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CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	**ARTIFICIAL INTELLIGENCE AND INTELLECTUAL PROPERTY LAWS IN INDIA: AN EMPIRICAL STUDY** *Dr. D. THIRUMALA RAO*	1
2.	**INFLUENCE OF PERFORMANCE APPRAISAL MANAGEMENT ON EMPLOYEES' PRODUCTIVITY: A CASE STUDY ON INDIAN PROFESSIONALS** *PRADEEP PANDA & Dr. ADARSH ARORA*	8
3.	**EMPIRICAL INVESTIGATION: POWER CONSUMPTION DURING CORONAVIRUS (COVID-19) PANDEMIC OUTBREAK WITH REFERENCE TO RESIDENTIAL SOCIETY** *ANUSHPAMATHI SUNDARARAJAN, DARSHINI A, MIRUNALINI B J, HARSHA DEEP KANKATA & Dr. J BHAVANI*	23
	REQUEST FOR FEEDBACK & DISCLAIMER	32

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- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

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ARTIFICIAL INTELLIGENCE AND INTELLECTUAL PROPERTY LAWS IN INDIA: AN EMPIRICAL STUDY

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ABSTRACT

In simple words, Intellectual Property Right is intangible creation of human mind. As we all know every one of us possess a talent with us, only few of them apply that talent for commercial use and gain out of it. Whether it is Bill Gates for Micro Soft, Copy Rights on books by famous authors, creating a logo, design, or a symbol which we call as "Trade Mark' developed by businessmen, geographical indication like Pochampalli famous for sarees, Kanchi for silk sarees, Mangalagiri for cotton dresses & sarees, Assam Tea, Bata for shoes and so on. There is no end for this, it is all the creation of a right by people among us, with the talent they have and make money out of it. The right created by the persons on the products, services should be protected to safeguard the efforts of its creators and benefit the society. Hence, Intellectual Property Rights (IPR) are legal rights which has been resulted from intellectual activity in business, trade, industry, science and other fields. The inventions and discovery by the human beings cannot be limited to one period or era. Since childhood, it is observed that video games, games in computer, then games and movies in cell phones today and the digitalization is taking us to get smart televisions, Alexa, Google Assistant. Very recent phenomenon is about "Artificial Intelligence" (AI). It is understood that this 'computer' is thriving AI. Hence, an attempt is made in this paper to correlate and emphasized the relevance of IPR in protecting the inventions or work that contributed to the emergence of AI.

Keywords
human mind, intellectual property rights, artificial intelligence, alexa and google assistant.

JEL CODES
O34, O39.

1. INTRODUCTION

During end of 1980s, Indians started using the word computers quite often and few affordable companies, institutions and some individuals started using computers. As a child, I remember, our school management purchased computer and taken all the students and gave a demo class on that. I was thrilled to see the computer for the first time. Then it was followed by video games played in computers in the mid of 1990s. The thrill was not ended here, it was followed by Mobile phones in the millennium. Mobile phones started with messages and calls, then color phones with camera resulted in digitalized phones and today the entire world is digitalized and moving towards "Artificial Intelligence". It is the credit to be given to the human brain to continue his innovative thoughts and taking us towards an ultra-modern era, which is beyond our imagination.

Such intellectual thoughts and innovation should be given protection and any human innovation should be safeguarded for the benefit of society, for which regulation and statutory law should be implemented.

Hence, in this paper, the intellectual property laws and artificial intelligence both are correlated and analyzed the views of respondents on the emerging importance of AI and the role of IPR in protecting the AI in India.

CONCEPT OF INTELLECTUAL PROPERTY RIGHTS

Intellectual Property Right is an exclusive right granted by Government of India for protection of originality of work of the inventor. Intellectual Property Rights include Patents, Trade Marks, Logos, Symbols, Copy Rights, Information, Layout Design. Intellectual Property Right is to safeguard the assets created by the human brain, which are intangible in nature. They are converted into tangible usage for commercial purposes.

CONCEPT OF ARTIFICIAL INTELLIGENCE

Artificial Intelligence, in simple terms can be defined as the "ability of a machine to mimic intelligent behavior. AI is that branch of computer science that aims to create "Intelligent Machines". These machines are programmed to "Think" like humans and mimic how a person acts and his mannerisms. AI aims at learning, reasoning and perception.

2. REVIEW OF LITERATURE

Computers coupled with human intelligence, have advanced to make decisions on their own. The ability of a computer system to take decision by itself came to be known as "Artificial Intelligence. The term 'AI' was formally coined by John McCarthy, a computer scientist at a conference in 1956[1].

According to McCarthy, it was the notion of a program, processing and acting on information, such that the result is parallel to how an intelligent person would respond in response to similar input[2].

It was this reliance and curiosity towards machines that AI projects were developed in a manner which allowed for the performance of tasks requiring human-like creativity[3].

