts, it seems like copying what human do into some machines and it could be dangerous and nowadays this Strong AI will use by all of the countries around the world. Even though every countries in the world use this Strong AI however we have to know about the history about how is Artificial Intelligence become some familiar issue in this century.

The Artificial Intelligence already started on 1936 on this case it called Turning Machine ( Bosch,Robert.2019). This Turning Machine as known as computing machine, the one that applied about this Theory was the Mathematician British, Alan Turing and he want to prove that this was the basic of Artificial Intelligence. In 1956, there was a conference at Dartmouth College in New Hampshire. On this side, they believe that Human Intelligence can be simulated by machines and from that the programmer called John McCarthy have proposed some program and this program was the first AI program it called "Logic Theorist" ( Bosch,Robert.2019) this program prove that several data and mathematics this program has also discussed while on the conference. On 1966 there was a machine called "ELIZA" that made it by German-American Computer which name is Joseph Weizenbaum, he made the first thing that make the computer program can communicate with humans and this Invents have made all around the world give appreciate to him. Even though on 1966 Joseph made "ELIZA" however "ELIZA" only a program not the computer, and invent on 1986 AI have more growth and growth, it can be seen by the computer is given a voice for the first time. It called NETtalk, it was Invent by Terrence J.Sejnowski and Charles Rosenberg ( Bosch,Robert.2019). And until now Artificial Intelligence become one of the technology

that have been popular and discussed in some conference therefore it could be interesting to discuss about the Artificial Intelligence.

Nowadays, every people in the world believe that Artificial Intelligence will make some big change, it can be seen that every people in the world use artificial intelligence as they tool to do some job and some of the countries use the Artificial Intelligence to make their economic stable and increase for example in China although they have a crisis about the Corona Virus, however they use Artificial Intelligence as they device to solve the problem. However the using of Artificial Intelligence not only happen in China but also in European Union while they can make their economic stable until now, even though they had big problem on 2010 about the Crisis of Economic and not all of them have the Stable Economic. The law is the attractive domain for AI researcher for several reasons (Anne Von der Lieth Gardner. 1987): First, the Law have the Tradition to examining its own reasoning process, the second which is the legal reasoning can be mentioned as stylized because of the stare Decisis, Stare Decisis is a legal doctrine that obligates the court to follow the historical cases when making a judgment on a similar case (Julie Young), the third is very much the legal knowledge that easy to access and relatively well structured, codified and also indexed.

In case of that they can make the Artificial Intelligence become their income to increase the economy and on 16 February 2017, the European Parliament adopted the resolution legislative initiative which recommended range of legislative and non-legislative in sector about Robotic and Artificial Intelligence (Law Library of Congress, Global Research Directorate, 2019) however some people have bad intentions to make Technology and Internet become some tool to attack people. As said before, Artificial Intelligence is about the Technology and also the Internet that can make robots do what human always do therefore the policy about the Artificial Intelligence in European Union should according to the Cyber Law which was the Convention on Cyber Law Budapest 2001 because the Cyber Law has regulate about the Technology, Internet and everything.

### Research Method

This Article uses the Normative Legal Research Method. Normative Legal Research Method is research that done through study on laws and regulations and also find the Information from the International Convention, the International Journal, and other Legal Document including the information on the Internet and also the cases. Therefore on this case, the Normative Legal Research is the Method that analyze the article with the References while on this situation, this article focusing on Artificial Intelligence in European Union.

## Discussion

### 1. The European Union on Artificial Intelligence

#### a. *The Understanding of European Union Law*

The European Union is not a country but it's like the Organization that the members are the country in Europe Area it's same like ASEAN, every Organization was made always have the purpose so does the European Union. The European Union was made for ending the war between the neighbors, which were culminated in the World War II. The one that have the role to make the European Countries become unity was European Coal and Steel Community however it's only in several sector which was Economic and Politic to secure lasting peace(European Union). There are six countries that can be called as the founding of the European Union which are Belgium, France, Germany, Italy, Luxembourg and the Netherlands. We know that the Community for the European Area is European Union however before that the name of the European Union was European Community, and there was a very obvious irony in the fact that European Community was founded by a Treaty of Rome (Ian Ward. 2009).