The results being rendered by the machine are an outcome of its own intelligence, or algorithms and commands. To tackle the same, Sir Alan Turing proposed a test called 'Turing-test[4].

In the words of Turing, an AI machine showed intelligence if the responses submitted by the same were distinguishable from real human responses. While this test worked for a couple of years, its application was restricted only to speech machines and certain quizzing purposes. The World Intellectual Property Organization (WIPO) identified the existence of AI and propounded three categories of AI, expert systems, perception systems and natural language systems[5].

3. RESEARCH GAP

The above review of literature concluded that, the AI was recognized decades ago and the WIPO identified its existence and hence, the research gap bridges the linkage between AI and the role of IPR in protecting it.

4. STATEMENT OF THE PROBLEM

The statement of the problem focuses on the issues relating to IPR in safeguarding the AI and its usage to the society in a beneficial way in India. Today India is one among many developed countries, which global share in technology, business, trade and education. AI can make and take India further to grow and placed in a pivotal position in contributing to the world economy and becomes a self-sufficient country and a role model to many countries which are in developing stage.

5. OBJECTIVES OF THE STUDY

Based on the research gap and statement of the problem, the following objectives are taken for the purpose of the study:

1. To study the growing importance of Artificial Intelligence and Intellectual Property Laws in India.
2. To analyze the views of respondents on role of IPR in protecting Intangible Assets including AI.

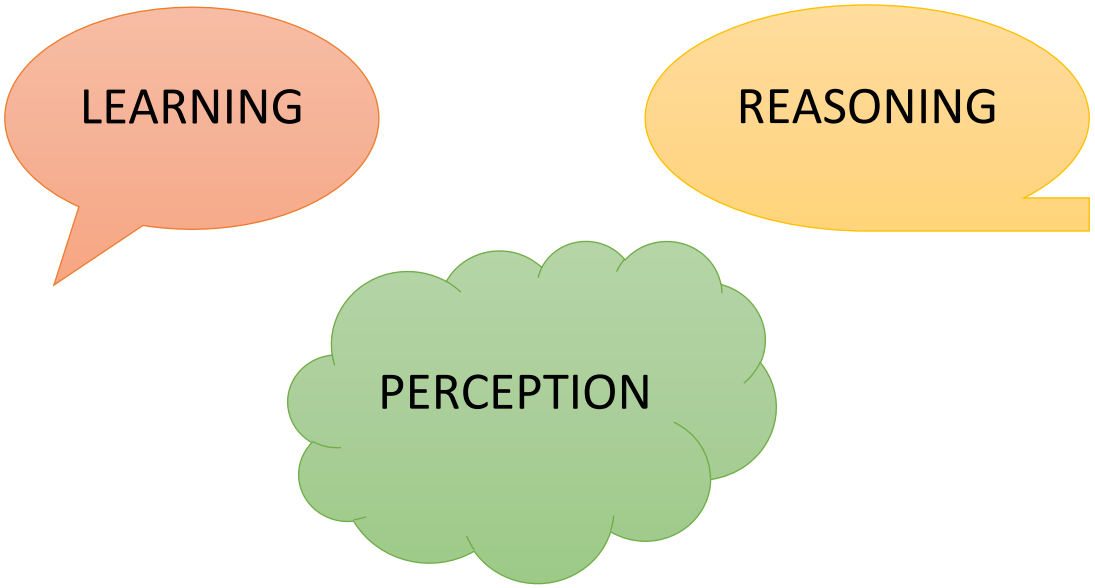
6. RESEARCH METHODOLOGY

1. Data Collection: Both Primary and Secondary Data is used for the purpose of research.
2. Sample Size: The sample size is 100, out of which 96 responded.
3. Sampling Method: Convenience Sampling
4. Primary Data Collection: Through questionnaire circulated in Google forms to the respondents.
5. Data Analysis Methods: Data is analyzed based on the responses given by the respondents – using Pie Diagrams & Bar Charts (percentage basis)

7. GROWING RELEVANCE OF ARTIFICIAL INTELLIGENCE AND THE ROLE OF IPR LAWS IN PROTECTING AI

Artificial Intelligence in simple terms can be defined as "the ability of a machine to mimic intelligent behavior. Artificial Intelligence is a branch of computer science that aims to create "intelligent machines". These machines are programmed to 'THINK' like humans and mimic how a person act.

PRESENTATION 1: GOALS OF ARTIFICIAL INTELLIGENCE



The goals of AI, creative and the knowledge exhibited by the AI systems is clearly evident to the world and there is a concern regarding protection of AI in the minds of users, enforcing the rights in relation to intellectual property. Thus, we should explore more deliberative ends of copyright and patent laws in connection with AI systems

Now a days, there are machines which are highly creative that would be eligible for copyright protection if they are created by humans. Any invention, if it is unique in nature, when applied, or submitted, should be eligible to get registered. But here, the role of AI is such that it is either

(i) augmented human life and enhance or extend human capabilities through a direct relationship between human interaction with AI or

(ii) are autonomous, making decisions within a contextual solution space and are being employed by humans to serve them.

The inventorship issue also raises the question of who should be recorded as the owner of a patent involving an AI application. Humans will not accept AI as their equals and grant them the same rights and eventually work for them. In that sense, AI cannot own property. If it is taken that, AI is by human care takers, in this sense, AI is a 'Hired Force', all fruits of labor of AI will be owned by the human-based entity it works for.

In this regard, it is considered that powerful organizations have more resources to employ and develop AI that can generate patentable IP.

To answer these issues and the impact of AI on science and technology is still unfolding in a raid rate and it is the time to bring awareness among the users on the application of AI and the protection of AI applications and the laws that should be generated to safe guard the interest of AI

The issues and questions are arising for IPR policy as a consequence of the advent of AI as the its applications are in wide usage among the companies. For this purpose, a conversation was organized at WIPO in September, 2019 with the participation of Member States and the representatives of Commercial, Research and Non-Governmental Sectors.

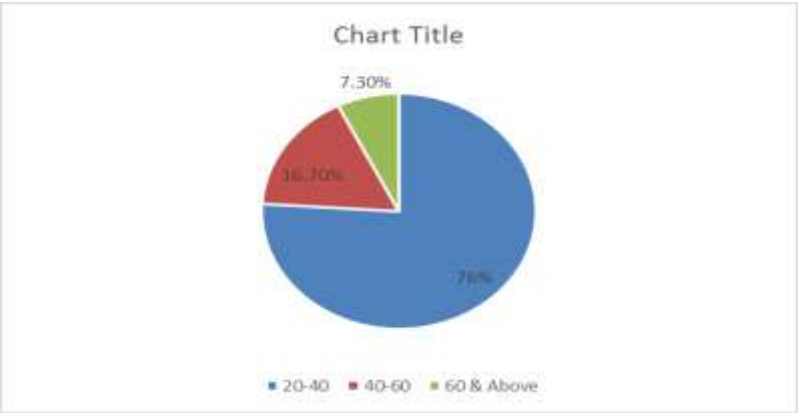
This paper focuses not only on the issues that are related to AI and IPR and the intervention of WIPO on its IP policy to protect AI, but also the views that are essential in drawing conclusion on the role of AI and IPR.

8. DATA ANALYSIS

DEMOGRAPHIC PROFILE OF 96 RESPONDENTS

1. Age of the Respondents

Fig. 1



Source: Primary Data

From the above figure, it is observed that out of 96 respondents, 76% belong to the age group of 20-40, followed by 16.7%, 40-60 age group and remaining 7.3% belong to 60 & above age group.

2. Occupation of the Respondents

FIG. 2

Source: Primary Data

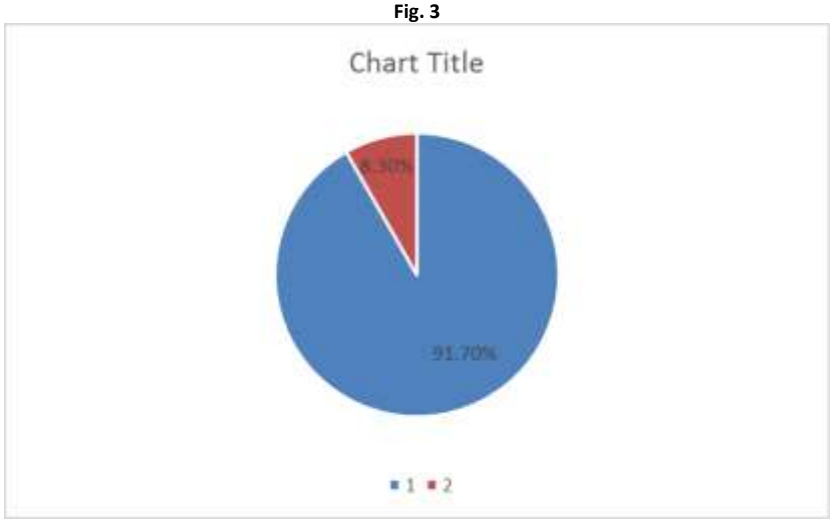
From the above figure, it is observed that, out of 96 respondents, 46% are from employment, followed by 14.3% from business, 21.7% from profession and 18% belong to others (students, home makers, retired persons).