On 1 January 1973, the European Union have 3 new members to join the European Union itself which were Denmark, Ireland and the United Kingdom were joined on that day and it made the European Community on that year become 9 Members including the founding. On 1970s, that was the first time that European Community made some Election to choose the Parliament of Europe and also on that year European Community adopted the laws to secure the environment , introducing the notion of 'the polluter pays' for the first time(European Union), therefore in the regulations, EU itself have four sources of EU Law (Routledge, 2010): which are a) law enacted by Member States which are the founding Treaties and Law Enacted by the EC; b) General Principles of Law Recognized by the European Court of Justice (ECJ); c) International Agreements with non-Member States; and d) Decision of the European Court of Justice and the Court of First Instance.

Those sources will be the main things to make the Law especially in Artificial Intelligence for European Union. In 1985 the Schengen Agreement was signed by France, Germany, Belgium, Luxembourg and The Netherlands establishing that we know until now as "Schengen Area" and the purpose of that agreement to guarantee free flow people and easy traffic of good and also aims at cooperation in the field of police services and judicial authorities ( Edgar Lammertse, 2017). In 1992, in Maastricht Treaty, the European Community have changed their name into European Union (Matthew J.Gabel ), and on that treaty also provided about the single currency of the European Union which is we know as Euro.

The European Union have principles about using artificial intelligence while the five principles of the Ethical Charter on the Use of Artificial Intelligence in Judicial Systems and their Environment which are (Council of Europe, 2018): Principle of respect for

Fundamental Rights, Principle of Non-Discrimination, Principle of Quality and Security, Principle of Transparency, impartiality, and Fairness, and the Principle “Under user Control”. The European Parliament have made the decision that every regulations and conventions should be update and complement the existing Union legal framework (European Parliament, 2019).

**b. *The Rules about Robotics and Artificial Intelligence in EU***

The regulations or the Convention is the rules that The European Union have made the guidelines on ethics on April 2019, and the European Commission President-elect, Ursula von der Leyen, has announced that the commission will put forward the proposals soon for a coordinated European Approach to the Human and Ethical Implication on AI (European Parliament, 2019). Some of People think that AI have a lot of benefits, not only that but they also highlight a number of ethical, legal, and economic problems that have related to the Human rights and the fundamental freedoms. Every Policy-makers in the world are looking at ways to tackle about the development of AI. And the European Union can be considered as front runner with regard to establishing a framework on ethical rules for AI. Because without Legal Certainty, the rule of law will collapse into ethics and come to depend on the ethical inclinations of the power and authority (Mireille Hildebrandt , 2019), therefore The European Parliament have request to European Commission to make the recommendation about the civil law rules on robotics on January 2017.

Therefore the Parliament have made the code of ethics for robotics and engineer to make the Plan go as well as they already planned. On 2019, the European Commission that endorsed by the Council of European Union published a coordinated plan to know about the National Strategy in each EU Members. The Guidelines about the Artificial Intelligence that have been made by the European Union is purposed to AI Stakeholders that developing, deploying, implementing, using or being affected by Artificial Intelligence in European Union itself, and those stakeholders have use this Guidelines while they using, developing the system of AI in European Union. There are some key for EU Requirements for achieving trustworthy AI, while there are (European Parliament, 2019):

- 1) Human Agency and Oversight
- 2) Robustness and Safety
- 3) Privacy and Data Governance
- 4) Transparency
- 5) Diversity, Non-Discrimination
- 6) Societal and Environmental well-being
- 7) Accountability

**c. *The Other Organizations related to Artificial Intelligence***

That's all about the Key Requirement that EU need to achieving for the Artificial

Intelligence. Even Though in Artificial Intelligence have their policy, in this case The European Union have Cyber Law, which was Convention on Cyber Law Budapest 2001. However the Convention on Cyber Law not following this era, they still used the old era, in the case of that it will hard if they keep this Convention as their regulation to make some Policy of Artificial Intelligence. United Nations itself have made some International Community that can help European Union to develop the Artificial Intelligence Policy, some of the example is United Nations Commission on International Trade Law (UNCITRAL).