DATA ANALYSIS

ON VIEWS OF 96 RESPONDENTS

3. Are you aware of the term Artificial Intelligence?

Fig. 3

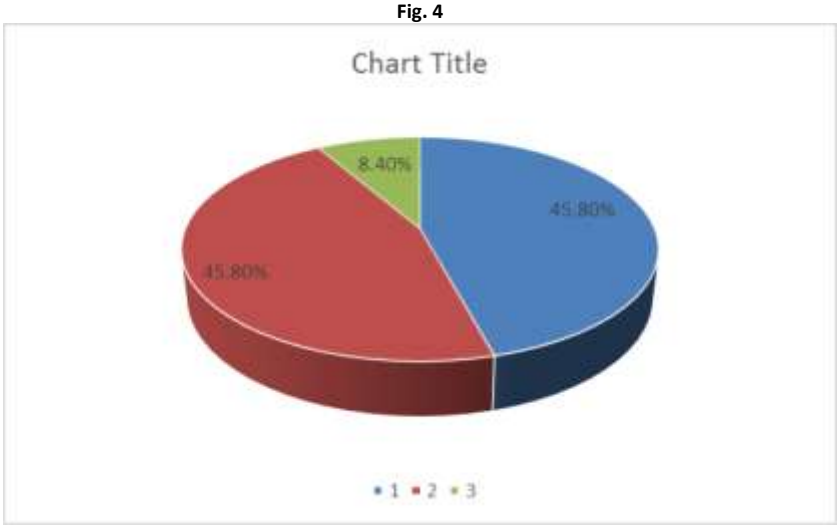


Primary Data

From the above figure, it is observed that out of 96 respondents, 91.7% are aware of the term Artificial Intelligence. 8.3% are unaware of the term.

4. Have you come across any programmes based on AI?

Fig. 4

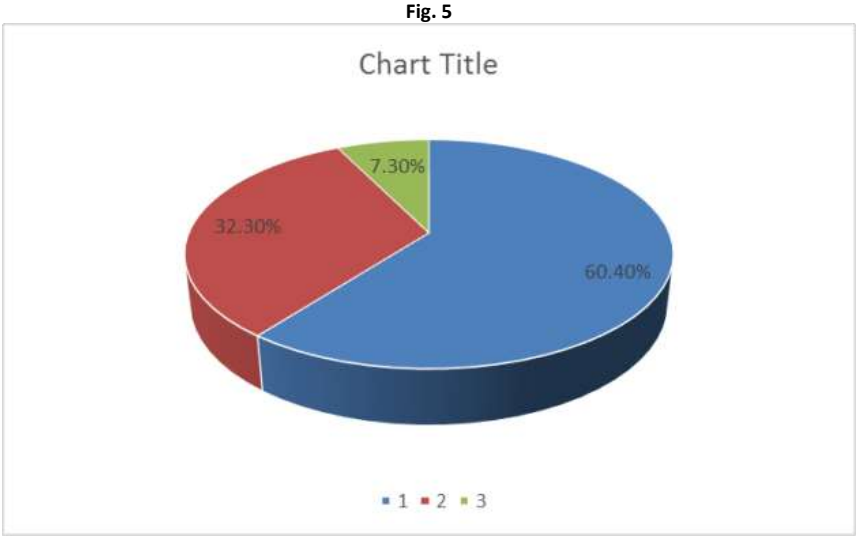


Source: Primary Data

From the above figure, it is opined that 45.8% respondents have come across programmes based on AI, whereas another group of 45.8% respondents have not come across any programmes based on AI. Remaining 8.4% are neutral.

5. Do you think that AI is going to through a challenge to the human intelligence in the near future?

Fig. 5

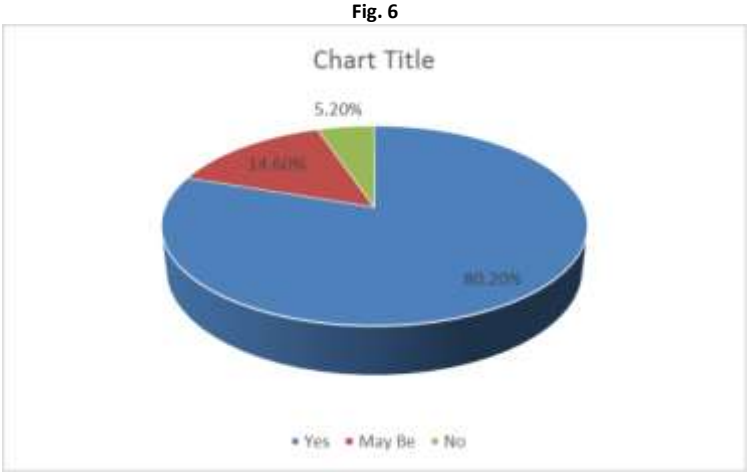


Source: Primary Data

From the above figure, it is observed that 60.40% of the respondents have opined that AI is going to through a challenge to the human intelligence in the near future.

6. Do you support the statement that, AI will bring tremendous changes in operations, processes and structure of both manufacturing and service sector in India?

Fig. 6

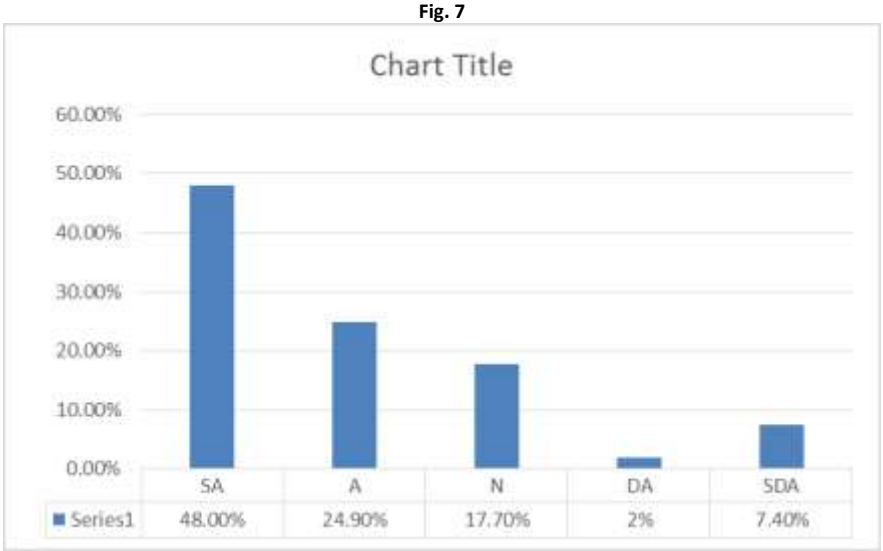


Source: Primary Data

From the above figure, it is emphasized that, 80.2% agree that AI will bring tremendous changes in operations, processes and structure of both manufacturing and service sector in India. 14.6% are neutral on this statement and remaining 5.2% not agreed with this statement.

7. AI should be used for the benefit of nation, for which it should be protected by IP Laws.

Fig. 7

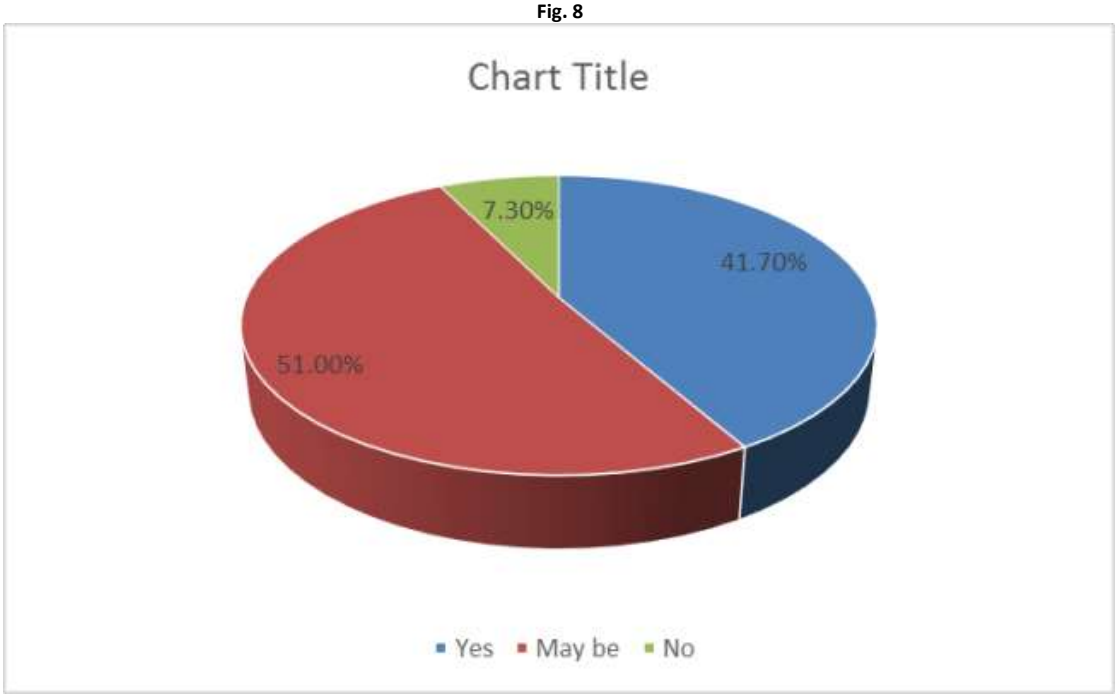


Source: Primary Data

From the above figure, it is emphasized that, 72.9% of the respondents agree with the statement, while 17% are neutral on this and remaining 9.4% did not agree with the statement.