UNCITRAL is one of the International Organization that discuss about the development of technology for the first time, this organizations was established by the General Assembly in 1966 (United Nations Commission on International Trade Law). If UNICTRAL will focusing on Cyber Crime, the organization in UN that focusing on Artificial Intelligence is UNICRI. The UNICRI also known as the United Nations Interregional Crime and Justice Research Institute or as known as Centre for Artificial Intelligence and Robotics. UNICRI was created in 1968 to assisting the intergovernmental, governmental and non-governmental organizations in formulating and implemented the policies in the field of crime prevention and criminal justice (United Nations Interregional Crime and Justice Research Institute (UNICRI)). On 2015, UNICRI has launched the program about Artificial Intelligence and Robotics, and opening the Centre for AI and Robotics, the Centre is in the Hague, Netherlands and on September 2017 with the support from the Municipality of the Hague, The Ministry of Foreign Affairs of the Netherlands and 1QB Information Technologies, Inc (United Nations Interregional Crime and Justice Research Institute (UNICRI)). This two organization can be measured for European Union to make some good combination between Artificial Intelligence and also Cyber Law because on this case we can't guarantee that some of Artificial Intelligence later on will do the Cyber Crime.

## 2. The Cyber Crime

Cyber Crime have means a lot in this technology era, Cyber Crime consist of illegal activity that conducted on a computer (Jessica Schubert ). It means Cyber Crime is all about the Technology, "Cyber" come from the words "*cybernetic*" words came from the Greece that has the meaning the one has skilled in directing or regulating (Nudirman Munir, 2017). The Words Cyber is using in other name such as *Cybersex*, *cyberspace*, and any other cyber name. Cyber Crime as said before has regulated all about the technology and the information in Cyber world. Internet one of the example about the Cyber Law. Widely, Cyber Law does not only cover crime on the Internet but also regulate and cover e-commerce, e-learning actors, copyright holder, patent, e-signature both concerning cyber Crime and Cyber Civil as well as Cyber Special (Nudirman Munir, 2017).

The one that very dangerous in Cyber Crime is the Cybercrime Perpetrators can do their Crime in different countries, for example is about the cases Anna Kournikova, she is from the Netherlands however the victim has straggle in every country around the



world by only the Internet (H.M.Arsyad Sanusi,dkk, 2011), therefore it very difficult to handle this Crime. Cyber Crime has classified into “white collar” crime because the perpetrators are the people that educated and have the knowledge about the computer itself. They take advantage of the weakness of the system in Computer therefore they can do the Crime. There are some characteristic features that this people are the perpetrators of Cyber Crime, while they are (H.M.Arsyad Sanusi,dkk, 2011):

- 1) The Age are between 18 until 30 years old;
- 2) Very Smarts;
- 3) Have good Motivation;
- 4) Brave;
- 5) Adventure;
- 6) Like the Challenges.

Even though the Cyber Crime become the serious crime in this century however we have to know about the history of Cyber Crime. Cybercrime have a lot of eventful history.

It is very difficult to know about the time of the first crime involving a computer (United Nations Manual on the Prevention and Control of Computer Related Crime, 1994). In 1900 B.C, the people of Egypt have using the encryption and decryption system to find the information however on 100-44 B.C, Julius Caesar use the normal alphabet to make the communication through the government for maintaining the information security. The History of Cyber Crime have been find out since the 1820 era. Exactly, the First Cyber Crime have been recorded on 1820, it was happened when Joseph-Marie Jacquard, a textile manufacture in France produced the loom. This loom make the threat for the employee that already work on there, because it can threat the livelihood and to protect their rights they do sabotage to discourage Jacquard from using that new technology (Harpreet Singh Dalla and Geeta, 2013).

That was recorded as the first Cyber Crime. The U.S. is the birthplace of Internet and Computer while also become the experienced Computer that facilitated crime in the year 1969 (Harpreet Singh Dalla and Geeta, 2013). In the year 1970, hacking become one of the Cyber Crime that have been exist, some of the malicious association do some hacking with the target was computerized phone system. And also in the same year, Internet, Cyber World, Network and everything about Cyber have been open to worldwide users. Many countries have made their own National Regulations about the Cyber Crime, until on 2001 in Budapest, Hungary every countries have decided that Cyber Crime become a serious crime in this century, therefore they made some Convention and we know as Convention on Cyber Crime Budapest 2001.