8. The ownership of any intangible asset is the issue of IPR Laws.

Fig. 8

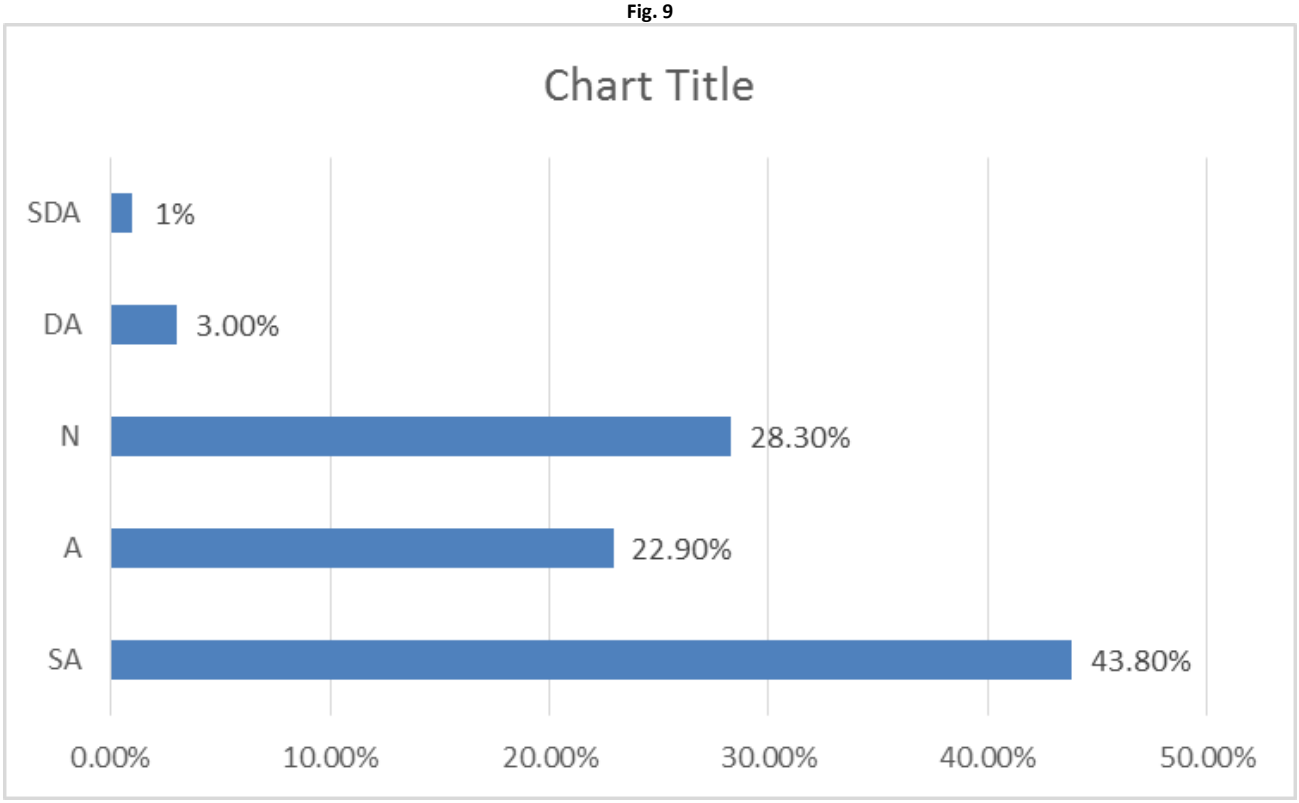


Source: Primary Data

From the above figure, it is observed that, 41.7% agree with this statement, while 51% are neutral on this statement and 7.3% did not agree with this statement.

9. The contribution of IPR Laws is necessary in Research and Innovation works in the present scenario.

Fig. 9

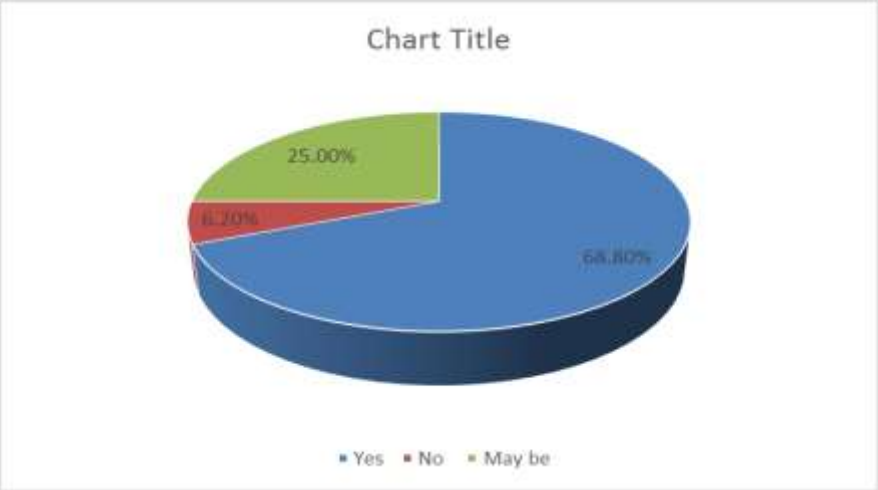


Source: Primary Data

From the above figure, it is opined that, 66.70% agree that contribution of IPR Laws is necessary in Research and Innovation works in the present scenario, 28.30% are neutral on this statement, while remaining 4% did not agree with this.

10. AI should be developed more and it should be under usage to generate a patent-able IP.

Fig. 10

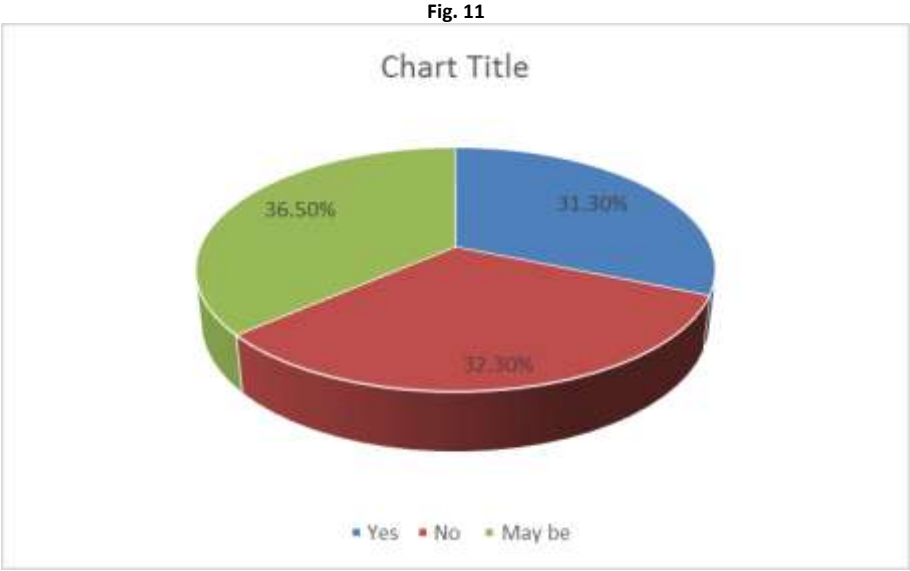


Source: Primary Data

From the above figure, it is emphasized that, 68.8% of the respondents agree that AI should be developed more and it should be under usage to generate a patent-able IP. 25% are neutral about this, while remaining 6.2% did not agree with this.

11. Are you aware that World Intellectual Property Organization is working on the aspects of AI that are specific to IPR Laws?

Fig. 11

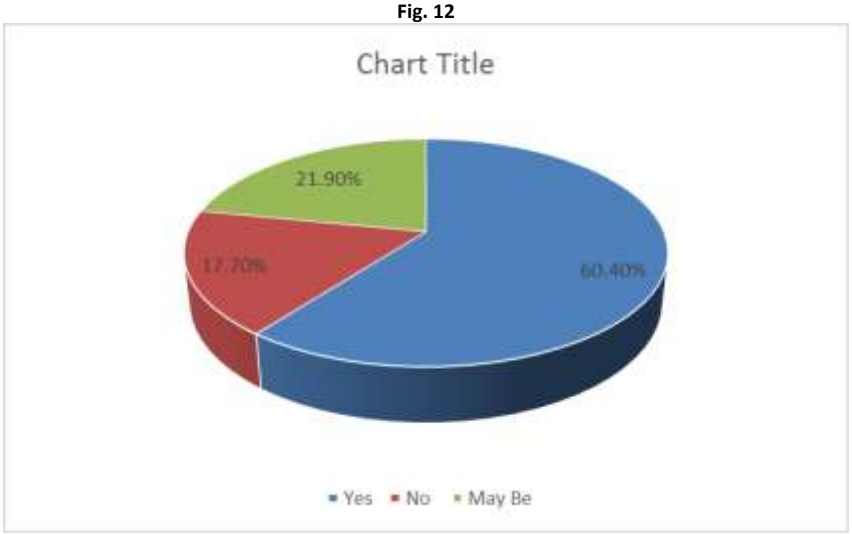


Source: Primary Data

From the above figure, it is emphasized that, 31.30% are aware that WIPO is working on the aspects of AI that are specific to IPR Laws. 32.30% are not ware with the same, while 36.5% are neutral on this statement.

12. Are you aware that, Government of India is promoting research in technology to address the ethical, bias and privacy issues of AI?