This Convention was made on 23 November 2001 in Budapest, Hungary and after that this convention put in into European Treaty Series 185 (H.M.Arsyad Sanusi,dkk, 2011). The Decisions for make this Convention were *firstly*, the International Society aware that the relationship between each country was necessary for fighting the cybercrime

and for protecting the importance in using and developing the Information Technology. *Secondly*, This Convention needed for reduce abuse of system, server and the Computer data to make something Criminal. *Thirdly*, United Nations have declare about the Human Right by make some the Convention about the Human Right and also about the Covenant Civil and Political Rights, therefore the Covenant Civil and Political Rights are including to freedom about share any information to the social media however they can't use their rights as they wish, they have convention about that and this Cyber Crime Convention compensate this problems.

This Convention have already agreed by all of the European Union Society as the Convention that can be accessed by all country around the world.

### 3. The Policy of AI that Implemented in EU Members

In Black Law Dictionary have said that the definition of Policy is the general principles by which a government is guided in its management of public affairs, or the legislature in its measures (Black Law Dictionary, 2020). This term always be applied into a law, ordinance or rule of law. Therefore from that definition we can say that Policy have the same role with the regulations. In Case of that, there are four factors that affect of policy making which are (SAGE Publications):

- 1) The Political Environment;
- 2) The Economic Environment;
- 3) The Social and Cultural Environment;
- 4) The Administrative Environment.

Public Policy is the Policy that have been declared by the state to Covers the state's citizens (Black Law Dictionary, 2020). In European Union, there is the Policy that being the object of a contentious debate which is Coherence Policy. The Policy that will be implemented in European Union should be agree by all the members therefore this Coherence Policy was very important for European Union. The origin of the debate policy coherence for Development in the EU can be traced back to the Treaty of Maastricht (Maurizio Carbonne, 2008).

The Policy Implementation is the doing policy that execute of the decisions to bring about change to address a public problem (Maurizio Carbonne, 2008). The performance of Policy Implementation can be categorized into three dimension which are (Anisur Rahman Khan, 2016): (1) Output, outcome, and ultimate outcome of Policy, (2) the impact of Policy itself, (3) Measurement that the Policy leads to the development of Country or Society as a whole.

When we talk about the Implemented of the Policy, there are some problems that should be look to tackle the Problem. One of the Problem is already said on the Guidelines that the Policy is not Binding, what is not Binding mean? For example there are some regulation in Human right which is Universal Declaration of Human Right,



the countries that ratification the UDHR have to Binding with that Convention or regulation, if they broke it they will got the punishment. However, in European Union the policy about the Artificial Intelligence is not binding other members in European Union (European Parliament, 2019), it means some countries can do anything that they want because the Convention or Regulation doesn't Binding them. Even though the European Union have the Cyber Crime to cover the uncertainty about the policy, it does not mean will guarantee the security because there are some things in policy of AI that doesn't match with the Convention on Cyber Crime 2001.

Therefore the Policy should Binding every Members in EU if they want to develop and use the Artificial Intelligence based on framework in European Union. The Other problem is about the Coordination of Actions at European Union and National Levels. The reason why this become the problem because the purpose to make this policy to make the Centre for Research in Artificial Intelligence was handled by European Union like UNICRI did, therefore every EU members have to give the National Strategy to European Union about the Artificial Intelligence therefore the European Union can controlled about the Development and the Using of Artificial Intelligence.

This Policy have not Binding every members in European Union itself therefore the European Union need transparency to make this Policy more useful by all members of the European Union. What does mean transparency in this situation? Transparency in Policy of Artificial Intelligence that will be implemented in Europe means that every members and society can see and know the framework of Artificial Intelligence, this Transparency is very important to ensuring that Artificial Intelligence can be explained.

#### 4. The Relation between Cyber Crime with the Artificial Intelligence

Sean B. Hoar have said that Cyber Crime is the crime that usually do in System Computer especially Internet (H.M.Arsyad Sanusi,dkk, 2011). From that statement, many people have their opinion that this Cyber Crime is the crime that use advance technology, therefore in this era we called Revolution Industry 4.0 which one of example of this advance is about Artificial Intelligence. When we discuss about the Cyber Crime exactly in European Union, don't forget that European Union has their own convention or constitution about Cyber Crime, so does Artificial Intelligence. Because of this era have become an era of Industry 4.0 it will be a lot of Crime in Cyber including Artificial Intelligence, for example:

- About the Copyright and Related Rights

The Copyright in this case when some people made this invention about Artificial Intelligence, it's absolutely belongs to the country and country that can controlled the situation about the Artificial Intelligence according to the Cyber Crime Convention that's already mention in Article 10 that discuss about the copyright.