Fig. 12



Source: Primary Data

From the above figure, it is opined that, 60.4% of the respondents are aware that Government of India is promoting research in technology to address the ethical, bias and privacy issues of AI. 21.9% are neutral about this statement, while 17.7% are not aware of this.

9. KEY FINDINGS

Based on the data analysis and interpretation, the following findings are taken into consideration for the purpose of the study.

1. 76% of the respondents are of the age group between 20-40 years.
2. 46% of the respondents are employees.
3. 91% of the respondents are aware of the term 'AI'.
4. 45.8% of the respondents have come across the programmes based on AI.
5. 60.4% of the respondents opine that AI is going to through a challenge to the human intelligence in the near future.
6. 80.2% of the respondents agreed that AI is going to bring structural changes in manufacturing and service sectors in India.
7. 72.9% of the respondents emphasize that, AI should be used for the benefit of nation, for which it should be protected under IP Laws.
8. 41.7% of the respondents agree that, the ownership of any intangible asset is the issue of IPR Laws.
9. 66.7% of the respondents opine that, the contribution of IPR Laws is necessary in Research and Innovation works in the present scenario.
10. 68.8% of the respondents agree that, AI should be developed more and it should be under usage to generate a patent-able IP.
11. Only 31.3% of the respondents are aware that WIPO is working on the aspects of AI that are specific to IPR Laws, while 32.3% are not aware about the same.
12. 60.4% of the respondents are aware that, Government of India is promoting research in technology to address the ethical, bias and privacy issues of AI.

10. CONCLUSION

Based on the key findings, the followings conclusion is drawn on the study:

Availability of "***Information***" has become most common thing in the present era. Right from electronic age to today's digital era, information has contributed to world's growth, innovation, development and brought the countries and states closure to each other from business, education, residence, market view point. Sitting at once place today, we are able to meet people from any corner of the world. The virtual reality is taking its complete shape from time to time. Artificial Intelligence is contributing its applications and playing its role beyond digitalization characteristics.

From the respondent's views, it is evident that 91% of the people are aware of the 'AI' in the present era and the benefits we are going to derive from AI to our community is manifolds and hence the responsibility to protect its privacy, confidentiality is a major issue to be considered.

Intellectual Property Laws should introduce new provisions to protect the privacy of AI, as it is used by the companies for commercial purpose in specific and for the benefit of society in general.

WIPO is working on this to bring laws which are specific for AI. Hence, the usage of AI should take new dimensions in various sectors of economy, to take us a step ahead, on par with world's economy, who are already using AI as their tools to develop holistically.

11. SUGGESTIONS

Based on the conclusion, the following suggestions are given:

1. Usage of AI should be authenticated by the Government, so that provisionally all sectors can make use of it legally.
2. Legal provisions should be made, taking into account, the country's economic status, situation prevailing and the current trend, w.r.t AI.
3. The application of AI should be introduced in Defense for security purposes of our country.
4. Inclusion of AI should be made in the curriculum along with provisions of IPR to bring awareness among the student fraternity, as they are the persons leading tomorrow's nation.
5. Protection of all intangible assets should be part of IPR Laws for benefit of society in particular and for security purposes in general.

12. SCOPE FOR FURTHER RESEARCH

Innovation, Discovery, Usage of Equipment, modernizing our lives from time to time is a regular phenomenon of human race. This is giving scope to researchers from a long time. Yester year's Electronic Age, Computer era, Digitalization regime has given a scope for the researchers to explore new avenues in research. AI is not doubt is going to open the doors for research further enhancing the domain of researchers in the areas such as "Role of AI in the business", "AI – Its emerging importance in the growth and development of our economy" "AI- SWOT Analysis", "AI- Issues & Challenges w.r.t usage of its Applications" and so on.

REFERENCES

1. A. Lakshminath & Mukund Sarda, (2011-12), *Digital Revolution & Artificial Intelligence, changes to Legal Education and Research.* CNLU LJ (2)
2. Racquel Acosta, *Artificial Intelligence and Authorship Rights*, Harvard Journal of Law and Technology (Feb, 17 2012).
3. M.B.Jaap-Koops et al., *Bridging the Accountability Gap: Rights for the New Entities in the information society*. MINN J.L. SCI & TECH 497, 549-50 (2010).
4. Alan Turing, Computing Machinery and Intelligence, 59 MIND 236 433-60 (1950).
5. *Id*
6. Abbott, Ryan, The Reasonable Computer: Disrupting the Paradigm of Tort Liability, 86 Geo. Wash. L. Rev. 1 2018.
7. Reform of the Law Relating to Copyright, Designs and Performer's Protection, A Consultative Document 58 Cmnd 8302 HMSO 1981.
8. Intellectual Property and Innovation (Cmnd 9712; HMSO, Ch 9, paras 9.6–8.
9. Abbott, R. Everything is Obvious, 66 UCLA. L. Rev. 2 2019.

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