- Limitation on Use

Artificial Intelligence could be one of autonomous weapon if we can not make the regulation about that, and the European Union have already made this Limitation, it could be seen on Article 28 Convention on Cyber Crime Budapest 2001, in Point 2 it mentioned about the Information that parties should give about the Artificial Intelligence that they made, therefore it could be more transparency and every people know that the Artificial Intelligence use for the increase of the economy not for the autonomous weapon.

- The Privacy and Data Protection

As said before that Artificial Intelligence have a lot of benefits and also the highlight a number of ethical, legal and economy concerns that relating to the fundamental freedoms and Human Rights, one of the example of this is about the personal Data Protection and the Privacy. Every People know Artificial Intelligence as Smart Machine that can save any data in one object, in this case it could be dangerous because every country and every people in the world have their secret data however Artificial intelligence can access it through them and it can be another autonomous weapon in Internet era. For example, there was an agreement between European Union with the United States about the Data Protection to make it stronger however the Austrian Citizen have complained about his Facebook that the data was inadequately protected due the US government surveillance was disclosed by Edward Snowden, the European Court of Justice overturned the safe harbor principles (Tim Saviola). However it could be good things for completed some problem in Criminal Justice, in case of that Artificial Intelligence can know the Data about the Defendant without asking to him, and Artificial Intelligence can become Machine Learning that can be used to solve problems such as face and speech recognition, online fraud detection, and automatic language translation (M.A, Berawi, 2020), therefore this Artificial Intelligence can be the tools to solve the problem in Cyber Crime. In European Union there is the regulation about the Data Protection, it called General Data Protection Regulation (European Parliament, 2019) and it must to comply by all the stakeholders in Artificial Intelligence Sector. Therefore all of the society in European Union can control over their own data and keep it secret. Added with the Convention on Cyber Crime Budapest 2001 it could be Data Protection that very hard to penetrate.

Every crime have their settlement in Tribunal, the one question is how to prove the cyber Crime Tribunal if the data and the information about the evidence was very hard to find, therefore the Cybercrime investigations require a mix of traditional and new policing techniques to deal with electronic data storage and real time data flows (Z.Cliffe Schreuders), furthermore Artificial Intelligence will be the good tools for prove it the evidence in the Court.

## Conclusion

Artificial Intelligence is the technology from Revolution Industry 4.0 that will replace the Position of Human it means Artificial Intelligence is the technology that can do what usually human do like: Planning, Learning, Problem Solving, etc. Artificial Intelligence become the high existence in this era, every people in the world have already discuss about this magnificent technology and also use this Artificial Intelligence to gain benefit for them. Although, every single technology will have some problem that will disobey the regulations therefore there are some problems if the Artificial Intelligence don't have any regulations, on the other hand the European Union made some Policy about the Artificial Intelligence and it should have relation with the Cyber Crime Convention Budapest 2001, which is every regulation about technology will according to the Cyber Crime definitely the Convention on Cyber Crime. Therefore the relation between the Artificial Intelligence and Cyber Crime itself are the copyright and the related rights, the Limitation on Use, The Privacy and Data Protection.

Cyber Crime is about the Crime in Data, System and Computer therefore this Artificial Intelligence was one of them and that's why the Policy of Artificial Intelligence have to related with the Cyber Crime Convention. Every Policy have their Problem that should tackle for every country including the European Union and on that case there are also the Problem about implemented the Policy in Artificial Intelligence, one of the problem is the Policy that doesn't Binding every member in European Union itself, it's very hard to implemented the Convention or Regulations if the Regulations doesn't binding the Member of European Union itself. Another problem is the Coordination of Actions between European Union and National Levels, Usually National Levels have their own framework and regulations about something therefore it's very hard to make the Coordination between the European Union and the National Levels because it can't make misunderstanding between the framework in European Union and other countries in European Union, the solution to tackle this problem to make the Convention on Artificial Intelligence and Binding every Members in European Union therefore the Members have to made the Framework based on the framework that the Convention or Policy of Artificial Intelligence have.

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